



19 December 2019

Mr Richard Bullock
Executive Manager
Research, Data and Regulation Branch
The Australian Communications and Media Authority (ACMA)
CANBERRA
ACT 2616

Via email to: richard.bullock@acma.gov.au

Dear Mr Bullock

RE: Submission on the *ACMA Discussion Paper on Artificial Intelligence*

Standards Australia thanks the Australian Communications and Media Authority (ACMA) for the opportunity to make a submission to the discussion paper titled '*Artificial intelligence in communications and media*'¹ (The Paper). We welcome the opportunity to discuss how standards might support the work of ACMA, including in relation to Artificial intelligence (AI).

Standards Australia has been deeply engaged in AI policy and standards discussions for the past two years. In the 2018 Budget, the Australian Government commissioned Standards Australia to undertake an AI Standards Roadmap. In June 2019, we released a discussion paper on developing standards for AI, to inform national consultation on this topic. This Roadmap, to be released in early 2020 will:

- Assess the international frameworks and architecture of standardisation in the field of artificial intelligence;
- Document an evidence base and rationale to support the proposed role for Australia in international standardisation activities;
- Identify priority areas for AI standards development; and
- Identify a pathway for Australia leadership on international standardisation activities for AI.

We have limited our comments in this submission to our expertise as Australia's national standards body and address specific questions (Question 7 and 9).

¹ ACMA (2019), *Artificial intelligence in communications and media*: Discussion Paper. Canberra: ACMA

How are ethical concerns being addressed in practice? What frameworks are being developed? (Question 7)

AI Standards through JTC1/SC42

As the Paper notes, one lever to share, and embed, best practice in designing, testing, deploying and evaluating AI is through international standards. Australian consumers are generally early adopters of information and telecommunication technologies (ICT), and many of these are imported.² Accordingly, the influence of International Standards-setting committees, through bodies such as the ISO (International Organisation for Standardization), could help Australia to effectively shape the responsible development of future technologies, including AI.

There are a variety of activities underway in relation to standards for AI. Through Standards Australia, Australia is actively participating in international ICT standardisation committee that has previously worked on MPEG, JPEG, cyber security and related areas of standardisation.

The international ICT standardisation committee (ISO/IEC JTC 1/SC42) was established in 2017 and its primary objectives are to:

1. Serve as the focus and proponent for JTC 1's standardisation program on AI
2. Provide guidance to JTC 1, IEC, and ISO committees developing AI applications

In late 2018, Standards Australia, at the request of stakeholders, formed a mirror committee to the international work (JTC 1/SC 42 (IT-043)). This Committee includes representatives from industry bodies, universities and government and regulatory functions. The role of this mirror committee is essentially to provide an Australian voice and vote internationally on matters concerning JTC 1/SC 42, which enables Australia to play a role in setting global AI standards. This role is envisaged through *Australia's Tech Future*, which calls for a global regulatory marketplace where "[g]lobal rules and standards affecting digital technologies and digital trade support Australia's interests."³ Using a 'one-country one-vote' system, through ISO and the International Electrotechnical Commission (IEC), Australian interests are properly considered and represented in the development of global and local solutions. This also plays a critical role in preventing standards being subverted for narrow foreign national economic and political objectives, which might otherwise occur in non-consensus-based bodies internationally.

The international ICT standardisation committee (SC 42) has published three standards and currently has thirteen areas of activity, focused variously on terminology, reference architecture and, more recently, 'bias in AI systems and AI aided decision making'. This committee is also driving work on the governance of AI within organisational settings, to ensure the responsible use of AI (through a Joint Working Group with JTC1/SC40 and SC42):

- Approved a study group focusing on a management system standards for AI. (This is likely to scaffold off existing Management Systems Standards); and;
- Is completing a Technical Report on ethical and societal issues, to inform further standards development activity.

Given the intersection of AI with big data and concerns around privacy, other standards of relevance in relation to AI might include ISO/IEC 27701. This standard established guidance for

² Productivity Commission (2016). *Digital Disruption: What do governments need to do? Commission Research Paper*, Canberra: Commonwealth of Australia, p.13.

³ Department of Industry, Innovation and Science (2018). *Australia's Tech Future. Delivering a strong, safe and inclusive digital economy*. Canberra: Commonwealth of Australia, p. 45.

establishing, implementing, maintaining and continually improving a Privacy Information Management System (PIMS). Standards such as these are more likely to be useful in the context of applications of big data and across larger organisations too.

There is, of course, other work required outside of the realm of Standards alone, for which other agencies, bodies, think tanks and companies themselves will have contributions to make.

