Submission to the Productivity Commission's Inquiry into Intellectual Property Arrangements

Open Source Industry Australia Ltd

Amplifying the voice of the Australian Open Source Software Industry

Lodged 30 November 2015

Summary

1 About Open Source Industry Australia

Open Source Industry Australia Ltd (here after refereed to as OSIA) represents & promotes the Australian open source industry by:

- Ensuring that the Australian business, government and education sectors derive sustainable financial and competitive advantage through the adoption of open source and open standards;
- Helping Australian Governments to achieve world leadership in providing a policy framework supportive of open standards and of the growth and success of the Australian open source industry;
- Ensuring Australia's global standing as the preferred location from which to procure open source services & products.

OSIA's members are organisations in Australia who invest in or build their future on the unique advantages of open source software. For further information, see the OSIA website at http://osia.com.au.

1.1 Contacts

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1.2 Copyright

2 Response to the Productivity Commission

The following pages contain OSIA response to the review of Australia's Intellectual Property Laws. The areas we have sought to respond to are ones that directly affect our members, Copyrights and Patents. OSIA have also given comments on the presented framework for evaluating the new structure.

3 Patents

3.1 Use of Patents within the Software Industry

We confine comments here solely to patents in relation to computer software, as that is the principal field in which the OSIA members innovate.

3.2 Changes Proposed

We propose that computer software be excluded from the scope of patentable subject matter altogether. For further information see our submission to the ACIP Review of the Innovation Patent System[1] where we also discussed Standard Patents.

3.3 Answers to Issues Report Questions

What evidence is there that patents have facilitated innovations that would not have otherwise occurred, or have imposed costs on the community, including by impeding follow-on innovation?

Are there aspects of Australia's patent system that act as a barrier to innovation and growth? If so, how could these barriers be addressed?

Is the existing coverage of patents optimal? Are there areas of innovation that should be included/excluded? Should the duration of patent protection take into account how the development of IP was funded?

There is no evidence to suggest that patents on computer software have facilitated any innovations that would not have otherwise occurred. On the contrary, patents on computer software act as barriers to progress in the field.

This is due to the nature of the rights granted to patent holders (compared to those granted to copyright holders) and to the nature of the software development process.

Throughout its relatively brief (less than 60 year) history, almost all progress in the field of computer software has been achieved iteratively—through programmers building upon, extending and improving the published ideas of other programmers.

Sometimes that progress is facilitated by a software developer releasing his or her work under a license designed to encourage the creation of derivative works (as is the case with all open source software), but virtually *always* that progress has been achieved by building upon the *ideas* of earlier programmers.

A patent on a computer program grants a monopoly on the *idea* embodied in that program (as opposed to a monopoly on the specific *embodiment* of that idea as is the case with copyright).

Such an arrangement stifles innovation, by delaying further iterative progress in the field by 20 years[2]. This consequence runs counter to the original purpose of the patent system (to encourage progress in the field). The 2015 Future of Open Source survey, conducted by Black Duck Software[3] found that 66% of companies surveyed reported creating software for customers built on open source.

1 Burton, J., Hideo, M., Christie, D. & Jitnah, D., *Submission to ACIP review of the innovation patent system*, Open Source Industry Australia Ltd, 4 Oct 2013, pp. 4-8. Available at http://osia.com.au/drupal7/corporate-documents/osias-submission-australian-advisory-council-intellectual-property.

4 Copyright

4.1 Use of Copyright within the Software Industry

In recent years in the Software Industry we have seen the rise of use of Open Source licensed software. The penetration of this license model has seen use everywhere from the White House, Australian Federal Government, Enterprise, SMB and with entrepreneurs. The use of Open Source licenses within the Start-Up scene has seen rapid growth and adoption. This is in part to the nature of web development which by nature of the inclusion of programming languages and libraries that themselves are licensed under Open Source use, attribution, distribution, modification rights frameworks.

Open Source Licensing systems have occurred to accommodate with the markets need for modification, distribution and attribution requirements that differ from the traditional Copyright objectives. This enables a creator to articulate how they would like their media used by the consumer. Which allows for greater transparency on the part of both the creator and the consumer. This then transfers to a greater understanding within the Market Place of consumers rights for certain media/assets.

