Planned Obsolescence: The Shortcomings of Canada’s Proposed Artificial Intelligence and Data Act (AIDA)

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Summary

Technologies powered by artificial intelligence (AI), from autonomous vehicles to AI-powered chatbots such as ChatGPT, are transforming so many aspects of our daily lives. But what laws apply to these transformative technologies? A regulatory vacuum has developed, and Canada proposes to fill it with the Artificial Intelligence and Data Act (AIDA or the Act). Introduced on June 16, 2022, AIDA is one of three components of Bill C-27, which seeks to comprehensively overhaul Canada’s outdated data protection laws.

This report compares AIDA with the European Union’s proposed AI Act and finds the proposed Canadian legislation lacking. Although AIDA may be a first attempt to regulate AI at the federal level, Canada risks enacting a law that will be obsolete and outdated compared to its international peers from day one.

AIDA needs to be strengthened in at least three ways. First, AIDA should apply to the federal public sector, rather than just the private sector, as government uses of AI can significantly impact the rights of Canadians. Second, AIDA should use more precise language and provide clearer definitions for its key terms, instead of the vague language that characterizes much of the current Bill. Third, fundamental reforms are needed to AIDA’s proposed accountability structure to ensure that enforcement of the bill is effective and meaningful.

CIPPIC therefore calls on the federal government to strengthen AIDA by:

1. Amending the proposed legislation to cover public sector AI use;
2. Defining “high-impact system” in the body of the legislation itself; and
3. Entrusting the administration and enforcement of AIDA to an independent regulator.¹

Introduction

On June 16, 2022, the federal government introduced Bill C-27, known colloquially as the Digital Charter Implementation Act, 2022. Bill C-27 aims to modernize Canada’s private sector privacy laws and comprises three components: the Consumer Privacy Protection Act, the Artificial Intelligence and Data Act, and the Personal Information and Data Protection Tribunal Act. On March 13, 2023, Innovation, Science, and Economic Development Canada (ISED) published a Companion Document to clarify the government’s intentions behind AIDA.

This report benchmarks AIDA against the European Union’s proposed Artificial Intelligence Act (EUAIA) and finds the proposed Canadian legislation lacking from a public interest perspective. AIDA does not adequately protect the rights of Canadians, and it falls well short of the proposed EU legislation on several fronts—which itself has come under fire for its own limitations. Some of AIDA’s most significant shortcomings include:

- its limited scope, applying only to private sector uses of AI, while government uses of these technologies remain unaddressed;
- its failure to define what constitutes a “high-impact system” in the text of the legislation; and
- its lack of effective and meaningful oversight and enforcement mechanisms.

This report proceeds in three parts.

Part 1 provides an overview of Canada’s AIDA. It describes AIDA’s purposes and objectives and sets out what CIPPIC views as its key shortcomings.

Part 2 compares AIDA with the EUAIA. It first describes the structure and objectives of the EUAIA, and then explains why Canada should follow the European approach by making its legislation more prescriptive.

Part 3 identifies three key criticisms of the EUAIA to further explain why AIDA should be amended. It then concludes with a summary of CIPPIC’s recommendations.

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2 Bill C-27, An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts, 1st Sess, 44th Parl, 2022 (first reading 16 June 2022) [Bill C-27].
4 Bill C-27, supra note 2.
6 Bill C-27, supra note 2, s 3(1).
1. What is AIDA? What does it do?

If enacted, AIDA would become the first federal law to regulate the development and use of AI systems by private sector entities in Canada.\(^7\)

AIDA aims to mitigate the wide range of risks to individual Canadians’ rights and safety that the use of AI systems presents.\(^8\) AIDA defines “artificial intelligence system[s]” as any:

> technological system that, autonomously or partly autonomously, processes data related to human activities through the use of a genetic algorithm, a neural network, machine learning or another technique in order to generate content or make decisions, recommendations or predictions.\(^9\)

However, it is uncertain if this broad definition can capture the ever-expanding AI landscape.

