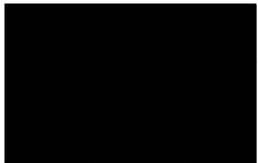


# Preliminary Inquiry – Use of Artificial Intelligence by Intelligence Agencies

Final report issued under section 25B of the Inspector-General of Intelligence and Security Act 1986

29 May 2024



The Hon Christopher Jessup KC

Inspector-General of Intelligence and Security



# **Executive Summary**

On 24 January 2024, the Inspector-General wrote to the heads of the six agencies in his jurisdiction (AGO, ASD, ASIO, ASIS, DIO and ONI) to initiate an own-motion preliminary inquiry under sub-section 14(2) of the *Office of the Inspector-General of Intelligence and Security Act 1986* (IGIS Act) into the use of Artificial Intelligence (AI) by agencies within the National Intelligence Community.

The purpose of the preliminary inquiry was to:

- a. confirm whether under sub-section 14(2) of the IGIS Act the Inspector-General could, and should inquire further into the use of Artificial Intelligence in the six agencies.
- b. provide assurance that the agencies are operating AI systems legally, with propriety and in accordance with human rights, and
- c. understand the use of these systems and consider impacts to the Office's oversight capabilities.

The preliminary inquiry revealed that the Inspector-General is authorised to make further inquiries. However, at this time, further inquiries are not required due to the nature of the agencies' current use of AI and the practices they have in place to ensure legality, propriety and human rights risks are appropriately considered and addressed in their use of AI. The remainder of this report presents the Inspector-General's findings and is issued under section 25B of the IGIS Act.

The Office found that while maturity in use of AI across the agencies is varied, ethical and legal considerations are a foundation of the agencies' AI development strategies and ultimately in the approval for the use of AI systems, with agencies committing to lawful operation and the protection of human rights. In some agencies, depending on the maturity of their implementation, the formation of AI governance boards and the adoption of ethical AI frameworks reflect a proactive stance towards responsible AI use.

Al's impact on the agencies' enhanced decision-making processes is notable, with its current use being primarily focused on augmenting human capabilities or judgement rather than replacing them with autonomous decision making. However, a small number of agencies did express a desire to further explore systems with more autonomy, but to do so in a considered manner. Agencies are implementing or planning rigorous governance structures for approving the use of Al systems, particularly where they may extend to operational and decision making uses to minimise and address potential impacts to transparency, explainability, accountability and oversight. Agencies are also seeking to put in place mechanisms for continuous review and compliance assurance over Al systems.

The Office has not identified any legality, propriety or human rights concerns with the current use of Al systems nor has it identified any drivers for immediate changes to its oversight approach.

The Office makes 3 recommendations that encourage agencies to continue investing in national AI policy discussions and adapting their AI governance, auditability, transparency and explainability capabilities at the same time as investing in the potential operational opportunities of AI.



#### Introduction

On 24 January 2024, the Inspector-General wrote to the heads of the six agencies in his jurisdiction to initiate an own-motion preliminary inquiry under sub-section 14(2) of the *Office of the Inspector-General of Intelligence and Security Act 1986* (IGIS Act) into the Use of Artificial Intelligence (AI) by agencies within the National Intelligence Community.

The following agencies were included in the scope of this preliminary inquiry:

- Australian Geospatial-Intelligence Organisation (AGO),
- Australian Signals Directorate (ASD),
- Australian Security Intelligence Organisation (ASIO),
- Australian Secret Intelligence Service (ASIS),
- Defence Intelligence Organisation (DIO), and
- Office of National Intelligence (ONI)

Under sub-section 14(2) of the IGIS Act, the Inspector-General can undertake a preliminary inquiry in order:

- a. To determine whether the Inspector-General is authorised to inquire into an action of the agency; or
- b. To determine whether the Inspector-General should inquire into the action if the Inspector-General is authorised to inquire into it.

The purpose of the preliminary inquiry was therefore to:

- a. confirm whether under sub-section 14(2) of the IGIS Act the Inspector-General could, and should inquire further into the use of Artificial Intelligence in the six agencies.
- b. provide assurance that the agencies are operating AI systems legally, with propriety and in accordance with human rights, and
- c. understand the use of these systems and consider impacts to the Office's oversight capabilities.

