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Overview of Report


New technologies, like artificial intelligence (AI), are reshaping our world. They present unprecedented opportunities and threats, especially to our human rights. The Report sets out a roadmap for Australia to seize the opportunities and address the threats.

Australia should pursue innovation that holds true to our liberal democratic values. This means we should approach new and emerging technologies by being consultative, inclusive and accountable, with robust human rights safeguards.

The Australian Human Rights Commission is Australia’s national human rights institution. The Commission is independent and impartial. It aims to promote and protect human rights in Australia.

The recommendations in the Report are informed by the Commission’s expertise, our research and extensive public consultation with the community, government, industry and academia.

The Report aims to foster a deeper understanding of the human rights implications for Australia of new and emerging technologies such as AI.

The Report is divided into four parts:

- **Part A**: A national strategy on new and emerging technologies
- **Part B**: The use of artificial intelligence in decision making by government and the private sector
- **Part C**: Supporting effective regulation through the creation of an AI Safety Commissioner
- **Part D**: Accessible technology for people with disability.
Part A: National strategy on new and emerging technologies

Part A addresses the question: *what should be Australia’s overarching approach to new and emerging technologies?*

International human rights law sets out globally-accepted legal principles that uphold the dignity of all people. As a liberal democracy, Australia should place human rights at the centre of its approach to technology, with a view to promoting fairness, equality and accountability in the use and development of all new and emerging technologies.

This approach provides the foundation for the Commission’s recommendations for law and other reform throughout the Report.

The Department of the Prime Minister and Cabinet is leading a process, on behalf of the Australian Government, to create the *Digital Australia Strategy*. This presents an excellent opportunity to articulate the key, big-picture elements of how Australia will respond to the rise of new and emerging technologies, such as AI.

The Commission urges the Australian Government to embrace technological innovation that holds true to our liberal democratic values. This means putting human rights at the centre of how Australia approaches new and emerging technologies.

The Commission recommends that the *Digital Australia Strategy* promote responsible innovation and human rights through measures including regulation, investment and education. This will help foster a firm foundation of public trust in new and emerging technologies that are used in Australia.
Part B: Artificial intelligence

AI is changing the way important decisions are made by government and the private sector—with significant implications for how human rights are fulfilled.

Part B of the Report focuses on ‘AI-informed decision making’—the use of AI to make decisions that have legal or similarly significant effects on individuals. The Commission makes recommendations to ensure human rights are protected where AI is used in decision making; and to provide effective accountability for such decisions.

Government use of AI: Chapter 5

Before the Australian Government introduces a new AI system to make administrative decisions, it should be required to undertake a human rights impact assessment (HRIA) (Recommendation 2). Where such an AI-informed decision-making system is adopted by the Government, the Commission recommends:

- measures to improve transparency, including notification of the use of AI and strengthening a right to reasons or an explanation for AI-informed administrative decisions (Recommendations 3-7)
- an independent merits review for all AI-informed administrative decisions (Recommendation 8).

Private sector use of AI: Chapter 6

Human rights and accountability are also vitally important when corporations and other non-government entities use AI to make decisions. The Commission recommends that:

- corporations and other non-government bodies be encouraged to undertake HRias before using AI-informed decision-making systems (Recommendation 9)
- individuals be notified about the use of AI-informed decisions affecting them (Recommendation 10).

Co- and self-regulation: Chapter 7

Co- and self-regulation should complement and support legal regulation to create better AI-informed decision-making systems, including through:

- standards and certification for the use of AI in decision making
- ‘regulatory sandboxes’ that allow for experimentation and innovation (Recommendation 14)
- rules for government procurement of decision-making tools and systems (Recommendation 16).

Algorithmic bias, unfairness and discrimination: Chapter 8

‘Algorithmic bias’ arises where an AI-informed decision-making tool produces outputs that result in unfairness or discrimination. Often this is caused by forms of statistical bias. Algorithmic bias has arisen in AI-informed decision making in the criminal justice system, advertising, recruitment, healthcare, policing and elsewhere.

The Commission recommends greater guidance for government and non-government bodies in complying with anti-discrimination law in the context of AI-informed decision making (Recommendation 18).

