
Submission to
House of Representatives
Legal and Constitutional Affairs Committee
Inquiry into technological protection measures exceptions

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October 2005

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This submission was prepared with the assistance of Ms Robin Wright, Research Fellow at the Centre for Media and Communications Law (CMCL), in the Law Faculty of the University of Melbourne. Wright's work is funded by an ARC-funded project, 'The Future of Television - Australian Legal Protection of Digital Broadcast Content', (DP0559783, CI Kenyon).

I am more than happy to respond to any questions on the submission or elaborate on request.

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Executive Summary

The issues raised in this review are not simple ones. Anti-circumvention laws constitute one of the most controversial aspects of current digital copyright law. This submission seeks to do three main things:

1. It provides a brief background on anti-circumvention law, and proposes some matters that the Committee should consider in choosing their ‘attitude’ towards exemptions (Part 1, page 7ff)
2. It makes specific recommendations on the nature of the process and role of this Committee (Part 2, page 13ff) and the interpretation of the criteria for exceptions (Part 3, page 16ff), and
3. It considers several areas where exceptions may be necessary (Part 4, below page 24ff).

The main points in each of these sections are summarized in this Executive Summary.

Part 1: Why is anti-circumvention law controversial, and what that means for the Committee?

The Committee should be under no illusions that anti-circumvention laws are a simple question of ‘locks’ and ‘lock-breakers’. In fact, anti-circumvention laws, sometimes referred to as ‘para-copyright’ or even ‘über-copyright’ are controversial and difficult to draft for three basic reasons:

1. In practice, technological measures which such laws enforce may not just prevent copyright infringement, but many other, non-infringing uses of digital material;
2. Copyright owners have used the technologies protected by such laws for commercial purposes well beyond, and even unrelated to copyright. For example, technological measures have been used to enforce geographical segmentation of markets, or ensure control over a technological platform; and
3. Anti-circumvention laws ban certain technologies. As a result, these laws may impact on – and inhibit – both innovation, and competition in technology markets.

One of the issues which faces the Committee in this review is how to deal with the fact that the market, and technologies, are rapidly developing. Obviously, the best outcome is where TPMs do not interfere unduly in non-infringing uses, and where parties affected by TPMs can reach a deal without detailed government intervention.

The Committee will no doubt receive submissions suggesting that the best way to achieve this result is to adopt a narrow approach: that it let the market develop and intervene only where real problems are shown.

The Committee should also consider, however, the effect of its own attitude to exceptions on the way that the ‘market’ operates. If policymakers show themselves willing to provide exemptions in the face of blocks to non-infringing uses, or impacts on technological innovation, copyright owners will have more incentives to make deals, rather than ‘hold out’, or simply stonewall requests for non-infringing access.

In addition, it is important that anti-circumvention laws *not* provide incentives for further restrictions on access to copyright works, and for the use of technological measures, like access controls, to restrict non-infringing uses. One way that the Committee, and policy-makers generally, can provide incentives for copyright owners to allow non-infringing uses, is to be ready to provide an exception where that is not properly done.

Part 2: The Role of the Committee and relevance of the US Copyright Office material

In my submission it is not the role of the Committee, at least at this early stage, to make highly detailed recommendations on the particular text of any exceptions. Instead:

1. It can make recommendations about the *process* for determining exceptions, both now and in the future, and the *way* the exceptions should be dealt with: specifically, about the need to ensure the exceptions are effective; and
2. It can identify, from an Australian policy perspective, what activities, which may be impacted by technological protection measures, must be allowed – acknowledging that such activities may be allowed either as a result of *ad hoc* exceptions, or as a result of the application of the basic prohibitions.

The US Copyright Office material is of only limited relevance to the Committee’s task. This Committee, as a representative of the legislative arm, can take a much broader view of its role than would be appropriate for the Copyright Office. In particular, the narrow interpretations adopted by the US Copyright Office must be rejected.

Part 3.1: Recommendations the Committee should make in relation to process

In relation to the process of determining exceptions, it is submitted that the following features should be recommended by the Committee:

1. A fair procedure must be specified for future reviews, including:
 - an adequate period of notice of any review

- An appropriate period for initial comments, *and* reply comments, which provides ample time for the collection of information about current impact;
 - A clear articulation, ahead of time, of the standards to be applied
2. Exceptions created should not ‘expire’ every four years or with every new review;
 3. A process should be established for exceptions to be created ‘between reviews’. The process should allow for the submission of complaints by parties whose non-infringing uses are being adversely affected, with the opportunity for response by the relevant copyright owners; and
 4. The body to whom is delegated the conducting of future reviews should be an external, expert body – such as the Copyright Tribunal or Copyright Law Review Committee.

Part 3.2: Interpretations the Committee should adopt in relation to the criteria

In relation to interpreting the criteria for exceptions, the Committee should avoid adopting the narrow views used in the United States, and instead take a broader view that appropriately reflects the Committee’s role as representative of the legislative arm of government. It is submitted that:

1. ‘Particular class of copyright material’ can be broadly construed. The class may be defined by reference to:
 - The ways the works are used: eg, for classroom instruction;
 - The users of the work: eg, universities;
 - The ‘type’ of work under the *Copyright Act*: eg, literary works; cinematograph films;
 - The media on which the work is distributed: eg, movies distributed on DVDs; or
 - The technical measure used on the work: eg, ‘material distributed using the Content Scrambling System or a variant on that system’ , or ‘works or other subject matter protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence’.
2. ‘Credible demonstration of likely or actual adverse impact on non-infringing uses of copyright material’ should also be interpreted flexibly, so that:
 - ‘Credible’ means ‘not incredible’, not speculative or theoretical;
 - Any and all adverse impacts may be considered, including both price, and impacts on the ability to make non-infringing uses;

- In relation to ‘likely’ adverse impacts, it is sufficient that such impact be reasonably anticipated. There should be no requirement that the impact be ‘imminent’; and
- Likely impacts may be established through showing impacts in other jurisdictions. Specific proof of impacts within Australia should not be required.

In addition, the Committee should recommend that any exception created for access control circumvention liability should be accompanied by a rule that allows third parties to circumvent the TPM on behalf of another person.

Part 4: Areas where exceptions may be necessary

In part 4 of this submission, several areas where the Committee may need to consider exceptions, based on overseas experience, are discussed. In particular, it is submitted that:

1. There should be a broad exemption allowing circumvention in relation to all works, regardless of what class of work is involved, that are protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence.
2. The Committee should recommend that activities geared to overcoming region-coding must be allowed, whether this be through exception or through the definition of the scope of the prohibition.
3. The Committee should adopt an unequivocal policy in favour of encryption and other computer security research, and should direct that the drafting of the legislation ensure that legitimate researchers may:
 - a. Circumvent to the extent necessary for any legitimate research into encryption, other technical access and/or copy control measures and any other issues relating to computer security; and
 - b. Publish, and publicly discuss, that research.

The Committee should recommend that ‘legitimate research’ includes research not only at institutions such as universities, but by other people conducting legitimate research.

4. This Committee to make unequivocal statements as to the importance of protecting *all* activities required to ensure interoperability.

1 Introduction

1.1 What is anti-circumvention law, and why is it hard?

This inquiry is part of the process of drafting Australia's new anti-circumvention laws as required to comply with the Australia-United States Free Trade Agreement ('AUSFTA'). Anti-circumvention laws apply to the technologies (called 'technological protection measures, or 'TPMs'¹) used by copyright owners to prevent infringement of copyright and often, more generally, to control the uses that may be made of copyright material.

The basic reasoning that justifies anti-circumvention law is as follows:

- A copyright owner² applies a TPM to their copyright material to prevent people from infringing copyright by making unauthorised copies;
- That TPM, however, will likely be 'hacked' or 'broken'.³ Once protection is removed, unlimited digital copies can potentially be made and distributed widely, interfering in the market of the copyright owner;
- This outcome is foreseeable. Knowing that protective technologies will be hacked, copyright owners may engage in several strategies, none of which are desirable from a societal point of view:
 - They may be unwilling to distribute material in a digital form;⁴
 - They may engage in an arms race, employing more and more elaborate systems as each successive one is 'hacked' or broken; and/or
 - They may cease to invest in, or reduce their investment in creating copyright content, thus leading to a decline in copyright material, or more likely, a decline in 'quality' copyright material which requires a significant investment to create.

The view taken at an international level⁵ has been that a better option than an arms race or demoralisation is 'unilateral disarmament': the law steps in to make the hacking illegal, or limit its effects by:

¹ See *Copyright Act* 1968 (Cth), s 10 (definition of 'technological protection measure').

² The term 'copyright owner' is used in this submission. The copyright owner may be the creator; more frequently, however, copyright in the kinds of commercial material with which we are concerned will be owned/controlled by an assignee of the creator such as a record company or publisher.

³ There is an assumption found in much of the literature in this area – that all technologies – at least those protecting popular material, where that material is made available to a mass market – will eventually be hacked: this assumption, or belief, has been expressed, for example, in the famous 'Darknet' paper: Peter Biddle, Paul England, Marcus Peinado and Bryan Willman, 'The Darknet and the Future of Copyright Distribution (2002), available at <<http://crypto.stanford.edu/DRM2002/darknet5.doc>>

⁴ There are debates of course over the extent to which copyright owners could now even contemplate not releasing material in some digital form, given the trajectory of technological development. The reasoning is probably still applicable at least in some circumstances.

