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4 July 2018

The Director, Copyright Law Section  
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### **Copyright modernisation consultation**

Dear Director

Google Australia (**Google**) appreciates the opportunity to submit comments to the Department of Communications and the Arts' copyright modernisation consultation.

There have now been a series of reviews of Australia's exceptions framework in the Copyright Act going back to 1998 with the Copyright Law Review Committee review.<sup>1</sup> Despite several recommendations for the introduction of a flexible, principles-based approach to exceptions as a result of technological developments over that 20 year period, successive Governments have failed to make that change.

Whether the Turnbull Government decides to finally act on these recommendations will determine in large part the extent to which Australian businesses, universities and institutions can, and are able to, develop cutting-edge technology in Australia such as artificial intelligence (**AI**) and machine learning, or whether they will be substantially locked out of participating in what is the most significant development in computing in our lifetime.

A recent paper released by the Brookings Institution titled 'Digital Australia, an economic and trade agenda' found:

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<sup>1</sup> Copyright Law Review Committee, *Simplification of the Copyright Act 1968, Part 1: Exceptions to the Exclusive Rights of Copyright Owners* (1998).

*“Australia’s approach to regulation of the digital economy should aim to enable the uptake and use of digital technologies. Supporting digital start-ups is also important, but ensuring access to and use of world-class digital technologies as key business inputs across the economy should be the focus for the government. This will require adjusting existing regulation that is no longer salient, and avoiding heavy-handed regulatory reactions to digital disruption. Australia’s domestic agenda should focus on building trust in the transition to a digital economy, enabling access to and sharing of data for innovation, and ensuring that regulations in areas such as intellectual property (IP), privacy, and competition policy support digital opportunities.*

*Designing Australia’s regulatory framework for a digital economy should learn from the legal and regulatory systems in other countries, given the global nature of the internet and the accompanying digital trade opportunities. In particular, Australia should look to the US, where the digital economy first emerged and which remains the most successful country in leveraging the internet and data for growth and jobs.”<sup>2</sup>*

As the development of technology plays an increasingly important role in driving economic growth and prosperity, for Australia to remain a prosperous and economically advanced country, the Australian Government must remove the unreasonable impediments that currently prevent technology from being developed in Australia. One of the main impediments is Australia’s exceptions framework in the Copyright Act.

This submission should be read in conjunction with Google’s previous submission on this topic to the Australian Law Reform Commission (the **ALRC**) as part of its review into the Digital Economy<sup>3</sup> and the Productivity Commission (the **PC**) into Australia’s Intellectual Property Arrangements.<sup>4</sup>

## **Rapid changes in technology require flexible copyright laws**

AI is the most significant development in computing in our lifetime. AI is based on computer algorithms that autonomously learn from data and information. Instead of being programmed by humans, machine learning allows for algorithms to learn by experience. At Google and its affiliates alone, AI is being used for an ever increasing number of applications, including: understanding images in Google Photos; enabling Waymo cars to recognize and distinguish objects safely; significantly improving sound and camera quality in our hardware; understanding and producing speech for Google Home; translating more than 100 languages in Google Translate; captioning over a billion videos in 10 languages on YouTube; improving the energy efficiency of our data centers; suggesting short replies to emails; helping doctors diagnose diseases, such as diabetic retinopathy; discovering new planetary systems; and creating better

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<sup>2</sup> Joshua P. Meltzer, ‘Digital Australia: An Economic and Trade Agenda’ (Global Economy and Development Working Paper No 118, Brookings Institution, May 2018) iv.

<sup>3</sup> Google Australia, Submission No 600 to Australian Law Reform Commission, *Copyright and the Digital Economy*, June 2013 <[www.alrc.gov.au/inquiries/copyright-and-digital-economy/submissions-received-alrc](http://www.alrc.gov.au/inquiries/copyright-and-digital-economy/submissions-received-alrc)>.

