



Australian Government
Productivity Commission

Intellectual Property Arrangements

Productivity Commission
Inquiry Report
Overview & Recommendations

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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

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The full report is available from www.pc.gov.au

OVERVIEW

Key points

- Australia's intellectual property (IP) arrangements fall short in many ways and improvement is needed across the spectrum of IP rights.
- IP arrangements need to ensure that creators and inventors are rewarded for their efforts, but in doing so they must:
 - foster creative endeavour and investment in IP that would not otherwise occur
 - only provide the incentive needed to induce that additional investment or endeavour
 - resist impeding follow-on innovation, competition and access to goods and services.
- Australia's patent system grants exclusivity too readily, allowing a proliferation of low-quality patents, frustrating follow-on innovators and stymieing competition.
 - To raise patent quality, the Australian Government should increase the degree of invention required to receive a patent, abolish the failed innovation patent, reconfigure costly extensions of term for pharmaceutical patents, and better structure patent fees.
- Copyright is broader in scope and longer in duration than needed — innovative firms, universities and schools, and consumers bear the cost.
 - Introducing a system of user rights, including the (well-established) principles-based fair use exception, would go some way to redress this imbalance.
- Timely and cost effective access to copyright content is the best way to reduce infringement. The Australian Government should make it easier for users to access legitimate content by:
 - clarifying the law on geoblocking
 - repealing parallel import restrictions on books. New analysis reveals that Australian readers still pay more than those in the UK for a significant share of books.
- Commercial transactions involving IP rights should be subject to competition law. The current exemption under the Competition and Consumer Act is based on outdated views and should be repealed.
- While Australia's enforcement system works relatively well, reform is needed to improve access, especially for small- and medium-sized enterprises.
 - Introducing (and resourcing) a specialist IP list within the Federal Circuit Court (akin to the UK model) would provide a timely and low cost option for resolving IP disputes.
- The absence of an overarching objective, policy framework and reform champion has contributed to Australia losing its way on IP policy.
 - Better governance arrangements are needed for a more coherent and balanced approach to IP policy development and implementation.
- International commitments substantially constrain Australia's IP policy flexibility.
 - The Australian Government should focus its international IP engagement on reducing transaction costs for parties using IP rights in multiple jurisdictions and encouraging more balanced policy arrangements for patents and copyright.
 - An overdue review of TRIPS by the WTO would be a helpful first step.
- Reform efforts have more often than not succumbed to misinformation and scare campaigns. Steely resolve will be needed to pursue better balanced IP arrangements.

Overview

1 The task at hand

Intellectual property arrangements are important

Intellectual property (IP) arrangements offer opportunities to creators of new and valuable knowledge to secure sufficient returns to motivate their initial endeavour or investment. In this respect, they are akin to the property rights that apply to ownership of physical goods.

But ideas are not like physical goods in other key respects. As observed by Thomas Jefferson more than 200 years ago, the use of an idea by one party does not reduce its capacity for use by another:

He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. (Jefferson 1813)

Ideas also provide economic and social value as others draw on them and extend the frontiers of knowledge. For these reasons, property rights over ideas and their expression are not granted in perpetuity and limitations are placed on their application.

IP rights take a variety of forms. The most familiar are patents, copyright and trade marks, but there are others, including rights over performances, designs, plant varieties and circuit layouts. A single product can — and often does — embody many IP rights (figure 1).

IP arrangements form part of the broader innovation system. The role they play differs depending on the right afforded. Patents and copyright seek to promote product innovation and the creation of new works. Design rights seek to encourage improvements in the look and feel of consumer products. Trade marks differ again, providing consumer information and protecting brand reputation.

Figure 1 **IP phone**



Today's smartphones are protected by over 1000 **patents**, including for their semiconductors, cameras, screens, batteries and calendars.

Copyright protects the artwork and software code within smartphones.

Design rights protect the aesthetics, and the placement of cameras, buttons and screens.

Circuit layout rights protect the electrical integrated circuits.

Brands, logos and other distinctive marks such as 'iPhone' are protected by **trade marks**.

But IP rights can lead to IP wrongs

Because IP rights give their holders the ability to prevent others from using that IP, there is a risk parties will unduly exercise market power. As noted by the Harper Competition Policy Review, this may allow owners of IP rights to extract excessive royalties from IP licences or place anticompetitive restrictions on knowledge dissemination, with adverse knock-on effects for innovation and ultimately consumers.

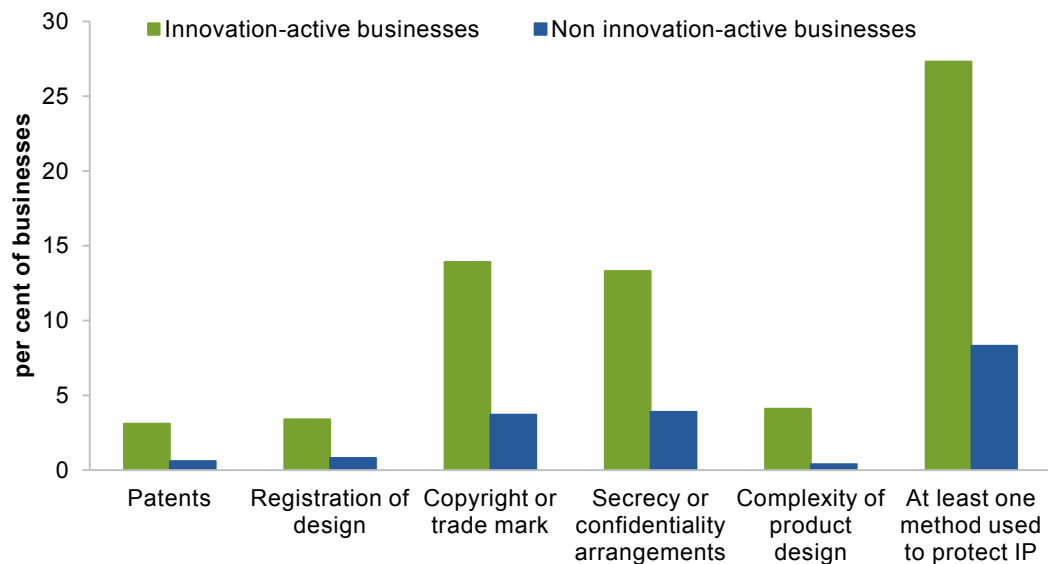
When innovation is cumulative, IP rights can reduce the flow of benefits from new ideas and processes. This is particularly harmful for Australian firms, who tend to 'adopt and adapt' innovations, building on the knowledge of others. Overly strong restrictions on diffusion can be so detrimental to innovation as to undo the benefits of the IP system in the first place:

... a poorly designed intellectual property regime — one that creates excessively “strong” intellectual property rights — can actually impede innovation. ... Knowledge is the most important input into the production of knowledge. Intellectual property restricts this input; indeed, it works by limiting access to knowledge. (Stiglitz 2008, pp. 1694, 1710)

And while patents and other IP rights can encourage innovation, they are not always necessary for it (figure 2). For example, in industries where the speed of technological change is fast moving, innovators tend to rely more on market-based arrangements, such as first-mover advantage. Similarly, IP rights are less important where innovations are difficult to copy or only entail minor development costs.

Poorly designed IP rights impose costs irrespective of whether countries are net importers or exporters of IP. However, Australia is overwhelmingly a net importer of IP, and the gap between IP imports and exports is growing rapidly. This means that the costs to consumers and follow-on innovators from higher prices and restricted availability are not offset by increases in Australian producer profits.

Figure 2 IP rights are used alongside other mechanisms^a



^a Businesses can nominate more than one type of protection.

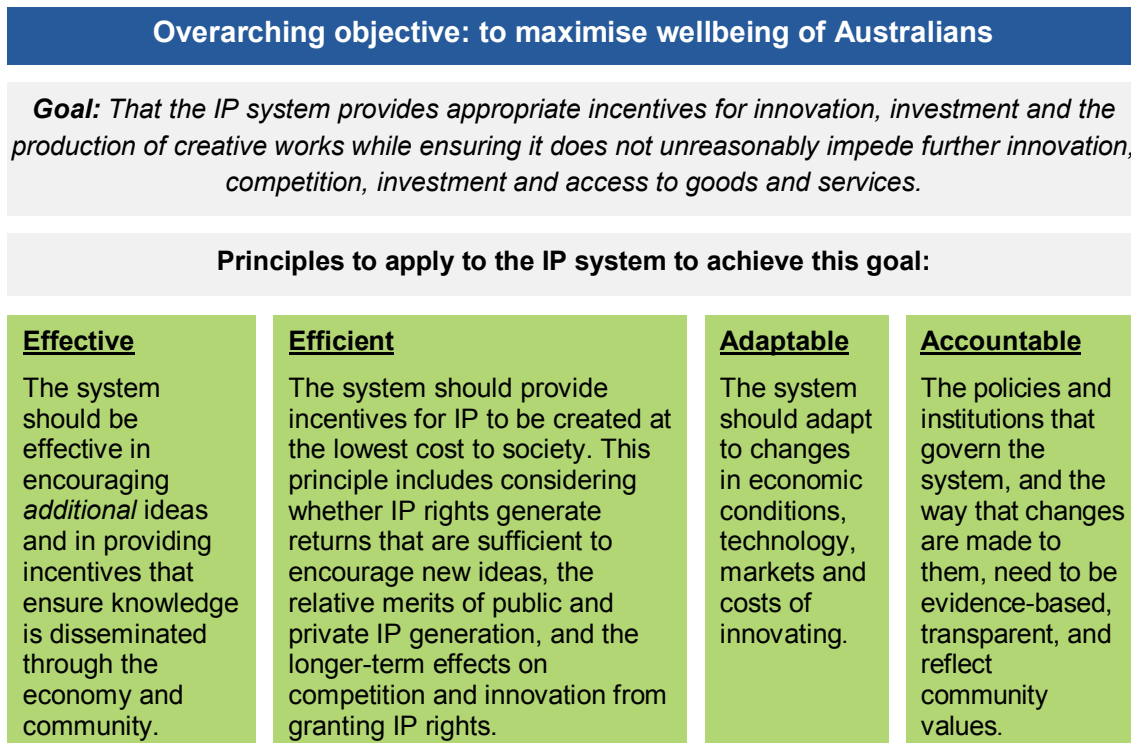
Advancing reform in a constrained environment