⁵ WIPO Copyright Treaty, Geneva, December 20, 1996.

- Making it illegal to distribute technologies (programs, or devices) which enable circumvention of TPMs;⁶ and/or
- Making it illegal to circumvent TPMs.⁷

This reasoning appears to be quite simple. Unfortunately, matters are not so simple in real life. Anti-circumvention laws have impacts well beyond copyright. There is a reason why they are called paracopyright,⁸ or as one High Court judge has put it, ‘über-copyright’.⁹ Three factors take anti-circumvention laws beyond simple ‘copyright enforcement’.¹⁰

1. In practice, technological measures may not just prevent copyright infringement, but many other, non-infringing uses of digital material, including
 - uses allowed under exceptions like fair dealing, and
 - ordinarily accepted and legitimate use of purchased material (eg, playing purchased music in a range of devices).

Copyright law has traditionally *not* prevented all uses of material, as Gleeson CJ et al pointed out in *Stevens v Sony*;¹¹

2. Copyright owners have used technology for commercial purposes well beyond, and even unrelated to those provided by copyright law. For example, technological measures have been used to enforce geographical segmentation of markets,¹² or ensure control over a technological platform;¹³

⁶ Currently banned in Australia under s 116A *Copyright Act*, and required to be banned under AUSFTA Article 17.4.7(a)(ii). In Australia, under current law, this is the only activity which is banned; the situation is similar in Japan: see Ian Kerr, Alana Maurushat, and Christian Tacit, ‘Technical Protection Measures: Tilting at Copyright’s Windmill’ (2002-2003) 34 *Ottawa Law Review* 7, 59-60.

⁷ Not currently illegal in Australia, but required to be made illegal under AUSFTA Article 17.4.7(a)(i). In Canada, under current draft proposals, this is the only activity which will be banned.

⁸ Kimberlee Weatherall, ‘On Technology Locks and the Proper Scope of Digital Copyright Laws - *Sony* in the High Court’, (2004) 26 *Sydney Law Review* 613

⁹ Kirby J, *Stevens v Kabushiki Kaisha Sony Computer Entertainment* [2005] HCA 58 (6 October 2005) (‘*Stevens v Sony*’) at [225].

¹⁰ The European Union did not include anti-circumvention provisions in its directive until 2001; many countries are still implementing those provisions. The ‘Digital Millennium Copyright Act’ in the United States, enacted early in 1998, is the frequent subject of reform efforts and criticism. Canada is currently debating how to implement the WIPO Copyright Treaty – draft legislation has been issued. The various laws, particularly the DMCA, have been widely criticized by many commentators, although not universally: on the ‘pro’ side of the debate, see the work of Professor Jane Ginsburg (Columbia University).

¹¹ *Stevens v Kabushiki Kaisha Sony Computer Entertainment* [2005] HCA 58 (6 October 2005) (‘*Stevens v Sony*’) at [39].

¹² See below Part 4.2, page 27.

¹³ See *Sony Computer Entertainment Inc v Connectix Corporation* (9th Cir. 2000). This case is not an anti-circumvention case, but one where Sony sued the producer of a ‘Games Emulator’ which enabled individuals to play Sony PlayStation games on their computer (ie, not on a special-purpose Sony console). The court noted that Sony sought ‘control over the market for devices that play games Sony

3. Anti-circumvention laws ban certain technologies. As a result, these laws may impact on – and inhibit – both innovation, and competition in technology markets. As one commentator recently put it, thanks to Digital Millennium Copyright Act (‘DMCA’):¹⁴

‘content owners deploying content with TPMs enjoy an important new ‘exclusive right’ – the right to demand that technology vendors enter a licensing arrangement before they can build a device that can access or copy the content in question.

This is a sea-change for rightsholders. Prior to the DMCA, technologists could build devices to interact with copyrighted works without having to ask permission. This meant that they could and did build things that disrupted existing entertainment industry business arrangements.’¹⁵

As a result of these three factors, drafting anti-circumvention law is a complex, rather than a simple question.

1.2 The issues in drafting anti-circumvention law

Policy-makers drafting anti-circumvention law must reach an accommodation between a range of competing interests: the interests of copyright owner, technology providers, individual consumers, researchers, and institutional users. The accommodation reached will be a function of three basic factors:¹⁶

1. The scope of the technologies protected: that is, the definition of ‘technological protection measure’;¹⁷
2. The scope of the activities prohibited in relation to those technologies – itself a function of two factors: for example, what counts as ‘distribution’ of a circumvention technology?
3. The scope of the exceptions to the prohibited activities.

produces or licenses. The copyright law, however, does not confer such a monopoly.’ Anti-circumvention laws are now used to seek the same control in some circumstances: see further below.

¹⁴ The DMCA is the US anti-circumvention law.

¹⁵ Fred von Lohmann, Electronic Frontiers Foundation, Comment on Picker Moblog, 15 August 2005, available at <http://picker.typepad.com/picker_moblog/von_lohmanndarknet/index.html>

¹⁶ On these issues generally, see Emma Caine and Kimberlee Weatherall, ‘Australia-US Free Trade Agreement – circumventing the rationale for anti-circumvention?’ (2005) 7(9) *Internet Law Bulletin* 121-125. I am happy to provide a copy of this article to the Committee on request.

¹⁷ In this submission, I will use this term, ‘technological protection measure’ (or TPM), because that is the term used in the Australian *Copyright Act*. Of course, the AUSFTA itself uses the term ‘effective technological measure’, which is the US term.

While Australia already has anti-circumvention law, all three issues may be up for negotiation and change during the process of drafting laws to implement Article 17.4.7 of the Australia-United States Free Trade Agreement ('AUSFTA').

1.3 The relationship between technological measures and copyright rights

One important issue in drafting anti-circumvention laws is the 'nexus', or connection, that must exist between a technological measure and liability for its circumvention, on the one hand, and the exercise of copyright rights, on the other. In short, there is an issue regarding whether liability should ever attach when a technical measure, and its circumvention, have nothing to do with copyright infringement.

In the United States, courts have developed caselaw which has ensured that the DMCA cannot be invoked in all circumstances. In particular, when confronted with claims:

- By printer manufacturers that access control measures prevented the manufacture of competing ink cartridges, as it would involve overcoming a technological measure;¹⁸ or
- By garage door companies, to prevent the manufacture of competing replacement garage door openers;¹⁹ or
- By companies to ban the repair of computer systems.²⁰

US Courts have developed principles holding, in essence, if uses prevented by an access control measure are not related to copyright rights, then the DMCA does not apply. As the Federal Circuit noted in *Storage Technology*,

*'To the extent that [the defendant's] activities do not constitute copyright infringement or facilitate copyright infringement, [the plaintiff] is foreclosed from maintaining an action under the DMCA. That result follows because the DMCA must be read in the context of the Copyright Act, which balances the rights of the copyright owner against the public's interest in having appropriate access to the work. ... courts generally have found a violation of the DMCA only when the alleged access was intertwined with a right protected by the Copyright Act.'*²¹

Issues of liability are strictly beyond the terms of reference. However, it would be open to the Committee to recommend that this caselaw, and this argument be considered in drafting the Australian legislation: and, in particular, that the legislation reflect the aim, referred to by government negotiators, that anti-circumvention laws protect copyright, rather than hinder competition more generally. It would be ironic if Australia were to

¹⁸ *Lexmark International Inc v Static Control Components Inc* 387 F.3d 522 (6th Cir. 2004)

¹⁹ *The Chamberlain Group Inc v Skylink Technologies Inc* 381 F.3d 1178.

²⁰ *Storage Technology Corporation v Custom Hardware Engineering & Consulting Inc* (Fed. Cir. 24 August 2005)

²¹ *Storage Technology Corporation v Custom Hardware Engineering & Consulting Inc* (Fed. Cir. 24 August 2005)

protect the use of circumvention laws to restrict markets in goods unrelated to copyright (like printer ink cartridges). Australian law should be drafted to prevent such arguments even being raised in Australian courts.

1.4 *The attitude policy-makers (and this Committee) should adopt in considering exceptions to anti-circumvention rules*

One of the issues which faces the Committee in this review is how to deal with uncertainty. The market, and technologies, are rapidly developing. How to draft exceptions in a fast-moving environment?

The Committee will no doubt receive submissions suggesting that it adopt a narrow approach: that it let the market develop and intervene only where real problems are shown. Obviously, the best outcome is where TPMs do not interfere unduly in non-infringing uses, and where parties affected by TPMs can reach a deal without detailed government intervention. It does not follow, however, that the best way to achieve that outcome is to leave matters entirely to the market.

Anti-circumvention laws are, most primarily, directed against technologies – technologies which in general will have both legitimate, and non-legitimate uses. By definition, the laws involve a serious intervention into the market for technological innovation.