<sup>4</sup> Google Australia, Submission No 102 to Productivity Commission, *Australia’s Intellectual Property Arrangements*, 15 December 2015 <[https://www.pc.gov.au/\\_data/assets/pdf\\_file/0011/194861/sub102-intellectual-property.pdf](https://www.pc.gov.au/_data/assets/pdf_file/0011/194861/sub102-intellectual-property.pdf)>.

neural networks.<sup>5</sup> As noted by Google's founder "[e]very month, there are stunning new applications and transformative new techniques. In this sense, we are truly in a technology renaissance, an exciting time where we can see applications across nearly every segment of modern society."<sup>6</sup>

Revenue from the application of artificial intelligence software across the world is forecast to grow from \$1.38 billion in 2016 to \$59.75 billion by 2025.<sup>7</sup> As part of the 2018 budget, the Australian Government itself announced that "it will support the development of Australia's artificial intelligence ... and machine learning capability to keep pace with global progress and improve our existing expertise in these technologies to maintain our competitiveness."<sup>8</sup> It also announced an investment of around \$2.4 billion into Australia's public technology infrastructure and research including "research into artificial intelligence."<sup>9</sup>

Despite this, because of Australia's outdated copyright laws, the extent to which AI will be able to be developed in Australia is in doubt. That is because AI technologies depend not only on having large sets of data and information to analyse, but also on making copies of those data sets as part of the process of training the algorithms. In many cases these data sets include material protected by copyright. This can pose significant barriers to the development of AI in countries like Australia which have only inflexible and prescriptive exceptions in their copyright laws. As recently noted by Deloitte, "[f]or the potential of machine learning to be completely unlocked, there should be minimal barriers to accessing the data."<sup>10</sup> Of course, Australia's inflexible copyright laws will not stop the development of AI overseas in countries with flexible copyright exceptions, such as the U.S., Israel and Singapore. What it will mean, however, is that products and services developed using AI will be created in those countries and then exported to Australia for use by Australian consumers and businesses.

Google Translate is an example of a product that Google develops in the U.S., due to the innovative opportunities afforded by fair use. Google Translate is used by more than 500 million people monthly to translate 140 billion words per day in some 103 different languages. Ninety-two percent of translations come from outside of the United States. In Australia, there have been more than 6 billion translations using Google Translate over the past three or so years.

Google Translate has several uses including the translation of online materials, text captured in images and real-time translation of spoken language. Google Translate was launched in 2006 as a rule-based system, where rules of grammar and syntax, along with vocabulary for each

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<sup>5</sup> Sergey Brin, *Founders' Letter* (2017) Alphabet Investor Relations <<https://abc.xyz/investor/founders-letters/2017/index.html>>.

<sup>6</sup> *Ibid.*

<sup>7</sup> Tractica, *Artificial Intelligence Market Forecasts* (2017) Tractica <<https://www.tractica.com/research/artificial-intelligence-market-forecasts/>>.

<sup>8</sup> Treasury Department, *Budget 2018–19 Overview: Stronger and Smarter Economy* (May 2018) <<https://www.budget.gov.au/2018-19/content/overview.html>>.

<sup>9</sup> Treasury Department, *Budget 2018–19 For Business: Building a Smart Economy by Investing in Science and Technology* <<https://www.budget.gov.au/2018-19/content/business.html>>.

<sup>10</sup> Deloitte Access Economics, 'Copyright in the digital age' (Report, 2018) 29.

language, were manually coded into a computer. In 2007 Google Translate switched to statistical machine translation system. Today, for many languages, Google Translate produces translations that are comparable to professional human translators. To train the computing system, Google requires large amounts of training data: millions of translated texts, many of which are protected by copyright. Google sources this data from a range of places including books, government documents, the United Nations, and websites from all around the world, relying in part on fair use.

