

9 March 2020

SAS welcomes the release of the Human Rights and Technology Discussion Paper and the opportunity to submit comments to the Australian Human Rights Commission.

As a leader in AI software solutions, SAS believes in the transformative power of AI to the benefit of people, our planet and the economy. We develop AI technology and support customers in using it in all sectors of the economy and across the globe. Therefore, we experience first-hand the potential benefits of AI but also the potential risks and threats to human rights and societal values.

SAS advocates for fair, accountable and transparent AI. We engage with governments around the world to help inform the debates, policy initiatives and legislation that will determine how the future world powered by AI can be shaped. We herewith submit thoughts and suggestions on the Australian Human Rights Commission proposals and questions based on our in-depth understanding of the technology, our insights into the current and future AI market across all sectors given our wide-ranging customer basis and our policy vision towards the ethical use of trustworthy AI.

We welcome the process that has taken place so far to inform the Discussion Paper. We believe that this work has resulted in well-balanced and pragmatic proposals. We take the opportunity to input to this consultation as a global AI technology vendor that strives to bridge the gap between the technology and the policy world by helping interpret policy aspirations into technical features. My team and myself remain at your disposal to assist further in this process as you see fit.



Region Vice President, SAS Australia & New Zealand

HUMAN RIGHTS AND TECHNOLOGY PROJECT DISCUSSION PAPER

SUBMISSION FORM

Your name or organisation: **SAS Institute Australia**

PART A: INTRODUCTION AND FRAMEWORK

Chapter 3: Regulation

Proposal 1: The Australian Government should develop a *National Strategy on New and Emerging Technologies*. This National Strategy should:

- a) set the national aim of promoting responsible innovation and protecting human rights
- b) prioritise and resource national leadership on artificial intelligence (AI)
- c) promote effective regulation—this includes law, co-regulation and self-regulation
- d) resource education and training for government, industry and civil society.

Chapter 4: Ethical Frameworks

Proposal 2: The Australian Government should commission an appropriate independent body to inquire into ethical frameworks for new and emerging technologies to:

- a) assess the efficacy of existing ethical frameworks in protecting and promoting human rights
- b) identify opportunities to improve the operation of ethical frameworks, such as through consolidation or harmonisation of similar frameworks, and by giving special legal status to ethical frameworks that meet certain criteria.

ENTER YOUR RESPONSE HERE:

SAS supports the Commission's Proposal to develop a National Strategy on New and Emerging Technologies underpinned by a strong ethical framework that is designed with the view of facilitating practical implementation by all size and type of economic operators. In other parts of the world, governments are moving ahead with such strategies that aim at both creating excellence through economic investment as well as a robust regulatory framework that can set global standards and ensure trust. Australia is well-placed to compete in this evolving global landscape in order to promote innovation, economic growth and prosperity for its citizens.

Throughout this submission, we further outline our preliminary views on some of the issues that relate to a National Strategy and Ethical Frameworks for New and Emerging Technologies.

PART B: ARTIFICIAL INTELLIGENCE

Chapter 5: AI-informed decision making

Question A: The Commission’s proposed definition of ‘AI-informed decision making’ has the following two elements: there must be a decision that has a legal, or similarly significant, effect for an individual; and AI must have materially assisted in the process of making the decision.

Is the Commission’s definition of ‘AI-informed decision making’ appropriate for the purposes of regulation to protect human rights and other key goals?

ENTER YOUR RESPONSE HERE:

We welcome the effort to define AI-informed decision making and particularly the intention to identify the appropriate threshold for proposed regulation to apply i.e. legal effect or similarly significant effect. The definition is inspired by the Council of Europe (CoE) Conventions and the GDPR is widely considered internationally. Based on experience with the GDPR negotiations on Article 22 as well as the implementation of this article in practice, there are challenges and potential, unintended consequences with the definition that we would like to note for the Commission’s consideration.

“AI”: We believe it will be important to consider defining or at least framing the scope of the term “AI” in future legislation. The scope of legislation on AI cannot be so broad as to essentially include any computerized process or any decision that merely involved a computer. As we point out further below in this section, using the example of traffic lights, such an approach could have unintended consequences with undesired effects on consumer protection and economic growth. Therefore, a one-size-fits all approach would not be adequate given the wide range of AI technologies and AI uses. Different AI systems and applications require a differentiated approach related to risk assessment, consumer protection needs and legal enforcement.

We acknowledge from our participation in policy discussions on an AI definition worldwide the challenge that legislators face given the intention to maintain technology neutrality and ensure AI legislation will be future proof in view of the rapid technology developments. We believe that this is a matter that needs to continue to be discussed and eventually agreed at a global level. A useful reference agreed at international level by the Organisation of Economic Cooperation and Development (OECD), where Australia is an active member country, are the definitions of “AI system” and “AI system lifecycle” included in the [OECD Principles on AI](#) adopted in 2019.