By banning certain technologies, anti-circumvention laws give copyright owners very significant rights to control the direction of technological innovation. As a result of anti-circumvention laws, a company wishing to provide introduce a new technology for accessing or disseminating copyright material must obtain the permission of the copyright owner. The potential negative impacts are obvious. Given the ubiquity of copyright-protected material in a digital environment, the possibility is that copyright owners obtain the right to determine who gets to innovate in that space, and what features may be introduced.

Of course, the same bans that hold up innovative technologies also impact on consumers and users: preventing them from consuming legitimately purchased copyright material on the platform of their choice. Imagine that:

- you could only view Hollywood movies on a Panasonic DVD player, but not a Sony one; or
- You can only listen to portable music if you buy an iPod, but not on any other portable device; or
- that a library can only use Microsoft programs, because only then will it be able to provide access to certain databases for its researchers (because they don't work on Apple, because Apple hasn't licensed the DRM).

These are all hypotheticals. There are real examples too:

In 2002, computer manufacturer Apple threatened Other World Computing with a DMCA violation. OWC had modified Apple iDVD authoring software. As shipped by Apple, the software could only be used on computers which included an internal drive capable of writing DVDs. OCW modified the software to enable it to be used with external DVD recorders: enabling consumers without internal DVD recording drives (ie, with older Apple computers, before such drives were standard) to ‘upgrade’ to allow authoring.²² In other words, consumers had to buy a new computer. OCW complied with Apple’s request to cease the conduct.

These arguments illustrate the point: that anti-circumvention law can impact on who can innovate, competition in technology markets, and simultaneously limit consumer choice in technology. This is a factor that the Committee should consider.

The attitude of policy-makers will impact on how copyright owners use this power, and use TPMs. The best possible result is if blocks do not happen; if copyright owners provide the kind of access that users, and others need; if deals can be reached.

It is possible that policy-makers can facilitate this outcome by showing themselves willing to create exemptions. If policymakers show themselves willing to provide exemptions in the face of blocks to non-infringing uses, or impacts on technological innovation, copyright owners will have more incentives to make deals, rather than ‘hold out’, or simply stonewall requests for access. This, in my opinion, is an argument in favour of a flexible approach by this Committee, and any future review.

In considering the areas where exceptions may be necessary, the Committee should also pay particular attention to the following, competing interests:

- The interests in protecting the interests of copyright owners and copyright industries, sufficient to ensure the incentive to create, and innovate in methods for distributing copyright material;
- The interests of researchers in being able to access copyright material, and also research copyright protection technologies;
- The interests of cultural institutions in providing access to the shared culture, and preserve that culture and knowledge base;
- The interests of individual users in making legitimate uses of legitimately purchased material.

²² Declan McCullagh, ‘Apple: Burn DVDs – and We’ll Burn You’, *CNET News*, 28 August 2002.

2 What is the role of this Committee?

According to the Review Terms of Reference, the role of this Committee is:

‘to review whether Australia should include in the liability scheme any exceptions based on Article 17.4.7(e)(viii), in addition to the specific exceptions in Article 17.4.7(e)(i) to (vii).’²³

Two issues confront the Committee in determining its role:

- How is the Committee to deal with the problem of drafting exceptions, when we do not know what the scope of the prohibition is?
- Since it might appear that the Committee has a role analogous to that of the US Copyright Office,²⁴ what is the relevance of the US material?

2.1 How is the Committee to deal with the problem of drafting exceptions, when we do not know what the scope of the prohibition is?

It is submitted that the Committee should not issue any final, determinative report on the necessary exceptions on the basis of submissions it will receive in the first round. It is very hard to draft exceptions to an unspecified ban. The detail of how to effect such exemptions may need to be left to the next stage of consultation and drafting. In any event, stakeholders should have the right to comment on, or respond to, any proposed exceptions.²⁵

In this context, there are two main roles which are eminently appropriate for the Committee:

1. It can make recommendations about the *process* for determining exceptions, both now and in the future, and the *way* the exceptions should be dealt with: specifically, about the need to ensure the exceptions are effective; and
2. It can identify, from an Australian policy perspective, what activities, which may be impacted by anti-circumvention rules, must be allowed – acknowledging that such activities may be allowed either as a result of *ad hoc* exceptions, or as a result of the application of the basic prohibitions.

²³ Terms of Reference, available at <<http://www.aph.gov.au/house/committee/laca/protection/tor.htm>>

²⁴ 17 U.S.C. §1201(a)(1)(C)

²⁵ Cf the US process, which has always provided for a ‘reply comment’ period. It would not be appropriate to consider any hearings the LACA might conduct as being in the nature of a ‘reply’.

2.2 The relevance of the US material

The terms of reference make the role of this Committee look like that undertaken by the US Copyright Office. No doubt the Committee will receive many submissions seeking to encourage the Committee to take a similar view of its role to the view adopted by the US Copyright Office.

In my submission, the role of the Committee is very different from the role of the US Copyright Office, and the US Copyright Office material will be of only limited use.

The US Copyright Office is tasked with hearing submissions and drafting exceptions, a role delegated by Congress, and constrained by the terms of the US *Copyright Act* (17 USC §1201(a)(1)(C)). Appropriately, the US Copyright Office considers itself constrained, in the way it interprets its role and the scope of exceptions it can introduce, by the legislative history of the Digital Millennium Copyright Act ('DMCA'). The US Copyright Office has taken the view that it is not its role to reshape the policy balance reached in the DMCA, but to create exemptions in 'exceptional circumstances'.

This Committee is not so constrained. It represents the legislative branch; its role is to shape policy. There is no legislative history yet. The process now being undertaken by the Committee – considering what exceptions are necessary for Australian conditions – is more analogous to the deliberations that occurred within Congress *prior* to the US Copyright Office 'taking over' with its triennial reviews.

Such 'history' to the treaty provision as does exist strongly suggests that the negotiators did *not* think that Australia had to adopt an 'Oz-DMCA' or mirror the US approach under the DMCA – itself a highly controversial law in the United States.²⁶ Government representatives following the conclusion of the AUSFTA consistently emphasised the flexibility that existed in Article 17.4.7, commenting that:

*We certainly have negotiated long and hard in this area to ensure that we have the flexibility in certain areas that are important to us to enable us to introduce legislation to meet the commitments under the agreement without changes to legislation to the maximum extent we could. Where we have changes, we will introduce them in a way which is consistent with the agreement but which still reflects the legal and regulatory framework that is important to Australians.*²⁷

In my submission, the main relevance of the US process is to assist the Committee in identifying possible areas where an adverse impact is 'likely'. Most importantly, the US

²⁶ See Pamela Samuelson, 'Intellectual Property and the Digital Economy: Why the Anti-circumvention Regulations need to be Revised' (1999) 14 *Berkeley Tech L. J.* 519 at 521.

²⁷ Stephen Deady, Special Negotiator, Department of Foreign Affairs and Trade, quoted in Senate Select Committee on the Free Trade Agreement between Australia and the United States Australia, *Final Report* (2004), at 89 [3.173].

material should not be used to interpret the meaning of the treaty text – it does not govern how Australia should approach the creation of exceptions.

It might be argued that, since the purpose of Article 17.4.7, like Chapter 17 as a whole, is to bring Australian law into harmony with US law, the aim should be to follow the US approach. However, the ‘harmony’ argument should not be overstated. The bare obligations contained in Article 17.4.7 necessarily move Australian law further into ‘harmony’ with the US position. In any event, during consultations on the FTA, government representatives downplayed the concept of harmonisation, noting that:

*‘so long as Australia remains consistent with its international obligations, then the AUSFTA does not constrain future government’s abilities to make laws relevant to intellectual property to suit our social and legal environment.’*²⁸

A particular area of flexibility emphasised by the government negotiators was the area of exceptions.²⁹ Limiting Australia to the US exceptions or the US approach to exceptions is not required, even in the interests of harmonisation of laws.³⁰

In fact, as leading copyright commentators have noted, the area of exceptions is one where *national* policy can and should come into play, and the primary consideration should be the interests of Australian creators and users:³¹

‘Regarding exceptions to copyright, a strong case may also be made for application of each country’s laws on its own territory. While international instruments impose a general framework, they preserve some national autonomy regarding the content (and, outside the E.U., the form) of copyright exceptions.’

²⁸ DFAT, Answers to Questions on Notice, 15 July 2004, p.1, quoted in Senate Select Committee on the Free Trade Agreement between Australia and the United States Australia, *Final Report* (2004)

²⁹ See eg Senate Select Committee on the Free Trade Agreement between Australia and the United States Australia, *Final Report* (2004) 86-89, [3.161] – [3.168].

³⁰ The international arena has long tolerated many differences in copyright exceptions. It may be worth noting that when ‘harmonisation’ of anti-circumvention law was established in the European Union, through the Information Society Directive, no real attempt was made to actually harmonise exceptions – countries may choose from an extensive list. This suggests that harmonization of exceptions is not considered important: *Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society*, OJ L 167 , 22/06/2001 P. 0010 – 0019.

³¹ Jane Ginsburg, ‘International Copyright: From a ‘Bundle’ of National Copyright Laws to a Supranational Code?’ (2000) 47 *J. Copyright Soc’y USA* 265 at 287.