Most, but not all, of AIDA’s substantive provisions apply to “high-impact” AI systems by imposing transparency and notification obligations on developers and providers of AI systems, among other things.\(^10\) AIDA purports to protect Canadians by ensuring such “high-impact” systems are developed and used in a way that identifies, assesses, and mitigates the risks of harm and bias.\(^11\) However, the Act leaves “high-impact system” to be defined in future regulations.\(^12\) Therefore, there is currently no working definition of the term.

The Act also establishes an AI and Data Commissioner (AIDA Commissioner) to support the ISED Minister in fulfilling ministerial responsibilities under the Act, such as monitoring company compliance, ordering third-party audits, and sharing information with other regulators and enforcement bodies as appropriate.\(^13\)

Finally, the Act contemplates significant penalties for non-compliance, such as administrative money penalties and fines for breaching obligations, and creates new criminal offences related to AI systems.\(^14\)

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\(^7\) In 2019, the Treasury Board of Canada Secretariat issued a directive on algorithmic impact assessment. However, it is merely a regulation that a future government can easily undo, unlike acts of Parliament, which are more enduring.

\(^8\) Department of Justice Canada, “Bill C-27: An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts” (10 November 2022), online: Government of Canada <www.justice.gc.ca/eng/csj-sjc/pl/charter-charte/c27_1.html>; House of Commons, Standing Committee on Access to Information, Privacy and Ethics, Evidence, 44-1 (28 November 2022) at 16:25 (Francesco Sorbara).

\(^9\) Bill C-27, supra note 2, s 2 “artificial intelligence system”.

\(^10\) Ibid, ss 11–12. “Person responsible” is defined under section 5(1) of AIDA as someone who “is responsible for an artificial intelligence system, including a high-impact system, if, in the course of international or interprovincial trade and commerce, they design, develop or make available for use the artificial intelligence system or manage its operation.”


\(^12\) Bill C-27, supra note 2, s 5(1) “high-impact system”.

\(^13\) Ibid, ss 15, 32–33.

2. Comparing the European Union’s proposed AI legislation with AIDA

On April 21, 2021, the European Commission introduced the world’s first comprehensive regulatory framework for regulating AI in the EU: the Artificial Intelligence Act (EUAIA).\(^\text{15}\)

Both the EUAIA and AIDA adopt a risk-based approach to AI regulation, aiming to balance safety and fundamental rights without overly stifling innovation.\(^\text{16}\) However, the EUAIA mitigates the risks of AI by explicitly banning specific uses of AI as unacceptable, while imposing significant requirements on “high risk” AI systems—defined as those AI systems that pose significant risks to fundamental rights.\(^\text{17}\) The EUAIA also encourages the development of codes of conduct to regulate uses of AI that present limited risks to fundamental rights.\(^\text{18}\) In this way, the EUAIA achieves a risk-based approach to AI regulation by moderating its requirements to the level of risk posed by an AI system.

It is obvious that Canadian lawmakers drew inspiration from the EUAIA in drafting AIDA.\(^\text{19}\) For example, AIDA and the EUAIA define AI relatively broadly and in a technologically neutral manner.\(^\text{20}\) The proposed Acts also define the concept of harm similarly.\(^\text{21}\) Further, they both create a new monitoring authority to administer and enforce the respective draft Acts.\(^\text{22}\)

That said, there are three significant areas where AIDA diverges from the EUAIA in ways that are detrimental to the effectiveness of the proposed legislation and ultimately to the rights of Canadians. CIPPIC therefore calls on the federal government to follow the EU’s lead in these three key areas.

A. Application and Scope

First, the EUAIA applies to any AI provider or distributor whose services or products are used in the European market.\(^\text{23}\) This means that the proposed European Act would apply to public and private entities that produce or distribute AI systems which are used in the EU, regardless of whether the provider is located inside or outside of the EU.\(^\text{24}\)

By contrast, AIDA applies only to private sector companies that develop AI systems for international or interprovincial trade and commerce.\(^\text{25}\) This stands in sharp contrast to the comprehensive EUAIA, which has broad private and public sector coverage. The EUAIA only excludes AI systems developed or used exclusively for military purposes, and those used by public authorities in a third country.

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\(^{15}\) EC, Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM/2021/206, 21 April 2021 [EUAIA].