“AI-informed”: We note this term includes decisions made by humans who rely on data points generated by an AI product or tool, as well as fully automated decisions. Unlike the CoE and GDPR definitions where the high-risk is associated with automated decisions, the scope proposed by the Commission is wider. The right balance should be sought between the scope of this provision and the identified threshold in the points below to ensure that

the overall scope of the definition does not result to overburdensome requirements disproportionate to the risk for certain AI systems. A wide definition may require more principle-level rules whereas a more focused definition may allow more prescriptive rules.

“Decision”: On the other hand, the term “decision” may be too wide to adequately protect human rights. A decision requires an assessment and an “action”. If the Commission intends to cover e.g. an AI-informed recommendation by a partially automated car about how the driver should handle a given hazard, it can be envisaged that this “decision” may not be covered under the definition because the actual decision is taken by the individual following a recommendation by the AI system. However, arguably this type of AI implementation should also adhere to fairness and accountability requirements. An alternative term that can be considered instead of “decision” is “measure” which may not necessarily require an “action”.

“Similarly”: Whereas the notion of legal effects is clear and indeed encompasses decision-making that may pose risks to human rights -as mentioned in applications related to criminal justice, social security benefits, credit applications-, it is a challenge to define in practice what effect is “similarly” significant to a legal effect. The GDPR guidance on this point is weak and every legislator’s attempt so far globally to frame this notion has been challenging. This has resulted to lack of legal clarity in practice and a strong rule that is not matched with strong implementation and enforcement.

“Significant” & “for an individual”: It is informative to study the GDPR negotiations debating the terms “significant” and previously “adverse”. The following alternatives have been considered “adverse effect for an individual” or “significant effect for an individual’s rights” or “significant risk of harm”. As above, the term significant is difficult to quantify, may be subjective and depends on the context of an application or an individual’s expectation or perception.

“Effect”: it can be argued that this term may need to be strengthened to “impact” in order to achieve a pragmatic threshold in the context of the wide range of AI-informed decision making across the economy.

Chapter 6: Accountable AI-informed decision making

Proposal 3: The Australian Government should engage the Australian Law Reform Commission to conduct an inquiry into the accountability of AI-informed decision making. The proposed inquiry should consider reform or other change needed to:

- a) protect the principle of legality and the rule of law
- b) promote human rights such as equality or non-discrimination.

ENTER YOUR RESPONSE HERE:

The term accountability in legal theory has been debated heavily recently, particularly within the context of data protection laws. The principle of accountability is enshrined in laws in different ways and encompasses different elements in various jurisdictions globally.

As previously stated, SAS believes that AI systems should always be accountable. We agree with the Commission that accountable AI-informed decision making should mean lawful, transparent, explainable, responsible decision making with human oversight and intervention. The protection of human rights is enshrined in all these elements of accountability.

Based on experience with legislators' attempts to enshrine the principle of accountability into law (notably the EU's GDPR and the US Algorithmic Accountability Act), we urge the Commission to consider the following:

- Legal text must clarify that accountability is an overarching principle that encompasses all the elements above. Accountability is often understood as just responsibility and by extension, in practice, as liability. Which actors are responsible and liable for AI-informed decisions is an important legal matter that must be carefully defined and clarified in order to ensure trust throughout the AI chain and ultimately at citizens' level. But accountable AI systems is a wider thematic.
- The accountability principle in law is often considered as a set of directions and incentives to enable operators to be responsible without prescriptive legal requirements and close regulatory oversight. In this sense, the use of the term has been confusing in practice. We caution that legal clarity around what the term "accountable" AI entails, will be important in practice for developers and users of AI.

Proposal 4: The Australian Government should introduce a statutory cause of action for serious invasion of privacy.

ENTER YOUR RESPONSE HERE:

Privacy rights must be respected during the process of AI-informed decision making primarily but also when the decision is applied, for instance in healthcare applications. We believe the general reviews of the privacy legal framework planned by the Australian government should take into account possible risks presented particularly by AI applications for the purposes of remote biometric identification and other intrusive surveillance technologies which would most likely be considered high-risk in terms of privacy rights. We also note that privacy may be impacted both during the deployment of AI including by AI-informed decisions but also during the design of AI. Namely, personal data may be used to train AI models.

We would caution against fragmenting privacy legislation with specific rules on AI-informed decision making in other legal instruments that could create a complex legal environment to

the detriment of correct implementation by economic operators of all sizes and effective enforcement by regulators. In addition, the quantitative threshold of “serious” and the qualification of “invasion” need to be defined for legal clarity as these notions are not included in the legal framework on privacy.

Proposal 5: The Australian Government should introduce legislation to require that an individual is informed where AI is materially used in a decision that has a legal, or similarly significant, effect on the individual’s rights.

ENTER YOUR RESPONSE HERE:

A more general obligation to inform about the existence of AI in the decision making could include the obligation to specifically inform when the decision has a legal or similarly significant effect on individual’s rights. We agree that citizens and consumers value this transparency but caution that too much information to individuals may have the opposite effect as we have seen in other jurisdictions worldwide, for example in Europe with legal requirements related to consent about the use of cookies.