Due for the need in technology to get to market quickly the concept of sharing code and technology libraries is one which is employed in not just the workforce of Australian and World Wide IT but also in the method of teaching Computer Science. If you take a look at any mobile application, banking software or website you interact with you can assume that there is code and concepts that have been shared under CopyLeft rights structures. With the inclusion of a Creative Commons [ref to CC] style Rights Framework for digital assets there will be a clearer guideline for creators and consumers on the rights they hold. This will encourage creativity and entrepreneurship with the Software Development space as creators can clearly select the rights for distribution, modification and attribution then select the best business model around their chosen license.

4.2 Changes Proposed

The recent changes to the Copyright Act included an increase of the length of Term of Copyright from 50 years to 70 years. We propose that there should be no further increase to the length of Term of Copyright.

Stating within the Act that the application of fair-use applies to all digital assets and digitisation works.

The need for the Copyright Act to preserve the creators right to replace specific requirements by way of use of an Open Source License which may add or remove rights of use in addition to the Copyright Act.

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2 20 years in the case of standard patents. “Innovation” patents, despite having shorter terms, are even more insidious, as the practise of grant without examination gives rise to total uncertainty about whether any given innovation patent will become enforceable. For legal risk management purposes therefore those who would otherwise seek to build upon the ideas claimed are discouraged from doing so, even if the claims are such that they would not withstand examination at a later date.

3 https://www.blackducksoftware.com/future-of-open-source

Furthermore an inclusion in the Copyright Act of a use, attribution, distribution, modification framework an example would be the rights framework laid out under Creative Commons. This would see the ability for creators to specify what areas of their work they where willing to share. This would increase competitive incentives for entrepreneurs to enable a rapid approach to adoption of creative works and enable marketing/PR exposure through attribution expressions.

The current Open Gov initiative which sees government department data sets released under Creative Commons could be stipulated further by reference in amendment to the Copyright Act that all future Government public data sets be available under Creative Commons or the inclusion of a Rights Framework within the Copyright Act.

4.3 Answers to Issues Report Questions

The above stated changes seek to address some of the questions presented in the Intellectual Property Issues report under the Copyright section on pages 20 - 21. The questions and the specific areas which are covered above are listed below;

How should the balance be struck between creators and consumers in the digital era?
Inclusion of rights framework for attribution, distribution, modification, use.

What role can fair dealing and/or fair use provisions play in striking a better balance?
Fair-Use to be applied for all digital assets (software, code, audio, video) and digitisation works.

Are copyright exemptions sufficiently clear to give users certainty about whether they are likely to infringe the rights of creators?
No they are too over complicated and could be simplified with the *Inclusion of rights framework for attribution, distribution, modification, use.*

Does the degree of certainty vary for businesses relative to individual users?
Yes, businesses have more resources available to understand what their rights are. However smaller businesses and start-ups can have the same complexities as individuals. The Inclusion of a rights framework [attribution, distribution, modification, use] would allow for a more transparent understanding for all parties and end consumers. A framework could be used and referenced on digital works to visually clearly state the creators license intentions. An example of this is how the creative commons uses visual cues to stipulate the terms the work is licensed under.

To be efficient and effective in the modern era, what (if any) changes should be made to Australia's copyright regime?
Stated in the proposed changes section.

Are there options for a 'graduated' approach to copyright that better targets the creation of additional works?
Inclusion of rights framework for attribution, distribution, modification, use, licensing structure for digitised assets, media and software.

To be efficient and effective in the modern era, what (if any) changes should be made to Australia's copyright regime?
The Copyright Act should be amended by: replacing the narrow Fair Dealings provisions with broader Fair Use provisions (for the reasons explained above); including a [use, attribution, modification, distribution] rights framework (again for the reasons explained above); and removing the TPM anti-circumvention provisions (for the reasons described in the next section).

5 Framework for evaluating IP arrangements Response

The four principles against which issues paper proposed evaluating IP regimes—"Effective", "Efficient", "Adaptable" & "Accountable"—all seem worthy of inclusion in the evaluating framework.