\(^{16}\) Ibid, art 1.1; Bill C-27, supra note 2, s 4(b); AIDA Companion Document, supra note 5.

\(^{17}\) EUAIA, supra note 15, arts 5–15.

\(^{18}\) Ibid.

\(^{19}\) House of Commons, Standing Committee on Access to Information, Privacy and Ethics, Evidence, 44–1 (28 November 2022) at 12:50 (Ya’ara Saks); AIDA Companion Document, supra note 5.

\(^{20}\) EUAIA, supra note 15, art 3(1); Bill C-27, supra note 2, s 2 “artificial intelligence system”.

\(^{21}\) EUAIA, supra note 15, art 3(44); Bill C-27, supra note 2, s 5(1) “harm”.

\(^{22}\) EUAIA, supra note 15, art 56; Bill C-27, supra note 2, s 33(1).

\(^{23}\) EUAIA, supra note 15, art 2, ss 1(a), (c).

\(^{24}\) Ibid, art 2, s 4.

\(^{25}\) Bill C-27, supra note 2, Part 1 “Regulation of Artificial Intelligence Systems in the Private Sector”.
(i.e., non-EU governments) or by international organizations (e.g., Interpol) for certain law enforcement purposes pursuant to international agreements.26

CIPPIC believes it makes little sense to regulate the private sector use of AI, while leaving public sector uses unregulated. Government uses of AI can have far-reaching impacts on the rights of Canadians, given the role that federal agencies from the RCMP to the CBSA play in our lives. Leaving federal government AI use entirely unregulated thus poses a serious threat to Canadians’ Charter and human rights. While the Treasury Board Secretariat’s 2019 Directive on Automated Decision-Making imposes some constraints on the federal government’s use of AI systems,27 it did not prevent the RCMP’s surreptitious use of Clearview AI—the controversial facial recognition software—in violation of the federal Privacy Act.28 Correspondingly, government institutions should be subject to AIDA’s requirements when their uses of AI present risks to the rights of Canadians.

B. Definitions

Second, the EUAIA is notable for its expansive definition of AI systems and the imposition of extensive technical documentation, training, and monitoring requirements on the AI tools that are subject to its provisions.29 Specifically, the EUAIA defines 44 terms that are used throughout the legislation, whereas AIDA defines only nine terms. For example, the EUAIA defines such terms as “remote biometric identification systems” and “training data” versus “validation data” so as to be able to regulate these phenomena.30 What is more, defined terms are essential to communicating the import of the legislation and to interpreting its provisions31—especially in a technical area such as the regulation of AI.

The EUAIA also classifies AI systems into four categories of risk, namely:

1. unacceptable risk;
2. high risk;
3. limited risk; and
4. low or minimal risk.32

The EUAIA bans unacceptable-risk AI systems outright, while high-risk systems are subject to extensive technical, monitoring, and compliance obligations.33 Specifically, the EUAIA identifies two categories of AI systems as high-risk:

29 EUAIA, supra note 15, art 3.
30 Ibid, arts 3(29)–(38).
31 Department of Justice Canada, “Legistics Definitions” (29 August 2022), online: Government of Canada <www.justice.gc.ca/eng/rp-pr/csj-sjc/legis-redact/legistics/p1p5.html#:~:text=Definitions%20are%20powerful%20provisions%20because,the%20interpretation%20of%20legislative%20texts>.
32 EUAIA, supra note 15, arts 5–7, 52, 69.
33 Ibid, art 5.2.2.
• AI that is (a part of) a product that is already subject to certain EU safety regulations (Annex II); and
• AI systems that have been designated by the European Commission as high risk (Annex III).\(^{34}\)

For example, some of the AI systems covered by the draft EU legislation as high-risk include medical devices, toys, and radio equipment.\(^{35}\)

Meanwhile, low-risk systems are subject to certain transparency obligations under the EUAIA, and providers of such systems are encouraged to self-regulate by implementing codes of conduct. In this way, EUAIA imposes heightened obligations on providers and users of higher risk AI systems, while still subjecting most other AI systems to at least some regulatory oversight.

