Submission to the Commonwealth Joint Standing Committee on Treaties regarding the Trans Pacific Partnership



Open Source Industry Australia Ltd

Amplifying the voice of the Australian open source software industry

Lodged 11 March 2016

About OSIA

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; and
- 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.

Contacts

For further information in relation to this document, contact: OSIA Chairman, Jack Burton OSIA Director, Paul Foxworthy

Copyright

This document is licensed under the Creative Commons Attribution-ShareAlike 3.0 Australia licence (CC-BY-SA-3.0-AU).

To view a copy of this licence, visit http://creativecommons.org/licenses/by-sa/3.0/au/or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

Contents

1		cutive summary	3
	1.1	Recommendations	3
2	Gene	eral observations on TPP	4
	2.1	TPP is not about free trade	4
	2.2	TPP undermines parliamentary sovereignty	4
	2.3	TPP provides no significant benefit to Australia	4
	2.4	TPP was negotiated through a biased, anti-democractic process	5
3	Obse	ervations on the Investment Chapter	6
	3.1	TPP turns Australian companies into second class citizens	6
	3.2	TPP is inherently discriminatory	6
	3.3	TPP mischaracterises investment	6
4	Obse	ervations on the Cross Border Trade in Services Chapter	7
5	Obse	ervations on the Electronic Commerce Chapter	7
	5.1	TPP may hinder enforcement of open source software licences	7
	5.2	TPP blocks future domestic policy reform	8
6	Obse	ervations on the Intellectual Property Chapter	9
	6.1	Trade agreements should not contain IP provisions	9
	6.2	The IP Chapter contradicts its own stated purposes	10
	6.3	TPP extends existing monopolies for no return	10
	6.4	TPP extends Crown copyright needlessly	11
	6.5	TPP locks Australia into contemporary copyright terms	11
	6.6	TPP may perpetuate the double regulation of software	12
	6.7	TPP makes old technology re-patentable	13
	6.8	TPP mandates pointless prohibitions	13
	6.9	TPP needlessly restricts judicial discretion	14
	6.10	TPP expands misuse of criminal law	14
	6.11		15
		TPP discriminates against end users	16
		TPP reverses the presumption of innocence	16
			16
	6 15	TDD discriminates against and users again	17

1 EXECUTIVE SUMMARY

1 Executive summary

OSIA welcomes the opportunity to comment on the Trans Pacific Partnership (TPP).

As a general principle, OSIA supports free trade and therefore we would also support Australia entering into treaties designed solely to enable free trade.

Disturbingly, TPP is not such a treaty (despite having been quite extensively—and one might add rather disingenuously—marketed as such). Rather than the proliferation of free trade (which would be a worthy goal), TPP appears carefully crafted to ensure the proliferation of *restrictions*, not only on trade but on a vast array of unrelated endeavours too.

By locking Australia into present-day regulatory regimes forever, TPP serves to undermine the sovereignty of Parliament on matters of domestic policy.

TPP was negotiated through a secret, anti-democratic process, which was inherently biased (in favour of a small cadre of entrenched interests, all based in the United States).

The Investment Chapter is inherently discriminatory, mischaracterises investment and if implemented will turn Australian companies into second class citizens within our own borders.

The Electronic Commerce Chapter, if implemented, would block future domestic copyright reforms and may also hinder copyright enforcement actions in relation to open source software.

Most disturbing for OSIA is the Intellectual Property Chapter, which seeks to reverse the presumption of innocence and to pre-empt the findings of at least one ongoing Inquiry. If implemented it will serve to stymie progress (both domestically and on the world stage) and to legitimise both anti-competitive behaviour and fraud.

Furthermore, independent economic modelling suggests that the minute proportion of TPP that does address free trade (Chapter 2) is likely to give rise to no significant economic growth for Australia.

OSIA's position is that the minuscule (less, even than the margins commonly allowed for error) growth expected through the operation of Chapter 2 cannot possibly justify the sheer breadth and depth of detriment Australia would suffer as a consequence of the following twenty-eight chapters.

1.1 Recommendations

OSIA recommends that:

- 1. Parliament should not ratify TPP.
- 2. Australia should show strong leadership in the Pacific region by opening fresh and completely transparent negotiations—with any and all former TPP Parties who may be interested in doing so—for a true free trade agreement (one whose sole purpose is to eliminate tariffs and quotas across the board).
- 3. A policy should be established prohibiting Australian participation in any treaty negotiated in secret (other than military treaties in time of war).

2 General observations on TPP

2.1 TPP is not about free trade

Free trade enables stronger global competition across all industries, both facilitating entry into broader export markets for vendors and enabling greater freedom of choice for purchasers. For those reasons, OSIA supports free trade and supports the Commonwealth Government pursuing any and all genuine free trade agreements.

The purpose of a genuine free trade agreement is to eliminate (or at the very least drastically reduce) tariffs and to eliminate (or at the very least drastically increase) quotas on international trade in goods and services.

TPP consists of 30 Chapters. Only one of those (Chapter 2—National Treatment & Market Access) bears any resemblance to a genuine free trade agreement. OSIA would not object to Chapter 2, if re-implemented as a standalone treaty focussed solely on free trade.

Rather than removing restrictions (as one would expect from any genuine free trade agreement), the purposes of each of the twenty-eight subsequent chapters are to introduce additional restrictions and/or to lock Parties into existing restrictions in perpetuity. Thus, TPP overwhelmingly seeks to *inhibit* free trade.

2.2 TPP undermines parliamentary sovereignty

Domestic policy reform is a matter for the Commonwealth Parliament. It must never be regarded as acceptable for Parliament's efforts on that front to be stymied by a regional treaty that locks Australia into existing domestic regulatory regimes in any field. TPP does just that, in many fields—including most notably copyright and patent law—and in doing so seeks actively to undermine the sovereignty of Parliament. See also Section 2.4.

2.3 TPP provides no significant benefit to Australia

It is disappointing that the Commonwealth Government has failed to commission any independent economic modelling of the impact ratifying TPP would have on Australia's economy (a task the Productivity Commission would seem ideally placed to undertake). We note, and agree with, the comments made by the ACCC in their recent submission to the Productivity Commission's Inquiry into Intellectual Property Arrangements¹ calling for a comprehensive and robust analysis of the actual impacts of TPP's IP Chapter. Nevertheless, some analyses of TPP conducted overseas have included a measure of findings in relation to Australia.