Explainability¹

Proposal 7: The Australian Government should introduce legislation regarding the explainability of AI-informed decision making. This legislation should make clear that, if an individual would have been entitled to an explanation of the decision were it not made using AI, the individual should be able to demand:

- a) a non-technical explanation of the AI-informed decision, which would be comprehensible by a lay person, and
- b) a technical explanation of the AI-informed decision that can be assessed and validated by a person with relevant technical expertise.

In each case, the explanation should contain the reasons for the decision, such that it would enable an individual, or a person with relevant technical expertise, to understand the basis of the decision and any grounds on which it should be challenged.

¹ Please note that in order to facilitate our responses, we have grouped together Proposals and Questions to create a section on ‘Explainability’.

Proposal 8: Where an AI-informed decision-making system does not produce reasonable explanations for its decisions, that system should not be deployed in any context where decisions could infringe the human rights of individuals.

Proposal 9: Centres of expertise, including the newly established Australian Research Council Centre of Excellence for Automated Decision-Making and Society, should prioritise research on how to design AI-informed decision-making systems to provide a reasonable explanation to individuals.

Question B: Where a person is responsible for an AI-informed decision and the person does not provide a reasonable explanation for that decision, should Australian law impose a rebuttable presumption that the decision was not lawfully made?

Question C: Does Australian law need to be reformed to make it easier to assess the lawfulness of an AI-informed decision-making system, by providing better access to technical information used in AI-informed decision-making systems such as algorithms?

ENTER YOUR RESPONSE HERE:

We believe explainability is a core element towards creating trust among individuals and ensuring lawfulness, fairness and transparency of AI-informed decisions.

The Commission's proposal rightly differentiates between a non-technical explanation and the possibility of technical explanations. It is not always possible or purposeful to "explain" an algorithm in technical terms, also taking into account intellectual property protection considerations. But it is always purposeful to ensure the algorithm is fair and transparent.

However, we would like to caution that a broad definition of "AI" in this context would have unintended consequences to the detriment of consumer protection and effective enforcement. Namely, there are countless algorithms that are trivial and not worth disrupting with these rules. For example, a traffic light uses an algorithm to decide when to turn red or green. It might be a simple timing algorithm, or maybe it takes into account traffic flow. Either way, it does not seem purposeful that cities should be answerable to drivers for these "AI" decisions that do have an "effect" or "impact" on whether the driver must stop the car or keep driving.

SAS would like to suggest that the term "explanation" should be defined broadly to include "interpretation" of an algorithm or an AI-informed decision. This is a pragmatic policy approach that translates into concrete technical possibilities which already exist today. For example, SAS uses techniques that essentially reconstruct the algorithm ex post based on the data input and output of the algorithm such as:

- "Partial Dependence Plots" which depicts relationship between the value of an input variable and the value of the model predictions after the influence of all other variables has been averaged out.

- “Individual Conditional Expectation” (ICE) which helps identify subgroups and interactions.
- “Local Interpretable Model-agnostic Explanations” (LIME) which builds an interpretable model of explanatory data samples at local areas in the analyzed data.

From a technical standpoint, model interpretability is also closely linked to the interface that helps manage the models as well as to model accuracy and model validation. The entire model lifecycle plays a role in the ability to interpret or where possible and purposeful explain a model. The policy goal of “explainability”, whether this relates to a technical or non-technical explanation, can only be achieved in practice through better model governance and model interpretability features. Therefore, we suggest that the Australian legislator should consider the necessary technical features throughout the entire model lifecycle in order to achieve explainability through meaningful insights into AI-informed decision making particularly when this is necessary to protect human rights of individuals.

We would like to take this opportunity to expand on this point and provide further comments on data quality and data governance more generally in the context of AI-informed decision making. AI governance and data governance are at times addressed in the Discussion Paper but we feel they should be explored further. We also believe it’s an oversight to not address the importance of data quality and model governance in this context.

Namely, the role of data is paramount in the design and deployment of an AI-informed decision making system. An AI decision is ultimately based on a model that is trained using an algorithm. The discussion in this section focuses on the need to explain and interpret the model used. But these considerations need to be extended towards a more holistic approach with the view to ensuring full transparency of the data that is used to train the model.

Technical capabilities exist today that provide data lineage and seamless control capabilities to enable the visibility needed into the training data set. Data lineage provides a complete audit trail for data and gives the possibility to trace data quality issues and other errors back to their root cause as well as perform impact analyses on proposed changes. As it links data in disparate systems at a logical level by showing how metadata is connected, data lineage helps identify model rule discrepancies and data incompleteness. Therefore, data lineage can enable many of the objectives set out in the Discussion Paper around accountable AI-informed decision making.

Furthermore, as AI models become more complex and increasingly used across all sectors of the economy, model governance also needs to be addressed. We believe that a holistic approach to data governance in combination with robust model governance will be paramount to achieving fair, transparent and explainable AI.