Biometric technology and privacy: Chapter 9

There is strong community concern regarding some forms or uses of biometric technology, especially facial recognition. Where biometric technologies are used in high-stakes decision making, such as policing, errors can increase the risk of human rights infringement and have an impact on individual privacy.

The Commission recommends law reform to provide better human rights and privacy protection regarding the development and use of these technologies (Recommendations 19, 21), and a moratorium on the use of biometric technologies in high-risk decision making until such protections are in place (Recommendation 20).
Accountable AI: upholding human rights

Critical risks
- Biometric surveillance & facial recognition
- Algorithmic bias: addressing unfairness & discrimination

Promoting accountable AI
- Government procurement
- Human rights by design
- Voluntary standards, certification & regulatory sandboxes

Govt use of AI in administrative decisions
- Mandatory AI notification
- Mandatory human rights impact assessment
- Explainable AI: preserving a right to reasons
- Human review

Private sector use of AI
- Encouraging explainable AI
- Legal liability & court oversight
- Encouraging human rights impact assessment
- Mandatory AI notification
Part C: Supporting effective regulation

Government agencies and the private sector are often unclear on how to develop and use AI lawfully, ethically and in conformity with human rights.

Part C of the Report recommends the creation of an AI Safety Commissioner to address this problem, by supporting regulators, policy makers, government and business in applying laws and other standards in respect of AI-informed decision making.

The challenge of AI

Regulators face challenges in fulfilling their functions as the bodies they regulate make important changes in how they operate.

Legislators and policy makers are under unprecedented pressure to ensure Australia has the right law and policy settings to address risks and take opportunities connected to the rise of AI.

The unprecedented rise in AI presents a once-in-a-generation challenge to develop and apply regulation that supports positive innovation, while addressing risks of harm.

Technical expertise and capacity building

We recommend the creation of an AI Safety Commissioner to provide technical expertise and capacity building. As an independent statutory office that champions the public interest, including human rights, an AI Safety Commissioner could help build public trust in the safe use of AI by:

- providing expert guidance to government agencies and the private sector on how to comply with laws and ethical standards regarding the development and use of AI
- working collaboratively to build the capacity of regulators and the broader ‘regulatory ecosystem’ to adapt and respond to the rise of AI in their respective areas of responsibility
- monitoring trends in the use of AI in Australia and overseas, providing robust, independent and expert advice to legislators and policy makers with a view to addressing risks and taking opportunities connected to the rise of AI (Recommendation 22).

The AI Safety Commissioner should be independent from government in its structure, operations and legislative mandate. It may be incorporated into an existing body or formed as a new, separate body. It should be required to have regard to the impact of the development and use of AI on vulnerable and marginalised people in Australia, and draw on diverse expertise and perspectives (Recommendation 23).
Private sector
Guidance on the use of AI
Education & training
Parliament
Policy makers

Government
Capacity building for regulators
Targeted advice

Independent statutory authority
Focus on risk of harm

Expert advice

AI Safety Commissioner

Diverse expertise

Structure & focus

Capacity building for regulators

Policy makers
Part D: Accessible technology

Good technology design can enable the participation of people with disability as never before—from the use of real-time live captioning to reliance on smart home assistants. On the other hand, poor design can cause significant harm, reducing the capacity of people with disability to participate in activities that are central to the enjoyment of their human rights, and their ability to live independently.

Part D of the Report focuses on improving the accessibility of goods, services and facilities that use Digital Communication Technology for people with disability.

**Technology is an enabling right: Chapter 11**

The accessibility of new technology, and especially of Digital Communication Technology, is an enabling right for people with disability because it is critical to the enjoyment of a range of other civil, political, economic, social and cultural rights.

**Improving functional accessibility: Chapter 12**

The ‘functional accessibility’ of goods, services and facilities that rely on Digital Communication Technology refers to the ability to use these things in practice. Problems in this area commonly relate to the user interface of tech-enabled products being designed in a way that excludes people with one or more disabilities.