There have been many recent reviews into IP, such that some inquiry participants have understandably questioned the need for yet another. However, previous reviews have focused on specific areas of IP, such as innovation patents, pharmaceutical patents, design protection, and copyright, and so lacked a consistent and coherent approach across Australia's IP arrangements — a point highlighted by the Harper Competition Policy Review. The Commission has taken a more holistic perspective to identify ways that the IP system could be improved.

The goal of IP policy should be to achieve a balance between the incentive to create and the risk of damaging the productive use of new ideas through over-protection, while also recognising that Australia's IP arrangements form part of a global system. With the overarching objective of maximising community wellbeing, the Commission has identified four guiding principles that the IP system should embody — it should be effective, efficient, adaptable and accountable (figure 3).

In applying these principles, the Commission has considered each aspect of the IP system — how rights are assigned, used and enforced. The Commission has also examined the governance and institutional arrangements underlying IP policy development, decision-making and implementation.

Figure 3 **The Commission’s approach**



But IP arrangements are not a blank slate. Many aspects of Australia’s IP arrangements have come about, or been strengthened, to give effect to commitments in international agreements. These agreements often contain prescriptive obligations relating to key policy levers such as the duration and scope of protection, and significantly curtail Australia’s capacity to change domestic policy arrangements.

There are also practical constraints to independent IP policy-making. IP is a globally tradeable asset and Australia is a relatively small market. Significantly departing from the IP arrangements in other countries could frustrate Australia’s access to overseas innovations.

While these constraints may see Australia fall short of achieving a balance across all aspects of IP arrangements, the Commission has identified much we can do to progress reform. Doing so necessitates an approach that:

- examines reform opportunities within the limits imposed by our international obligations
- embeds institutional and governance arrangements that promote transparent, informed and coherent policy outcomes
- advocates for multilateral change where the stakes are sufficiently high.

It also requires a dedicated reform champion with resolve to pursue change in the face of strong vested interests.

2 Copy(not)right — looking at the evidence

Copyright protects the material expression of literary, dramatic, artistic and musical works, as well as books, photographs, sound recordings, films and broadcasts.

In addition to being instrumental in rewarding creative and artistic endeavour, many creators value the recognition that the copyright system provides. It does so by granting creators the exclusive right to reproduce or adapt their work in material form, as well as to publish, perform, and communicate their work to the public. Exercise of these rights is commonly licensed to intermediaries, such as publishers, record companies, film studios, broadcasters, and copyright collecting societies.

However, copyright protection in Australia suffers from a number of shortcomings. It is overly broad, applying equally to: commercial and non-commercial works; works with very low levels of creative input; works that are no longer being supplied to the market; and works where ownership can no longer be identified. Further, copyright does not target those works where ‘freeriding’ by users would undermine incentives to create new works. As such, Australia’s copyright arrangements are skewed too far in favour of copyright owners to the detriment of consumers and intermediate users.

Despite many claims to the contrary, the Commission is not recommending any changes to the length of copyright term — doing so would require amendments to international agreements such as the Berne Convention, TRIPS and AUSFTA. But even within the limits of these agreements, there is scope to do more.

Overly long term reduces community access to valuable works

Copyright protects literary, musical, dramatic and artistic works for the duration of the creator’s life plus 70 years, sound recordings and films for 70 years, television and sound broadcasts for 50 years, and published editions for 25 years. To provide a concrete

example, a new work produced in 2016 by a 35 year old author who lives until 85 years of age will be protected until 2136.

Evidence (and logic) suggests copyright protection lasts far longer than is needed. Few, if any, creators are motivated by the promise of financial returns long after death, particularly when the commercial life of most copyright material is less than 5 years. Studies have found that a term of around 25 years enables rights holders to generate revenue *comparable* to what they would receive in perpetuity (in present value terms). Of course, some very successful works have commercial lives well beyond a few years, as repeatedly cited by inquiry participants in submissions and public hearings. But it remains the case that these are exceptions to the norm.

While some copyright holders claim that there are few, if any, costs associated with excessive term, this has not been borne out in practice. Many works become commercially unavailable during their period of copyright protection. Overly long copyright term perversely increases the likelihood and duration for which works are unavailable. Demand for works that have been created, but are not being supplied while under copyright protection, reduces community welfare and returns to original rights holders and potential new providers. Nothing better exemplifies the costs of excessive copyright term than the fact that once copyright expires and works enter the public domain, many become commercially available again.

Long periods of copyright protection, coupled with automatic application and no registration requirements, also result in ‘orphan works’ — works protected by copyright but unusable by consumers, libraries, and archives because the rights holder cannot be identified. The existence of orphan works has become a greater issue as libraries and archives have sought to make their collections available online. The Australian National Film and Sound Archive estimated as much as 20 per cent of its collection is orphaned or abandoned and highlighted examples of projects that have been shelved, and opportunities to celebrate Australia’s heritage foregone, due to the time and expense of identifying the relevant rights holders.

Governments and academics, here and overseas, continue to explore innovative options for promoting a better balance on copyright term. In the United States (US), for example, the Register of Copyrights has publicly discussed the idea of requiring registration for rights holders to benefit from copyright term in excess of life plus 50 years (registration is already required to bring a court action for infringement in the US). Such arrangements would underscore the notion that rights holders should face obligations in order to benefit from protections.

A fairer system of user rights

Australia’s current limited exceptions, fair dealing being the most well-known, do little to restore the copyright balance.

Australia's exceptions are too narrow and prescriptive, do not reflect the way people today consume and use content, and do not readily accommodate new legitimate uses of copyright material. Legislative change is required to expand the categories of use deemed to be fair. Even when this occurs, changes have simply 'caught up' with existing community practice — Australia did not legalise the wide-spread practice of home VCR recording until as late as 2006, by which time most VCRs were household relics. Universities Australia summarised the extent of the problem:

After 20 years of reviews that have considered this question, the evidence is in: Australia's existing inflexible, purpose-based copyright exceptions are no longer fit for purpose. They are holding Australia back, not just in our universities and schools, but also in our digital industries. Innovative and useful technologies, and new ways of using content in socially beneficial ways, automatically infringe copyright in Australia unless their use falls within one of the existing narrow, purpose-based exceptions. (sub. DR453, p. 1)

Australia's narrow purpose-based exceptions should be replaced with a principles-based, fair use exception, similar to the well-established system operating in the US and other countries. As part of modernising its copyright arrangements, Israel recently adopted fair use to enable better access to copyright material 'for the advancement of culture and knowledge'. Fair use would similarly allow Australia's copyright arrangements to adapt to new circumstances, technologies, and uses over time.

Some inquiry participants suggested that the benefits from fair use are largely academic because, although current exceptions do not reflect how people use copyright material in the digital age, rights holders do not pursue infringements for 'ordinary' uses. The example of teenagers sampling music and videos to make mash ups was raised more than once.

But the opportunities Australian businesses and consumers forego because of the current inflexible exceptions are much more extensive. Participants argued that Australia's current exceptions frustrate the efforts of online businesses seeking to provide cloud computing solutions, prevent medical and scientific researchers from taking full advantage of text and data mining, and limit universities from offering flexible Massive Open Online Courses. The education sector has also indicated that fair use would avoid the current perverse situation where Australian schools pay millions of dollars each year to use materials that are freely available online.

Recent analysis undertaken by EY for the Australian Government assessed the benefits and costs of introducing a broad US-style fair use exception, and concluded that adoption of fair use in Australia would be a net benefit to the Australian community. While intrinsically difficult to assess, the analysis (unlike others commissioned by inquiry participants) examined the impact of fair use on Australian consumers and the broader community, users of copyright material such as schools and libraries, and rights holders. Some aspects of fair use offer larger gains, including education and government use, and improved community access to orphan works. Other changes reduce uncertainty for consumers and businesses, improving Australia's innovation environment.