Google also relies on fair use as part of the process of training and developing its AI models for Google Photos. Over 5 billion photos are viewed in Google Photos every day. The training and development of the models that help power Google Photos occurs in the United States, in part because fair use enables better use of technology for these purposes. Australian law does not have the benefit of a fair use exception. Using AI in Google Photos provides a variety of functionality to the product that would not otherwise exist, including:

- enabling users to search through their photos by people, places and things;
- the automatic generation of albums (with Google Photos automatically suggesting collections based on faces, locations and trips);
- turning static photos into videos;
- highlighting past memories at significant times;
- improving the quality of photos and videos.

### **Successive reviews have recommended fair use**

Multiple Government reviews have recommended that Australia adopt a fair use style exception in its Copyright Act. Most recently, in December 2016 the PC recommended to the Government that it accept and implement the final recommendations of the ALRC regarding a fair use exception in Australia following an exhaustive 12-month inquiry.<sup>11</sup> The ALRC's recommendation that Australia's Copyright Act provide an exception for fair use was itself made in 2014, following an 18 month inquiry that included 109 consultations and considered 870 submissions.<sup>12</sup>

As noted some 20 years ago by what was then known as the Copyright Law Review Committee (the **CLRC**):

*[M]uch of the present complexity in the fair dealing provisions and the miscellany of other provisions and schemes that provide for exceptions to copyright owners' exclusive rights is due to the fact that they operate on the basis of a particular technology or in relation to dealings with copyright materials in a particular material form. Technological*

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<sup>11</sup> Productivity Commission, *Intellectual Property Arrangements*, Report No 78 (23 September 2016).

<sup>12</sup> Australian Law Reform Commission, *Copyright and the Digital Economy*, Report No 122 (2013) 132.

*developments will no doubt continue, and they will probably affect copyright owners and users in ways that are and will remain unpredictable.*<sup>13</sup>

The CLRC itself recommended a consolidation of the fair dealing exceptions into a single section and its expansion into an open-ended model not confined to the closed list of fair dealing exceptions but instead applying five fairness factors to all fair dealings.<sup>14</sup>

Both the PC and ALRC, recommended the adoption of a fair use style exemption, but there are several other ways that greater flexibility could be achieved in Australia's copyright laws to facilitate the rapidly changing technological environment. They include:

- consolidating and replacing some or all of the existing purpose-based exceptions with an open-ended flexible exception; or
- keeping the existing exceptions (after review to ensure technological neutral operation) and introducing a supplementary, open-ended, flexible exception.

What is common to these recommendations is that the exceptions frameworks are flexible and not static, that they are open ended and that they are not technologically prescriptive. These principles are fundamental to any serious reform to the exceptions in the Copyright Act. No copyright modernisation agenda can be considered to modernise and future proof Australia's copyright system without a flexible copyright exceptions as the centrepiece of that agenda.

The only review that failed to recommend the adoption of a fair use style exception in Australia was the Ergas review. The Ergas committee declined to make such a recommendation because of concerns that, at the time, the transaction costs associated with the change in the law might outweigh any benefits.<sup>15</sup> As further indicated below, as a result of rapid changes to technology, Professor Ergas now also recommends that Australia adopt a flexible exceptions framework. In addition, the Department of Communications and the Arts commissioned Ernst and Young (EY) to undertake the cost/benefit analysis of a fair use provision that the Ergas Committee considered a necessary prerequisite. The EY review found that the benefits of introducing a fair use provision clearly outweighed the costs.<sup>16</sup>

## **Further developments**

Since the findings of the ALRC, PC and EY, Deloitte Access Economics published a report titled 'Copyright in the Digital Age', which considered how fair use works in a rapidly changing technological environment; provided case study evidence of activities likely to be encouraged or carried out with greater legal predictability under fair use; and qualitatively reviewed the evidence about the impacts of fair use. Amongst other things, the report found that:

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<sup>13</sup> Copyright Law Review Committee, *Simplification of the Copyright Act 1968, Part 1: Exceptions to the Exclusive Rights of Copyright Owners* (1998) [6.0].