To improve functional accessibility, the Commission recommends:

- the creation of a new Disability Standard, focused on Digital Communication Technology (Recommendation 24)
- new government procurement rules to require accessible goods, services and facilities (Recommendation 25)
- measures to improve private sector use of accessible Digital Communication Technology (Recommendation 26).

**Broadcasting and audio-visual services: Chapter 13**

The 21st century has seen a massive expansion in how content is delivered, including through subscription television, video and online platforms. Reform is needed to ensure that all media respect the right of people with disability to receive news, information and entertainment content in ways that they can understand.

The Commission recommends reforms to facilitate:

- increased audio description and captioning for broadcasting services, as well as video, film and online platforms (Recommendations 27-29)
- reliable accessible information during emergency and important public announcements (Recommendation 30)
- better monitoring of compliance with accessibility requirements and voluntary targets for the distribution of audio-visual content (Recommendation 31).

**Availability of new technology: Chapter 14**

The availability of goods, services and facilities can be reduced where people with disability cannot afford them, or do not know about them. Exclusion can worsen inequality and disadvantage for people with disability. The Commission recommends:

- better provision of accessible information on how goods, services and facilities can be used by people with disability (Recommendation 32)
- more accessible broadband internet by introducing a concessional rate for people with disability (Recommendation 33)
- National Disability Insurance Scheme funding to improve access to Digital Communication Technology for people with disability (Recommendation 34).

**Design, education and capacity building: Chapter 15**

Good design, education and capacity building can promote accessible Digital Communication Technology.

The Commission recommends applying a ‘human rights by design’ approach including by the Australian Government adopting, promoting and modelling good practice and incorporating this approach into education, training, professional development and accreditation (Recommendations 35-38).
Access to Digital Communication Technology is an enabling right for people with disability

- Addressing disability discrimination
  - New Disability Discrimination Act Standard
  - New voluntary standards

- Design, education & capacity building
  - Human rights by design in curricula
  - Accessible technology in new National Disability Strategy

- Industry action
  - Concessional NBN broadband for people with disability
  - Inquiry into industry compliance with accessibility standards

- Government action
  - Government procurement rules promote accessibility
  - Accessible tech under the NDIS

- News, information & entertainment
  - Audio description & captioning
  - Accessible emergency announcements

Australian Governments comply with accessibility standards: policies & targets
List of Recommendations

PART A: NATIONAL STRATEGY ON NEW AND EMERGING TECHNOLOGIES

Recommendation 1: The Digital Australia Strategy, which is currently being developed by the Australian Government Department of the Prime Minister and Cabinet, should set Australia’s national strategy for new and emerging technologies. The Digital Australia Strategy should promote responsible innovation through:

(a) effective regulation—including law, co-regulation and self-regulation—that upholds human rights in the development and use of new technologies
(b) the development of a community-wide action plan on education, training and capacity building regarding the human rights implications of new and emerging technologies
(c) funding and investment for responsible innovation that complies with human rights
(d) practical measures to achieve the Strategy’s aims, including through the establishment of an AI Safety Commissioner (see Recommendation 22).

PART B: ARTIFICIAL INTELLIGENCE

Chapter 5: Legal accountability for government use of AI

Recommendation 2: The Australian Government should introduce legislation to require that a human rights impact assessment (HRIA) be undertaken before any department or agency uses an AI-informed decision-making system to make administrative decisions.

An HRIA should include public consultation, focusing on those most likely to be affected. An HRIA should assess whether the proposed AI-informed decision-making system:

(a) complies with Australia’s international human rights law obligations
(b) will involve automating any discretionary element of administrative decisions, including by reference to the Commonwealth Ombudsman’s Automated decision-making better practice guide and other expert guidance
(c) provides for appropriate review of decisions by human decision makers
(d) is authorised and governed by legislation.

Recommendation 3: The Australian Government should introduce legislation to require that any affected individual is notified where artificial intelligence is materially used in making an administrative decision. That notification should include information regarding how an affected individual can challenge the decision.

Recommendation 4: The Australian Government should commission an audit of all current or proposed use of AI-informed decision making by or on behalf of Government agencies. The AI Safety Commissioner (see Recommendation 22), or another suitable expert body, should conduct this audit.