Economic modelling conducted by the United States Department of Agriculture (USDA) found that the elimination by TPP of tariffs and tariff-rate quotas (TRQs) would have no measurable impact (0.00%) on Australia's real GDP in 2025². The USDA report is particularly interesting because its model takes into account only the positive elements of TPP—the elimination of tariffs and TRQs—and still finds no real benefit for Australia.

Economic modelling conducted by the World Bank³ was somewhat more optimistic than the USDA model, but still found that, by 2030 TPP will on average raise member country GDP by only 1.1 percent (which equates to a compound annual growth rate (CAGR) of only 0.08%), on a GDP-weighted average basis⁴ and in particular will raise Australia's GDP by only 0.7 percent (which equates to a CAGR of only 0.05%)⁵.

The forecasts of both the USDA and World Bank models are cause for significant concern. It would not seem prudent to sign up to a very large, very complex treaty, which limits Australia's future potential for domestic policy reform in so many areas, in exchange for a paltry 0.05% per annum additional growth in GDP—as the World Bank predicts—and even less prudent on the basis of the USDA's forecast of no measurable impact at all.

¹ACCC submission to the Productivity Commission Inquiry into Intellectual Property Arrangements in Australia, Australian Competition & Consumer Commission, November 2015, p. 18. Available at http://www.accc.gov.au/system/files/ACCC%20Submission% 20-%20PC%20inquiry%20into%20IP%20arrangements%20in%20Australia%20-%2030%20November.pdf

²Burfisher, M. E., Dyck, J., Meade, B., Mitchell, L., Wainio, J., Zhaniser, S., Arita, S. & Beckman, J., *Agriculture in the Trans-Pacific Partnership*, ERR-176, U.S. Department of Agriculture, Economic Research Service, October 2014, Table 8, p. 21. Available at http://www.ers.usda.gov/media/1692509/err176.pdf

³Potential Macroeconomic Implications of the Trans-Pacific Partnership, Chapter 4 in World Bank Group, Global Economic Prospects, January 2016: Spillover amid Weak Growth, World Bank, Washington, 2016, pp. 219–236. Available at http://www.worldbank.org/content/dam/Worldbank/GEP/GEP2016a/Global-Economic-Prospects-January-2016-Spillovers-amid-weak-growth.pdf

⁴*Id.*, p. 226.

⁵*Id.*, Figure 4.1.6A, p. 227.

2.4 TPP was negotiated through a biased, anti-democractic process

TPP was negotiated in secret. No Australian stakeholder was permitted access to any part of the negotiating text at any point during the process. For a treaty that is being marketed as being about trade, it seems very odd indeed that industry (presumably the intended beneficiaries of such a treaty) should be completely excluded from the process.

The Department of Foreign Affairs and Trade (DFAT) did consult with industry during the course of the negotiations (and indeed OSIA lodged a submission⁶ with DFAT as part of that consultation process). However, it is difficult to imagine that process being particularly effective, when all Australian stakeholders were essentially "flying blind", relying solely on the occasional document leaked overseas.

Secrecy in negotiation has obvious negative effects on industry stakeholders such as OSIA and our members, but it also has negative effects on citizens, civil society groups and other interested stakeholders. When Australians cannot read what is being negotiated "on our behalf", our elected representatives cannot meaningfully canvas our views on it, so cannot meaningfully represent us. In the absence of open debate in parliament, clearly it is not possible for the Minister responsible to instruct DFAT accurately in Australia's best interest. Now that the text has been released, it has been presented to parliament, to the Australian people and to Australian industry as a fait accompli, without any possibility of amendment. The process was anti-democratic in the extreme and clearly designed to undermine the sovereignty of parliament (and its equivalents in most other TPP Parties).

Of particular note is that the process in the United States was very different. TPP was not negotiated, as one might expect on the basis the Australian experience, by the US State Department. Rather, it was negotiated by the United States Trade Representative, in consultation with its 28 Advisory Committees, many of which consist of representatives from US industry. Those US industry representatives not only had access to the text, but were intimately involved with its negotiation.

So, whilst industry in Australia (and in all ten of the other Parties) were denied any meaningful participation in the process, select representatives of US industry were right at its core.

As a result, the bias in favour of a few entrenched interests in the US industry can be seen quite plainly in the final text (most obviously in the Intellectual Property Chapter).

OSIA calls upon the Commonwealth Government to reject any trade agreement negotiated under a process that actively discriminates against Australian industry.

11 Mar 2016

⁶Burton, J., Holden, C. & Christie, D., Submission to the Commonwealth Department of Foreign Affairs & Trade on the Trans-Pacific Partnership, Open Source Industry Australia Ltd, 2013. Available at http://osia.com.au/drupal7/sites/default/files/default/osia_trans_pacific_partnership_submission_0.pdf

3 Observations on the Investment Chapter

3.1 TPP turns Australian companies into second class citizens

TPP's Investment Chapter contains investor-state dispute settlement (ISDS) provisions. If a Party's future changes to domestic policy adversely effect the investment of a foreign investor from another Party, under the ISDS provisions the disgruntled investor can sue the Party for compensation.

Whether or not an investor (regardless of nationality) should ever be able to sue a government simply for exercising its sovereign right to set domestic policy is debatable. OSIA takes no position on that question.

However, if such a right is granted to investors domiciled in other Parties, but not to those domiciled in the Party in question (and the Investment Chapter quite clearly prohibits the latter), we will have a situation in which foreign investors in Australia will carry less long-term financial risk than Australian investors in Australia.

OSIA recognises that one of the purposes of a free trade agreement is to put foreign investors on an equal footing with Australian investors in Australia (and vice-versa in the other Party). That is not in dispute.

However, it should be immediately obvious that a system that grants foreign investors in Australia rights that are not available to Australian investors can *never* be in Australia's best interest. Such an arrangement could rightly be characterised as the opposite of free trade.

3.2 TPP is inherently discriminatory

We note that there is a long list of non-conforming measures (NCMs) in the Annexes of various Parties in relation to the Investment Chapter, each of which focus on a particular industry sector (the most publicly aired being Australia's NCM in relation to the tobacco industry).

We submit that there is little point in having an Investment Chapter when so many NCMs relating to it exist. Persisting with the Investment Chapter actively discriminates against domestic industry in those sectors not covered by NCMs.