In contrast to the EUAIA, AIDA does not bother to define what constitutes a “high-impact system,” even though the legislation is designed primarily to regulate such systems. Rather, the definition of this key term is to be worked out in regulations.\(^{36}\) In its Companion Document, ISED explained that it would define the criteria for high-impact systems in regulations “to allow for precision in the identification of systems that need to be regulated through this framework, for interoperability with international frameworks such as the EU AI Act, and for updates to occur as the technology advances.”\(^{37}\) This would, according to ISED, “avoid imposing undue impacts on the AI ecosystem.”\(^{38}\)

This is unacceptable when the Act is directed entirely at addressing the risks of these “high-impact” systems in the first place. In fact, defining the term would promote interoperability with the EUAIA. Without a clear, precise definition to provide certainty, it will be difficult for individuals and businesses to know whether their system falls within the scope of the Act, thereby hampering the Act’s ability to “facilitate compliance with [its] rules.”\(^{39}\) In this regard, CIPPIC proposes that high-impact systems should be those which have a high or substantial impact on the rights of Canadians.

Perhaps more importantly, Parliament needs to establish criteria that would render an AI system “high-impact.” Although the Companion Document does well to point out the considerations that should go into such an assessment, this language needs to be put into the legislation itself.\(^{40}\) It is not enough to have these considerations defined in regulations or a companion document that does not have the force of law. Moreover, requiring small businesses, for example, to reference three separate documents to determine whether their AI system is “high-impact” is both burdensome and inefficient.

C. Governance Structure and Oversight

Finally, the EUAIA creates a “European Artificial Intelligence Board” (Board) composed of representatives from the European Commission and the EU’s 27 member-states.\(^{41}\) Each member-state is required to establish or designate a national competent authority to ensure the proper

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\(^{34}\) Ibid, art 6.

\(^{35}\) Ibid, Annex II.

\(^{36}\) Bill C-27, supra note 2, s 5(1) “high-impact system”.

\(^{37}\) AIDA Companion Document, supra note 5.

\(^{38}\) Ibid.

\(^{39}\) Bill C-27, supra note 2, Preamble.

\(^{40}\) AIDA Companion Document, supra note 5.

\(^{41}\) EUAIA, supra note 15, arts 56-57.
application of the EUAIA. Under the EUAIA, the Board can issue opinions, recommendations, and written contributions on matters related to the EUAIA's implementation. In other words, the Board will act in an advisory role and oversee the EUAIA's implementation, but the national authorities of the member states will be primarily responsible for enforcing the proposed legislation.

AIDA, by contrast, vests the power to oversee and enforce its provisions in the ISED Minister, who may delegate some or all of their powers to a new AIDA Commissioner. Unlike other federal commissioners, the AIDA Commissioner is not independent. Rather, the AIDA Commissioner must be drawn from a department that the ISED Minister presides over, and their role is to “assist” the Minister. On the other hand, the Privacy Commissioner is an independent and non-partisan authority that will oversee the administration of the proposed Consumer Privacy Protection Act. Such a commissioner can provide truly independent oversight, as they report directly to Parliament instead of merely “assisting” a Minister.

Given that many other federal commissioners are independent, there is no reason why the AIDA Commissioner should not be independent as well. Instead, AIDA establishes a weak form of governance and oversight for the AI sector, which runs contrary to Organisation for Economic Co-operation and Development (OECD) guidance on AI governance. To achieve good governance, the OECD strongly emphasizes the creation of an independent and structurally separate regulatory body that is at “arm’s length” from the government. Regulators should also not be assigned conflicting or competing functions or goals. Establishing an independent regulator is even more important in cases where the government may be a stakeholder, as is the case here. As part of its mandate, ISED is committed to improving conditions for investment, enhancing Canada’s innovation performance, increasing Canada’s share of global trade, and building a fair, efficient, and competitive marketplace. There is potential for conflict when the AIDA Commissioner is part of the same service delivery organization.

In short, Canada should follow the European model and create an independent and/or external regulatory body to administer and enforce AIDA, rather than leaving this to ISED.