Rights holders have argued against the adoption of fair use in Australia. They claim that by design, fair use is imprecise and would create significant legal uncertainty for both rights holders and users. Initial uncertainty is not a compelling reason to eschew a fair use exception, especially if it serves to preserve poor policy outcomes. Australia's current exceptions are themselves subject to legal uncertainty, and evidence suggests that fair use cases, as shown in the US, are more predictable than rights holders argue. Moreover, courts routinely apply principles-based law to new cases, such as in consumer and employment law, updating case law when the circumstances warrant doing so.

And over time, both rights holders and users will become increasingly comfortable with making judgements about when uses of copyright material are likely to be fair. Where the courts are called on to determine whether a new use is fair, legislation would require that they be guided by four fairness factors:

- the purpose and character of the use
- the nature of the copyright material
- the amount and substantiality of the part used
- the effect of the use upon the potential market for, or value of, the copyright material.

Rights holders also argued fair use would significantly reduce their incentives to create and invest in new works, holding up Canada as an example. Some have proclaimed that fair use will equate with 'free use', particularly by the education sector. But these concerns are ill-founded and premised on flawed (and self-interested) assumptions. Changes in Canada's publishing industry had little to do with copyright exceptions (where fair dealing still prevails) and more to do with other market factors. Notably, the Australian education sector has repeatedly made clear that fair use would coexist with the current education statutory licence scheme.

Indeed, rather than ignore the interests of rights holders, under fair use the effect on the rights holder is one of the factors to be considered. Where a use of copyright material harms a rights holder, the use is less likely to be considered fair. In the US, where fair use is long established, creative industries thrive.

In addition to the fairness factors above, uncertainty would be further limited by including a non-exhaustive list of illustrative fair uses to guide rights holders and users. By drafting the fairness factors to closely follow the wording of Australia's existing fair dealing exceptions, as well as the wording of fair use overseas, existing Australian and foreign case law (particularly from the US where fair use has operated for some time) would provide an additional source of guidance. The use of foreign case law to reduce uncertainty was a key factor in Israel's successful implementation and transition to a fair use regime. Among heavy users of copyright material, such as education and government users, as well as those in the creative sector, the Commission notes the abundance of guidelines developed collaboratively to further assist users in how to make judgements.

Making it easier for users to access legitimate content

Rights holders and consumer organisations raised concerns about online copyright infringement. Some see Australia's efforts to curb unauthorised downloading as woefully inadequate; others consider existing steps as overreach. Arguments made in submissions reflect the polarised stance on this issue.

Research consistently demonstrates that timely and cost effective access to copyright-protected works is the best way for industry to reduce online copyright infringement. Therefore, in addition to implementing a new exception for fair use, the Commission is recommending making it easier for users to access legitimate copyright-protected content.

Geoblocking

Geoblocking restricts a consumer's access to digital products, enabling rights holders and intermediaries to segment the Internet into different markets and charge different prices (or offer different services) to consumers depending on their location.

The use of geoblocking technology is pervasive, and frequently results in Australian consumers being offered a lower level of digital service (such as a more limited music or TV streaming catalogue) at a higher price than in overseas markets. Studies show Australian consumers systematically pay higher prices for professional software, music, games and e-books than consumers in comparable overseas markets. While some digital savvy consumers are able to avoid these costs (such as through the use of proxy servers and Virtual Private Networks), most pay inflated prices for lower standard services and some will ultimately infringe.

The Australian Government should make clear that it is not an infringement of Australia's copyright system for consumers to circumvent geoblocking technology and should avoid international obligations that would preclude such practices.

Parallel importation of books

Parallel import restrictions (PIRs) on books are the physical equivalent of geoblocking. Except in limited cases, Australian booksellers are prevented from purchasing stock from lower priced suppliers overseas, but must purchase from an Australian publisher regardless of the price. This restriction applies to booksellers only — Australian consumers can purchase books themselves from overseas online retailers. The restrictions can put Australian booksellers at a competitive disadvantage, and result in those Australians unable to purchase online paying higher prices.

No fewer than eight past reviews, including by the Commission, and most recently by the Harper Competition Policy Review, have recommended that prohibitions on parallel imports be repealed. The Australian Government supports the removal of the restrictions

and agreed to progress this reform subject to the recommendations of this inquiry regarding transitional issues.

In responding to a range of false claims and flawed analyses made by participants, the Commission has undertaken a comprehensive analysis of book prices, comparing the price of over 1000 like-for-like titles sold in Australia and the UK (and 400 in Australia and the US). Over three quarters of the books in the sample were more expensive in Australia than the UK, with Australian prices around 20 per cent higher. Under reasonable assumptions regarding discounting and freight costs, the Commission estimates the benefits to Australians from repealing the restrictions could be around \$25 million per year.

The publishing industry has stridently opposed the removal of the restrictions. In doing so it has put forth a number of (often contradictory) arguments, including that the:

- restrictions do not raise the price of books in Australia, but at the same time are crucial to supporting the production of Australian literature (which would require a premium on Australian book prices)
- price of Australian books is competitive with those in the US and UK, yet removal of PIRs would result in importation of cheaper books and the demise of local publishing
- removal of the restrictions would unduly harm local authors. Yet the Commission has found the benefits of the restrictions are overwhelmingly enjoyed by global publishers and offshore authors.

The Commission found arguments about the role of publishers in supporting local authors particularly unconvincing. In order for this to occur, publishers would need to charge higher prices (which they deny) and channel the revenues from these higher prices back to Australian authors. During public hearings the Commission sought (but did not receive) evidence from publishers on the quantum of support they provide to Australian writers and how their support differs from that provided by publishers in other jurisdictions where PIRs do not apply, such as the US.

The Commission recognises the cultural and educational value of books is significant. While most of these benefits are captured in the price readers are willing to pay, some are not. However, these broader benefits are best targeted by direct public support — as is already provided by Australian Governments (of around \$40 million each year for Australian books and authors) — rather than through the ill-targeted PIRs.

Publishers also expressed concern that removing PIRs will harm Australian booksellers. Yet the Commission received evidence that Australian publishers act as the local supplier when individuals import books from foreign online retailers. In this way, publishers appear less concerned about Australian consumers accessing books at lower prices than they are about ensuring their continued primacy in the local supply chain. Dymocks highlighted how PIRs unequally discriminate against Australian booksellers:

... when an Australian customer makes a purchase from UK based Book Depository the order is fulfilled through a local Australian publisher rather than being sent from the UK. Australian

booksellers — unable to source supply from overseas — are not given the same freedom. (sub. DR613, p. 1)

And concern that overstocked books in foreign markets (remainders) would harm Australian publishers ignores the fact that, for the majority of books, the same publishing house holds both the Australian and foreign rights. For example, the Commission matched 1126 book titles across the Australian and UK market and found that 95 per cent were published in both markets by the same publisher or an owned subsidiary. Claims that lower priced books from overseas — especially those of Australian authors — will be ‘dumped’ in Australia are unsubstantiated and misleading, and may reflect a desire by some publishers to continue price discriminating against Australian readers.

In short, no new evidence was presented in this inquiry that overturns the existing case for removing the restrictions. The Australian Government should proceed with its announced plans to repeal parallel import restrictions, with effect no later than the end of 2017. Additional transitional arrangements are not needed given the positive confluence of efficiencies made by the Australian publishing industry and broader economic circumstances.

3 Patents — getting the fundamentals right

Patents can advance human knowledge by encouraging socially valuable innovation that would not have otherwise occurred. However, if poorly calibrated, they also impose net costs on the community. By design, patent protection inhibits competitors from freely using an inventor’s technology, but over-protection can stifle competition more broadly, leading to reduced innovation and excessive prices. Moreover, by blocking subsequent innovators, patent protection can perversely inhibit the advancement of knowledge through ‘follow-on’ innovation.

Notwithstanding reforms introduced under the 2012 *Raising the Bar* initiative, Australia’s patent system remains tipped in favour of rights holders and against the interests of the broader community.

- A multitude of low-value patents make it harder for innovators to signal the value of their inventions to investors, and also frustrate follow-on innovators and researchers who are forced to invest in costly workarounds. Costs are ultimately borne by the users of technology.
- Australia provides stronger patent rights than most other advanced economies. As a net importer of patented technology, the strength of rights is particularly costly for Australia.

As in other areas of IP, reform options are restricted by Australia’s international obligations. However, within these constraints, the Commission has identified a package of reforms that would go some way to striking a better balance.

Making clear what Australians want from their patent system

Consistent with the absence of overarching principles to guide IP policy, the Patents Act does not have an objects clause to guide legal interpretation. Many participants supported the principle of introducing an objects clause to provide greater guidance to decision makers involved in the design and application of the Act.

An objects clause would provide a number of benefits. Greater guidance would play an important role given the scope for administrative and judicial interpretation to diverge over time from policy intent. Setting out broad objectives would also help the Act remain adaptable and fit for purpose as technologies emerge and economies and business models evolve.