As noted in the Paper, examples of this activity includes, but is not limited to:

- The Human Rights and Emerging Technologies Project being undertaken by the Australian Human Rights Commission⁴
- World Economic Forum (WEF)⁵ project on Shaping the Future of Technology Governance: Artificial Intelligence and Machine Learning.
- The OECD, including the development of AI principles and related approaches⁶
- Company principles – Including those developed by both Google and Microsoft, often accompanied by practical tools. It is important to note that beyond these company-specific approaches, both Google and Microsoft are engaged in the development of International Standards through SC42, with Google hosting the second international Plenary meeting of SC42 in 2018.

Recommendation 1: Standards Australia recommends that the ACMA give consideration to participating in the Standards Australia's Mirror Committee to ISO/IEC/JTC1/SC42 (namely IT-043). This will enable the ACMA to participate in, and leverage, the considerable work being undertaken internationally to develop AI Standards.

Is there a role the ACMA could play in enabling ethical AI innovation or use in the communications and media sector? (Question 9)

There is significant discussion in Australia on the notion of ethical AI, as the Paper notes. The Paper refers to concepts such as 'fairness', 'transparency and accountability' and privacy, in the context of ethical AI. Standards Australia notes the recent release of Australia's Ethical AI Framework, which refers to similar terms.⁷

More broadly, Standards Australia is alert about general and non-justiciable terms, not currently reflected in Australia's legal framework, being used to describe the nation's perceived 'values', as the relevant statutory tests are likely to differ for companies, bodies and individuals. In the absence of a coherent and justiciable bill of rights in Australia, achieving consistency, across jurisdictions, attributes and areas of public life will remain difficult in areas seemingly central to ethical AI, such as anti-discrimination law. Stakeholders, to date, have not developed detailed proposals for how a scheme would work coherently in this area at a technical level, so we await the release of an international technical report, through SC42, to outline further how this work might progress at a practical level (through controls, techniques and guidance material).

Standards Australia does, however, see the potential to achieve greater alignment between standards and the evolving legal frameworks in areas such as privacy law, however. Here, we

⁴ Australian Human Rights Commission and World Economic Forum (2019). *Artificial Intelligence: Governance and Leadership*. Sydney: Australian Human Rights Commission and World Economic Forum.

⁵ <https://www.weforum.org/platforms/shaping-the-future-of-technology-governance-artificial-intelligence-and-machine-learning>

⁶ <https://www.oecd.org/going-digital/ai/principles/>

⁷ Dawson, D. and Schleiger, E., Horton, J., McLaughlin, J., Robinson, C., Quezada, G., Scowcroft, J., & Hajkowicz, S. (2019). *Artificial Intelligence: Australia's Ethics Framework*. Sydney: CSIRO Data61.

are already exploring how this might take place and would welcome the opportunity to discuss this further, particularly in light of the publication of ISO/IEC 27701 in 2019.

Standards Australia would also welcome the opportunity to engage further with the ACMA on proposals we have to create more dynamic test-beds for AI Standards, which might be beneficial in enabling the growth of 'responsible AI.' This might include a consideration of existing international standards, standards being developed and techniques more broadly from data-science concerning data-labelling and sampling issues. Here, appropriate regulatory referencing of international standards, based on consultation with industry and appropriate impact assessments, might assist the widespread adoption of responsible AI standards.

Recommendation 2: Standards Australia recommends that the ACMA consider referencing, as appropriate, standards developed through JTC1/SC42 in AI and related areas (such as privacy).

Further contact

For further questions in relation to this submission, please do not hesitate to contact our Strategic Advocacy Manager, Dr Jed Horner, on 0408 496 848 or via email:

Jed.Horner@standards.org.au

Yours sincerely

A handwritten signature in black ink, appearing to be 'Daniel Chidgey', written over a horizontal line.

Daniel Chidgey
Head of Stakeholder Engagement

Appendix

Standards Australia: Who we are and what we do

Standards Australia is recognised by the Commonwealth as Australia's peak non-government standards body. Founded in 1922, it is an independent and not-for-profit organisation and is the Australian member of the International Organisation for Standardization (ISO), International Electro technical Commission (IEC) and the Pacific Area Standards Congress (PASC). At the international level, Standards Australia is committed to representing the views of stakeholders, government and consumers in standards development and related activities. Domestically, standards are developed for the net benefit of Australia and enhance economic efficiency, increase community safety and sustainability, and improve industry and international competitiveness.

Standards Australia facilitates standards development through technical committees, by bringing together relevant stakeholders to develop standards documents through a process of consensus. Our current catalogue consists of approximately 6000 voluntary standards across 12 sectors of the Australian economy, including energy and electrotechnology, ICT, manufacturing and consumer products and services. The building and construction sector is a standards development priority for Standards Australia and involves engagement with legislative authority at all levels of Australian government.

Standards Australia works with all tiers of government and industry. Our standards development process creates opportunities for a robust exchange of knowledge, expertise, and perspectives in the development of consensus based standards and other solutions to improve performance, productivity, as well as health and safety outcomes for all Australians.