The preliminary inquiry was conducted between 24 January 2024 and 19 April 2024. The Office provided written questions to each of the six agencies in scope and followed up with further engagement and questions where required in order to prepare this report which is issued under section 25B of the IGIS Act.

## The Current Landscape of AI in the Intelligence Community

Artificial Intelligence (AI) is reshaping the way some aspects of government operate, introducing both efficiencies and complexities. In Australia's national intelligence and security community the role of AI is likely to become increasingly important. The agencies' adherence to ethical and legal standards will be critical for maintaining public and government trust.

In the National Intelligence Community that the Office currently oversees (AGO, ASD, ASIO, ASIS, DIO and ONI), the maturity of each agency's use of AI is varied. Agencies are cautiously integrating these technologies to augment and enable human capabilities and judgement, not replace them and aim to streamline data processing and uncover insights that would be challenging to derive by humans or rule-based analytics alone. Initial applications are primarily focused on making efficient and effective sense of, and correlating, large, complex and unstructured data sets in order to provide intelligence



analysts with more actionable information on which they can make timely judgements and decisions.

Strategically, agencies are developing comprehensive roadmaps for future AI use, characterised by a balance between technological advancement, operational opportunity and ethical and legal considerations. Agencies are actively assessing how AI can drive efficiency and innovation whilst aligning with legal and ethical standards.

# **Ethical and Legal Foundations**

Legal and ethical frameworks for the use and management of AI systems are currently being discussed and developed at the national and international levels. However, experience has shown that these are often focused on citizen-focused or facing uses of AI systems. The principles do not always translate well to the covert, and at times intrusive, but legal work of the intelligence community. There remains a risk that as these frameworks progress, they will preclude or hinder some of the important current and future uses of AI in the intelligence community.

In recognition of that, some agencies that were reviewed have set up ethical frameworks and policies to guide their Al endeavors, with the establishment of Al ethics boards to oversee these initiatives. These frameworks often emphasise ensuring that Al applications adhere to existing laws and policies. The creation of such boards and the emphasis on ethical guidelines and policies underscore a commitment to responsible Al use.

Privacy and data governance are central to these ethical and legal foundations. Agencies recognise the critical importance of robust data management practices and privacy protections, not only for compliance but also for maintaining trust. Effective data governance ensures the security, privacy and integrity of data which is particularly crucial in the context of AI systems as their insights and outcomes are shaped directly by the data, not by the rules that a human programs into the system. These measures reflect a broader understanding that ethical AI use and organisational trust are linked.

#### Impact and Implications

Al's integration into the National Intelligence Community has the potential to enhance decision-making processes and, in some cases, improve compliance. By improving data analysis capabilities and providing sophisticated translation services, Al allows for quicker, more informed decisions, which ultimately can have a positive impact particularly on the propriety of agency activities. These technologies augment human judgement rather than replace it, enabling staff to focus more on strategic or judgement-based tasks.

The primary objective behind employing AI in the National Intelligence Community is to achieve greater operational efficiency while enhancing human decision-making capabilities. Agencies are seeking to leverage AI to streamline processes and improve productivity, but they do so with the clear intent to stay within defined ethical and legal boundaries. This considered approach ensures the pursuit of efficiency does not compromise propriety or ethical standards or legal compliance.

#### Challenges and Oversight

Overseeing AI systems presents significant challenges due to their complexity and the potential opacity in how they arrive at outputs and decisions. Efforts to enhance transparency and accountability of AI systems to enable effective oversight are critical. The Office found that some agencies are employing AI itself to monitor and audit AI models. The aim of effective oversight, and



the role of this Office, is to ensure that decision-making accountability remains through transparent and explainable actions and activities.

The agencies understand this, which is underscored by the establishment of specialised review boards and committees within some agencies to ensure transparency and explainability all the way from concept to implementation. These bodies play a pivotal role in scrutinizing AI applications to ensure they adhere to legal standards and propriety and ethical principles. Engaging with relevant stakeholders, oversight bodies and subject matter experts is also deemed crucial. Such engagement ensures broader consensus on acceptable AI practices and bolsters trust in AI applications within the agencies.