An objects clause should make clear that the principal purpose of the patent system is to enhance the wellbeing of Australians by promoting technological innovation, and by promoting the transfer and dissemination of technology. In so doing, the patent system should balance the interests of producers, owners and users of technology.

Reforming the inventive step

An invention must satisfy five criteria to qualify for patent protection, including that it involve a non-obvious ‘inventive step’ (box 1). The test for inventive step is particularly important because it provides the closest proxy for an invention’s technological advance. A high inventive step means that only significant improvements on existing inventions achieve patent protection, while a low inventive step means that incremental advances can secure the same term and scope of protection.

Box 1 What are the criteria for granting a patent?

IP Australia grants patents to inventions that meet the criteria outlined in the Patents Act. To satisfy the criteria for a standard patent, inventions must:

- be a ‘*manner of manufacture*’ — described by the courts to be an invention that involves human intervention to achieve an end result, and has an economic use
- be *novel* — the invention must be novel in light of ‘prior art information’ (information about the current state of technology)
- involve an *inventive step* compared with the prior art base — the invention must not be obvious to a person skilled in the relevant art in light of ‘common general knowledge’ (knowledge of a worker in the field)
- be *useful* — there must be a specific, substantial and credible use for the disclosed invention
- have *not been secretly used* — the invention cannot be used before the priority date (the date from which a patent application is assessed against the patent criteria — typically the date when a party first files an application).

In assessing whether an application has an inventive step, IP Australia must consider a number of factors, including the:

- definition of the invention
- ‘prior art’, or current state of technology
- minimum advance over the prior art required to meet the test, or ‘obviousness test’
- ‘person skilled in the art’, who is assumed to have common general knowledge.

The inventive step has been subject to ongoing reform. Most recently, the *Raising the Bar* initiative increased the inventive step threshold by reforming the definitions of prior art and common general knowledge. This has moved Australia’s requirements closer to the thresholds applied in the US and the European Union (EU).

These reforms have moved the inventive step in the right direction, but there are grounds to go further. Measures of patent quality suggest that thresholds in the US and EU fall short of the ideal, and so are not sufficiently high benchmarks. And post-*Raising the Bar* patent outcomes (analysed by the Commission) indicate IP Australia still has a greater propensity to grant patent applications that have been rejected by the European Patent Office (EPO).

Ongoing disparities between outcomes in Australia and the EU are not surprising, as Australia still applies a less rigorous test for obviousness. In particular, the required minimum advance over the prior art in Australia is a mere ‘scintilla of invention’, which is highlighted by some patent attorneys and referenced in IP Australia’s Patent Examiners Manual. Evidence also suggests that the inventive step is not always effective in filtering out patents that fail to advance technology.

A robust case exists for raising the inventive step further to reduce the proliferation of low-value patents. Raising the threshold would also help to address specific concerns with pharmaceutical and software patents (see below). To raise the threshold, the required advance over the prior art should be increased and efforts should be taken to better ensure only technological inventions pass the inventive step.

Given the weight of evidence that patent systems are out of balance, these unilateral reform options would leave the inventive step below the optimal level. Going further and significantly raising the threshold above the level applied in other countries would, however, entail risks. Such endeavour is best pursued in collaboration with like-minded countries.

Improving the evidence base for granting patents

As patents may impose costs on the community, judgements about whether or not to grant a patent must be well informed.

Patent examiners draw on a significant amount of information when deciding whether to grant a patent, including on the current state of technology. In many cases an applicant will have better access to such information than patent examiners.

In Europe, a patent applicant must identify the technical features of the invention in their set of claims. This enables the patent office to better target genuine advances in technology, establishes a clearer link between the prior art and the market protection being sought, and allows follow-on innovators to identify the core technical element of a patent claim.

Given applicants are best placed to identify the technical features of their invention, requiring them to do so as part of an application for an Australian patent would impose minimal burden while helping to ensure only technological inventions are granted patent protection.

Making better use of patent fees

The structure and level of patent fees is another policy lever for improving the patent system. The Australian Government should set patent fees to promote broader IP policy objectives, rather than the current primary objective of achieving cost recovery.

Renewal fees influence decisions about whether to maintain a patent. As such, they can help achieve a number of policy aims, including reducing economic rents that arise from patent holders exercising market power, limiting the risk that patents are used strategically, and ensuring only valuable patents are held in force.

As a policy lever, renewal fees are underutilised. Many patented inventions require less than 20 years protection. Yet renewal fees only increase in three stages across the life of a standard patent. The structure of renewal fees in Australia should be reformed to increase more steeply with patent age, akin to the approach in the UK.

Claim fees, in combination with effective rules on how claims are constructed, can decrease the scope of claims, and in so doing the breadth of market protection. Fewer claims also decrease the time taken to review applications.

The structure of claim fees in Australia suggests they can be better deployed to discourage rights holders casting claims too widely and from using the system strategically. Currently, applicants only pay a flat fee for each claim in excess of 20 claims. Australia should adopt a similar approach to Japan, South Korea and Europe by lowering the initial threshold for claim fees, and applying much higher fees for applications with a large number of claims.

4 Other patent system improvements

The ‘second-tier’ patent experiment has failed

In addition to standard patents, Australia has a (second-tier) innovation patent system (IPS). The system’s objective (and that of comparable systems overseas) is to promote innovation by small- and medium-sized enterprises (SMEs). Compared to the standard patent system, the IPS provides more contained rights — innovation patents are limited to five claims and the maximum duration of protection is eight years. Australia’s IPS is little used. In 2015, innovation patents made up fewer than 5 per cent of patents in force.

The IPS was introduced in response to concerns that the previous petty patent system was not meeting the needs of firms (especially SMEs) that invested in ‘incremental innovations’. Reflecting this, the ‘innovative step’ required to receive an innovation patent is lower than the inventive step for standard patents; even where innovation patents apply to obvious contributions, they have been found valid by the courts.

The low innovative threshold has proven more harmful than helpful, including (perversely) for SMEs. It has encouraged a multitude of low value patents, covering everything from a pet bed to a pizza box that converts to a bib. This, in turn, has reduced the credibility that patents provide for attracting finance for commercialisation, and created uncertainty for other innovators who are unsure whether they are infringing on another party’s patent. Patent attorneys openly advertise ways in which users can game the system, including to improve their bargaining position in patent disputes and to frustrate entry by competitors.

Some participants have called for the IPS to be abolished; others have called for its reform. Were the IPS to be reformed, there would be strong grounds to exclude obvious inventions by setting the innovative step at the same level as the inventive step for standard patents. It would also be necessary to address strategic behaviour, most likely by reintroducing a mandatory examination process, and limiting the period in which damages could apply. However, reforming the IPS along these lines would see innovation patents resemble petty patents, and so represent a return to an approach already found to be lacking — tantamount to a policy ‘Groundhog Day’. The community’s interests, and the interests of SMEs, would be better served by abolishing innovation patents and directly tackling the IP issues of greatest concern to SMEs, such as patent infringement and enforcement costs.

Software patents — staying on track

The rise of the digital economy means that software is now a part of many everyday goods and services, and is a vital building block for new ideas and technologies. But while software represents the future, the legal constructs of software patents are stuck in the past — using concepts that stem from England’s 1624 Statute of Monopolies. Unsurprisingly, the use of a four century old definition has proven challenging to apply to contemporary innovations.

Software innovations are also increasingly at odds with the economic underpinnings of the patent system. Software development typically occurs rapidly, builds sequentially on existing ideas, and is getting cheaper. In contrast, patents provide a long period of protection and can frustrate follow-on innovation. Over the last decade, there has been growing concern that software patents are being used to protect simple or straightforward ideas, and to gain exclusivity over existing business processes that are merely automated using a computer, rather than being particularly novel.

Recent court decisions have helped to narrow the circumstances where computer-implemented innovations can gain patent protection. Business methods are no longer patentable, and other software innovations must now embody some technical contribution in order to qualify for patent protection. The Commission's proposed patent reforms would assist further in limiting low-value software patents.

The patentability of software merits close and ongoing scrutiny given its importance to the modern economy, and to ensure that the effect of recent legal decisions has been in the best interests of the community.

5 Pharmaceuticals — a better policy prescription

The pharmaceutical sector relies on IP protection more than most, since many pharmaceutical advances require large upfront investment in research and development and are easy to copy. In addition to the standard suite of IP protections, the pharmaceutical sector benefits from bespoke IP arrangements.

Extensions of term

Further to the 20-year term applying to all patents, pharmaceutical patents can qualify for an additional five years of protection. Extensions of term (EoT) are capped at an effective market life of 15 years. These bespoke arrangements were intended to attract pharmaceutical research and development investment to Australia and to improve incentives for innovation by providing an effective market life for pharmaceuticals more in line with other technologies.

However, Australia's EoT scheme has had little effect on investment and innovation; Australia represents a meagre 0.3 per cent of global spending on pharmaceutical research and development. As pharmaceutical companies have acknowledged, the prospect of future returns in such a small market (accounting for only 2 per cent of global pharmaceutical revenues) provides little in the way of additional incentive.