42 Ibid, art 59.
43 Ibid, art 58.
44 Ibid, art 5.2.6.
45 Bill C-27, supra note 2, ss 32–33.
46 Ibid, s 33.
47 Ibid, s 33(1).
48 Ibid.
49 Privacy Act, RSC 1985, c P-21, s 53(1).
53 Ibid at 30.
54 Ibid at 49.
3. Analysis and Recommendations

The EUAIA is considerably stronger than AIDA, but it is far from perfect. It has shortcomings. While Canada would do well to model its own legislation after this aspirational legislation, the proposed EUAIA has faced considerable criticism.

First, some have claimed that the European approach is too prescriptive and is hence ill-fitted for general-purpose AI models capable of accomplishing a range of tasks. AIDA, by contrast, is written in a more technologically neutral manner, allowing it to be more adaptable to new technologies. 56

Second, some have claimed the EUAIA fails to meaningfully protect the fundamental rights to social security and an adequate standard of living. 57 Human Rights Watch takes issue with the EUAIA’s narrow safeguards, which fail to consider how existing inequities and failures to protect human rights shape the design of AI systems, such as algorithmic decision-making. 58 For example, banning certain types of “trustworthiness” scoring over a “certain period of time” is vague and does not meaningfully capture the practical realities of behavioural scoring. Rather than only banning some scoring systems, the EUAIA should ban any such system that negatively impacts human rights. 59

Third, the EUAIA risks developing ineffective harmonized standards. 60 Adhering to harmonized standards is an “objectively verifiable” way of complying with EU legislation. However, the organizations responsible for developing these standards could develop weak and high-level standards, effectively making the EUAIA toothless because dangerous AI systems could be overlooked. 61 The difficulty—and perhaps impossibility—with creating such standards boils down to technical feasibility. Importantly, we do not even know how to determine whether AI systems adhere to these standards in the first place. 62 Therefore, it is not clear whether technical AI standards can adequately protect fundamental rights.

In light of these criticisms, it is particularly alarming that AIDA falls short of the proposed European Act. If the EUAIA has faced considerable scrutiny, what does it say about AIDA? Naturally, this would mean that Canada is doing even worse than its European counterparts on regulating AI. This is problematic given that Canada calls itself a “world leader in the field of artificial intelligence.” 63 For example, Canada launched its ambitious Pan-Canadian AI Strategy in 2017 to strengthen Canada’s

58 Ibid.
59 Ibid.
61 Ibid.
62 Ibid.
63 AIDA Companion Document, supra note 5.
leadership in AI.64 As such, Canada must do more as a self-proclaimed global leader in AI to position itself at the forefront of the emerging global AI landscape.65

Thus, AIDA risks being obsolete the moment it comes into force and threatens to undermine the very interests it purports to protect. It falls well short of the EUAIA, which itself has faced considerable criticism since its inception.

Canada needs to do more to create a “responsible” AI framework that sufficiently protects the rights of Canadians.66 AIDA should therefore be amended in three ways. First, its application should be broadened to include the public sector, namely government institutions. Second, “high-impact system” should be defined within the body of AIDA’s text. Finally, its proposed governance framework should be overhauled to ensure transparency and accountability in providing meaningful oversight and enforcement.

Hailed as “future-proof legislation,”67 the EUAIA does considerably better than AIDA on all these fronts. While neither legislative framework is perfect, a weak framework can have far-reaching social and economic implications. Without a more robust framework in place, Canadians’ rights may be in jeopardy. As we have seen, AI systems, if not properly regulated, can lead to discriminatory profiling, false arrests, negative health care outcomes, and mass surveillance, particularly for marginalized groups.68 What Canadians need is comprehensive and detailed legislation that adequately safeguards their privacy interests. To that end, AIDA must be improved to better respect individual privacy rights, a fundamental right of every Canadian.

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64 Innovation, Science and Economic Development Canada, “Pan-Canadian Artificial Intelligence Strategy” (20 July 2022), online: Government of Canada <ised-isde.canada.ca/site/ai-strategy/en>; Canadian Institute for Advanced Research, “The Pan-Canadian AI Strategy” online: CIFAR <cifar.ca/ai/).


66 AIDA Companion Document, supra note 5.