3 The process and criteria for determining exceptions

I noted above that the Committee should make recommendations regarding the process for creating exceptions, now and in the future. It is important that we have clarity and predictability in this process for the future. There are three issues of process which need to be dealt with:

- How should future reviews be conducted, and by whom;
- How should the criteria for the exceptions be interpreted, and
- How can exceptions created under Article 17.4.7(e)(viii) be made effective?

3.1 The process for exceptions

The text of Article 17.4.7(e)(viii) provides that adverse impacts giving rise to exceptions must be credibly demonstrated:

‘in a legislative or administrative review or proceeding; provided that any such review or proceeding is conducted at least once every four years from the date of conclusion of such review or proceeding’

The text of this provision says little about how the review or proceeding should be conducted. It is submitted that the following features, set out in Table 1 should be recommended by the Committee.

Table 1: Recommendations on process

Recommendation	Justification
<p>A fair procedure must be specified for future reviews, including:</p> <ul style="list-style-type: none"> • an adequate period of notice of any review • An appropriate period for initial comments, <i>and</i> reply comments, which provides ample time for the collection of information about current impact; • A clear articulation, ahead of time, of the standards to be applied 	<ul style="list-style-type: none"> • Transparency and predictability of process are desirable. • The current process is unclear, and it has been difficult to draft a submission in the absence of better information about the proposed scope of the prohibition; • The time periods allowed in the current review, in the context of other reviews, have made it difficult to identify impacts; • It is not currently clear what opportunities for replay will be provided, leading to difficulties in drafting responses.
<p>Exceptions created should not ‘expire’ every four years or with every new review.</p>	<ul style="list-style-type: none"> • There is no requirement in the text that exceptions ‘expire’ at the end of any review period – only that their existence be reviewed; • The need to ‘make a case’ for an exception every four years is an unfair and unnecessary burden on users: particularly, on public institutions and/or non-

	<p>governmental organisations.</p> <ul style="list-style-type: none"> • The interests of copyright owners are protected by the existence of a review. • In other areas of IP law there is no requirement to provide ongoing justification for exceptions. • Uncertainty as to the continuation of exceptions will prevent investment in businesses or practices that rely on such exceptions. For example, a university may not invest in resources that may require circumvention if it is unclear whether, in four years time, those resources will become unavailable.
<p>A process should be established for exceptions to be created 'between reviews'.</p> <p>The process should allow for the submission of complaints by parties whose non-infringing uses are being adversely affected, with the opportunity for response by the relevant copyright owners.</p>	<ul style="list-style-type: none"> • Nothing in the text of Article 17.4.7(e)(viii) prevents the establishment of a power to create <i>ad hoc</i> exceptions; • Flexibility is desirable: technology is constantly evolving and users should not have to wait up to four years before they can make a case for the means to make non-infringing uses; • Such a process would not preclude negotiation between copyright owners and users; on the contrary, such negotiation would be facilitated if copyright owners were aware of the possibility of exceptions being created in the absence of agreement; • It is consistent with approaches adopted elsewhere, in particular, in the European Union³² and the United Kingdom.³³
<p>The body to whom is delegated the conducting of future reviews should be an external, expert body – such as the Copyright Tribunal or Copyright Law Review Committee.</p>	<ul style="list-style-type: none"> • Ongoing consideration of exceptions is unlikely to be a useful task for a non-expert legislative body; • While the Copyright Tribunal has the necessary expertise, the fact that proceedings are run like judicial proceedings may be a drawback which needs to be considered; • The review should be external: reviews run entirely internally by the relevant Department not only place a burden on the Department, but they are undesirable from a public policy perspective, due to the lack

³² Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167 , 22/06/2001 P. 0010 – 0019, Article 6(4).

³³ In the United Kingdom, people prevented from making non-infringing use of material may complain to the Secretary of State, who may then 'give directions', in the absence of voluntary agreement or measure, to ensure that copyright owner makes available to the complainant the means of carrying out the permitted act: *Copyright, Designs and Patents Act 1988, s 296ZE*. In other words, complaint may be made at any time, and exceptions may be created at any time. One drawback of this system is transparency, however, it would appear to avoid the potential problem of having to wait four years for a chance at attempting to have an exception provided, where non-infringing uses are being impacted. The process does not appear to have imposed an undue burden or created undue problems for copyright owners at this stage. The Intellectual Property & Innovation Directorate of the UK Patent Office advised as at 20 September 2005 that although some requests to act under s. 296ZE have been received, 'there was no evidence that technical protection measures were preventing any of the exceptions in Schedule 5A from being carried out. The Secretary of State has not therefore given any directions.' (email 20/9/05, on file with author).

3.2 The criteria for additional exceptions

The second matter which the Committee must consider is the *criteria* for the creation of exceptions: what must be established before an exception will be created?

The Committee is the first body publicly to consider the meaning of the criteria set out in Article 17.4.7(e)(viii). The meaning of these criteria in an Australian context is currently ‘at large’, and is not elaborated in the Issues Paper that accompanied the Terms of Reference.³⁴

In my submission the requirements can and should be construed flexibly by this Committee.³⁵ The AUSFTA is not a statute, but a treaty which should be interpreted, and implemented, in accordance with Australian public policy. The indications from the government negotiators are that the language was understood broadly at the time of the negotiations.³⁶

There are narrower understandings of these terms in the United States,³⁷ but, as noted above,³⁸ those understandings reflect the US Copyright Office’s interpretation of the US legislative history (irrelevant here in Australia), and its confined role (which does not apply to this Committee of the legislature).³⁹

³⁴ Compare the first, and subsequent US Copyright Office processes, where the standards that would be applied by the Copyright Office were extensively explained in the initial Request for Comments: 64 *Federal Register* 66139 (24 November 1999)

³⁵ This is consistent with my comments above regarding the role of the Committee: above Part 2, page 13.

³⁶ I draw this conclusion from statements by negotiators emphasising that ‘Australia has retained the ability under the AUSFTA to create appropriate exceptions to suit its own circumstances.’: Senate Select Committee on the Free Trade Agreement between Australia and the United States Australia, *Final Report* (2004), at [3.166] – [3.174], especially the comment from Toni Harmer, that ‘the IP Chapter ... contains flexibility for us to implement [elements of the DMCA] in a way that is appropriate for us. ... Whilst we have treaty level obligations, we will be implementing those within our own legal context’: quoted at [3.174].

³⁷ These understandings are heavily influenced by the US legislative history to the DMCA and the rule-making process; clearly, that legislative history is irrelevant to the role of the LACA in this review: see Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, *Final Rule* 65 FR 64556-01, 27 October 2000.

³⁸ Part 2.2, page 14

³⁹ Notably, the US Copyright Office, in outlining its exceptions and the ‘broad and sweeping’ claims made by some parties, noted that ‘while many commenters and witnesses made eloquent policy arguments in support of exemptions for certain types of works or certain uses of works, such arguments in most cases are more appropriately directed to the legislator than to the regulator...’: Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, *Final Rule* 65 FR 64556-01, 27 October 2000 at 64562. In this case, of course, any arguments addressed to the Committee *are* directed to the legislator, which is entitled, accordingly, to take a broad view of the needs of Australian copyright owners and users.

There are three criteria for exceptions additional to those specifically listed:⁴⁰

- (1) The exception must relate to a particular class of works, performances, or phonograms;
- (2) There must be a credible demonstration of likely or actual adverse impact on non-infringing uses of copyright material; and
- (3) The exception must not impair the adequacy of legal protection or the effectiveness of legal remedies against the circumvention of effective technological protection measures.

3.2.1 *Particular class of copyright material*

Under Article 17.4.7(e)(viii), any exception addition to those specifically listed must relate to a ‘particular class of copyright material’. All that should be required is that the ‘particular class’ in the exception constitute an identifiable set of circumstances where circumvention is allowed

In the US, the Copyright Office has taken the view that a ‘particular class of copyright material’ is determined:

- First, by reference to one of the ‘categories’ of copyright works (literary works, musical works, etc); and
- Second, by reference to other limiting criteria.

This is a very narrow view, adopted by the US Copyright Office on the basis of the US legislative history. This Committee need not, and should not do the same – first, because it is not required, and second, because the narrow interpretation has led to practical problems in the US:

- It disadvantages inexperienced people or uses, who may not have any idea how to ‘define’ a particular ‘class’;
- Sometimes, users with real, identifiable problems making non-infringing uses cannot identify a ‘particular class’ to the satisfaction of the Office, leading to the proposed exception failing without serious consideration.⁴¹

⁴⁰ AUSFTA, Article 17.4.7(e)(i) – (vii)

⁴¹ See, for example, the Copyright Office’s response to a proposed exception by Professor Edward Felten for ‘musical recordings and audiovisual works, protected by access control mechanisms whose circumvention is reasonably necessary to carry out a legitimate research project, where the granted exceptions applies only to acts of circumvention whose primary purpose is to further a legitimate research project.’ This proposed exception was rejected by the Office as not identifying a ‘particular class of works’ – without the Office *ever considering* whether research was being negatively impacted. This is not a sensible approach. See *Submission of Edward Felten*, Library of Congress/Copyright Office Rulemaking on ‘Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies’, 2003, and US Copyright Office, *Exemption to Prohibition on*

In addition, the narrow view doesn't match what the process is meant to be doing:

- The US approach means that classes cannot be defined by reference to the TPM itself: which makes no sense, since the whole idea is to create exceptions to the ban on circumvention of particular TPMs which are interfering with non-infringing uses. It makes sense to be able to define a 'class' of works, for example, like:

'All copyright works and subject matter protected by the TZX-737 algorithm, where circumvention is done for the purposes of legitimate research.' [*This is a fictional example*]⁴²

- It also means that classes cannot be defined by reference to the use to be made. This is not sensible, since the essential inquiry is whether non-infringing uses are being adversely affected. Defining the class by reference to the affected non-infringing uses would seem to make sense: for example:

'All audio-visual works protected by encryption, the decoding of which is necessary to enable the work, or an excerpt of the same, to be included in a compilation for classroom instruction'.