Moreover, the benefits sought from EoT arrangements have proven largely illusory, resulting in a costly policy placebo. Poor targeting means that more than half of new chemical entities approved for sale in Australia enjoy an extension in patent term, and consumers and governments face higher prices for medicines.

Rather than compensating firms for being slow to introduce drugs to the Australian market, extensions should only be allowed where the actions of the regulator result in an *unreasonable* delay. Timeframes (of around one year) set by Government for the Therapeutic Goods Administration (TGA) provide a ready benchmark for determining what constitutes a reasonable processing period. EoT should only be granted where the time taken by the regulator exceeds this period. The Commission estimates that this approach would lower the cost of pharmaceuticals in Australia and save consumers and taxpayers more than \$250 million per year.

Sharing rather than protecting data

The confidential data submitted in support of regulatory approval processes are also protected for a period of five years. During this period, manufacturers of generic pharmaceuticals must independently prove that their products are safe and effective, even though they are chemically identical to already approved drugs.

Pharmaceutical companies have pressed the Australian Government to extend the duration of data protection. They view data protection as an insurance policy to guard against what they see as inadequate patent protection. Most recently, negotiations for the Trans-Pacific Partnership Agreement saw (unsuccessful) calls to extend data protection for biologics from 5 to 12 years.

Despite decade-long claims of inadequate patent protection, there is little evidence of a problem. Even if isolated cases were verified as genuine, extending protection to a broad class of products to address exceptional cases would represent a blunt and costly response. And using data protection as a proxy for patent protection has drawbacks. Beyond the obvious absence of disclosure of information to promote further innovation, data protection lacks other important balances that apply to patents. Data protection arises automatically and cannot be challenged in court.

As well as there being strong grounds for resisting further calls to extend the period of data protection, there is a case for making data more widely available. At present, not only are follow-on manufacturers prevented from relying on clinical data for a period of five years, the data is kept confidential indefinitely. Allowing researchers access to this data could provide substantial public health benefits. But doing so unilaterally would have some downsides. Companies may respond by delaying the release of medicines in the Australian market. Accordingly, any moves to publish the relevant data need to be internationally coordinated.

Reducing the scope for strategic behaviour

The ability of companies to leverage their IP rights to forestall entry by generics — effectively extending the term of exclusivity — can have a significant negative impact on consumers and (through the Pharmaceutical Benefits Scheme (PBS)) on taxpayers.

Firms can use a variety of strategies to further extend the commercial life of their products including (so-called) evergreening and pay-for-delay.

Evergreening refers to the strategy of obtaining multiple patents that cover different aspects of the same product, typically on improved versions of existing products. Some of these patents relate to genuine improvements that increase consumer wellbeing, such as significantly reducing side effects of certain medications. However, some ‘improvements’ may involve a slightly different chemical combination or process of production, which show no appreciable difference to the user. An additional benefit of changing the inventive step is it would reduce the scope for the latter type of behaviour — by granting new patents only for genuinely inventive products.

Pay-for-delay refers to the practice whereby patent holders pay generic manufacturers, as part of a settlement for a patent infringement case, to keep their products off the market beyond the scope of a patent. Delays of this kind limit competition by restricting the number of products on the market and any subsequent price reductions, including those triggered under the PBS.

In contrast to the US and Europe, which have arrangements to detect suspect agreements, Australia has taken a ‘see no evil’ approach to pay-for-delay settlements. A transparent reporting and monitoring system should be put in place to detect pay-for-delay settlements. This would require reporting to the Australian Competition and Consumer Commission (ACCC) settlement arrangements between originator and follower pharmaceutical companies that affect the timing of market entry for a generic version of a product into the Australian market. To minimise compliance and transition costs, monitoring arrangements should be based on those employed by the US Federal Trade Commission.

6 Other IP rights

Australia’s IP arrangements encompass other protections. Protections are available for the physical features of products (designs) and their branding or styling (trade marks). *Sui generis* rights are intended to fill apparent gaps in established IP protection, such as in plant varieties and circuit layouts.

Registered designs

Registered design rights serve a niche yet important role in Australia’s IP rights system — protecting the appearance of products that have an industrial or commercial use.

Inquiry participants expressed concerns about Australia’s design rights system, including the low uptake of design rights due to the cost of registration and enforcement, and a poor understanding of design law, which can lead to designers inadvertently losing their rights or failing to seek protection in the first place.

The Australian Government has committed to making changes that would partly address these issues. Following a review by the Advisory Council on Intellectual Property, the Government has agreed, among other things, to the introduction of a grace period for filing registered design applications. This will help ensure designers do not inadvertently lose eligibility for design protection and allow them to undertake some market testing prior to incurring the cost of filing.

The Commission is also recommending some general measures to improve dispute resolution processes, discussed below. These reforms would go some way to addressing concerns among designers about enforcement costs and access to dispute resolution options.

Many participants see joining the Hague Agreement as offering the potential for lowering the costs of registration. Under Hague, Australian designers would be able to seek protection in multiple countries through a single international application. But the benefits to Australian firms, and in particular SMEs, are likely to be much smaller than some anticipate. Filing for protection under the Hague Agreement is not necessarily cheaper than directly filing for protection, particularly where firms seek protection in a limited number of countries. More importantly, joining the Hague Agreement would involve extending the maximum term of protection for registered designs from 10 to 15 years.

The Australian Government has already agreed to further investigate the costs and benefits before making a decision to sign on to Hague. Consistent with the approach taken by the Commission in this inquiry, such a process should ensure the gains from ‘harmonisation’ outweigh the costs of extending term, and that the interests of Australian consumers are adequately considered.

Trade marks

Trade marks help consumers to identify goods and services and provide a means for businesses to build and maintain a positive reputation.

But when trade marks are granted too broadly or in too great a number, they can inhibit new market entrants by making branding difficult — an outcome known as ‘cluttering’. These difficulties have been exacerbated by legislative change, which has broadened the ‘presumption of registrability’, resulting in protection being sought and granted more often.

While legislative change has made it easier to achieve trade mark protection, there has been less effort to ensure unused marks — such as those held by defunct firms — are removed quickly from the trade mark register. Requiring trade mark applicants to nominate whether they are using the mark applied for, and if not, to later provide evidence of use in order to retain trade mark rights would remedy this problem.

The protection and information that trade marks convey is also causing confusion for consumers. Marks are being used to convey an ‘impression’ of provenance or quality. For example, there have been recent cases where goods have been marked with terms or logos to indicate they are handmade in picturesque locales like the Barossa Valley or Byron Bay, when in fact they are factory produced in industrial centres. Strengthening the existing requirements for marks not to be misleading or confusing would address this issue.

Firms also find the trade mark regime confusing, often conflating the protection afforded by a trade mark with that of registering a business name. This confusion can result in firms undertaking costly rebranding after unintentionally infringing on a trade mark. Linking the trade mark and business name registers would reduce this confusion.

The law that governs the importation of legitimately trade marked goods produced in other countries also needs reforming. While the Trade Marks Act contains provisions about when parallel imports may be allowed, recent legal cases have ‘muddied the waters’ to the point where firms are unsure if they are able to import marked goods legally. Amending the Act to make clear that parallel imports are allowed, would resolve the uncertainty and ultimately benefit the community.

Plant breeder’s rights

Plant breeder’s rights (PBRs) provide their holders with exclusive, time-limited control over the sale and propagation of registered plant varieties. PBR protection is less extensive than patent protection because of the breeder’s exception, which recognises the incremental and long-term nature of conventional plant breeding, and allows new plant varieties to be used in further breeding programs.

PBRs have helped transform agricultural plant breeding in Australia by introducing competition and price signals to a market that was previously characterised by a high degree of state provision. Growers pay directly for access to new plant varieties, and their willingness to pay rewards successful breeders.

Notwithstanding the success of the regime in encouraging greater private sector activity, plant breeders and other stakeholders have expressed concern that the scope of protection provided by PBRs is being undermined by technological changes. This may have opened the door to greater free-riding on protected varieties. Currently, so long as they do not register copied varieties with IP Australia, breeders are potentially able to copy and sell PBR-protected varieties with only minor variations, undermining the protection afforded by the right. Amending the Act would address this.

Misrepresentation of varieties and refusal to pay royalties remain concerns, particularly for breeders of pasture crops. Improving compliance with PBR and licensing agreements is best achieved through closer cooperation and consultation, with industry groups best placed to lead these efforts.

Circuit layout rights

Circuit layout rights (CLRs) protect the layout designs (three-dimensional topography) of integrated circuits. The rights granted to circuit designers are narrow, and rapid change in the industry has brought the need for CLRs into question. Most circuits are custom designed for specific purposes and not generally adaptable for other uses.

Australia's adoption of CLRs is illustrative of the 'protect first, assess later' way IP rights have been expanded in the past. While the legislative protection for circuit layouts was premature, given international obligations, the removal of such rights would cause more problems than solutions. Retaining CLRs remains the 'least worst' option.