OSIA suggests that a fifth principle—"Equitable", perhaps the most important of all—ought also to be included.

Effective

> "The system should be effective in encouraging *additional* IP that would not have occurred otherwise, and provide incentives to ensure that IP is actively disseminated through the economy and community."

The requirement that any encouragement be specific to the creation of *additional* IP is paramount. Clearly, encouragement serves no purpose with respect to works already created or ideas already invented. It follows naturally that any mooted changes to the duration of the monopolies granted by copyright or patent should not be applied retrospectively.

The requirement that any incentives ensure that IP is actively disseminated has consistently not been applied in recent years[4] and OSIA welcomes its return.

In answer to the specific questions raised in the issues paper:

> "To what extent does the IP system actively disseminate innovation and creative output? Does it do so sufficiently and what evidence is there of this? How could the diffusion of knowledge-based assets be improved, without adversely impacting the incentive to create?"

The existing copyright system neither encourages nor discourages dissemination of creative output actively. Authors are free to set license terms which promote or restrict dissemination at their own discretion. As organisations who publish computer software, our members reap considerable benefit from licensing that software under terms that permit redistribution and modification (as all open source software licenses do). However we recognise that not all classes of copyrightable work share that characteristic and in any event the choice of license terms should remain at the author's discretion.

The existing patent regime actively discourages dissemination of innovation. We recognise that for many classes of invention that may be a necessary cost of using a patent system to encourage investment in research. For computer software however, patents serve only to stifle innovation[5].

4 For example, parallel importation restrictions and the application of anti-TPM-circumvention measures to circumvention for purposes that do not infringe copyright are two obvious aspects of the current copyright regime that actively work against the goal of disseminating useful works through the economy and community

5 See Response to Patents Section Three

> "What, if any, evidence is there that parties are acting strategically to limit dissemination."

In relation to patents it is worth noting that one original purpose of the patent regime was to ensure wide dissemination of information about inventions (through public access to the claims), so that after the expiry of the patent the invention could be reproduced and improved upon by anyone ordinarily skilled in the art. We cannot speak to patents on other classes of invention, but in the field of computer software it is relatively common for claims either to be excessively vague or to be otherwise obfuscated, which defeats the purpose of claim disclosure.

In relation to copyright, there are several hundred years worth of parties (usually parties other than the original author who have subsequently acquired the copyright) using the copyright actively to prevent dissemination of works (so called "orphan works")[6].

Efficient

> "The system should provide incentives for IP to be created at the lowest cost to society. This principle includes consideration of factors such as whether IP rights encourage returns that are proportional to the effort of generating IP; the relative merits of public and private IP generation; and the longer-term effects on competition and innovation from granting IP rights."

Efficiency—as defined as minimising the cost *to society*—is indeed a useful criterion and OSIA supports its inclusion in the evaluation framework.

It should be noted however that encouraging "returns that are proportional to the effort of generating IP" would appear to be the opposite of efficiency: such a policy would provide incentive to maximise the effort expended in creating any given work. We suggest that a better approach would be encourage returns that are proportional to the utility of the work or invention.

In answer to the specific questions raised in the issues paper:

> "What are the relative costs and return to society for public, private and not-for-profit creators of IP? Does the public provision of IP act as a complement or substitute to other IP being generated? Are there any government programs or policies that prevent, raise or lower the costs of generating IP?"

Crown copyright has two costs to the public: the cost to the commons for the duration of the copyright term (in exchange for the incentive to publish, as with all copyright); and the direct cost of development, also funded by the taxpayer.

Other approaches are certainly possible. For example, in the USA all works produced and published by the Government are placed in the public domain[7].

Perhaps a good middle ground would be to retain crown copyright but to require that all works published by the Commonwealth be released under a suitable open source license.

> "What are the merits and drawbacks of using other methods to secure a return on innovation (such as trade secrets/confidentiality agreements) relative to government afforded IP rights? What consid-

6 Multiple examples can be found in T. B. Macaulay's speech in the British House of Commons opposing the extension of copyright terms, 5 Feb 1841—reproduced at http://homepages.law.asu.edu/~dkarjala/OpposingCopyrightExtension/commentary/MacaulaySpeeches.html

7 *Copyright Act 1976 (USA)*, 17 USC 105.

