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Response to the Consultation Paper on Al and ADM Regulation

There exist several potential risks from Artificial Intelligence (AI) that we believe Australia's existing regulatory approaches do not sufficiently address. As noted in the discussion paper, one such risk is the inherent bias and discriminatory outcomes that can occur in AI systems, particularly those utilising machine learning algorithms. These risks can arise due to biased training data or algorithms that reinforce systemic discrimination. To mitigate these risks, we suggest the implementation of legislation that mandates the use of bias testing and mitigation measures during the development and deployment of AI systems. Such a regulation would help ensure fairness and equality in AI-driven decisions and services. As a laboratory specialising in biometrics and AI testing, we believe it is essential that any proposed measures or initiatives reinforce the need for independent testing and assurance of systems that include AI or ADM and the underlying algorithms.

Another risk pertains to privacy and data security, especially with advancements in AI and Automated Decision-Making (ADM) technologies that use large volumes of personal data. The existing Privacy Act does not fully consider these new dynamics introduced by AI. We propose the establishment of a new regulation to specifically address data protection in AI and ADM technologies, including, for example, provisions for anonymisation of data used in AI training and decision-making processes.

The Australian Government can implement several non-regulatory initiatives to support responsible AI practices. One such initiative could be the promotion of educational and training programmes aimed at creating awareness of AI ethics and responsible AI practices. The government could also fund research into mitigating AI biases, ensuring privacy in AI systems, and designing more transparent AI models. To support this, we believe that testing and related assurance mechanisms are a key part of the future safe use of AI. There is an opportunity for Australia to build capability in this field to support responsible development of AI and its uses internationally.

BixeLab already undertakes research and testing for biometric and related AI systems, both for Australian and international customers. Indeed, BixeLab performed the world's first testing for bias in systems for detecting presentation attacks against biometric systems, resulting in development of a framework for such testing.

We hope these suggestions contribute to the thoughtful discussion around the governance and regulation of Al and ADM in Australia, and we stand ready to provide additional insight and recommendations if needed

We would be pleased to provide further information and advice on this issue if required, or welcome you to visit our lab to learn more about our work.

Yours sincerely,

Dr Ted Dunstone CEO (and Founder)