In my submission, the Committee should take the broad view: that the 'class of copyright material' could be defined in any one of a number of ways, provided only that the class can sensibly be identified. Examples of ways to define the class would include:⁴³

- The ways the works are used: eg, for classroom instruction;
- The users of the work: eg, universities;
- The 'type' of work under the *Copyright Act*: eg, literary works; cinematograph films;
- The media on which the work is distributed: eg, movies distributed on DVDs;
- The technical measure used on the work: eg, 'material distributed using the Content Scrambling System or a variant on that system', or 'works or other

Circumvention of Copyright Protection Systems for Access Control Technologies: Final Rule, 68 *Federal Register* 62011, 31 October 2003, at 62015.

⁴² There would be some perverse incentives otherwise. Imagine that the class was defined as 'all films protected by the TZX-737 algorithm...'. A copyright owner would be able to include within the envelope of the protection some other kind of work, like a literary work, and then argue that circumvention was no longer just of the protection on the film.

⁴³ The Copyright Office in the United States has taken a different view, finding that a class of works must be a 'discrete subgroup' of works, which takes the category of works under the Act (eg literary works, musical works, dramatic works) as the starting point: Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule* 65 FR 64556-01, 27 October 2000. However, that interpretation is based on the US legislative history (irrelevant for present purposes); is controversial in the United States and even the Copyright Office itself has suggested that the statutory language (ie, the treaty language) is 'ambiguous': *Ibid*.

subject matter protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence’.⁴⁴

This is consistent with the treaty language itself: some of the specific exceptions are defined, not according to the ‘type’ of work, but according to the use: for example, Article 17.4.7(e)(v) allows ‘lawfully authorised activities carried out by government employees, agents, or contractors for law enforcement intelligence, essential security, or similar governmental purposes.’ There is no reference in that exception to ‘literary works’ or any other category.

On this broad approach, all the Committee has to do is identify non-infringing uses, which are or are likely to be impacted by TPMs. Drafting the detail is then up to the next stage of the process.

3.2.2 *Credible demonstration of likely or actual adverse impact on non-infringing uses of copyright material*

The next issue is the showing of adverse impact. Several questions arise here:

- *What kind* of adverse impact is sufficient?
- *How much* of an adverse impact must be shown?
- *How* can it be demonstrated (what kind of evidence will suffice)?

In my submission, once again, the Committee should accept a flexible view. Once again, this is justified by the fact that, again by definition, it is non-infringing uses that are being impacted. In practice, this would mean the following:

Question	Interpretation
<i>What kind</i> of adverse impact?	<p>Any and all adverse impacts may be considered, including:</p> <ul style="list-style-type: none"> • Price: uses are more expensive⁴⁵ • Capacity: uses are prevented or made much more difficult. <p>This would not mean that a simple ‘cost’ impact would be sufficient to justify an exemption. However, cost (particularly prohibitive or unreasonable or differential cost) would be a factor that would be relevant.</p>
<i>How much</i> adverse impact?	The requirement that the demonstration be ‘credible’ would

⁴⁴ An exception like this was created in the first Copyright Office rulemaking, although in that case the class was limited to literary works: Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule* 65 FR 64556-01, 27 October 2000 at 64561. The Copyright Office did, however, note that it was ‘tempting’ to describe the class in the above, broader form.

⁴⁵ For example, consider region coding. Region-coding does not necessarily prevent non-infringing uses, but it may make them considerably more expensive as a result of market segmentation: see below Part 4.2, page 27.

	<p>seem to suggest that an utterly speculative impact would be insufficient: ie one that was entirely theoretical, or de minimis, or abstract.</p> <p>However, it should be noted that:</p> <ul style="list-style-type: none"> • The language does not require that the impact be ‘imminent’ – only likely;⁴⁶ • It should be sufficient that an adverse impact is ‘reasonably anticipated’. <p>The concept of ‘reasonable anticipation’ better fits in a situation where technology is rapidly developing.</p> <p>It should also be remembered that even the existence of an exemption will not necessarily lead to acts of circumvention. In many cases, circumvention may be a fallback – attempted only after access is sought with the cooperation of copyright owners – particularly when we are talking about the activities of the larger, more risk averse entities like cultural and educational institutions.⁴⁷ The benefit of an exemption in such circumstances is to affirm the basic position in copyright: that the default position is that the use is to be free from copyright owner control.</p>
<p>How may adverse impact, including likely adverse impact, be shown?</p>	<p>Proving impact is notoriously difficult in the field of intellectual property. It is submitted that actual examples taken from Australia need not be shown, and that credible evidence of adverse impact overseas should be sufficient, unless there is particular reason to think Australia will be different. So for example, it is submitted that either of the following could be sufficient to establish a likely adverse impact:</p> <ul style="list-style-type: none"> • An exemption granted in the US process; or • Evidence of significant issues, lawsuits, or complaints in the United States or in other countries.

⁴⁶ Cf the approach in the United States: Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule* 65 FR 64556-01, 27 October 2000

⁴⁷ It is worth noting recent empirical research in Australia which confirms that cultural institutions (such as libraries, galleries and archives) are, in relation to copyright matters, generally risk averse: Hudson, Emily and Kenyon, Andrew, (2005) ‘*Communication in the Digital Environment: An Empirical Study into Copyright Law and Digitisation Practices in Public Museums, Galleries and Libraries*’, IPRIA Working Paper 15/05. This only affirms that such institutions are likely, in the first instance, to seek assistance from the copyright owner, with circumvention attempted only as a fallback should assistance fail to be forthcoming: see to similar effect Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule* 65 FR 64556-01, 27 October 2000 at 64565

3.2.3 *Non-impairment of adequacy of legal protection or the effectiveness of legal remedies against the circumvention of effective technological protection measures.*

The final criteria requires that any additional exception under Article 17.4.7(e)(viii) must not impair the effectiveness of legal remedies against circumvention. Detailed comment on this criteria is not required, although it should be noted that the provision cannot mean that there should be *no* impairment (since by definition an exemption ‘impairs’ the prohibition): the impairment would need to be significant for this provision to make sense.

3.2.4 *Making the exceptions effective*

Exceptions created under Article 17.4.7(e)(viii) apply only to liability for circumvention of access controls. In other words, exceptions may not be created for liability arising from the supply of circumvention devices or services.⁴⁸ Interpreted completely literally, this might mean that if John has an exception to allow John to circumvent a TPM, but John is not technically competent, John could not ask or hire Betty to do the circumvention for him.

This would make no sense – it would create meaningless exceptions, or exceptions available only to the technically competent. Nor is it clear that John, in our example, could fall back on general copyright principles. In other areas of copyright, under current Australian case law it would appear that Betty cannot, in acting on behalf of John, rely upon an exception available to John.

As the Law Council submission notes, such an outcome should be avoided – sound policy demands that a person’s ability to use an exception not be determined by their level of technical competency.

I therefore support the proposal by the Law Council, that any exception created for access control circumvention liability should be accompanied by a rule that allows third parties to circumvent the TPM on behalf of another person. If further control over the act is required, the current ‘signed declaration’ system could be used: that is, John would have to provide Betty with a signed declaration regarding John’s non-infringing and permitted purpose.

Providing such a rule would not interfere with the effectiveness of the anti-circumvention laws (the main goal, of preventing uncontrolled distribution of circumvention devices, is still achieved) but ensure that the exceptions can be used. There was no evidence, in the *Digital Agenda Review*, that the declaration system was leading to widespread circulation of circumvention devices.⁴⁹

⁴⁸ Article 17.4.7(f)

⁴⁹ Phillips Fox, *Digital Agenda Report and Recommendations* (2004), [18.15] – [18.16].

4 Areas where an exception is or may be required

A final matter that the Committee must deal with is the question of what exemptions may be necessary to the ban on circumvention of access controls. As argued above,⁵⁰ it is particularly difficult, at this stage, to make a case for particular exemptions, in the absence of more information about the scope of the prohibition. I have argued that Committee should seek to identify activities that could be impacted which it is in Australia's interests to protect.

It will be for the Committee to determine whether there is 'credible demonstration' of an adverse impact or likely adverse impact on non-infringing uses. As a specialist researcher in the field, rather than a direct stakeholder, I do not have 'evidence' as such of impacts on myself personally. However, I have argued that the Committee can and should consider evidence of adverse impacts in other jurisdictions to support an inference that adverse impacts are 'likely' here in Australia.⁵¹

In the sections below, I therefore outline impacts that have been documented elsewhere, including in the US Copyright Office proceedings, and in caselaw in the United States. Where possible, I refer to anecdotal evidence relating to Australia. It should be noted, however, that the material gathered particularly in relation to Australia is not the result of systematic study.