<sup>14</sup> *Ibid* [2.01].

<sup>15</sup> Intellectual Property and Competition Review Committee, *Review of intellectual property legislation under the Competition Principles Agreement* (2000).

<sup>16</sup> Ernst and Young, *Cost benefit analysis of changes to the Copyright Act 1968* (2016) 29.

- major new uses of copyrighted material are occurring outside of any clear, supportive legal framework, including vitally important growth areas such as text and data mining and cloud computing;
- the allowed scope of transformative uses of creative materials, such as digital remixing, remains shrouded in uncertainty and hindered by unnecessarily high transaction costs;
- a move to fair use would make it more likely that any contentious issues would be resolved in a manner that promotes creativity, innovation and growth;
- while there may be some initial uncertainty as to precisely how the new arrangements would work, such uncertainty is likely to be short lived;
- the change would not in itself alter the balance between users and copyright owners. Rather, it would clarify and simplify the relationship between new creators, who should be able to ‘stand on the shoulders of giants,’ and their predecessors, preserving and protecting the interests of both;
- the claim that such a change would undermine the incentives for investment in creative effort flies in the face of the proposed fair use test, which explicitly takes market impacts into account. It is also inconsistent with the spectacular growth and international competitiveness of the U.S. copyright industries since fair use was statutorily recognised in 1976.<sup>17</sup>

Importantly the report also identified that from an economic perspective, reliance on prescriptive rules, such as fair dealing, will incur especially high error costs (being the costs of incorrectly determining the permissible range of uses of copyright work) in situations where technology and commercial circumstances are changing rapidly and unpredictably, as is presently the case. To this end the report includes a model for considering the error costs arising under fair dealing and fair use. It finds that in the current environment error costs are greater under fair dealing relative to fair use. It also finds that the relative costs are likely to increase over time as a result of rapid digital transformation.<sup>18</sup>

The opportunities for Australia in moving to a flexible exceptions framework are not only about helping Australia’s technology companies, but also just as much about helping traditional Australian businesses that will increasingly rely on technology and data in the transformation of their businesses. As noted by the Brookings Institution:

*[b]uilding a digital economy is not merely about transforming physical goods and services into digital products. In a digital economy, data can be the product; it can be used to create digital goods and services and can be a source of information that leads to further action. The digitization of economic growth and trade will be increasingly driven by the use and extraction of value from data.*

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<sup>17</sup> Deloitte Access Economics, ‘Copyright in the digital age’ (Report, 2018).

<sup>18</sup> Ibid 56.

*The expansive use of data will be needed across the economy and within sectors that traditionally have been outside information technology (IT), such as manufacturing, mining, and agriculture.*<sup>19</sup>

Further, the Brookings paper also found that fair use exceptions to copyright were instrumental in the development of the digital economy in the US. And “recommend[ed] Australia consider adopting US-style fair use exceptions to copyright protection.”<sup>20</sup> As noted in the paper:

*A key reason for Australia to adopt fair use exceptions would be to move to technology-neutral open standards that would be sufficiently flexible to accommodate new technologies and the use of data than the current prescriptive fair dealing exceptions. This should support more transformative uses of data; using copyright material for a different purpose than the use for which the material was created. This form of innovation includes ‘recombinative innovation’— the piecing together of existing information to create new ideas. Such innovation leads to new uses that should be permitted without a license and which do not harm rights holders, as they are being used for a different purpose than the original copyrighted work and have larger public benefits.*

*In the US, the fair use exceptions have demonstrated a good capacity to adapt to technological change. A principles-based approach would also seem to provide predictability, possibly more than Australia’s current prescriptive approach to assessing fair dealing.*<sup>21</sup>

## **Orphan works**

Google supports sensible and scalable orphan works reform. Google believes that policies about orphan works should encourage a wide array of productive uses, both commercial and non-commercial. Restricting the use of orphan works to a small subset of non-profit entities would likely limit the development of innovative, scalable projects requiring significant resource investment.