Finally, as regards the question on a rebuttable presumption that the decision was not lawfully made, where a person is responsible for an AI-informed decision and the person does not provide a reasonable explanation for that decision, we believe this approach may

be too far-reaching. Firstly, the responsibility and liability of operators in the AI ecosystem still needs to be further debated. The law needs to be clear about “when a person is responsible” for the AI-informed decision. Secondly, not all “decisions” pose the same risk and merit this level of protection. There needs to be a differentiated approach for decisions that are, for instance, trivial or unimportant.

Proposal 10: The Australian Government should introduce legislation that creates a rebuttable presumption that the legal person who deploys an AI-informed decision-making system is legally liable for the use of the system.

ENTER YOUR RESPONSE HERE:

We believe it is important to ensure legal clarity relating to the roles of the actors responsible for an AI-informed decision-making system and the liability rules. This is a core component of trustworthy AI towards not only protecting Australian citizens but also creating the necessary trust to boost the uptake of AI and its benefits for the Australian economy.

However, we caution that the AI chain of economic operators can be very complex and varied in different types of AI applications and uses. For example, the operator that “deploys” the AI system may be the manufacturer or the user. Furthermore, the liability regime may need to be designed or applied in relation to the AI “system” or the AI “implementation” when e.g. the human is part of the decision as in our previous example with the partially automated car. In addition, the existing definition of “harm” in the current liability regime may not be adequate across all types of AI applications and systems.

Therefore, designing an adequate liability regime necessitates a thorough analysis of how existing horizontal and sectoral legislation on product and services liability may apply. The legislator’s endeavor to consequently address any legal gaps identified should consider the unique complexity of an AI system where the developer, deployer and user may overlap or interact in ways that need to be taken into account in the design and application of liability rules.

Question D: How should Australian law require or encourage the intervention by human decision makers in the process of AI-informed decision making?

ENTER YOUR RESPONSE HERE:

The possibility or a right to human intervention is often discussed by legislators globally as a tool to ensure accountable and fair AI.

A good example of the importance of human intervention is illustrated in [this](#) article by SAS Chief Operating Officer & Chief Technology Officer, Oliver Schabenberger, involving research

to establish whether machine learning could guide the treatment of pneumonia patients. Namely, a research team was trying to predict the risk of complications in pneumonia patients where low-risk patients could receive outpatient treatment. A rule-based machine learning system decided that pneumonia patients who also had asthma could be sent home because they experienced few complications from pneumonia. However, the reason patients with asthma and pneumonia experienced few complications was because they received intensive care at the hospital. The important connection between patient condition and quality of care was not reflected by the machine learning algorithm. This example also illustrates that human intervention in AI decision-making is closely linked to explainable and fair AI.

SAS believes that human intervention is necessary in AI-informed decision making that presents certain types and level of risks for individuals. Furthermore, as a company that develops sophisticated and complex AI algorithms, we also believe that the protection of human rights in AI-informed decision making should be enhanced using technology features that ensure model accuracy, continuous model validation and model accountability more generally. SAS advocates for such principles to be integrated into algorithmic development and use “by design”. It is widely accepted today that the intervention of human decision makers may become difficult or impossible with the deployment of ever more complex models. Therefore at this early stage of policy debates, it will be important to ensure that both the algorithmic input (i.e. data quality) and the algorithmic model produce an output that a) can be reviewed by a human and b) is continuously self-validated irrespective or in addition to the need or possibility of human intervention.

Proposal 11: The Australian Government should introduce a legal moratorium on the use of facial recognition technology in decision making that has a legal, or similarly significant, effect for individuals, until an appropriate legal framework has been put in place. This legal framework should include robust protections for human rights and should be developed in consultation with expert bodies including the Australian Human Rights Commission and the Office of the Australian Information Commissioner.

ENTER YOUR RESPONSE HERE:

The majority of countries that are discussing ethical AI today are specifically examining facial recognition technology because of the higher risks it may pose to privacy and human rights more generally. In more advanced discussions within this frame, we note that the focus is shifted towards a wider scope of technologies under the general description of “remote biometric identification and other intrusive surveillance technologies” to ensure technology neutrality and future proof rules. This is, for instance, the case in the recently published [AI White Paper](#) by the European Union following extensive debate on this specific issue.

Chapter 7: Co- and self-regulatory measures for AI-informed decision making

Human Rights By Design²

Proposal 12: Any standards applicable in Australia relating to AI-informed decision making should incorporate guidance on human rights compliance.

Proposal 13: The Australian Government should establish a taskforce to develop the concept of ‘human rights by design’ in the context of AI-informed decision making and examine how best to implement this in Australia. A voluntary, or legally enforceable, certification scheme should be considered. The taskforce should facilitate the coordination of public and private initiatives in this area and consult widely, including with those whose human rights are likely to be significantly affected by AI-informed decision making.