Recommendation 5: The Australian Government should not make administrative decisions, including through the use of automation or artificial intelligence, if the decision maker cannot generate reasons or a technical explanation for an affected person.
Recommendation 6: The Australian Government should make clear that, where a person has a legal entitlement to reasons for a decision, this entitlement exists regardless of how the decision is made. To this end, relevant legislation including s 25D of the Acts Interpretation Act 1901 (Cth) should be amended to provide that:

(a) for the avoidance of doubt, the term 'decision' includes decisions made using automation and other forms of artificial intelligence
(b) where a person has a right to reasons the person is entitled also to a technical explanation of the decision, in a form that could be assessed and validated by a person with relevant technical expertise
(c) the decision maker must provide this technical explanation to the person within a reasonable time following any valid request.

Recommendation 7: The Australian Government should engage a suitable expert body, such as the AI Safety Commissioner (see Recommendation 22), to develop guidance for government and non-government bodies on how to generate reasons, including a technical explanation, for AI-informed decisions.

Recommendation 8: The Australian Government should introduce legislation to create or ensure a right to merits review, generally before an independent tribunal such as the Administrative Appeals Tribunal, for any AI-informed administrative decision.

Chapter 6: Legal accountability for private sector use of AI

Recommendation 9: The Australian Government’s AI Ethics Principles should be used to encourage corporations and other non-government bodies to undertake a human rights impact assessment before using an AI-informed decision-making system. The Government should engage the AI Safety Commissioner (Recommendation 22) to issue guidance for the private sector on how to undertake human rights impact assessments.

Recommendation 10: The Australian Government should introduce legislation to require that any affected individual is notified when a corporation or other legal person materially uses AI in a decision-making process that affects the legal, or similarly significant, rights of the individual.

Recommendation 11: The Australian Government should introduce legislation that provides a rebuttable presumption that, where a corporation or other legal person is responsible for making a decision, that legal person is legally liable for the decision regardless of how it is made, including where the decision is automated or is made using artificial intelligence.

Recommendation 12: Centres of expertise, including the newly established Australian Research Council Centre of Excellence for Automated Decision-Making and Society, should prioritise research on the ‘explainability’ of AI-informed decision making.

Recommendation 13: The Australian Government should introduce legislation to provide that where a court, or regulatory, oversight or dispute resolution body, has power to order the production of information or other material from a corporation or other legal person:

(a) for the avoidance of doubt, the person must comply with this order even where the person uses a form of technology, such as artificial intelligence, that makes it difficult to comply with the order
(b) if the person fails to comply with the order because of the technology the person uses, the body may draw an adverse inference about the decision-making process or other related matters.

Chapter 7: Encouraging better AI-informed decision making

Recommendation 14: The Australian Government should convene a multi-disciplinary taskforce on AI-informed decision making, led by an independent body, such as the AI Safety Commissioner (Recommendation 22). The taskforce should:

(a) promote the use of human rights by design in this area
(b) advise on the development and use of voluntary standards and certification schemes
(c) advise on the development of one or more regulatory sandboxes focused on upholding human rights in the use of AI-informed decision making.

The taskforce should consult widely in the public and private sectors, including with those whose human rights are likely to be significantly affected by AI-informed decision making.
Recommendation 15: The Australian Government should appoint an independent body, such as the AI Safety Commissioner (Recommendation 22), to develop a tool to assist private sector bodies undertake human rights impact assessments (HRIAs) in developing AI-informed decision-making systems. The Australian Government should maintain a public register of completed HRIAs.

Recommendation 16: The Australian Government should adopt a human rights approach to procurement of products and services that use artificial intelligence. The Department of Finance, in consultation with the Digital Transformation Agency and other key decision makers and stakeholders, should amend current procurement law, policy and guidance to require that human rights are protected in the design and development of any AI-informed decision-making tool procured by the Australian Government.

Recommendation 17: The Australian Government should engage an expert body, such as the AI Safety Commissioner (Recommendation 22), to issue guidance to the private sector on good practice regarding human review, oversight and monitoring of AI-informed decision-making systems. This body should also advise the Government on ways to incentivise such good practice through the use of voluntary standards, certification schemes and government procurement rules.