The examples gathered here is not exhaustive, and not intended to be.

One matter not discussed here in detail is the issue of fair dealing exceptions. The Committee should bear in mind that as recently as 2004, the Digital Agenda Review found that including fair dealing as an exception to the anti-circumvention laws would better serve the balance of interests sought by the Australian government. In my submission, if the Committee takes the view that it cannot include fair dealing as an exception, it should be ready to consider a number of situations where there is evidence that impacts on fair dealing may be reasonably anticipated.

⁵⁰ See above Part 2.1, page 13.

⁵¹ See above, Part 3.2, page 18ff

4.1 **Obsolescence or failed technology**

4.1.1 *Summary*

It is submitted that there should be a broad exemption allowing circumvention in relation to all works, regardless of what class of work is involved, that are protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence. This area fits the criteria:

- There is an adverse impact on non-infringing uses: the inability to provide, and ensure, long term access to digitally stored materials by universities, and the inability of users to make legitimate uses of material;
- The concern is ‘credible’: there is evidence of the issue in the United States and similar concern through the Digital Agenda Review in Australia; and
- An exemption would not impair the effectiveness of the regime: by definition, it is not impacting on the current interests of copyright owners.

4.1.2 *Background*

There is ample reason to support such an exemption. First, where technology is obsolete, or malfunctioning, banning circumvention hinders non-infringing uses and does not serve the interests of copyright owners. An exemption would therefore not impair the effectiveness of the overall regime (as has, indeed, been accepted in the United States). Second, there is evidence that this is considered a problem in both the United States, and in Australia.

The relation to the United States, in a recent paper, Professor Jane Ginsburg has noted that ‘the characteristic most of the [excepted] categories [in the United States] share is obsolescence or malfunction: the work was made available in formats no longer generally in use or which are ineffective, and circumvention is necessary to access the work.’ The theme is indeed striking. Libraries and other cultural institutions are particularly affected: part of their role is to provide long-term access to information, an ability to obtain access and to format-shift copy from obsolescent media for long-term preservation are also critical to operations, as has been recognized in the United States:

‘Libraries and educational institutions also stated that they have experienced instances where materials they obtained were protected by access controls that subsequently malfunctioned, and they could not obtain timely relief from the copyright owner. ... Similarly, libraries stated that there have been instances where material has been protected by technological access protections that are obsolete or are not longer supported by the copyright owner.’⁵²

⁵² US Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, Final Rule 65 FR 64556, 27 October 2000 at 64565. According to discussions with librarians at the University of Melbourne, concerns about obsolescence do impact on

It is even arguable that the failure in the US to include an exemption for circumvention of obsolete, or malfunctioning technologies was an oversight. The US Copyright Office has noted that:

'[t]his appears to be a genuine problem that the market has not adequately addressed, either because companies go out of business or because they have insufficient incentive to support access controls on their products at some point after the initial sale or license. In cases where legitimate users are unable to access works because of damaged, malfunctioning or obsolete access controls, the access controls are not furthering the purpose of protecting the work from unauthorized users. Rather, they are preventing authorized users from getting the access to which they are entitled ...

Not only does such a result have an adverse impact on noninfringing uses, but it also does not serve the interests of copyright owners ...

*...This subject matter is probably more suitable for a legislative exemption, and the Register recommends that Congress consider amending section 1201 to provide a statutory exemption for all works, regardless of what class of work is involved, that are protected by access control mechanisms that fail to permit access because of malfunction, damage, or obsolescence.'*⁵³

There is evidence specific to Australia also: similar concerns have been raised in Australia in the context of the *Digital Agenda Review*:

*'Where the company is defunct, there remains no way in which to negotiate for continued access nor anybody to contact to gain the instructions to bypass TPMs that have erroneously failed to enable access to legitimate users. Where the products are no longer for sale, vendors have no incentive to continue providing assistance for gaining access. The result is that the product purchased is rendered useless because of the implementation of TPMs. A similar result can occur with malfunctioning technology, or measures that prevent use of particular media on particular devices (which is not necessarily known by users). It is said that this results in consumers being prevented from accessing information or products that they have lawfully acquired.'*⁵⁴

acquisition decisions: certain media are not acquired due to the issue of future obsolescence. This would seem to be contrary to the basic aim of long term access to and preservation of knowledge.

⁵³ US Copyright Office, *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule* 65 FR 64556, 27 October 2000 at 64565. It is notable that in the second Rulemaking, the exception was limited. The Librarian of Congress noted that '[m]any commenters supported a renewal of the previous exemption' however '[f]ew commenters ... provided any factual support for such an exemption.' [62013]. However, it is arguable that the problem there lay with the considerable burden of 'establishing' a problem through the high level of proof required by the US Copyright Office. This Committee is entitled to consider the broad policies involved, and determine that banning circumvention in these circumstances does not serve the purposes that justify anti-circumvention law. As argued above, there is no requirement in Australia that exemptions expire periodically, so long as they are reviewed periodically (see above Part 3.1, page 16).

⁵⁴ Phillips Fox, *Digital Agenda Report and Recommendations* (2004), [18.48]

4.2 Consumer devices and consumer use of media

A second area raised in the Terms of Reference is where TPMs impact on consumer access to legitimately purchased material. The area I focus on in this submission is regional playback control. This kind of control is really only one example of the kind of limit that may be applied to consumer material, but it is one that we have experience with already.

It is submitted that the Committee should recommend that activities geared to overcoming region-coding must be allowed, whether this be through exception or through the definition of the scope of the prohibition.

4.2.1 Regional Playback Control (Region-coding)

Regional playback control refers to situations where technology is used to limit the use of digital media, so that those media may only be used (played back) on devices purchased in the same geographical region. There are several contexts in which region coding is currently known to be used. The best known examples are Sony, in relation to the PlayStation platform, and movies distributed on DVD. So, for example, in the case of DVDs, where a form of region playback control is used, a disk purchased in the Australian region (Region 4) may not be played on a DVD player purchased in the US region (Region 1).

How region coding (currently) works: the DVD CSS system⁵⁵

Movies distributed on DVDs are protected using a system called the Content Scrambling System (CSS). CSS is a proprietary technology developed by MEI and Toshiba. CSS is currently used to enforce region coding as follows:

- The contents of a Commercial Movie DVD are encrypted using CSS. To decrypt, and hence play the content, a DVD player⁵⁶ must have the right ‘key’.
- The ‘keys’ necessary for a DVD player (hardware, or software) to access the content are encrypted also.

⁵⁵ The description found here builds on three sources: the specifications available on the DVD CCA website (current as at 10 August 2005), and two studies: Ian Kerr, Alana Maurushat, and Christian Tacit, ‘Technical Protection Measures: Tilting at Copyright’s Windmill’ (2002-2003) 34 *Ottawa Law Review* 7, 17-18; Dean S. Marks and Bruce H. Turnbull, ‘Technical Protection Measures: the Intersection of Technology, Law and Commercial Licenses’, WIPO Document WCT-WPPT/IMP/3 (December 3, 1999).

⁵⁶ A player may come in the form of ‘hardware’ (the physical player that is connected to the TV), or software (the program which can be installed on a computer equipped with a DVD drive, so that the computer will play the CSS-encrypted DVD).

- CSS licensing is managed by the DVD CCA (DVD Copy Control Association);⁵⁷
- In order to obtain the ‘keys’ for incorporation into a DVD player, the player manufacturer or software provider must license the CSS technology.
- CSS licenses contain certain conditions that a party must agree to and comply with, in order to get access to the keys. Manufacturers who violate the contractual rules can be sued, have their products enjoyed and pay damages. Conditions that players must comply with under the current version of the license include:
 - Content decrypted within a DVD device must be securely protected from unauthorized access within the device, and contents can only be sent to certain authorised outputs (to prevent copying);⁵⁸
 - DVD players must implement ‘recordable media playback control’ – that is, they must refuse to play back recordable DVD discs containing digital source code indicating that the content was never to be copied;⁵⁹ and
 - Devices sold in a particular geographic region can only play back disks authorized for playback in that region.⁶⁰

As can be seen from this description, it would appear that currently, multi-region DVD players are not consistent with these arrangements. The Committee will no doubt be aware that multi-region players are commonly available in Australia at present. This has ameliorated concerns about lack of access to DVD material purchased outside the authorised Australian region (*Region 4*).

However, it is still arguable that there is a ‘likely’ adverse effect should an exception not be provided to allow circumvention of measures used to enforce region-coding.

First, material other than DVDs is still protected using measures that enforce region-coding. One obvious example is the Sony PlayStation games. Second, region-coding is enforced in other, comparable countries, including the United States.⁶¹ If multi-region players are presently available in Australia, it would appear to be as a result of

⁵⁷ Their website is here: <<http://www.dvdcca.org>>

⁵⁸ CSS Procedural Specifications Version 2.8 (10 August 2005), Clause 6.2

⁵⁹ CSS Procedural Specifications Version 2.8 (10 August 2005), Clause 6.2.1.5. The purpose of this requirement is to ensure that if CSS-encoded material is copied onto a recordable DVD, in an unauthorized manner, then commercial DVD players and commercial DVD-playing software will refuse to play the content.