7 Improving the broader landscape

Improving interactions between IP rights and competition policy

IP rights holders currently enjoy an exemption from aspects of Australia's competition law. But the rationale for the exemption has largely fallen away. IP rights and competition are no longer thought to be in 'fundamental conflict'. IP rights do not, in and of themselves, have significant competition implications.

Recognising that competition and IP policy are not at odds, a better approach would allow the ACCC to address any anticompetitive conduct, while minimising uncertainty for rights holders and licensees. Repealing the exemption, combined with ACCC guidance on the application of competition law to IP transactions, would achieve this outcome.

No less than seven reviews have recommended repealing the exemption. The only remaining obstacle to doing so will be removed when recommendations of the Harper Competition Policy Review, to limit the scope of 'per se' prohibitions on anticompetitive conduct, are given effect.

Commercialisation of publicly-funded research

IP arrangements can facilitate commercialisation of publicly-funded research by allowing exclusivity over certain inventions created with the benefit of public funding. Where IP rights are used in combination with broader innovation policies, such as direct funding for research, it is important that the neutrality of public sector funding allocation is not compromised.

The current policy settings for publicly-funded research, whereby recipients of funding own any resultant IP, and specialised technology transfer offices facilitate the dissemination of research results, are generally sound.

However, copyright restrictions on access to publicly-funded research publications limit the dissemination of knowledge, and digitisation has significantly diminished the rationale for limiting access in this way. Publicly-funded research publications should be available to the public under open access arrangements after a 12 month embargo period.

Suggestions for a ‘use it or lose it’ approach to university-owned IP are not supported by the available evidence, and may impose a higher barrier to access than existing compulsory licensing arrangements. Recent concerns around low rates of research collaboration have prompted government, academic and industry-led initiatives to improve the commercialisation of publicly-funded research. These initiatives should be given time to work before any further interventionist approaches are considered.

Making it easier to resolve IP disputes

While large, well-resourced firms are able to satisfactorily resolve their IP disputes, SMEs are often deterred from doing so due to the high costs and risks involved. Participants pointed to the UK’s Intellectual Property Enterprise Court (IPEC) as one model for addressing these concerns. The Commission has examined this model and the evidence suggests that the IPEC has improved access to justice for SMEs, who now have an avenue for timely and low cost dispute resolution.

The Federal Court has already initiated reforms to improve the efficiency of IP litigation in Australia. While welcome, these reforms are unlikely to provide the savings to litigants afforded by the IPEC model. The benefits of the IPEC derive from its ability to minimise parties’ court appearances and the limits on claimable damages and costs. Some see the specialist nature of the court as further contributing to its success.

The Federal Circuit Court was established to be a lower cost court with less formal rules. Consistent with this approach, the Federal Circuit Court routinely refers IP cases to mediation prior to litigation. Its ‘low-cost DNA’ and informal approach makes it well-placed to play a greater role in resolving lower value IP disputes.

The Commission recommends the Federal Circuit Court introduce a specialist IP list, with procedural rules similar to the IPEC. The Court’s jurisdiction should be expanded to cover the full range of IP matters, mandatory caps should apply to cost and damages awards, and strict case management adopted to minimise court events. A separate small claims track suitable for self-represented litigants should provide an informal forum for low-value cases.

The Commission anticipates that these reforms will result in some additional demand for the Court’s services. The Court should be adequately resourced to ensure that any increase in its workload does not result in longer resolution times.

8 Charting a new course in IP policy

Strengthening domestic governance arrangements

Australia has strayed on IP policy for a number of reasons. The absence of an overarching objective, policy framework and reform champion have collectively contributed to poor policy outcomes.

To promote a more coherent, economywide perspective, there would be value in specifying the overarching objectives of the IP system to inform the broader community and guide agencies and departments involved in IP policy development and administration. A common framework for formulating IP policy would also assist; the four principles employed by the Commission throughout this report provide a ready starting point (figure 3).

Responsibility for policy development and advice being shared across multiple agencies has further contributed to poor policy outcomes. The Department of Industry, Innovation and Science (DIIS) has kept a low profile in IP policy debates and has afforded few resources to this responsibility. IP Australia has played a more active policy role, but in doing so has blurred the line between policy development and administration. To help clarify the respective roles of the IP administrator and the department, and to increase transparency, the Minister responsible for IP should outline the functions and responsibilities for IP Australia through a public statement of expectations. The statement could cover issues such as the Government's overall objectives for the IP system (mentioned above) and how IP Australia should contribute to IP policy development.

The Commission also considered whether consolidating responsibility for IP policy (including for copyright) into a single department would promote a more coherent approach. While such an approach has merit, on balance the Commission considers that the Government should instead introduce an interdepartmental IP Policy Group that is responsible for overseeing IP policy development. Doing so would provide many of the same benefits of policy consolidation, but with relatively low costs and disruption to the system. This should be complemented with formal arrangements specifying how agencies and departments will work together to achieve the objectives of the IP system and adhere to the common policy framework.

Good governance is equally important for private sector intermediaries. In Australia, as well as overseas, copyright collecting societies issue collective licences, collect payments from users, and distribute royalties to their rights holder members. Collective licensing has merit to the extent that it can help reduce transaction costs, particularly for high volume, low-value transactions. But the ability to collectively license IP rights can also give rise to market power.

It is for this reason that Australia's collecting societies are governed by a voluntary code of conduct and (while lesser known) subject to ACCC scrutiny. However, participants raised concerns about the efficacy of the current code of conduct and the extent to which it constrains the behaviour of collecting societies.

There are grounds for bolstering these arrangements. The code is voluntary and does not appear to be as robust as those operating in other jurisdictions, such as Europe. The ACCC should review the guidelines to ensure that they not only reflect contemporary international best practice, but are being followed. This review would also inform whether the guidelines are made mandatory.

Better understanding and pursuing our international interests

A 'more is better' mindset, and poor consultation and transparency, have proven problematic in Australia's international IP dealings. International agreements that commit Australia to implement specific IP provisions — such as the duration of patent or copyright protection — have worked against Australia's interests. These agreements typically involve trade-offs, and keen to cut a deal, Australia has capitulated too readily.

Australia's cooperation with other countries on IP arrangements should focus on minimising the transaction costs associated with assigning, using and enforcing IP rights, and encouraging more balanced policy arrangements for patents and copyright. Supporting global cooperation among international patent offices through the World Intellectual Property Organization is a good example.

Good policy outcomes also depend on a high-quality information and evidence base, underpinned by transparent policy development. Many inquiry participants expressed concerns with Australia's approach to negotiating IP provisions in international agreements, and the absence of meaningful stakeholder consultation. As international treaties strongly influence Australia's IP settings, and are difficult to reverse, transparency and substantive public consultation processes are critical.

As the Commission and others have previously recommended, greater use of independent and public reviews, and more effective consultation, would improve treaty-making processes. These recommendations are equally applicable to agreements dealing with Australia's IP arrangements.

There is also scope to better identify and articulate defensive and offensive interests. Some examples could include maintaining the right to draft exceptions and limitations (such as in public health) and identifying 'no go' outcomes (such as retrospective extensions of IP rights).

Finally, the Commission has identified specific reforms that Australia should pursue with like-minded countries in the 'long game' of achieving more balanced IP settings. These include introducing formalities for copyright, improving the quality of patents, and

allowing manufacture of pharmaceuticals for export, as well as the publication of clinical trial data. This should not be seen as an exercise in horse-trading or cajoling. Many of the issues are equally problematic in other countries. An overdue review of the TRIPS Agreement by the World Trade Organization would be a helpful first step.

9 An improved IP system has broad benefits

International agreements significantly constrain Australia's flexibility for IP policy reform. Nonetheless, the Commission has identified improvements to better target IP protection while not unduly disadvantaging rights holders. The package of reforms is expected to improve community wellbeing.

- Consumers would benefit from access to new and cheaper goods and services, and more easily avoid unintentional infringement.
- Government and ultimately taxpayers would benefit from a substantial reduction in health costs through a more efficient PBS.
- Rather than hindering innovation and creativity as claimed by some participants, IP reform would also invigorate innovation as:
 - Australian firms will be able to take full advantage of opportunities in cloud computing solutions
 - medical and scientific researchers will be able to better utilise text and data mining
 - universities will have the flexibility to offer Massive Open Online Courses
 - the education sector will avoid paying millions of dollars each year to use materials that are freely available online
 - innovative SMEs will be able to innovate without fear of infringing frivolous or strategic patents and be better able to enforce legitimate rights through low-cost dispute resolution mechanisms.

Table 1 summarises the anticipated benefits from pursuing the Commission's recommendations.

But achieving reform will not be easy. Some vocal interest groups have long shaped Australia's IP arrangements to advance their own interests. And in the past, reform efforts have more often than not succumbed to misinformation and scare campaigns. The same tactic has been deployed here, with some parties publishing more fiction than fact about the Commission's draft report. Government will need to show steely resolve to pursue a better balanced IP system in the face of strong vested interests.