# Risks and Mitigations

The most prominent risk that the deployment of AI poses is the risk of decisions (autonomous or AI enabled human) being influenced by biased datasets or algorithms, potentially compromising the integrity or accuracy of the decision or operation. Such a risk, in the case of the National Intelligence Community, could have substantial real-world implications. While bias can exist in purely human decision-making processes, in these cases the bias can be generally understood and adjusted for. Autonomous decision-making amplifies this risk, and detection and adjustment may become more difficult when the bias is inbuilt to the data which is directly contributing to the decision or action. The phenomenon of automation bias, where over-reliance on AI could devalue human critical evaluation, presents an additional challenge.

In addition to transparency and explainability, the potential for bias in an AI system – a reflection of the data it learns from – is openly acknowledged by the agencies. The Office found evidence of agencies actively assessing training datasets to identify and eliminate inherent biases, striving for outcomes that are equitable and without prejudice. To address these risks, the agencies have adopted ethical AI frameworks and principles, steering the development and application of AI technologies towards alignment with legal requirements, societal expectations and the agencies' values. A commitment to a human-centered approach in AI usage in most agencies ensures that human judgement remains at the forefront of decision-making processes. Ongoing attention should ensure AI's outputs are balanced and fair.

The agencies' responses to the Office's questions underscore the current importance agencies place on human judgement when addressing the legal, propriety and ethical risk of AI use. AI, while potentially transformative, is primarily considered a human augmentation tool, ensuring that decisions, particularly those with significant implications, are grounded in human judgement and decision making, but those decisions and judgements are better informed through the analytic advantages AI offers. This approach is intended to maintain legal, propriety and ethical consideration in AI-driven or enabled decisions.

#### Looking ahead: Opportunities and Recommendations

As the use of AI within the National Intelligence Community continues to evolve, it will bring both opportunities and potential risks. When embarking on future developments in the use of AI, the agencies will have to carefully consider the likely significant efficiency and effectiveness benefits against the ethical and legal implications, ensuring that the innovations they pursue align with legislation and government and societal expectations.

While this preliminary inquiry has not identified any concerns with current uses and therefore the Office does not propose to inquire further or make any legality or propriety findings, the Office



makes three recommendations for agencies to consider in relation to their future use and governance of AI, particularly as their use of AI moves into higher risk or more operationally sensitive areas:

- Recommendation 1 agencies should continue to refine and adapt their governance frameworks, policies and approval processes for the use of AI and the data that enable it. This should particularly be the case should AI be used for more autonomous action or decision making.
- Recommendation 2 agencies should continue to harness opportunities to enhance the transparency and auditability of AI systems. This should particularly be the case should AI be used for more autonomous action or decision making.
- Recommendation 3 agencies, either through the Office of National Intelligence or independently, should continue to engage with Australian Government policy makers to ensure legislation and other frameworks governing the use of AI, remain applicable to, or don't preclude, the activities of the National Intelligence Community.

#### Conclusion

The preliminary inquiry revealed that the Inspector-General is authorised to make further inquiries, however at this time further inquiries are not necessary. This is due to the nature of the agencies' current use of AI and the governance frameworks, policies and practices they have in place to ensure legality, propriety and human rights risks are appropriately considered and addressed.

The Office found that maturity of the use of AI across the six agencies is varied. Current uses or applications are primarily, but not completely, focused on enhancing operational efficiency through enabling or enhancing human analysts. At this stage AI is not being used for autonomous action or decision making. There is a clear intent among agencies to embed AI more deeply in their operations and activities, evidenced by strategic planning and the development of ethical guidelines, policies and governance structures to manage the future opportunities and risks of AI systems.

The Office did not identify any legality, propriety or human rights concerns with the current use of Al systems in the National Intelligence Community, nor did it identify any immediate need for changes to its approach to oversight to address the agencies use of Al. The Office found that ethical and legal considerations form a foundation of the agencies' Al development and in the approval for the use of Al systems. The formation of Al governance boards, the adoption of ethical Al frameworks and a strong focus on data governance reflect a proactive stance towards responsible Al use.

The Office makes 3 recommendations that encourage agencies to continue investing effort in national AI policy discussions and adapting their AI governance, auditability, transparency and explainability capabilities at the same time as investing in the potential operational opportunities of AI.