⁶⁰ CSS Procedural Specifications Version 2.8 (10 August 2005), Clause 6.2.1.4, which states that ‘Each DVD Player shall be designated for only one region and shall implement regional code playback controls so that CSS Data are not played back except in accordance with the regional code instructions contained on the prerecorded DVD Disc. DVD Players may play back such data only if the data are coded for playback in the same geographic region for which the DVD Player is itself designated.’

⁶¹ According to anecdotal evidence provided by visiting academics to Melbourne University, multi-region players are not so readily available, for example, in the United States of America.

forbearance on the part of the CSS licensors to sue the providers or enforce the contractual conditions set out in the CSS Procedural Specifications. The current specifications are sufficient to show a ‘reasonably anticipated’ or likely adverse effect on non-infringing uses.

Finally, region-coding of DVDs is still having an effect at present. On at least some computers, DVD-playing software is set such that disks from different regions may be used for a short period, but after that, an election must be made, and the region is from that period ‘fixed’ on that computer: although we have no information on how common such an issue may be.⁶²

4.2.2 Adverse Impacts on Non-Infringing Uses

One adverse impact on non-infringing uses that this has is to raise the cost of access in Australia. Where a copyright owner is able to control who can sell in, and import into Australia, they can set different prices in Australia from those which pertain in other countries. Past government inquiries have found that geographical segmentation of markets is likely to lead to higher prices in Australia.⁶³ As the Intellectual Property and Competition Review Committee noted in 2000,

‘Australia is a relatively small and somewhat isolated market, which is nonetheless attractive because per capita incomes are relatively high. Although international comparisons are difficult, it seems reasonable to assume that Australians are substantial consumers of material covered by copyright, in all its various forms. The willingness to pay for such material is likely to be quite high – most notably when compared to markets in poorer parts of the world.’⁶⁴ A supplier of such material with some degree of market power, and the ability to price-discriminate internationally, would likely set higher prices in the Australian market than elsewhere.

While industry bodies have argued to the contrary, this inference seems to be borne out by the ACCC’s comparisons of international prices for books, and by the work carried out for this review by the NZ Institute of Economic Research (Inc.) To the extent that the restrictions do confer market power on suppliers of

⁶² Anecdotal information obtained from academics at the University of Melbourne.

⁶³ It might be argued that ‘higher prices’ is not an ‘adverse effect’ within the language of the treaty. This argument would be incorrect. There is no indication in the text of the treaty that the ‘adverse effect’ refers only to *preventing* uses. Uses are adversely affected if they become more expensive.

⁶⁴ On this issue, see also D. Richardson, ‘Intellectual Property Rights and the Australia-US Free Trade Agreement’, Parliamentary Library Research Paper, 31 May 2004, available at <<http://www.aph.gov.au/library/pubs/rp/2003-04/04rp14.htm>> (noting a ‘quick comparison’ on Sony PlayStation prices which indicated that it might be the case that ‘normal prices are around 50 per cent higher in Australia [as compared to the United States] and Australians might miss out on substantial discounts’)

*copyright material, and allow them to exercise that power through price discrimination, Australian consumers could be disadvantaged.*⁶⁵

Price is not the only issue. A second adverse effect on consumers is the inability to play material legitimately purchased overseas: a matter which is, of course, of considerable concern to the government, and contrary to the stated policies of the government:

*'In terms of regional coding itself, if a person is playing a legitimate, non-pirated product, the government's intention would not be for that to fall foul of the laws in relation to technological protection measures.'*⁶⁶

*'It seems to me that there is the capacity for Australia to introduce exceptions to allow for the legitimate use of non-pirated material here. The agreement, I think, certainly allows for that through exceptions, and I think that is accepted.'*⁶⁷

The ACCC, too, has long been concerned that the use of anti-circumvention legislation to protect regional coding, was an inappropriate use of copyright legislation as it potentially reduced the ability of consumers to access lawfully acquired copies of the games in question, such as games 'acquired in the United States and brought back to Australia for personal use'⁶⁸ rather than preventing copyright infringement.

It is important to note, too, that this second adverse impact applies *even where there is a ban on parallel importation*. It is not the case that, even in relation to films, region-coding 'simply enforces' existing copyright rights. The ban on parallel importation of films applies only to commercial activities – importing for commercial use, for example. A consumer who purchases a DVD overseas, or purchases a DVD from an online site like Amazon.com, is not infringing copyright – by purchasing or by using the disk.

A third adverse impact of enforcing regional coding measures is the effect on institutions who use, or seek to collect, material on digital media. One example is educational institutions. The University of Melbourne holds a collection of approximately 2,500 DVDs purchased from all over the world. Over half of the collection is sourced from regions other than the Australian region 4. This will be an ongoing issue for the university, which will always have a requirement to access DVDs from regions other than

⁶⁵ Intellectual Property and Competition Review Committee, *Review of Intellectual Property Legislation under the Competition Principles Agreement*, September 2000, at 62. See similarly the comments of the Australian Competition and Consumer Commission in its submission to the Digital Agenda Review in 2003, which noted that 'the Commission is of the view that TPMs which also have as a function RPC should not, as a matter of policy, be given legislative protection from circumvention'. To similar effect, see Alan Fels and Fred Brenchley, 'Copyright: Divide and Rule', *Australian Financial Review*, 18 October 2005.

⁶⁶ Simon Cordina, *Transcript of Evidence*, Senate Select Committee, 18 May 2004, pp91-92, quoted in Senate Select Committee on the Free Trade Agreement between Australia and the United States Australia, *Final Report* (2004), 87 [3.165]

⁶⁷ Deady, *Transcript of Evidence*, Senate Select Committee, 6 July 2004 p122, quoted in Senate Select Committee *Transcript of Evidence*, Senate Select Committee, 86 [3.163]

⁶⁸ *Kabushiki Kaisha Sony Computer Entertainment v Stevens* [2002] FCA 906 (26 July 2002) (2002) 200 ALR 55 [91]

region 4 as not all DVDs are released in region 4 and in such cases the university is required to source the item from overseas suppliers.

Indeed, I understand, from conversations with university academics in film studies areas, that there are already issues arising in an educational context.⁶⁹ Under s 28 of the *Copyright Act*, it is not an infringement of copyright to ‘perform’ or show a film or sound recording during the course of classroom instruction. Under this section, lecturers are entitled to show movies, or excerpts of movies during class – which can be important in many fields, including cinema studies. Lecturers would prefer to be able to show DVDs using their laptops or computers, because using a laptop may provide additional functionality (eg, the ability to freeze frame, and perhaps juxtapose that frozen frame against some other picture on the same screen). However, it would appear that computers are not ‘multi-regioned’ the way that DVD players may be. The result is that the computer cannot be used, in class, to use and show many DVDs which are in the University’s collection. This has an adverse effect on the educational and pedagogical techniques used in university classrooms.

A final matter is worth noting. In a side letter to the United States – Singapore Free Trade Agreement dated 6 May 2003, the parties agreed the following:

Nothing in this Agreement shall require Singapore to restrict the importation or domestic sale of a device that does not render effective a technological measure whose sole purpose is to control market segmentation for legitimate copies of motion pictures, and is not otherwise a violation of law.

This tends to detract from any argument that allowing circumvention in such circumstances will reduce the effectiveness of the anti-circumvention regime.

4.3 Encryption and security research

4.3.1 Summary and recommendation

Another activity which may be interfered with by anti-circumvention laws is research on encryption and other computer security systems. The Committee should adopt an unequivocal policy in favour of encryption and other computer security research, and should direct that the drafting of the legislation ensure that legitimate researchers may:

- Circumvent to the extent necessary for any legitimate research into encryption, other technical access and/or copy control measures and any other issues relating to computer security; and
- Publish, and publicly discuss, that research.

⁶⁹ I thank Ms Robin Wright for this information. Ms Wright, research fellow at CMCL, conducted a number of conversations in preparation for this submission, which inform Part 4 in particular.

The legislation should ensure that ‘legitimate research’ includes research not only at institutions such as universities, but by private companies.⁷⁰ One appropriate model may be that provided by the ALRC in relation to patent law, in its recommendation for an exception:⁷¹

- that applies only if study or experimentation is the sole or dominant purpose of the act; and
- that makes it clear that the existence of a commercial purpose or objective does not preclude the application of the exemption.

It may be argued that research issues are unnecessary to consider, because they are dealt with in a specific exception under the AUSFTA (Article 17.4.7(e)(ii)). However, that exception is limited. The exception on which it is modelled, in the US, has not provided full protection for research activities. As argued earlier, this Committee can make general findings of the activities that must be allowed, when the AUSFTA is implemented. It would be entirely appropriate for this Committee to make unequivocal statements as to the importance of protecting *all* legitimate research activities.