Whilst OSIA does not support the inclusion of ISDS provisions in any trade treaty, we note that a situation in which they apply to some industry sectors but not to others is even more peverse.

3.3 TPP mischaracterises investment

Article 9.1 defines "investment" as including "intellectual property rights". Since the term "right" is not further defined in the Investment Chapter, it seems reasonable to assume that "intellectual property rights" would include rights granted under a copyright or patent licence.

All of our members routinely enter into copyright licensing arrangements for computer software (and assorted other forms of work) on a daily basis (both as licensors and as licensees), many of which with parties outside Australia. In the computer software industry, those transactions are as commonplace as the sale of goods is in the manufacturing sector. To characterise the grant of rights in those transactions as "investments" is, to be blunt, patently absurd.

Whilst our members' own international copyright licensing transactions do not give rise to any concern for them (since our members will be under no obligation to make use of the Investment Chapter's ISDS provisions), OSIA is concerned that the bizarre definition of "investment" as including "intellectual property rights" may give rise to a situation where the threat of ISDS actions from our members' competitors in other TPP Parties may prevent the Commonwealth Government from enacting sensible reforms to the Copyright Act & Patents Act and/or from instituting sensible reforms in the field of software procurement (see also Sections 5 & 6).

4 Observations on the Cross Border Trade in Services Chapter

OSIA welcomes the provisions in Chapter 10 (*Cross Border Trade in Services*) that grant international suppliers "most favoured nation" status, and the provisions that aim to ensure that compliance with standards is done for good technical reasons rather than as an artificial trade barrier.

We note that Investor-State dispute settlement does not apply to this chapter, i.e. trade in services including engineering and legal services. As noted in Section 3, OSIA opposes unrepresentative bodies restricting the right and the duty of Australia's government and other governments to make laws for the benefit of their own citizens.

If Investor-State dispute settlement (ISDS) is considered such a fine idea, why should it not apply to trade in services as well? Similarly, the specific exclusion of tobacco control measures implies there is a fundamental problem with ISDS, and yet it is limited in a piecemeal fashion. ISDS should have been eliminated from TPP altogether during negotiation. Its continued presence is a strong indicator that TPP should not be ratified.

5 Observations on the Electronic Commerce Chapter

Article 14.17(1) of TPP states:

1. No Party shall require the transfer of, or access to, source code of software owned by a person of another Party, as a condition for the import, distribution, sale or use of such software, or of products containing such software, in its territory.

That gives rise to two problems, as outlined below.

5.1 TPP may hinder enforcement of open source software licences

Article 14.17(3) contains the following exception:

- 3. Nothing in this Article shall preclude:
 - (a) the inclusion or implementation of terms and conditions related to the provision of source code in commercially negotiated contracts; or ...

That exception provides some solace for copyright holders of open source software (such as our members), in that it reassures us that the execution of licences containing terms requiring transfer of or access to source code (which includes all open source software, by definition⁷) will still be permitted.

Certainly, under any interpretation of that exception, where a breach of an open source software licence occurs, the copyright holder could still sue for damages.

However, the notable absence of the word "enforcement" from the phrase "inclusion or implementation" leaves open to interpretation the question of whether or not specific performance (of the term requiring transfer of, or access to, source code) would remain available as a remedy in such actions for breach of licence.

It should be noted that, at least for "copyleft" licences (open source software licences that require any licensees who distribute derivative works to provide their downstream licensees with access to all source code—the best known of which is the GPL⁸), in the vast majority of enforcement cases the copyright holder seeks specific performance, rather than damages. That is only natural, since the utility of a copyleft licence is dependent on compliance with its terms.

Clearly, the absence of specific performance as a potential remedy for breach of copyleft terms in software licences would hinder enforcement of such licences. Assuming specific performance remains as a potential remedy for breaches of non-copyleft terms in software licences, removing it solely in the case of copyleft terms would constitute active discrimination against copyright holders (including many OSIA members) who choose to distribute their works under copyleft licences.

⁷Perens, B., *Open Source Definition*, Open Source Initiative, 1998, Criterion 1. Available at http://opensource.org/osd

⁸Free Software Foundation, *GNU General Public License*, Version 3, 29 June 2007. Available at http://www.gnu.org/licenses/gpl-3.0.en.html

It is far from clear whether or not the wording of the exception in Article 14.17(3)(a) would be interpreted as described above. However, that ambiguity could very easily have been avoided by the inclusion of the term "enforcement" in the exception.

5.2 TPP blocks future domestic policy reform

The prohibition in Article 14.17(1) also gives rise to concern that it may limit the Commonwealth's ability to institute sensible domestic reforms to copyright law and/or to government procurement policy.

The exception at Article 14.2(3)(a) covers the case of government procurement, so that is not at issue here. Two other very narrow exceptions exist: the definition of "covered person" in Article 14.1 excludes any "financial institution" or "cross-border financial service supplier"; and the exception at Article 14.17(2) excludes "software used for critical infrastructure".

Nevertheless, it is not difficult to envisage sensible potential future reforms that would be prohibited by Article 14.17. For example, consider the following scenario:

At some point in the future, the Commonwealth realises that the risks associated with orphaned, unmaintained software are having a significant negative impact on productivity in Australian industry.

This risk applies only to closed source software (since with open source software, the licensee always has the right to inspect, modify and redistribute the source code⁹ and so always has the option to maintain any orphaned or otherwise abandoned work in-house, or hire any suitably competent firm to do so on their behalf).

However, the Commonwealth cannot simply mandate that all commercially negotiated software licences must be open source (however much our members may like that idea), since such a regulation would restrict free trade.

Imagine instead then a proposed solution involving a mandate that for any software distributed under a closed source licence the source code be placed in escrow with a Commonwealth agency, not to be released publicly unless/until: (a) the copyright expires and the software enters the public domain; (b) the copyright holder ceases to distribute the software for longer than a given minimum period; or (c) the copyright holder refuses to fix documented bugs in the software, at any price—whichever occurs first.

Such a scheme would eliminate one (but by no means all) of the risks faced by licensees of closed source software, whilst still permitting all copyright holders to continue distributing their own software under licence terms of their own choosing.

Whilst the scenario above is not currently on the table in any pre-existing copyright reform process, it is not difficult to imagine such a reform being mooted during some future review.