Table 1: Summary of reforms and their expected benefits

<i>Proposed reform</i>	<i>Expected benefits</i>
PATENTS	
Raise the inventive step for patent eligibility, add an objects clause to the Patents Act, improve patent filing processes, restructure patent fees and abolish the innovation patent system (7.1, 7.2, 7.3, 7.4 and 8.1).	Elevate patent quality over time to improve the signal value of patents, reducing thickets, limiting strategic misuse and shortening pendency, stimulating innovation and business activity. Restructuring renewal fees will reduce the risk that poor quality patents remain entrenched.
Reform extensions of term for pharmaceutical patents (10.1).	Reforming extensions of term will lower the cost of pharmaceuticals, benefiting consumers and saving the government an estimated \$258 million each year. Additional public health benefits will arise from improved access to affordable medicines.
Improve monitoring of settlements between originator and generic drug companies (10.2).	Reducing opportunities for pay-for-delay settlements will ensure timely access to affordable medicines and improve competition in the pharmaceuticals market for the benefit of consumers.
COPYRIGHT	
Replace Australia's existing fair dealing exceptions in the Copyright Act with a broad and open-ended fair use exception (6.1).	Australia's copyright system will better adapt to technological change and new uses of copyright material, without compromising incentives to create. Improved access to copyright works would increase economic activity and community welfare. Material gains include: <ul style="list-style-type: none"> • In the case of orphan works, flexible exceptions that improve access are conservatively estimated to generate new economic activity worth between \$10 million and \$20 million per year. • Consumers would enjoy better access to archived, commercially-unavailable, or otherwise hard-to-access works. • Fair use would end the practice where education and government users pay statutory licence fees for freely available online material, saving taxpayers an estimated \$18 million per annum.
Repeal parallel import restrictions for books (5.3).	Australian consumers will be able to directly access competitively priced books in Australian bookstores. Compared to average selling prices in the UK, prices in Australia are higher by an average of 20 per cent. This will benefit consumers (especially students), Australian bookstores, and overall community welfare.
Strengthen the Copyright Act to make clear circumventing geoblocking technology is not a copyright infringement (5.2).	Consumers of software, TV shows, movies, music and games gain from better access and more competitive prices. Greater consumer certainty will drive competition and reduce price differentials between Australian and overseas markets — which were about 49 per cent in professional software, 67 per cent in music, and 61 per cent in games in 2013.

<i>Proposed reform</i>	<i>Expected benefits</i>
ACCC review to ensure best practice in governance, reporting and transparency arrangements for collecting societies (5.4).	Best practice governance and transparency will improve the efficiency of collecting societies and their distribution practices, and facilitate fair negotiations between users and rights holders. Separate accounting of statutory and voluntary licence revenue will ensure taxpayer funds achieve value for money.
OTHER IP RIGHTS	
Trade marks	
Expedite the removal of unused marks, and make it harder to register misleading marks (12.1).	Fewer but more accurate trade marks will enhance their value to businesses and consumers.
Link the business name and trade mark registers, and allow the importation of legitimately marked goods (12.1).	Linking the trade mark and business name registers will reduce renaming and rebranding costs caused by unintentional infringement, while allowing legitimate imports will lead to lower prices and greater choice for consumers.
Plant Breeders' Rights	
Enable IP Australia to make essentially derived variety declarations in respect of any new plant variety (13.1).	Improved enforcement and compliance will increase incentives to invest in pasture and fodder crop breeding, contributing to genetic gain increases and boosting livestock farming productivity and profitability.
ENFORCEMENT AND GOVERNANCE	
Enhance the role of the Federal Circuit Court by introducing a dedicated IP list with caps on claimable costs and damages (19.2).	Individuals and SMEs would face lower costs to resolve IP disputes through the court system. Lower risks and costs provide rights holders with greater certainty while improving access to enforcement and justice.
Expand the safe harbour scheme to cover all online service providers (19.1).	Online service providers, such as cloud computing firms, would face fewer impediments to establish operations in Australia. The copyright system will be more adaptable as new services and technologies are developed, facilitating greater innovation. Aligning with international systems further reduces business uncertainty.
Implement an open access policy for publicly-funded research (16.1).	Publicly-funded research publications will be cheaper to access, facilitating faster and wider dissemination of the knowledge and ideas contained within them.
Identify overarching objectives and a common framework for IP policy development, and establish an interdepartmental policy group and other formal working arrangements between agencies (17.1).	Adherence to a whole-of-government policy framework will promote a more balanced and integrated approach to IP policy and its development.
Develop best practice guidance for developing IP provisions in international treaties (17.2).	More independent input and transparency in trade negotiations involving IP will promote public confidence and help ensure any changes to IP laws are in Australia's interests.
Work with like-minded countries through multilateral forums to achieve more balanced IP settings and to reduce transaction costs (18.1).	Greater balance in IP arrangements will facilitate the production of creative works and innovation (including follow-on innovation), boosting productivity. Reducing the risks and costs of seeking protection abroad will facilitate the flow of IP and capital across borders.

Recommendations and findings

Chapter 2: An analytical framework for assessing the IP system

RECOMMENDATION 2.1

In formulating intellectual property policy, the Australian Government should be informed by a robust evidence base and be guided by the principles of:

- *effectiveness*, which balances providing protection to encourage additional innovation (which would not have otherwise occurred) and allowing ideas to be disseminated widely
- *efficiency*, which balances returns to innovators and to the wider community
- *adaptability*, which balances providing policy certainty and having a system that is agile in response to change
- *accountability*, which balances the cost of collecting and analysing policy-relevant information against the benefits of having transparent and evidence-based policy that considers community wellbeing.

Chapter 4: Copyright term and scope

FINDING 4.1

The scope and term of copyright protection in Australia has expanded over time, often with no transparent evidence-based analysis, and is now skewed too far in favour of copyright holders. While a single optimal copyright term is arguably elusive, it is likely to be considerably less than 70 years after death.

Chapter 5: Copyright use and licensing

RECOMMENDATION 5.1

The Australian Government should amend the *Copyright Act 1968* (Cth) to:

- make unenforceable any part of an agreement restricting or preventing a use of copyright material that is permitted by a copyright exception
- permit consumers to circumvent technological protection measures for legitimate uses of copyright material.

RECOMMENDATION 5.2

The Australian Government should:

- amend the *Copyright Act 1968* (Cth) to make clear that it is not an infringement for consumers to circumvent geoblocking technology, as recommended in the House of Representatives Standing Committee on Infrastructure and Communications' report *At What Cost? IT pricing and the Australia tax*
- avoid any international agreements that would prevent or ban consumers from circumventing geoblocking technology.

RECOMMENDATION 5.3

The Australian Government should proceed to repeal parallel import restrictions for books to take effect no later than the end of 2017.

RECOMMENDATION 5.4

The Australian Government should strengthen the governance and transparency arrangements for collecting societies. In particular:

- The Australian Competition and Consumer Commission should undertake a review of the current code, assessing its efficacy in balancing the interests of copyright collecting societies and licensees.
- The review should consider whether the current voluntary code: represents best practice, contains sufficient monitoring and review mechanisms, and if the code should be mandatory for all collecting societies.

Chapter 6: Fair use or fair dealing — what is fair for Australia?

RECOMMENDATION 6.1

The Australian Government should accept and implement the Australian Law Reform Commission's final recommendations regarding a fair use exception in Australia.

RECOMMENDATION 6.2

The Australian Government should enact the Australian Law Reform Commission recommendations to limit liability for the use of orphan works, where a user has undertaken a diligent search to locate the relevant rights holder.

Chapter 7: The patent system — getting the fundamentals right

RECOMMENDATION 7.1

The Australian Government should incorporate an objects clause into the *Patents Act 1990* (Cth). The objects clause should describe the purpose of the legislation as enhancing the wellbeing of Australians by promoting technological innovation and the transfer and dissemination of technology. In so doing, the patent system should balance over time the interests of producers, owners and users of technology.

FINDING 7.1

The *Raising the Bar* initiative moved the inventive step and other elements of patent law in the right direction by raising the threshold for granting a patent. There is a strong case, however, for further raising the threshold.

RECOMMENDATION 7.2

The Australian Government should amend ss. 7(2) and 7(3) of the *Patents Act 1990* (Cth) such that an invention is taken to involve an inventive step if, having regard to the prior art base, it is not obvious to a person skilled in the relevant art. The Explanatory Memorandum should state:

- a ‘scintilla’ of invention, or a scenario where the skilled person would not ‘directly be led as a matter of course’, are insufficient thresholds for meeting the inventive step
- the ‘obvious to try’ test applied in Europe would in some instances be a suitable test.

IP Australia should update the Australian Patent Office Manual of Practice and Procedure such that it will consider the technical features of an invention for the purpose of the inventive step and novelty tests.

RECOMMENDATION 7.3

IP Australia should reform its patent filing processes to require applicants to identify the technical features of the invention in the set of claims.