> eration do businesses/creators of IP make in order to select between options? How does Australia's use of methods besides IP rights to protect IP compare to other jurisdictions? Why might such differences arise?"

In the case of computer software, trade secrets have some advantage over patents (as they do not preclude independent implementations). Nevertheless, copyright remains the most appropriate regime for software.

The main drawback of using trade secrets instead of copyright or patents is the risk that the work or invention might *never* reach the public domain.

> "Are there obstacles in the IP system which limit the efficient trade of IP between creators and users? Are there particular areas here trade, licensing and use of IP could be more readily facilitated?"

Yes. It is often difficult to ascertain from whom permission must be obtained in order to create derivative works based on "orphaned" works.

The obvious solution, mandatory copyright registration, is prohibited under TRIPS.

A rights framework as described in OSIA response to Copyrights provides an alternative solution.

> "Are there sufficient safeguards to ensure that IP rights do not lead to unduly restrictive market power? Are there ways (including examples employed overseas) to improve the dissemination of IP while preserving incentive to generate IP? Could such methods be adopted within the Australia IP system?"

No. "Submarine patents" occur when an organisation contributed to the development of a standard material which is covered by a patent not disclosed at time of contribution, then later asserts that patent against users of the standard. This is much more of a problem with software patents than with patents in traditional fields (where such a contribution would be far less likely to go unnoticed). The obvious solution is to remove computer software from the scope of patentable software matter. The *Patents Act 2013 (NZ)* provides a good model for doing so.

> "What are the longer term effects on the IP system competition and innovation? What evidence is there to assess and measure these effects?"

Patents on computer software act to stifle innovation (see Patents response).

Whilst IP is inherently anti-competitive (since even limited monopolies are nevertheless monopolies), that is acknowledged implicitly in the recognition of the need for copyright and trade mark regimes (and the need for a patent regime in fields of engineering other than computer software).

Adaptable

> "The system should be adaptive to change, as the impact of rigid incentives could have a strong, negative impact on society."

Adaptability is a key criterion. Public good and economic growth would both be advanced further by encouraging industry to adapt their business models to suit the changing technological landscape (rather than artificially restricting the technology to suit long-outdated business models).

Additionally, adaptability of IP arrangements should always be taken into account when negotiating international treaties. Participation in future iterations of global or near-global IP treaties (such as the Berne

Convention and TRIPS) will no doubt continue to be important for Australia. Whilst OSIA supports Australia entering into true free trade agreements (i.e. those which contain only provisions for tariff/quota reduction/elimination), it is clear that the long-term cost of entering into any bilateral or regional treaty that contains IP provisions needs to be reviewed to ensure that it holds a longer term vision and does not only focus on potential short-term trade benefits. The TPP is a case in point.

In answer to the specific questions raised in the issues paper:

> "How well has Australia's IP system adapted to changes in the economic, commercial and technological environment and how well place is it to adapt to such changes in the future? What factors may make it harder for the IP system to adapt to change? What policy options are there to remedy any difficulties, and why might they be preferable?"

Australia's patent system has adapted poorly to technological change by extending the scope of patentable subject matter to cover computer software. See Patents response.

As noted above, Australia's copyright system has adapted poorly to the economic, commercial and technological environment by attempting to use regulation to protect the obsolete business models of a small cadre of organisations. A better approach would be to embrace the range of economic and commercial benefits made possible by modern technology. See Section Copyrights response.

A further failure to adapt to the modern technological environment was the introduction to the Copyright Act of provisions prohibiting circumvention of "technological protection measures" (TPMs). The new provisions introduced are at best superfluous (where the circumvention results in copyright infringement, suitable remedies for infringement were already available to copyright holders) and at worst iniquitous (where the circumvention does not result in copyright infringement there is no possible public policy reason for prohibiting the circumvention).

Accountable

> "The policies and institutions that govern the system, and the way that changes are made to them, need to be evidence-based and transparent."