Proposal 14: The Australian Government should develop a human rights impact assessment tool for AI-informed decision making, and associated guidance for its use, in consultation with regulatory, industry and civil society bodies. Any ‘toolkit for ethical AI’ endorsed by the Australian Government, and any legislative framework or guidance, should expressly include a human rights impact assessment.

Proposal 16: The proposed *National Strategy on New and Emerging Technologies* (see Proposal 1) should incorporate education on AI and human rights. This should include education and training tailored to the particular skills and knowledge needs of different parts of the community, such as the general public and those requiring more specialised knowledge, including decision makers relying on AI datapoints and professionals designing and developing AI-informed decision-making systems.

Question E: In relation to the proposed human rights impact assessment tool in Proposal 14:

- a) When and how should it be deployed?
- b) Should completion of a human rights impact assessment be mandatory, or incentivised in other ways?
- c) What should the consequences be if the assessment indicates a high risk of human rights impact?
- d) How should a human rights impact assessment be applied to AI-informed decision-making systems developed overseas?

ENTER YOUR RESPONSE HERE:

We welcome the notion of ‘human rights by design’ through an impact assessment tool. Based on practical experience with privacy impact assessments and ongoing discussions in

² Please note that in order to facilitate our responses, we have grouped together Proposals and Questions to create a section on ‘Human Rights by Design’.

Australia and other countries focusing on impact assessments for ethical AI, we have identified the following points for the Commission's consideration:

- In the design phase of an algorithm, it is often not meaningful to mandate impact assessments that include legal assessments related to the output or use of the algorithm. The related requirements should ensure the algorithmic design provides the possibility to conduct such assessments prior and in relation to the deployment of the algorithm.
- The requirements of an ethical AI impact assessment including a human rights impact assessment must be simple and clear to ensure that developers and users without a legal background are able to make a meaningful assessment.
- One of the key elements of the assessment should focus on the choice and impact of deploying a fully as opposed to a partially automated AI decision making system. Today, the criteria for the use of a fully automated AI decision making system are largely driven by commercial considerations. AI decision making systems, such as recommendation engines or next best offers, are often fully automated due to the fact that there would be minimum commercial downsides caused by a 'poor' decision made by the system. On the other hand, AI systems informing, for instance, insurance claim triage are more assistance or augmented-based where there is a large element of human involvement in order to minimise the commercial downside. We believe that the decision around whether a fully automated AI- decision making system is adequate for a certain use needs to be made taking into account an assessment that is not merely commercially driven and includes e.g. a human rights risk assessment.
- Australia should not develop a toolkit for ethical AI in isolation. We encourage global cooperation to ensure AI products and deployment can cross borders among likeminded jurisdictions without unnecessary obstacles.

SAS supports Proposal 13 regarding public-private dialogue and partnerships that will aim at developing the concept of 'human rights by design' specifically in the context of AI-informed decision making and examining how best to implement this in Australia. In particular, this is a matter that requires close cooperation between the legal and technology communities given each needs to educate the other on human rights law notions and technical 'by design' possibilities respectively. Certification schemes can be helpful but need to be developed within the frame of international cooperation to ensure Australia can benefit from trusted AI developed overseas but also that AI developed in Australia can cross national borders without burdensome obligations particularly for smaller operators.

We would also like to address Proposal 12 on standards in this section in order to make a similar point. We agree that technical standards should incorporate guidance on human rights compliance. In order to best achieve this result, the technical community needs clear and simple guidance and a meaningful 'translation' of how to consider legal requirements and rules.

Proposal 16 underlines a core element of the proposed National Strategy on New and Emerging Technologies which is especially relevant in this thematic, i.e. the need to develop a strategy around education and training related on AI and human rights. This is not an easy task and we acknowledge the challenges which we have identified during our own effort to develop AI training for our employees and customers through the SAS Education division. This is an area where the public and private sectors can exchange views and experiences and will need to cooperate in terms of resources and best practices.

Regulatory Sandbox

Proposal 15: The Australian Government should consider establishing a regulatory sandbox to test AI-informed decision-making systems for compliance with human rights.

Question F: What should be the key features of a regulatory sandbox to test AI-informed decision-making systems for compliance with human rights? In particular:

- a) what should be the scope of operation of the regulatory sandbox, including criteria for eligibility to participate and the types of system that would be covered?
- b) what areas of regulation should it cover eg, human rights or other areas as well?
- c) what controls or criteria should be in place prior to a product being admitted to the regulatory sandbox?
- d) what protections or incentives should support participation?
- e) what body or bodies should run the regulatory sandbox?
- f) how could the regulatory sandbox draw on the expertise of relevant regulatory and oversight bodies, civil society and industry?
- g) how should it balance competing imperatives eg, transparency and protection of trade secrets?
- h) how should the regulatory sandbox be evaluated?

ENTER YOUR RESPONSE HERE:

SAS supports the Proposals for the creation of a regulatory sandbox. We believe that the Commission is asking the right questions. These are currently being discussed by many like-minded countries as well.