RECOMMENDATION 7.4

The Australian Government and IP Australia should set patent fees to promote broader intellectual property policy objectives, rather than the current primary objective of achieving cost recovery. To this end, the Australian Government, with input from IP Australia, should:

- restructure patent renewal fees such that they rise each year at an increasing rate (including years in which patents receive an extension of term) — fees later in the life of a patent would well exceed current levels
- reduce the initial threshold for claim fees, and increase claim fees for applications with a large number of claims.

Chapter 8: The innovation patent system

RECOMMENDATION 8.1

The Australian Government should abolish the innovation patent system.

Chapter 9: Business method patents and software patents

FINDING 9.1

Raising the inventive step, requiring technical features in patent claims, and the inclusion of an objects clause would better balance the patent rights of software innovators and users.

Chapter 10: Pharmaceuticals - getting the right policy prescription

RECOMMENDATION 10.1

The Australian Government should reform extensions of patent term for pharmaceuticals such that they are only:

- (i) available for patents covering an active pharmaceutical ingredient, and
- (ii) calculated based on the time taken by the Therapeutic Goods Administration for regulatory approval over and above 255 working days (one year).

The Australian Government should reform s. 76A of the *Patents Act 1990* (Cth) to improve data collection requirements for extensions of term, drawing on the model applied in Canada. Thereafter no extensions of term should be granted until data is received in a satisfactory form.

FINDING 10.1

There are no grounds to extend the period of data protection for any pharmaceutical products, including biologics.

RECOMMENDATION 10.2

The Australian Government should introduce a system for transparent reporting and monitoring of settlements between originator and generic pharmaceutical companies to detect potential pay-for-delay agreements. This system should be based on the model used in the United States, administered by the Australian Competition and Consumer Commission, and include guidelines on the approach to monitoring as part of the broader guidance on the application of the *Competition and Consumer Act 2010* (Cth) to intellectual property (recommendation 15.1).

The monitoring should operate for a period of five years. Following this period, the Australian Government should review the regulation of pay-for-delay agreements (and other potentially anticompetitive arrangements specific to the pharmaceutical sector).

Chapter 11: Registered designs

FINDING 11.1

The Australian Government has committed to implement many of the recommendations made by the Advisory Council on Intellectual Property in its recent review of Australia's designs system. These measures will help address participant concerns about the cost of acquiring registered design rights, and the lack of understanding of design law.

Recommendation 19.2 provides for a low-cost avenue for IP enforcement currently sought by designers.

Chapter 12: Trade marks and geographical indications

RECOMMENDATION 12.1

The Australian Government should amend the *Trade Marks Act 1995* (Cth) to:

- reduce the grace period from 5 years to 3 years before new registrations can be challenged for non-use
- remove the presumption of registrability in assessing whether a mark could be misleading or confusing at application
- ensure that parallel imports of marked goods do not infringe an Australian registered trade mark when the marked good has been brought to market elsewhere by the owner of the mark or its licensee. Section 97A of the *Trade Marks Act 2002* (New Zealand) could serve as a model clause in this regard.

IP Australia should:

- require those seeking trade mark protection to state whether they are using the mark or 'intending to use' the mark at application, registration and renewal, and record this on the Australian Trade Mark On-line Search System (ATMOSS). It should also seek confirmation from trade mark holders that register with an 'intent to use' that their mark is actually in use following the grace period, with this information also recorded on the ATMOSS
- require the Trade Marks Office to return to its previous practice of routinely challenging trade mark applications that contain contemporary geographical references (under s. 43 of the Trade Marks Act)
- in conjunction with the Australian Securities and Investment Commission, link the ATMOSS database with the business registration portal, including to ensure a warning if a business registration may infringe an existing trade mark.

RECOMMENDATION 12.2

The Australian Government should amend the *Australian Grape and Wine Authority Act 2013* (Cth) and associated regulations to allow the Geographical Indications (GIs) Committee to amend or omit existing GIs in a manner similar to existing arrangements for the determination of a GI (including preserving the avenues of appeal to the Administrative Appeals Tribunal). Any omissions or amendments to GIs determined in such a manner should only take effect after a ‘grace period’ determined by the GI Committee on a case-by-case basis.

Chapter 13: Plant Breeder’s Rights

RECOMMENDATION 13.1

The Australian Government should proceed to implement the Advisory Council on Intellectual Property’s 2010 recommendation to amend the *Plant Breeder’s Rights Act 1994* (Cth) to enable essentially derived variety (EDV) declarations to be made in respect of any variety.

Chapter 14: Circuit layout rights

FINDING 14.1

Dedicated intellectual property protection for circuit layouts is not ideal and seldom used, but given Australia’s international commitment to protect circuit layouts and no superior alternatives, the best policy option is to maintain the status quo.

Chapter 15: Intellectual property rights and competition law

RECOMMENDATION 15.1

The Australian Government should repeal s. 51(3) of the *Competition and Consumer Act 2010* (Cth) (Competition and Consumer Act) at the same time as giving effect to recommendations of the (Harper) Competition Policy Review on the per se prohibitions.

The Australian Competition and Consumer Commission should issue guidance on the application of part IV of the Competition and Consumer Act to intellectual property.

Chapter 16: IP and public institutions

RECOMMENDATION 16.1

The Australian, and State and Territory governments should implement an open access policy for publicly-funded research. The policy should provide free and open access arrangements for all publications funded by governments, directly or through university funding, within 12 months of publication. The policy should minimise exemptions.

The Australian Government should seek to establish the same policy for international agencies to which it is a contributory funder, but which still charge for their publications, such as the Organisation for Economic Cooperation and Development.

FINDING 16.1

The adoption of an additional ‘use it or lose it’ provision for patents owned by publicly-funded organisations is not warranted.

Chapter 17: Intellectual property’s institutional arrangements

RECOMMENDATION 17.1

The Australian Government should promote a coherent and integrated approach to IP policy by:

- establishing and maintaining greater IP policy expertise in the Department of Industry, Innovation and Science
- ensuring the allocation of functions to IP Australia has regard to conflicts arising from IP Australia’s role as IP rights administrator and involvement in policy development and advice
- establishing a standing (interdepartmental) IP Policy Group and formal working arrangements to ensure agencies work together within the policy framework outlined in this report. The Group would comprise those departments with responsibility for industrial and creative IP rights, the Treasury, and others as needed, including IP Australia.

FINDING 17.1

Australia's approach to negotiating IP provisions in international treaties could be improved through greater use of independent impact assessment and more meaningful stakeholder consultation.

RECOMMENDATION 17.2

The Australian Government should charge the interdepartmental IP Policy Group (recommendation 17.1) and the Department of Foreign Affairs and Trade with the task of developing guidance for IP provisions in international treaties. This guidance should incorporate the following principles:

- avoiding the inclusion of IP provisions in bilateral and regional trade agreements and leaving negotiations on IP standards to multilateral fora
- protecting flexibility to achieve policy goals, such as by reserving the right to draft exceptions and limitations
- explicitly considering the long-term consequences for the public interest and the domestic IP system in cases where IP demands of other countries are accepted in exchange for obtaining other benefits
- identifying no go areas that are likely to be seldom or never in Australia's interests, such as retrospective extensions of IP rights
- conducting negotiations, as far as their nature makes it possible, in an open and transparent manner and ensuring that rights holders and industry groups do not enjoy preferential treatment over other stakeholders.

Chapter 18: International cooperation in IP

RECOMMENDATION 18.1

The Australian Government should:

- pursue international collaborative efforts to streamline IP administrative and licensing processes separately from efforts to align standards of IP protection. In so doing, it should consider a range of cooperative mechanisms, such as mutual recognition
- use multilateral forums when seeking to align standards of protection.

RECOMMENDATION 18.2

The Australian Government should play a more active role in international forums on intellectual property policy — areas to pursue include:

- calling for a review of the TRIPS Agreement (under Article 71.1) by the WTO
- exploring opportunities to further raise the threshold for inventive step for patents
- pursuing the steps needed to explicitly allow the manufacture for export of pharmaceuticals in their patent extension period
- working towards a system of eventual publication of clinical trial data for pharmaceuticals in exchange for statutory data protection
- identifying and progressing reforms that would strike a better balance in respect of copyright scope and term.

Chapter 19: Compliance and enforcement of IP rights

RECOMMENDATION 19.1

The Australian Government should expand the safe harbour scheme to cover not just carriage service providers, but all providers of online services.

FINDING 19.1

Timely and competitively-priced access to copyright-protected works is the most efficient and effective way to reduce online copyright infringement.

RECOMMENDATION 19.2

The Australian Government should introduce a specialist IP list in the Federal Circuit Court, encompassing features similar to those of the United Kingdom Intellectual Property Enterprise Court, including limiting trials to two days, caps on costs and damages, and a small claims procedure.

The jurisdiction of the Federal Circuit Court should be expanded so it can hear all IP matters. This would complement current reforms by the Federal Court for management of IP cases within the National Court Framework, which are likely to benefit parties involved in high value IP disputes.

The Federal Circuit Court should be adequately resourced to ensure that any increase in its workload arising from these reforms does not result in longer resolution times.

The Australian Government should assess the costs and benefits of these reforms five years after implementation, also taking into account the progress of the Federal Court's proposed reforms to IP case management.