Chapter 8: AI, equality and non-discrimination

Recommendation 18: The Australian Government should resource the Australian Human Rights Commission to produce guidelines for government and non-government bodies on complying with federal anti-discrimination laws in the use of AI-informed decision making.

Chapter 9: Biometric surveillance, facial recognition and privacy

Recommendation 19: Australia’s federal, state and territory governments should introduce legislation that regulates the use of facial recognition and other biometric technology. The legislation should:

(a) expressly protect human rights
(b) apply to the use of this technology in decision making that has a legal, or similarly significant, effect for individuals, or where there is a high risk to human rights, such as in policing and law enforcement
(c) be developed through in-depth consultation with the community, industry and expert bodies such as the Australian Human Rights Commission and the Office of the Australian Information Commissioner.

Recommendation 20: Until the legislation recommended in Recommendation 19 comes into effect, Australia’s federal, state and territory governments should introduce a moratorium on the use of facial recognition and other biometric technology in decision making that has a legal, or similarly significant, effect for individuals, or where there is a high risk to human rights, such as in policing and law enforcement.

Recommendation 21: The Australian Government should introduce a statutory cause of action for serious invasion of privacy.

PART C: SUPPORTING EFFECTIVE REGULATION

Recommendation 22: The Australian Government should establish an AI Safety Commissioner as an independent statutory office, focused on promoting safety and protecting human rights in the development and use of AI in Australia. The AI Safety Commissioner should:

(a) work with regulators to build their technical capacity regarding the development and use of AI in areas for which those regulators have responsibility
(b) monitor and investigate developments and trends in the use of AI, especially in areas of particular human rights risk
(c) provide independent expertise relating to AI and human rights for Australian policy makers
(d) issue guidance to government and the private sector on how to comply with laws and ethical requirements in the use of AI.

Recommendation 23: The AI Safety Commissioner (see Recommendation 22) should:

(a) be independent from government in its structure, operations and legislative mandate, but may be incorporated into an existing body or be formed as a new, separate body
(b) be adequately resourced, wholly or primarily by the Australian Government
(c) be required to have regard to the impact of the development and use of AI on vulnerable and marginalised people in Australia
(d) draw on diverse expertise and perspectives including by convening an AI advisory council.
PART D: ACCESSIBLE TECHNOLOGY

Chapter 12: Functional accessibility

Recommendation 24: The Attorney-General should:

- develop a Digital Communication Technology Standard under section 31 of the Disability Discrimination Act 1992 (Cth), and
- consider other law and policy reform to implement the full range of accessibility obligations regarding Digital Communication Technologies under the Convention on the Rights of Persons with Disabilities.

In doing so, the Attorney-General should consult widely, especially with people with disability and the technology sector.

Recommendation 25: The Australian Government and state, territory and local governments should commit to using Digital Communication Technology that fully complies with recognised accessibility standards—especially WCAG 2.1 and Australian Standard EN 301 549, and successor standards.

To this end, all Australian governments should:

- introduce whole-of-government requirements for compliance with these standards, including by:
  - providing information that is publicly available about how each agency complies with these requirements, reported annually
  - establishing central line agency and ministerial responsibility for monitoring compliance across government
  - resourcing training and advisory support to assist compliance
- promote accessible goods, services and facilities that use Digital Communication Technology by favouring procurement from entities that implement such accessibility standards in their own activities
- develop policies and targets to increase the availability of government communications in Easy English and provide human customer supports for people with disability who need to communicate with people instead of accessing digital services.

Recommendation 26: The Australian Government Department of Industry, Science, Energy and Resources or the Digital Transformation Agency should conduct an inquiry into compliance by industry with accessibility standards such as WCAG 2.1 and Australian Standard EN 301 549.

The inquiry should consider the extent to which incentives for compliance with standards should include changes relating to taxation, grants and procurement, research and design, and the promotion of good practices by industry.