Article 14.17(1) would prohibit such a reform ever being enacted (except to the very limited extent that it could be applied to the extremely narrow exceptions for government procurement, critical infrastructure and financial services—and such a scheme is unlikely to be cost-effective unless it could be applied across the board).

⁹Perens, B., op. cit., Criteria 1, 2 & 3

6 Observations on the Intellectual Property Chapter

6.1 Trade agreements should not contain IP provisions

As noted previously, the presence of IP provisions in what is supposed to be a free trade agreement is incongruous. The IP Chapter has almost nothing to do with trade (the sole exception being the provisions on customs measures relating to the interception of counterfeit goods).

Bilateral or regional treaties on free trade can make sense. However, international standards on other matters—especially those relating to copyright and patents—are far better set by narrowly-focussed treaties of global or near-global scope. The reasons for that are simple.

Firstly, the utility of works and inventions can only be maximised through global dissemination. Global treaties on copyright and patents already exist and Australia is a party to those treaties. Regional and bilateral treaties including terms on copyright and patent law can create a divergence in global copyright and patent standards, which defeats the purpose of having negotiated global treaties on copyright and patents in the first place.

Secondly, inclusion in a trade agreement of provisions on copyright, patents and a cornucopia of other non-trade-related matters across the various chapters leads to an unnecessarily tight coupling between wildly unrelated policy domains. As a result, when in future it becomes clear that TPP's provisions in one policy domain (e.g. patents) are no longer in a Party's interests, that Party cannot secede from the agreement in that domain, without also seceding from the entire treaty, including provisions on totally unrelated domains (e.g. labour standards), which may remain acceptable. It is difficult to imagine such "all or nothing" treaties ever serving the best interests of any nation in the long term. OSIA's contention is that in each individual policy domain, if a new international agreement is even warranted, it should be implemented as a standalone treaty, of global or near-global scope to avoid the consequences of artificial dependencies between unrelated policy domains.

At the other end of the scale, ratification of a regional or bilateral treaty containing substantial copyright and/or patent related terms, even in circumstances where no change to existing domestic law may be required, would lock Australia into its contemporary copyright and patent regimes in perpetuity, thus preventing any sensible domestic policy reforms in those domains from being pursued. Such an approach undermines Australia's sovereignty and the legislative mandate of the Commonwealth Parliament.

The need for domestic policy reform in the area of copyright and patent law is clear and pressing. The Commonwealth has yet to implement the recommendations of the Productivity Commission's inquiry into parallel importation restrictions¹⁰, ACIP's review of the innovation patent system¹¹ or ALRC's inquiry into copyright & the digital economy¹². Indeed, the Productivity Commission's Inquiry into Intellectual Property Arrangements is still in progress and its issues paper¹³ raises questions that suggest the need for a wide range of reforms (as outlined in OSIA's initial submission to that Inquiry¹⁴). All of those inquiries and reviews suggest a pressing need to introduce reforms that lead to more permissive copyright and patent regimes. Ratification of TPP would prevent the implementation of most such reforms, thereby damaging Australia's domestic policy reform agenda.

For all of those reasons, OSIA opposes Australia's participation in regional or bilateral trade agreements which contain provisions on any matter other than free trade.

It should be noted that the Productivity Commission, after reviewing the efficacy of existing bilateral and regional trade agreements, reached a similar conclusion in 2010, recommending against the inclusion of IP provisions (and also ISDS provisions) in future bilateral and regional trade agreements ¹⁵.

¹⁰Restrictions on the Parallel Importation of Books, Research Report, Productivity Commission, 2009. Available at http://www.pc.gov.au/inquiries/completed/books/report/books.pdf

¹¹ Review of the Innovation Patent System: Final Report, Advisory Council on Intellectual Property, 2015. Available at http://www.ipaustralia.gov.au/pdfs/reviews/Final_Report_for_Innovation_Patent_Review.pdf

¹²Copyright and the Digital Economy: Final Report, ALRC Report 122, Australian Law Reform Commission, 2013. Available
at http://www.alrc.gov.au/sites/default/files/pdfs/publications/final_report_alrc_122_2nd_
december_2013_.pdf

¹³Intellectual Property Arrangements: Productivity Commission Issues Paper, Productivity Commission, 2015. Available at http://www.pc.gov.au/inquiries/current/intellectual-property/issues/intellectual-property-issues.pdf

¹⁴Forsstrom, A. & Burton, J., Submission to the Productivity Commission's Inquiry into Intellectual Property Arrangements, Open Source Industry Australia, 2015. Available at http://www.osia.com.au/drupal7/sites/default/productivitycommisionreport.pdf

¹⁵ Bilateral and Regional Trade Agreements, Research Report, Productivity Commission, 2010, rec. 4(b) & 4(c), p. 285. Available at http://www.pc.gov.au/inquiries/completed/trade-agreements/report/trade-agreements-report.pdf

6.2 The IP Chapter contradicts its own stated purposes

The IP Chapter contains a number of benevolent-sounding "motherhood" statements on matters such as: the need to achieve a balance of rights and obligations as between producers and users 16; the need for measures to prevent the abuse of IP rights by rights holders or "practices which unreasonably restrain trade or adversely affect the international transfer of technology" 17; the need to "foster competition and open and effective markets" 18; and "the importance of a rich and accessible public domain" 19.

OSIA acknowledges and supports all those statements. Unfortunately, all of them are contradicted by the substantive provisions of the Chapter themselves.

The Chapter's substantive provisions require highly restrictive copyright and patent regimes, far from the "balance" called for in the Chapter's Objectives.

The desired "balance" in relation to preventing abuse by rights holders is conspicuously absent from the provisions of Section J relating to legal remedies and safe harbours²⁰.

The desired prevention of unreasonable restraints of trade is conspicuously absent from the substantive provisions on technological protection meaures (TPMs)²¹.

The need to "foster competition and open and effective markets" is not reflected in the provisions on patents²².

Finally, "the importance of a rich and accessible public domain" is not addressed to an acceptable degree by the provisions on retrospectivity²³, on copyright term²⁴, on TPMs²⁵ or on Government use of software²⁶.

Whilst Art. 31(1) of the Vienna Convention on the Law of Treaties provides that the terms of a treaty are to be interpreted "in the light of its object and purpose", that latitude seems unlikely to extend to taking into account the purpose when that purpose is contradicted by the substantive terms. We can only presume that if TPP is ratified, when implementing the IP Chapter the Commonwealth will be bound to follow its substantive terms, despite their being contrary to its stated objectives. From a public policy perspective, that is highly undesirable outcome.