The key features of a regulatory sandbox to test AI-informed decision making or other aspects of AI systems use for compliance with human rights or other legal requirements, can be determined taking into account experience with existing regulatory sandboxes in areas

such as FinTech worldwide and in Australia specifically as managed by the Australian Securities and Investments Commission (ASIC).

A specificity that may apply to AI systems relates to rules around data access and sharing. For instance, the EU legislators are trying to address the lack of legal clarity around such rules in business-to-business and business-to-government relations with the view to also facilitate the creation of regulatory sandboxes for AI.

AI-informed decision making by the Australian Government³

Proposal 6: Where the Australian Government proposes to deploy an AI-informed decision-making system, it should:

- a) undertake a cost-benefit analysis of the use of AI, with specific reference to the protection of human rights and ensuring accountability
- b) engage in public consultation, focusing on those most likely to be affected
- c) only proceed with deploying this system, if it is expressly provided for by law and there are adequate human rights protections in place.

Proposal 17: The Australian Government should conduct a comprehensive review, overseen by a new or existing body, in order to:

- a) identify the use of AI in decision making by the Australian Government
- b) undertake a cost-benefit analysis of the use of AI, with specific reference to the protection of human rights and ensuring accountability
- c) outline the process by which the Australian Government decides to adopt a decision-making system that uses AI, including any human rights impact assessments
- d) identify whether and how those impacted by a decision are informed of the use of AI in that decision-making process, including by engaging in public consultation that focuses on those most likely to be affected
- e) examine any monitoring and evaluation frameworks for the use of AI in decision-making.

³ Please note that in order to facilitate our responses, we have grouped together Proposals and Questions to create a section on 'AI-informed decision making by the Australian Government'.

Proposal 18: The Australian Government rules on procurement should require that, where government procures an AI-informed decision-making system, this system should include adequate human rights protections.

ENTER YOUR RESPONSE HERE:

We welcome the Commission’s proposals that the Australian Government should lead by example when it deploys an AI-informed decision making system. Governments recognize their responsibility to adhere by the same or sometimes stricter rules as those proposed to economic operators, when this involves a risk to individuals’ rights.

Other governments are also specifically considering how AI is deployed but also procured by the public sector in order to set a standard for accountable AI across the economy. We are noting for reference the recently published Guidelines for AI procurement by the UK government available [here](#).

We caution however that without a reasonable definition of “AI” as per the point made in a previous section, governments would risk creating excessive administrative burden that may not be necessary in order to protect their citizen’s rights.

PART C: NATIONAL LEADERSHIP ON AI

Chapter 8: National leadership on AI

Proposal 19: The Australian Government should establish an AI Safety Commissioner as an independent statutory office to take a national leadership role in the development and use of AI in Australia. The proposed AI Safety Commissioner should focus on preventing individual and community harm, and protecting and promoting human rights. The proposed AI Safety Commissioner should:

- a) build the capacity of existing regulators and others regarding the development and use of AI
- b) monitor the use of AI, and be a source of policy expertise in this area
- c) be independent in its structure, operations and legislative mandate
- d) be adequately resourced, wholly or primarily by the Australian Government
- e) draw on diverse expertise and perspectives
- f) determine issues of immediate concern that should form priorities and shape its own work.

ENTER YOUR RESPONSE HERE:

The global debates around ethical AI always include the discussion around an overseeing or enforcement body. Most prominent in these discussions, have been the data protection authorities that have globally voiced in their international fora their concern and interest in this topic.

We wonder whether currently it may be premature to propose new regulators specifically for AI because new rules are still being discussed and the applicability of existing legislation, e.g. on liability, still needs to be clarified. Furthermore, it is difficult to envisage the structure and capabilities necessary for an AI regulator that has horizontal oversight and this topic may need to be further debated, also at international level.

The proposed AI Safety Commissioner would focus on “safety” of AI systems. Even if the term “safety” is defined widely enough to encompass the whole spectrum of accountable AI systems the following concerns need to be considered:

- a) Which body will regulate the AI use and development that does not fall under “safety”?
- b) How will the AI Safety Commissioner interact with existing either sectoral (e.g. financial supervision authorities) or policy-specific bodies (e.g. human rights or privacy commissions)?
- c) How do such initiatives impact international cooperation on the ethical use and development of AI and what status should this body have in order to participate in international exchanges on behalf of the Australian government particularly when other countries seem to be reluctant to introduce such a body at the moment?

Notably, the European Union seems to be taking a direction towards encouraging cooperation among existing competent authorities and enhancing their capacity rather than creating an overarching, horizontal governance infrastructure for all AI systems, uses and applications.

PART D: ACCESSIBLE TECHNOLOGY

Chapter 9: The right to access technology

Proposal 20: Federal, state, territory and local governments should commit to using Digital Technology that complies with recognised accessibility standards, currently WCAG 2.1 and Australian Standard EN 301 549, and successor standards. To this end, all Australian governments should:

- a) Adopt an accessible procurement policy, promoting the procurement of accessible goods, services and facilities that use Digital Technology in a way that meets the above accessibility standards. Such a policy also would favour government procurement from entities that implement accessibility standards in their own activities.