Chapter 13: Broadcasting and audio-visual services

Recommendation 27: The Australian Government should amend the Broadcasting Services Act 1992 (Cth) to increase the amount of accessible content available for people who have hearing or vision difficulties as follows:

- national and commercial free-to-air television services should be required to provide audio described content for a minimum of 14 hours of programming per week, distributed across the primary and secondary channels. This should be increased to a minimum of 21 hours per week in a timeframe to be determined in consultation with people with disability and broadcasting services.
- subscription television services should be required to provide audio described content for a minimum of 14 hours per week for their main channels. This should be increased to a minimum of 21 hours per week in a timeframe to be determined in consultation with people with disability and broadcasting services.
- national and commercial television free-to-air services should be required to increase the captioning of their content on an annual basis, resulting in all such broadcasting being captioned on primary and secondary channels within five years. The Government should determine a formula for annual progressive increases of captioning in consultation with industry, people with disability and their representatives.

Recommendation 28: The Australian Government Department of Infrastructure, Transport, Regional Development and Communications should conduct a review to identify effective, practical ways to increase audio description and captioning on secondary or specialist broadcast television channels.
Recommendation 29: The Australian Government should introduce legislation to provide minimum requirements for audio description and captioning in respect of audio-visual content delivered through subscription video-on-demand, social media and other services that are not covered by the Broadcasting Services Act 1992 (Cth). Obligations should be determined in consultation with industry, and people with disability and their representatives.

Recommendation 30: The Australian Government, and state and territory governments, should ensure that people with disability can receive and understand emergency and other important public announcements, including by requiring government agencies to provide Auslan interpreters at their emergency and important public announcements.

The Australian Government should amend the Broadcasting Services Act 1992 (Cth) to require any television or other company, which broadcasts or re-broadcasts emergency and other important public announcements, to ensure that Auslan interpretation is visible on the screen at all relevant times; and captions are readable, accurate and comprehensible.

Recommendation 31: The Australian Communications and Media Authority should consult with broadcasters and introduce monitoring and compliance measures to support them to:

(a) comply with accessible service requirements
(b) provide quality accessible services
(c) increase organisational capacity to comply with current and future accessible service obligations.

Chapter 14: Availability of new technology

Recommendation 32: Standards Australia should develop, in consultation with people with disability and other stakeholders, an Australian Standard or Technical Specification that covers the provision of accessible information, instructional and training materials to accompany consumer goods, services and facilities.

This Australian Standard or Technical Specification should inform the development of the recommended Digital Communication Technology Disability Standard under section 31 of the Disability Discrimination Act 1992 (Cth) (see Recommendation 24).

Recommendation 33: The NBN Co should implement a reasonable concessional broadband rate for people with disability who are financially vulnerable, in consultation with them, their representatives and other stakeholders.

Recommendation 34: The National Disability Insurance Agency, in consultation with people with disability, should review its policies regarding funding of reasonable and necessary supports as those policies apply to accessible goods, services and facilities, which use Digital Communication Technologies and which can be shown to enable people with disability to enjoy greater independence and participation in all areas of life.

In particular, the NDIA should focus on increasing access to internet plans, computers, tablets, laptops and smartphones and other items that rely on Digital Communication Technologies.

Chapter 15: Design, education and capacity building

Recommendation 35: The Disability Reform Council, through the Disability Reform Ministers’ Meeting, should:

(a) include accessible technology as an outcome area in the next National Disability Strategy to improve access to Digital Communication Technologies for people with disability
(b) lead a process for the Australian Government and state and territory governments to adopt and promote human rights by design in the development and delivery of government services using Digital Communication Technologies, and monitor progress in achieving this aim.

Recommendation 36: Providers of tertiary and vocational education should include the principles of human rights by design in relevant degree and other courses in science, technology, engineering and mathematics. The Australian Government should engage the Australian Council of Learned Academies to provide advice on how to achieve this aim most effectively within the tertiary and vocational sectors.

Recommendation 37: Professional accreditation bodies for science, technology, engineering and mathematics should introduce mandatory training on human rights by design as part of continuing professional development.

Recommendation 38: The Australian Government should commission an expert body to lead the national development and delivery of education, training, accreditation, and capacity building for accessible technology for people with disability.