TPP extends existing monopolies for no return

Article 18.10(1) provides that the IP Chapter applies retrospectively. Art. 18.10(2) provides a exception for subject matter that has already entered the public domain by the time TPP comes into force. That exception cleanly avoids the problem of "zombie" copyrights & patents (i.e. the resurrection of copyright or patent rights on works or inventions that had already entered the public domain). However, it fails to avoid the other detrimental effects of retrospective action.

Existing works published in Australia prior to 2005 by living authors or by authors who have died since 1955 are in copyright today and will remain so until 50 years after the author's death. TPP would extend the copyright on those existing works until 70 years after the author's death.

Similarly, anonymous & pseudonymous works published in Australia between 1966 & 2005, works first published posthumously between 1966 & 2005 and works published by the Crown between 1966 & the present are in copyright today and will remain so until 50 years after the year of publication. TPP would also extend the copyright on those existing works until 70 years after publication.

The purpose of granting limited monopolies by way of copyright is to encourage authors to create new and useful works, by granting authors the exclusive right to exploit their works for a limited period of time. That is the only valid justification for having a system of copyright.

```
<sup>16</sup>Art. 18.2, 18.4 & 18.66.
<sup>17</sup>Art. 18.3(2).
<sup>18</sup>Art. 18.4(c).
<sup>19</sup>Art. 18.15(1).
<sup>20</sup>See Sections 6.14 & 6.15.
<sup>21</sup>See Section 6.8.
<sup>22</sup>See Sections 6.6 & 6.7.
<sup>23</sup>Art. 18.10. See also Section 6.3.
```

²⁴Art. 18.63

²⁵See Section 6.8.

²⁶Art. 18.80(2). See also Section 6.11.

The system is intended to provide a suitable compromise or balance between the public interest in the wider dissemination of works (which naturally demands a shorter copyright term) and the public interest in encouraging the creation of more works (which some argue demands a longer copyright term). If one believes the latter argument, the logic behind increasing copyright terms for new works is that it generates a return in the form of more, or better, works to be disseminated and eventually growth of the public domain.

Leaving aside temporarily the question of whether or not longer copyright terms motivate authors to publish more works or better works²⁷, it should be noted that it is physically impossible for a *retrospective* extension of copyright today to have any effect whatsoever on the level of motivation to publish an existing author may or may not have had at some point in the past.

Therefore, there can be no possible public policy justification for extending copyright terms on works that have *already* been created. On the contrary, doing so robs the commons of those works for a period of two decades, in direct contravention of the IP Chapter's own stated aim of recognising the importance of "a rich and accessible public domain" 28.

6.4 TPP extends Crown copyright needlessly

In Australia today, copyright in works first published by the Commonwealth or a State subsists for 50 years after the year of publication²⁹.

In the absence of any exception in TPP's IP Chapter for works published by the Parties themselves, presumably if TPP were ratified Art. 18.63(b)(i) would apply to Crown copyright, requiring the term of Crown copyright in Australia to be extended to 70 years after the year of publication.

Crown copyright is a strange concept in the first place. Noting the purpose of copyright (see Section 6.3), it is difficult to imagine that the Commonwealth has a need to motivate *itself* to produce more or better works. Furthermore, Crown copyright costs the public twice: the cost to the commons for the duration (as with all copyright) and the additional cost to the taxpayer for the development.

In some other jurisdictions (most notably the United States³⁰) all works produced and published by the Government are placed in the public domain. OSIA has previously suggested³¹ a suitable policy reform to reconcile the nature of Crown copyright with the need to maximise dissemination of works published by the Commonwealth.

Regardless of the efficacy or otherwise of current arrangements for Crown copyright, it is clear that there is no benefit (and at least some detriment) in extending the term of Crown copyright in new works by a further 20 years.

6.5 TPP locks Australia into contemporary copyright terms

With the exception of Crown copyright (see Section 6.4), TPP Article 18.63 would not require any changes to the current duration provisions of the *Copyright Act 1968 (Cth)* with respect to new works (for existing works, see Section 6.3).

Nevertheless, it is noted that the term of copyright set by ss. 33, 34 & 81 of the Act are already 20 years in excess of the current globally agreed standard as set in Art. 12 of TRIPS.

Returning again to the purpose of copyright—to provide authors with an incentive to create more, or better, works—there is substantial doubt about whether even terms as long as those set by TRIPS may be significantly beyond the point of diminishing returns. Whilst clearly *some* authors do derive additional benefit from such long copyright terms, those works which continue to deliver substantial returns to the copyright holder beyond the 50 year mark are exceedingly few and far between. In the computer software industry, to date there have been none at all³².

²⁷We will return to that question in Section 6.5.

²⁸Art. 18.15(1).

²⁹ Copyright Act 1968 (Cth), s. 180(1)(b).

³⁰ Copyright Act 1976 (USA), 17 USC 105. Although presumably if the United States ratifies TPP they will be obliged to amend their laws to remove that benefit.

³¹Forsstrom, A. & Burton, J., op. cit., p. 8.

³²Prior to 1967, software was not generally regarded as being copyrightable in any jurisdiction

However, whether or not authors derive *actual* returns 50 to 70 years on is a moot point. The more pertinent question is whether authors, prior to creating a work, have a reasonable expectation of doing so, and if so, at what point in the future the additional expected return ceases to have a significant impact on the decision to create the work.

Companies that create new works need to make informed decisions on which projects to invest in bringing to fruition. Just as in any other endeavour, those decisions are usually made on the basis of projected returns over time, approximated in today's dollars (the ubiquitous discounted cash-flow analysis). In the modern world, those returns are most often modelled over a relatively short term: 3- to 10-year NPVs are typical, although in a few capital-heavy industries, terms as long as 25 years are sometimes considered.

OSIA is not aware of any Australian company that makes project selection decisions on the basis of 50 year or longer estimates. So the question must be asked: at what point do copyright term extensions cease to contribute any further to the public policy goal of providing an incentive for the creation of new works? We don't have a definitive answer to that, but we suspect it to be somewhere between the 25 and 50 year mark. In the past, when methods of publication and dissemination of works were orders of magnitude *slower* than today, perhaps a compelling argument for long copyright terms could have been made. However in the modern world, with all the advances in technology—particularly digital technology—at our disposal, we are certain that the copyright terms currently in force far exceed those required to provide the necessary incentive to create new works.