- b) Develop policies that increase the availability of accessible communication services such as Easy English versions and human customer supports.

ENTER YOUR RESPONSE HERE:

SAS supports the proposals to adopt an accessible procurement policy and to develop policies that increase the availability of accessible communication services. In particular, we support the proposal to use existing standards that have been widely adopted such as WCAG 2.1. This policy aligns the interests of governments around the world and encourages international technology companies to create products for the global market.

At the same time, we encourage the Commission to consider several realities of technical accessibility standards. First, if a product complies with a technical accessibility standard that does not mean people with disabilities can realize the same benefits of outcomes and productivity as their fully-abled peers. Designing products for usability with assistive technologies such as screen readers is vital for equivalent access. People with disabilities must be included in the development process.

Second, standards in any domain tend to become a ceiling. Over time, the standards discourage innovation. This stagnation can often be observed within government procurement processes as well as product development processes within industry. We encourage the Commission to view standards as a floor, not a ceiling.

Third, existing accessibility standards have been developed based on existing technology. This is right because it must be possible to meet standards or they will not be adopted. However, we encourage the Commission to recognize that existing technologies and standards are not sufficient to provide equal access to all domains where technology is employed. There is an urgent need to create new technologies that push the boundaries of the possible. This innovation requires collaboration from both government agencies and industry.

Proposal 21: The Australian Government should conduct an inquiry into compliance by industry with accessibility standards such as WCAG 2.1 and Australian Standard EN 301 549. Incentives for compliance with standards could include changes relating to taxation, grants and procurement, research and design, and the promotion of good practices by industry.

ENTER YOUR RESPONSE HERE:

We support the proposal to promote accessibility standards and believe that incentives for compliance will greatly increase functional access for people with disabilities. However, as stated above, compliance with existing standards is not sufficient to enable equal access in many domains. Therefore, we also urge the Commission to develop incentives that encourage industry to develop and distribute technologies that close the gap between the outcomes of fully-abled users and users with disabilities.

Those gaps are frequently domain-specific. For example, in the domain of analytics, data visualization technology has become ubiquitous. It enables fully-sighted users to quickly discover insights within large heterogeneous data sets, make informed decisions, and take actions that lead to amazing outcomes. However, approximately 285 million people with visual impairments or blindness do not have equal access to this powerful technology.

In 2011, SAS began investing in the research and development of technology that solves this problem. During 2017, we unveiled innovative new technology that enables users with visual impairments or total blindness to perceive, understand, and operate highly-interactive data visualizations using non-visual methods. People with visual impairments or blindness can install a free extension for Google Chrome named SAS Graphics Accelerator and access this technology free of charge. We continue to deliver new capabilities and have recently increased our R&D investment in this technology. As a result, students and professionals with visual impairments or blindness have greater access to a foundational technology that is widely used across many domains. We encourage the Commission to create incentives that promote this type of innovation within every domain.

Proposal 22: The Australian Government should amend the *Broadcasting Services Act 1992* (Cth) to require national broadcasting services, commercial broadcasting services, and subscription broadcasting services to:

- a) audio describe content for a minimum of 14 hours per week for each channel, with annual increases
- b) increase the minimum weekly hours of captioned content on an annual basis.

ENTER YOUR RESPONSE HERE:

We support the proposal to increase the amount of audio-described and captioned content in broadcast media. We also encourage the Commission to consider expanding this proposal to include instructional media.

We believe individual success in the 21st century knowledge economy requires lifelong learning. Technology changes rapidly. Individual workers must learn how to learn new skills in formal education settings as well as independent informal settings. Online media plays an important role in both settings therefore equal access to online media is essential.

Proposal 23: Standards Australia should develop an Australian Standard or Technical Specification that covers the provision of accessible information, instructional and training materials to accompany consumer goods, in consultation with people with disability and other interested parties.

ENTER YOUR RESPONSE HERE:

SAS supports these proposals and believes the private sector can also play a key role to this end with voluntary initiatives.

We place great importance in providing product usage information for users with disabilities. Users with disabilities can access up-to-date information about the accessibility of SAS products on the [SAS Disability Support Center](#). The SAS Disability Support Center includes links to documentation that explains the accessibility features of SAS products, videos that demonstrate the accessibility features of SAS products, accessible training that enables people with disability to learn marketable analytical skills, and much more.

SAS users with disabilities can send questions to accessibility@sas.com and they are answered by SAS employees with disabilities that are intimately familiar with the accessibility features of SAS products.

Proposal 24: The National Broadband Network should undertake economic modelling for the provision of a concessional wholesale broadband rate for people with disability who are financially vulnerable.