4.3.2 Background

There is a clear public interest in the promotion, and protection of legitimate research into encryption, access and copy controls:

- Computer security is vital to the interests of both governments and businesses, because it leads to more secure and effective technologies;
- Research – and the publication and discussion of research – provides information to:
 - Consumers of computer security technologies, including businesses and governments, regarding the implications of such technologies for their activities; and
 - Users of computer security technologies, including copyright owners, giving them a better understanding of the capabilities and limitations of technologies available to them, and so they can decide whether to entrust content to such technologies.
- Research also fosters informed public debate in areas impacted by such technologies;

⁷⁰ The concept of ‘legitimate’ researchers is more than adequate to avoid the exception becoming a loophole for illegitimate activities. Australian policy should support research by any and all organizations, including the ‘traditional’ sites at universities, and research and development in private firms, as well as partnerships between the two.

⁷¹ Australian Law Reform Commission, *Report Number 99: Genes and Ingenuity* (2004), Recommendation 13-1

- Without a proper research exception, Australian universities and innovative Australian companies will be disadvantaged compared to other countries.

The importance of research exceptions has recently been recognised in a cognate field, in the proposal by the Australian Law Reform Commission to introduce a research exception into Australian patent law.⁷²

Current Australian law expresses a strong public policy in favour of computer and computer security research. Sections 47B and 47F of the *Copyright Act* allow acts in relation to computer programs where it is necessary for ‘the purpose of studying the ideas behind the program and the way it functions’ (s 47B), and/or ‘investigating, or correcting, in good faith a security flaw in, or in the vulnerability to unauthorised access of, the original copy’ (s 47F). Any attempt to overcome these exceptions via contract are void under Australian law.⁷³ The latter of these is currently an exception to the anti-circumvention laws in Australia.⁷⁴ There was little or no controversy over these provisions in the recently conducted Digital Agenda Review.⁷⁵ The CLRC has in the past noted that ‘it is difficult to see how reproduction [for the purposes of studying how a program works] will unreasonably prejudice the interests of the author.’⁷⁶

4.4 How anti-circumvention laws have interfered with research in other jurisdictions

There are several well-documented cases, in the United States, of threats against university-based and non university-based researchers:

- In April 2001, Professor Edward Felten, a computer scientist at Princeton University, was threatened with a DMCA action if he presented a conference paper on weaknesses in digital watermarking technologies that were proposed to be used by music copyright owners.⁷⁷ The paper was withdrawn from the original conference, and in June 2001 Felten brought an action seeking a positive declaration that the paper and its publication would not violate the DMCA. The copyright owners withdrew the DMCA threat, rendering the legal proceedings moot.⁷⁸ The paper was presented at a conference in August 2001.⁷⁹

⁷² Australian Law Reform Commission, *Report Number 99: Genes and Ingenuity* (2004), Recommendation 13-1.

⁷³ *Copyright Act* s 47H

⁷⁴ *Copyright Act* s 116A(7)(b).

⁷⁵ Phillips Fox, *Digital Agenda Report and Recommendations* (2004), [17.32] – [17.33] (noting that few submissions were made on the issue, and that where submissions were made they generally supported the balance in the provisions).

⁷⁶ Copyright Law Review Committee, *Computer Software Protection* (1995) [10.34]

⁷⁷ Pamela Samuelson, ‘Anticircumvention rules: Threat to Science’, *Science* 293.5537 (14 September 2001).

⁷⁸ See the transcript of the hearing, *Felten v Recording Industry Association of America*, November 28, 2001, available at <http://www.eff.org/IP/DMCA/Felten_v_RIAA/20011128_hearing_transcript.html> ex tempore judgment included, holding that there was no controversy in light of the withdrawal of the threats by the relevant copyright owners.

- In 2001, Niels Ferguson, a professional cryptographer found a flaw in the cyptographic system called High-Bandwidth Digital Content Protection (HDCP), used to encrypt video on connections between digital video cameras and DVD players, and digital televisions. While Ferguson wrote a paper on his research – as would be normal in research, for circulation, spread of knowledge and corrections – he did not publish the paper, expressing concern regarding prosecution under the US DMCA if he were to travel to the United States.
- In 2002, Hewlett Packard invoked the DMCA when threatening to sue a collective of researchers who publicised flaws in the company's software, threatening that the group "could be fined up to \$500,000 (£320,000) and imprisoned for up to five years".⁸⁰ HP backed down from this threat a couple of days later.
- In April 2003, Blackboard Inc, an educational software company, obtained an *ex parte* order to prevent the presentation of research on security vulnerabilities in its products at a conference in Atlanta.⁸¹
- In October 2003, Princeton graduate student John Halderman was threatened with a lawsuit for violation of the US DMCA after publishing a report online which noted that SunnComm's MediaMax CD-3 software could be bypassed by holding down the shift key on a Windows PC when a copy-protected CD was inserted into a disc drive.⁸² Halderman's report contained other disclosures to which the company objected.⁸³ Shortly after the threat of lawsuit was made, the company withdrew the threat.
- Also in 2003, researcher Andrew Huang had a publisher withdraw from publication on Huang's security research on security flaws in the Microsoft X-Box game console, citing DMCA liability concerns. The book was eventually (self-) published.⁸⁴
- According to the Electronic Frontiers Foundation, based on declarations filed by researchers in various legal actions, a number of researchers in the computer science field have withdrawn, or not published their research for fear of DMCA prosecution.⁸⁵
- The Institute of Electrical and Electronics Engineers (IEEE), which publishes 30% of all computer science journals worldwide, proposed a new policy requiring

⁷⁹ 'SDMI Code-breaker speaks freely', *Wired News* 16 August 2001

⁸⁰ 'HP backs down on DMCA warning', ZDNet News, 2 August 2002, available at <<http://news.zdnet.co.uk/business/0,39020645,2120211,00.htm>>

⁸¹ 'Court Blocks Security Conference Talk', CNET News, April 14, 2003.

⁸² 'Student sued over CD piracy study', BBC News, 10 October 2003, available at <<http://news.bbc.co.uk/1/hi/technology/3180212.stm>>

⁸³ 'Shift Key Case Rouses DMCA Foes', *Wired News*, 11 October 2003, available at <<http://www.wired.com/news/digiwood/0,1412,60780,00.html>>

⁸⁴ Andrew Huang, *Hacking the Xbox* (No Starch Press).

⁸⁵ See Electronic Frontiers Foundation, 'Unintended Consequences: Five Years under the DMCA', Version 3, September 24, 200

researchers to indemnify IEEE for any liabilities incurred under the DMCA as a result of publication of research. That policy was eventually reversed.⁸⁶

Such cases have caused even US government officials to express concern.⁸⁷ It is notable that no such threats have, so far, proceeded to trial. It is to be hoped that none will, and that further threats of this kind will not be made. It is arguable, however, that the number of such threats made in the United States represents a ‘credible showing’ that it is likely that non-infringing activities will be impacted. The threat of such a lawsuit may be sufficient to lead a researcher to till less controversial fields.

4.5 Interoperability

A third set of issues for exceptions to anti-circumvention law relates to issues regarding interoperability. Australia has a long-standing policy in favour of allowing such activities as are necessary to make interoperable products. Again, it may be argued that interoperability issues are unnecessary to consider, because they are dealt with in a specific exception under the AUSFTA (Article 17.4.7(e)(i)). However, as argued earlier, this Committee can make general findings of the activities that must be allowed, when the AUSFTA is implemented. It would be entirely appropriate for this Committee to make unequivocal statements as to the importance of protecting *all* activities required to ensure interoperability.

It is worth noting that Australia has a long-standing policy in favour of broad support for the creation of interoperable products. After careful consideration in 1995, the CLRC recommended *both* that:

- Decompilation of computer programs, and reproduction that might otherwise infringe copyright be allowed for the purposes of making interoperable products; and
- That ‘program locks’ be allowed to be circumvented for the purposes of making interoperable products.

This policy was embodied in the 2000 Amendments to the *Copyright Act*, which introduced s 47D. Moreover, care was taken at that time to overturn one of the effects of the High Court decision in the *Data Access* case which had stood in the way of effectively making interoperable computer programs.⁸⁸ When the current anti-

⁸⁶ IEEE, ‘IEEE to revise new copyright form to address ‘author concerns’, Press Release, 22 April 2002.

⁸⁷ At a conference at MIT in October 2002, White House Cybersecurity Chief Richard Clarke noted concern that the DMCA had been used to chill legitimate computer security research, saying ‘I think a lot of people didn’t realize that it would have this potential chilling effect on vulnerability research.’ ‘Cyber Chief Speaks on Data Network Security’, *The Boston Globe*, October 17 2002. Quoted in Electronic Frontiers Foundation, ‘Unintended Consequences: Five Years under the DMCA’, Version 3, September 24, 2003.

⁸⁸ One of the effects of the decision in *Data Access Corporation v Powerflex Services Pty Ltd & Ors* [1999] HCA 49 was that the maker of an interoperable product could not copy a document, or table,

circumvention laws were introduced, creation of interoperable computer programs was one of the exceptions allowed to the ban on circumvention devices and services.⁸⁹

even if that copying was necessary to make an interoperable computer program. In the *Copyright Amendment (Digital Agenda) Act* this issue was overcome by the expansion of the definition of computer program: see Revised Explanatory Memorandum to the Copyright Amendment (Digital Agenda) Act 2000 (Cth), at [79] – [85].

⁸⁹ *Copyright Act* s 116A(7)(b) (including s 47D as one of the permitted purposes).