Although a reduction in the global minimum terms set by TRIPS may well be some years away, it is clear that, as technology continues to advance, that must be the eventual result. In the meantime, a return of Australia's copyright terms for new works to the global standard set by TRIPS is a reform far more likely to be worthy of consideration in the near future.

Ratification of TPP would create a new obstacle to the Commonwealth pursuing that, or any other sensible domestic policy reforms in relation to duration of copyright.

6.6 TPP may perpetuate the double regulation of software

Article 18.37(1) requires that Parties make patents available "in all fields of technology". Its wording closely follows the first half of TRIPS Art. 27(1). As OSIA has noted previously, there has been much debate globally about the correct interpretation of TRIPS Art. 27 in relation to whether or not computer software constitutes patentable subject matter. That debate centres around whether or not computer software can be regarded as "technology" or indeed as an invention—in both cases we contend that it cannot³³.

It should also be noted that computer software is unique in that it is the only class of work to be subject both to copyright and to patents simultaneously. This "double regulation" has a deterimental effect on progress in the field, in stark contrast to the original purposes of both copyright and patent law.

As OSIA has pointed out previously³⁴, both the nature of computer software itself and the nature of the software development process are such that copyright provides a far better regime for the protection of software than patents do: since software consists solely of algorithms and data, it far more closely resembles a literary work than an invention.

In Australia at present a "computer-implemented invention" can be considered patentable subject matter in certain circumstances³⁵, computer software at a higher level of generality is not³⁶. The various, rather nebulous, tests introduced in the domestic cases serve only to add further confusion to the doubt about the interpretation of TRIPS Art. 27.

All that confusion could easily be avoided, simply by explicitly removing computer software from the scope of patentable subject matter, as has been done in New Zealand³⁷. Such a move will not affect the incentive to produce new and useful works of computer software, which is already more than adequately provided by copyright. Rather, such a move will foster innovation by removing the spectre of unjustified software patent assertions.

³³Burton, J., Holden, C. & Christie, D., op. cit., p. 8.

³⁴Burton, J., Hideo, M., Christie, D. & Jitnah, D., Submission to the Australian Council on Intellectual Property Review of the innovation patent system, Open Source Industry Australia, 2013, pp. 4–5. Available at http://www.osia.com.au/drupal7/sites/default/files/default/osia_sub_201310_acip.pdf

³⁵International Business Machines Corporation's Application [1980] FSR 564.

³⁶Commissioner of Patents v. RPL Central Pty Ltd [2015] FCAFC 177.

³⁷Patents Act 2013 (NZ).

It is not completely clear whether or not Art. 18.37(1) of TPP precludes the removal of computer software from the scope of patentable subject matter (for the same reasons that the near-identical wording in TRIPS Art. 27(1) remains unclear). However what is abundantly clear is that entering into yet another ambiguous treaty on patents cannot be in Australia's best interest.

6.7 TPP makes old technology re-patentable

Article 18.37(2) requires that Parties make patents available for "new uses of a known product, new methods of using a known product, or new processes of using a known product".

Whilst such new uses or processes of existing known products may well be regarded as innovations, it should be abundantly clear, even to the layman, that they are not inventions.

Innovation is a necessary and useful component of progress in many fields, but it is not of the same ilk as invention. OSIA sees no public policy benefit at all in extending the monopolies granted by patent to mere innovations, as discussed in our 2013 submission to ACIP's Review of the Innovation Patent System³⁸. ACIP themselves evidently agree³⁹.

Rather, we suspect that implementation of Art. 18.37(2) would *stifle* innovation through introducing the potential for new patent monopolies to be granted on *old* technology.

6.8 TPP mandates pointless prohibitions

Article 18.88 requires Parties to prohibit the circumvention of technological protection measures (TPMs) along with the manufacture, importation, distribution and sale of products capable of circumventing TPMs, to provide various civil remedies in all cases and to provide criminal penalties where the circumvention is for the purposes of commercial advantage or financial gain.

At present, such measures are in force in Australia⁴⁰. They were introduced in 2004 and made even more restrictive in 2006, during the implementation of the disastrous Australia–United States Free Trade Agreement (AUSFTA). OSIA has previously objected to those provisions both at the time⁴¹ and more recently⁴².

The principal problem with anti-TPM-circumvention measures is that they address no possible public policy goal in their own right.

Where the circumvention is done for the purposes of infringing copyright, it is the act of infringing copyright itself that ought to be (and already is) prohibited. The addition of an extra civil wrong (or, worse still, criminal offense) simply for the *manner* in which the copyright was infringed adds nothing. Worse, the existence of anti-TPM-circumvention measures *encourages* the deployment of TPMs, which ultimately erodes the commons (as the TPM will persist, even once the copyright in the work itself has expired).

Prohibiting circumvention for non-infringing purposes is even worse: doing so has no legitimate public policy purpose, yet gives rise to a further impediment to the proliferation of useful works.

Criminal liability for TPM circumvention is the most heinous measure of all. Whilst OSIA opposes the criminalisation of copyright infringement in general (as to date the existence of the civil wrong has proved sufficient to enforce copyright), we can at least see how an argument (no matter how flawed) might exist for attaching criminal liability to the worst possible cases of infringement. However, attaching criminal liability to TPM circumvention—an act which, in itself, can do no possible harm—merely serves to create disincentives to research & development and to grant authors unprecedented additional rights of control over the *use* of their works, never envisaged in the original purpose of copyright.

³⁸Burton, J., Hideo, M., Christie, D., & Jitnah, D., *op. cit.*, s. 2.2.2, p. 9.

³⁹Advisory Council on Intellectual Property, Statement by the Advisory Council on Intellectual Property (ACIP) regarding the Innovation Patent System, May 2015. Available at http://www.ipaustralia.gov.au/pdfs/reviews/Statement_for_web_release.doc

⁴⁰Copyright Act 1968 (Cth), ss. 116AK-116AQ & 132APA-132APE.