ENTER YOUR RESPONSE HERE:

SAS supports the proposal to increase broadband access for people with disabilities that are financially vulnerable. We recognize that the adoption of digital technology yields enormous benefits for society and it is critically important to ensure that all members of society can participate in those benefits.

Question G: What other measures could the private sector take to eliminate barriers to accessibility related to the affordability of Digital Technologies for people with disability?

ENTER YOUR RESPONSE HERE:

SAS has a vested interest in ensuring that everyone can use and benefit from analytical technology that enables better decisions. As a result, we make accessible software, online training and other resources available to individuals and formal institutions of education at no cost. We hope that the Australian government will be able to encourage the private sector to consider the broader societal benefits of such policies.

Chapter 10: Design, education and capacity building

Proposal 25: The Council of Australian Governments Disability Reform Council should:

- a) lead a process for Australia’s federal, state and territory governments to commit to adopting and promoting ‘human rights by design’ in the development and delivery of government services using Digital Technologies, and monitor progress in achieving this aim
- b) include policy action to improve access to digital and other technologies for people with disability as a priority in the next National Disability Strategy.

Proposal 26: Providers of tertiary and vocational education should include the principles of ‘human rights by design’ in relevant degree and other courses in science, technology and engineering. With appropriate support, the Australian Council of Learned Academies should undertake consultation on how to achieve this aim most effectively and appropriately within the tertiary and vocational sector.

Proposal 27: Professional accreditation bodies for engineering, science and technology should consider introducing mandatory training on ‘human rights by design’ as part of continuing professional development.

ENTER YOUR RESPONSE HERE:

SAS strongly supports the proposals on ‘human rights by design’ with the view to enabling users of all abilities to access the power of technology. At SAS, we have learned that it is not possible to create accessible technology without building the skills and capabilities of our R&D staff.

In order to achieve our accessibility goals, SAS appointed a Director of Accessibility and established a centralized accessibility team that is charged with managing the accessibility program across the entire company. The centralized accessibility team includes accessibility subject matter experts from a variety of disciplines including user experience design, visual design, computer science, quality assurance, and project management.

More than half of our central accessibility team have disabilities including the Director. As a result, the accessibility features of SAS products are largely created by people with disabilities for people with disabilities. The importance of this fact cannot be overstated. One of the many positive consequences is that the goal of accessibility at SAS is not compliance. Rather, the goal is to enable people with disabilities to enjoy a delightful user experience and realize all the power and benefits of SAS products.

One of the key functions of the central accessibility team is to train our R&D staff. This training enables individual contributors within SAS R&D to integrate accessibility into their daily work. To date, training classes have been created for WCAG, the Accessible Rich Internet Application (ARIA) specification, accessibility testing procedures, the JAWS screen reader for Microsoft Windows, and the VoiceOver screen reader for Apple iOS. Hundreds of individual contributors within R&D have completed these classes and learned technical skills. More importantly, they have learned critical insights about the needs of SAS users with disabilities from SAS employees with disabilities.

In summary, it is useful to include people with disabilities in the design process. It is much better for that process to be led by people with disabilities. We encourage the Commission to ensure adequate representation throughout all levels of the programs that implement 'human rights by design'.

Proposal 28: The Australian Government should commission an organisation to lead the national development and delivery of education, training, accreditation, and capacity building for accessible technology for people with disability.

Question H: What other tertiary or vocational courses, if any, should include instruction on 'human rights by design'?

ENTER YOUR RESPONSE HERE:

We believe accessible technology is a means to an end. The broader goal is inclusion. Therefore, we encourage the Commission to include 'human rights by design' in the curricula for education programs for Business Management and Human Resources. It is essential that the hiring process and the broader work environment is also designed with accessibility and inclusion in mind.

Chapter 11: Legal protections

Proposal 29: The Attorney-General of Australia should develop a Digital Communication Technology Standard under section 31 of the *Disability Discrimination Act 1992* (Cth). In developing this new Standard, the Attorney-General should consult widely, especially with people with disability and the technology sector. The proposed Standard should apply to the provision of publicly available goods, services and facilities that are primarily used for communication, including those that employ Digital Technologies such as information communication technology, virtual reality and augmented reality.

Question I: Should the Australian Government develop other types of Standards, for Digital Technologies, under the *Disability Discrimination Act 1992* (Cth)? If so, what should they cover?

ENTER YOUR RESPONSE HERE:

We believe that legal protections may be helpful and can build on existing initiatives to promote accessibility by design in all technologies, and in particular AI technologies as their use is rapidly increasing. AI is expected to transform our societies and we should ensure this happens in an inclusive manner.

In this effort, it will be important for the Australian government to maintain an international outlook. It would be counterproductive to fragment the global goal of accessible

technologies through national initiatives that do not reflect existing or future global standards.

SAS also agrees that it is crucial to ensure wide consultation in order to benefit from existing experience and expertise in companies like SAS that have a long-standing, proven commitment to accessible software. Furthermore, we agree that such consultations must include people with disabilities. As mentioned, several members of our accessibility team have disabilities.