The ALRC recommended amending the Copyright Act to limit the remedies available in any copyright infringement action where:<sup>22</sup>

- a. a reasonably diligent search for the rights holder had been conducted and the rights holder had not been found; and
- b. as far as reasonably possible, the user of the work has clearly attributed the author.

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<sup>19</sup> Joshua P. Meltzer, ‘Digital Australia: An Economic and Trade Agenda’ (Global Economy and Development Working Paper No 118, Brookings Institution, May 2018) iii.

<sup>20</sup> Ibid v.

<sup>21</sup> Ibid 24.

<sup>22</sup> Australian Law Reform Commission, *Copyright and the Digital Economy*, Report No 122 (2013) 310.

The ALRC suggested that in determining whether a reasonably diligent search was conducted, regard should be had to:<sup>23</sup>

- a. the nature of the copyright material;
- b. how and by whom the search was conducted;
- c. the search technologies, registers and databases available at the time; and
- d. any guidelines, protocols or industry practices about conducting diligent searches available at the time.

### *Reasonably diligent search*

Google submits that this standard allows sufficient flexibility for the criteria to take into account both present and future search technologies. There could be merit in including statements in an Explanatory Memorandum or in guidelines regarding what constitutes a reasonably diligent search to ensure that users must only be expected to base their search for a rights holder on the information at their disposal. For example, the potential user of a book would likely know the name, author and other key information to assist in their search for a copyright holder. In contrast, potential users of some materials on the internet may only have a few minutes or seconds of video without any relevant authorship or other contextual information.<sup>24</sup> In this regard, databases of rightsholder information could help potential users determine whether a work is abandoned, and provide the basis for an objective standard. It would also be helpful to provide guidance on when a searcher can be seen to have ‘searched enough.’

### *Limitation of remedies*

If a rights holder subsequently comes forward after a work is used after a reasonably diligent search, Google submits that the remedies should be limited to fair compensation for the use of the work. Compensation should be set at what a reasonable seller and buyer would have agreed to *ex ante*. No large-scale orphan works project will make the necessary investments in time and money if the whole endeavour can be shut down at any time if a rights holder later comes forward and demands significant monetary damages or an injunction.

### **Copyright and contract**

The internet is the critical infrastructure of the digital economy—ensuring its effective functioning is absolutely core to public interest. Google submits that in the 21st century, ensuring appropriate protection for private use or copyright works (including via the cloud) and non-consumptive technical and incidental uses such as AI and machine learning, is as critical to the public interest and the future of Australia’s digital economy as the more traditional fair

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<sup>23</sup> Ibid.

<sup>24</sup> This is also relevant to obligations of attribution. For some online materials there may be no authorship information accompanying a work. In this context, Google submits that a link to the source location of the work should be considered to be sufficient authorisation.

dealing purposes were in the 20th century.

It is also essential that all exceptions introduced to enable these core public interest uses must be protected from contractual override.

**Urgent reform is needed so Australia doesn't fall behind**

We are encouraged by the Turnbull government's willingness to further consider the proposed scope of Australia's copyright exceptions framework. This is an important opportunity and aligned with the Government's other policy goals regarding innovation and the encouragement of AI development in Australia. A truly modern copyright framework will enable Australia's innovators to take their place in this exciting new world of technological advancement. However, Google is concerned that the current proposed approach to copyright reform is too limited given the economic and social opportunities at stake. If the Turnbull government fails to adopt a genuinely flexible approach to copyright exceptions and instead opts for the addition of a more limited fair dealing exception, then the big losers will be Australian businesses, universities and institutions, the researchers and innovators they employ, and ultimately the Australian economy.

We look forward to continuing to work with a wide variety of stakeholders throughout this process.

Yours faithfully,

Michael Cooley

A handwritten signature in grey ink, appearing to be 'M Cooley', written in a cursive style.

Public Policy and Government Relations Counsel

Google Australia