⁴¹Scott, B., Submission to Inquiry into Technological Protection measures (TPM) Exceptions, Open Source Industry Australia, 2005; Scott, B., Submission on Exposure Drafts—Copyright Amendment (Technological Protection Measures) Bill 2006 and Regulations, Open Source Industry Australia, 2006; Scott, B., Submission to Senate on Copyright Amendment Bill 2006, Open Source Industry Australia, 2006; and Scott, B., Provisions of the Copyright Amendment Bill 2006—Supplementary Submission, including Repsonse to Question on Notice, Open Source Industry Australia, 2006. All available at http://osia.com.au/drupal7/publications

⁴²Burton, J., Holden, C. & Christie, D., op. cit., s. 2.1, pp. 6–7; and Forsstrom, A. & Burton, J., op. cit., p. 10.

Ratification of TPP would lock Australia into its present—and in OSIA's view highly inappropriate—anti-TPM-circumvention regime, thus preventing the sensible reforms which we and others have proposed in the past and no doubt will continue to be proposed until such time as this pointless, unreasonable impost is excised from the *Copyright Act*.

6.9 TPP needlessly restricts judicial discretion

Judges weigh up many factors when they impose a penalty. Most legislation allows for a range of penalties so that the punishment fits the crime.

Article 18.71(5) calls for "proportionality between the seriousness of the infringement of the intellectual property right and the applicable remedies and penalties". Yet Art. 18.74(4) & 18.75(5) seek to prescribe what damages should be applied using measures invented by a complainant. Claims for damages have been notoriously excessive and should be examined objectively and sceptically by judicial authorities.

Art. 18.74(6) goes even further, providing for pre-established damages at the election of a rights holder. Art. 18.77(6)(a) again prescribes criminal penalties when these should be at the discretion of our judges. OSIA's view is that only judges should determine a penalty case by case, without undue influence for any other party.

Art. 18.74(4), 18.74(5) 18.74(6) & 18.77(6)(a) are hostile to good legal practice and should be removed.

6.10 TPP expands misuse of criminal law

The goal of civil law is to compensate an organisation or person who has been wronged, usually financially. The goal of criminal law is to protect society at large from destructive acts against social order.

Clearly breaches of intellectual property laws protecting patents, trademarks and copyright are a civil matter. OSIA opposes the application of criminal law to these matters.

Art. 18.77 seeks to apply criminal law to "wilful" breaches of intellectual property law on a "commercial scale". These are differences of degree and not kind. Civil law should suffice.

Article 18.77(1) requires Parties to maintain criminal procedures and penalties for copyright infringement "on a commercial scale". TPP's definition of "on a commercial scale" in Art. 18.77(1) is far broader than that provided in s. 132AC(5) of the *Copyright Act* so if implemented will undoubtedly cover acts not generally considered to be of a commercial scale.

Regardless of the scope, OSIA questions whether any need for criminal liability for copyright infringement exists. Clearly, when copyright is infringed, the principal damage is suffered by the author, so the need for authors to have access to civil remedies for copyright infringement is not in dispute. However, it is not apparent what, if any, damage the State suffers as a result of copyright infringement, so it is difficult to see how the associated criminal offences can be justified. Granted, criminal sanctions can have a deterrant effect, but then so can well implemented civil remedies. Even the Attorney-General, Sen. Brandis is on record as having asserted the status of copyright infringement as "only a civil wrong" OSIA supports Sen. Brandis' inference that Division 5 of Part V should be excised from the *Copyright Act*. Ratification of TPP would preclude such a reform from being enacted.

Article 18.77(6)(f) provides that, in cases where infringing goods that were the subject of a criminal enforcement action were not destroyed, Parties must ensure that their competent authorities have the authority to provide access to those goods and to any other evidence to the rights holder for use in civil infringement proceedings. OSIA supports that requirement: if criminal proceedings for copyright infringement must exist (and we contend they ought not—see above), it makes sense to ensure that evidence used in a criminal proceeding can be re-used subsequently in an associated civil action. However, we are concerned that Art. 18.77(6)(f) only obliges Parties to provide that authority in relation to access by plaintiffs, not by defendants. Surely, if pertinent evidence is held by the Crown, both parties to any dispute involving that evidence should have equal access to it? To provide otherwise would run the grave risk of prejudicing the civil proceeding in favour of the plaintiff.

⁴³Comment made by Sen. Brandis on *Q* & *A*, ABC Television, 3 Nov 2014. Given that copyright infringement *is* a criminal offence in Australia (and indeed was on 3 Nov 2014), one can only interpret Sen. Brandis' comment as expressing a view that copyright infringement *should be* "only a civil wrong".

6.11 TPP prohibits government use of public domain software

Article 18.80 (Government Use of Software) states:

- 1. Each Party recognises the importance of promoting the adoption of measures to enhance government awareness of respect for intellectual property rights and of the detrimental effects of the infringement of intellectual property rights.
- 2. Each Party shall adopt or maintain appropriate laws, regulations, policies, orders, government-issued guidelines, or administrative or executive decrees that provide that its central government agencies use only non-infringing computer software protected by copyright and related rights, and, if applicable, only use that computer software in a manner authorised by the relevant licence. These measures shall apply to the acquisition and management of the software for government use.

OSIA supports the sentiment expressed in Article 18.80(1) and agrees on the importance of ensuring that any use by governments (just as with any use by other entities) of copyrighted software be non-infringing in nature, and compliant with the terms of the relevant licence.

However, the drafting of Article 18.80(2) is rather clumsy. By requiring that "central government agencies use only non-infringing computer software protected by copyright and related rights", Article 18.80(2) effectively prohibits governments from using any software that is in the public domain (since, by definition, works in the public domain are no longer subject to copyright).

Broadly speaking, software in the public domain can be considered as falling into one of three categories: software published prior to the introduction of automatic copyright, on which copyright was never claimed (almost all software published before 1967 falls into this category); software on which the copyright has expired; and software placed in the public domain by explicit declaration of its author. We will deal with each category in turn.

In relation to the first category, pre-1967 software is unlikely to be of much use today in most fields of government endeavour. However, it has particular application in the field of preservation and archiving of digital records and other digital artefacts of that era. Standardisation of digital formats and encodings was not widespread until much more recently. As a result, access to surviving software of the era is important to aid in preservation of other digital artefacts of the the era. A prohibition on government use of software that was never subject to copyright would therefore be an unreasonable impost on government agencies undertaking digital preservation and archiving tasks with pre-1967 material.