Transparency is paramount. Clearly any changes to Australia's IP arrangements will need to be agreed by the Commonwealth Parliament (not any external parties) following broad consultation and vigorous debate in industry and community. For this reason, amongst others, the Commonwealth Government should adopt a strict policy of refusing outright to ratify any treaty containing IP provisions that has been negotiated in secret and merely presented to Parliament as a fait accompli. Again, TPP is a case in point.

The requirement that policies be evidence-based is also of great value. Certain changes to date have been instituted—mainly as a result of various obligations under international treaties which ought never to have been ratified—without any attempt to analyse the likely economic impact, with predictably detrimental outcomes for Australia. Naturally any repetition of such practices should be avoided.

In answer to the specific questions raised in the issues paper:

> "Ideally, what sort of information is needed to evaluate the IP system? In their absence, what alternative data or proxies are available?"

Economic modelling can certainly be useful in evaluating past or proposed future changes to the IP system. Any further restrictions require careful analysis to ensure that the economic benefit derived exceeds the sum of financial costs and the value of any non-financial detriment.

Naturally changes can only be worth considering if they will genuinely encourage the creation of more useful works or novel inventions.

In the context of copyright, it is also essential to ensure that no future change causes any further erosion of the commons.

> "What factors have constrained transparent evaluation of IP rights extensions?"

The principal factor constraining responsible and transparent evaluation of IP rights extensions has been the negotiation of bilateral and regional treaties with IP provisions in secret. This practice should be abandoned altogether.

> ``The Commission seeks submissions about how the parameters of the IP system came to be set, and on the basis of what evidence and analysis.
>
> How were decisions to extend IP rights in the past (e.g. copyright) assessed? Is an evidence-based approach systematically used to assess changes to the IP system? How transparent have decisions to change the IP system been, including when it comes to legislation and international agreements? Is a stronger evidence base and greater transparency in the public interest, and if so, how should this be accomplished?"

Transparency and reliance on evidence have been variable on different occasions.

The process undertaken by ACIP and IP Australia for the recent review of the innovation patent system provides a good example of an evidence-based, reasonably transparent reform process.

In general a stronger evidence base is highly desirable (noting the review of the innovation patent system as a prominent exception, where the economic modelling was of a high standard).

Transparency is always in the public interest. This should be accomplished through public consultation and open debate.

> "How should a context of limited information, long legacy tails and IP policy irreversibility bear on the stringency of IP rights? In particular, if a precautionary principle is applied, should it err on the side of the consumers or on the side of the IP rights holder? In a global context, which approach best suits Australia?"

In general, permissive regimes are preferable to restrictive ones, although naturally some measure of restriction will always be inherent in IP systems.

In a global context, Australia should seek closer alignment with the European market, whilst ensuring that we do not alienate our two largest trading partners: China and India. Although Australia is a net importer of IP, Australian industry reaps the greatest benefit when it exports IP. Measures that seek to address the IP trade deficit may be viewed favourably.

Equitable

Whilst the four criteria of the Productivity Commission's proposed evaluation framework provide a solid base, we contend that it is equally important to ensure that any changes result in an IP regime that is equitable to all parties concerned.

Certain proposals we have heard to date—for example draconian copyright enforcement provisions loosely modelled on the *Digital Millennium Copyright Act (USA)*, which takes the outrageous step of reversing the presumption of innocence; and proposals to make copyright term extensions apply

retrospectively to works which have already entered the public domain, running counter to the established test on such things in Australia[8]—would clearly fail to meet such a criterion.

However the new "Equitable" criterion ought not to be just a matter of applying sane principles of jurisprudence (although that would be a good start) to prevent the obvious abuses such as the two examples given above, but should also extend to ensuring that the resulting IP arrangements deliver an equitable balance of rights and obligations as between authors/inventors and the public good. In any areas of uncertainty in establishing that balance, the arrangement should err in favour of the public good (in accordance with the frameworks stated overarching objective "to maximise wellbeing of Australians").

8 *Yrttiaho v. Public Curator (Queensland)* (1971) 125 CLR 228