Very little software in the second category exists in 2016, since for its copyright to have expired already, it must have been published no later than 1966 (and hardly any software published prior to 1967 claimed copyright). However, from 2017 onwards⁴⁴ progressively more software will enter this category every year. Again, government agencies will find little if any use for software written more than half a century ago, other than in the field of digital preservation and archiving, for which the same objections apply as for the first category above (but far more dangerously, as this category will eventually apply to almost all software published since 1967).

The biggest problem though is in relation to the third category: software which is in the public domain by virtue of its author explicitly declaring it so. Although perhaps not as prolific today as copyrighted software, some authors continue to contribute their software directly to the public domain. One prominent example is Berkeley yacc (byacc), a leading parser generator⁴⁵ which was explicitly placed in the public domain by its author, Robert Corbett, in 1990 and remains in wide use today. Whilst byacc is not something the average user might call for, it is used heavily in computing research and development environments. It would be a tragedy indeed, for example, if implementation of TPP were to result in Australia's public universities and research institutes such as the CSIRO being prohibited from using this indispensible tool.

These issues could easily have been avoided simply by omitting the words "protected by copyright and related rights" from Art. 18.80(2)—providing yet another example of how finalisation of trade agreements prior to broad industry review of and consultation on the text itself tends to lead to undesirable results.

 $^{^{44}}$ Or from 2037 onwards, if the peverse retrospective copyright term extensions called for by Art. 18.10(1) & 18.63 are implemented. See Section 6.3

⁴⁵Parser generators, in brief, are programs used to generate other programs which parse their inputs against formal grammars, often—as is the case in compilers—to produce yet more programs.

6.12 TPP discriminates against end users

Footnote 154(a) states that a Party may comply with its obligations under Art. 18.82(3) by ensuring that "stake-holder organisations" (supposedly independent bodies responsible for verifying the validity of notices alleging copyright infringement) include representatives of both Internet Service Providers (ISPs) and right holders.

Clearly, if such bodies are to exist (we contend they should not—see Section 6.13) it is indeed essential that both ISPs and authors be represented on them. However, it is equally essential that end users (or end user organisations) be represented on any such bodies, in order to achieve the balance called for by Art. 18.2, 18.4 & 18.66. A "stakeholder organisation" constituted with only representatives of ISPs and of authors is highly likely to be biased against the interests of end users.

6.13 TPP reverses the presumption of innocence

Footnote 154(c) provides that an ISP must promptly remove or disable access to the disputed materials upon receipt of a verified notice.

Similarly, Article 18.82(3)(a) requires that ISPs expeditiously remove or disable access to the disputed materials in a variety of circumstances, including on receiving "a notice of alleged infringement from the right holder".

The presumption of innocence, even in civil matters, has long been a fundamental principle of Australian law: the burden of proof lies with the party making the allegation⁴⁶.

A mere allegation giving rise to a presumption of guilt (as dictated by Art. 18.82(3)(a) & Footnote 154(c)) should be regarded as repugnant to natural justice, and therefore rejected outright.

6.14 TPP fails to protect against automated fraud

Article 18.82(5) states:

5. Each Party shall ensure that monetary remedies are available in its legal system against any person that makes a knowing material misrepresentation in a notice or counter-notice that causes injury to any interested party as a result of an Internet Service Provider relying on the misrepresentation.

If Australia is to have an extra-judicial system of notices and counter-notices for online copyright infringement allegations (and we contend that Australia ought not have such a system as such systems are inherently prejudicial—see Section 6.13), it is essential to prohibit its use for fraud and misrepresentation. However, Art. 18.82(5) does not go far enough toward that end.

Experience with these sorts of regimes overseas, in particular the regime established by the *Digital Millenium Copyright Act 1998 (USA)* (DMCA), has shown that by far the most common class of fraudulent notice has been those issued by automated devices ("DMCA-bots") with little or no human intervention. OSIA is concerned that the phrase "*knowing* material misrepresentation" is unlikely to cover the case of DMCA-bots, which pose a clear and present threat to legitimate use of copyrighted material under the existing fair dealing exceptions (and the proposed fair use exception) and indeed to freedom of speech in general.

Although the majority of such cases reported overseas have resulted from DMCA-bots failing to take into account valid fair use exceptions, a concerning number have been reported where exceptions were not involved and the accused (not the owner of the DMCA-bot) was in fact the copyright-holder. To prevent such outrageous occurrences in Australia, it is essential that negligent design and/or programming of DMCA-bots be treated at least as severely as wilful fraud by a human actor.

OSIA recognises and supports the need for injunctive relief if and where infringement can be proven (preferably in a Court of Law, rather than in some DMCA-like "guilty until proven innocent" kangaroo court) and we recognise and support the need to prohibit fraudulent misuse of such a system. However, a safegaurd against fraud that does not specifically address the problem of inaccurate infringement notices issued by DMCA-bots is unlikely to be effective.

⁴⁶Currie v. Dempsey, (1967) 69 SR (NSW) 116, at 125.

6.15 TPP discriminates against end users again

Article 18.82(7) requires Parties to provide copyright holders who have made legally sufficient infringement claims "to obtain expeditiously from an Internet Service Provider information in the provider's possession identifying the alleged infringer".

ISPs may find this provision, if enacted in those words, to be impossible to comply with. Any ISP should certainly be capable of identifying the *subscriber* whose service is alleged to have been used to do an infringing act (e.g. by IP address). However, the ISP cannot possibly know whether or not that subscriber is indeed the person who committed the allegedly infringing act.

Whilst the intent of Art. 18.82(7) seems reasonable, its drafting is perhaps misguided. It seems to assume that the subscriber to a communications service is the only person who can use that service for infringing purposes. That simply isn't true. In fact, infringers of commercial scale (who are, after all, the only ones worth expending significant funds on pursuing) often tend to compromise the communications services of third parties and use those to commit the infringing acts.

It is instructive to note that, whilst Art. 18.82(5) fails to provide penalties for accusers whose computers act fraudulently without their knowledge (see Section 6.14), Art. 18.82(7) seeks to facilitate the prosecution of end users whose computers may be used to commit infringing acts without their knowledge. Why is the presumption in favour of the ignorant for one class of person yet against the ignorant for another (especially when the accusers are, for the most part, far better technically and financially equipped to rectify that ignorance)? This obvious disparity shows a clear failure of the balance called for by Art. 18.2, 18.4 & 18.66.