

MEMORANDUM TO THE MINISTER OF ARTIFICIAL
INTELLIGENCE AND DIGITAL INNOVATION

Request to Approve a Compliance and Enforcement Approach for the Regulation of Large
Language Models to Protect Mental Health of Youth.

© Laurianne Bouchard, Martha Desrosiers, Hajra Mazhar,
Garth Nazareth, Shaan Rashid & Alisha Wilkinson

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Carleton University

SUMMARY

Large Language Models such as ChatGPT appeared four years ago and have been rapidly adopted. Use of these models has been shown to exacerbate issues of mental health for both children and adults. The Budget sets out a strategy to promote AI growth in Canada, but the mental health risk associated with this computer software may jeopardize public confidence in the technology and discourage investment.

Regulating Large Language Models is challenging due to their novelty, rapidly emerging evidence on the impact, concerns around international competitiveness, and enforcement challenges. While the Department of Innovation, Science, and Development Canada continues to assess the risks posed to Canadians, the proposed approach would promote industry conformance to voluntary standards, leverage existing regulations, and enhance public awareness of the potential risks of using AI, in parallel with continued monitoring and researching.

BACKGROUND

The popularity and use of Artificial Intelligence (AI) powered Large Language Models (LLMs) has risen globally. One platform, ChatGPT, gained 1.7 billion users in its first year, and LLMs are increasingly integrated into many aspects of everyday life, including educational tools, digital services, social media platforms, and consumer products. However, there are risks associated with LLM use, particularly among vulnerable populations such as youth. There are a growing number of cases linking LLM use to mental illness, suicide, and violence, as well as notable instances of industry failing to report concerning user behaviour or address LLMs reinforcing suicidal ideation and violence. For example, Open AI identified concerning user behaviour tied to the recent mass shooting in Tumbler Ridge, but they failed to proactively share this information with law enforcement.

The 2025 Federal Budget and the Spring Economic Update 2026 committed to promoting innovation and investment in the AI sector; managing associated risks is required to responsibly promote AI growth in Canada. Imposing overly prescriptive regulation could increase compliance burden on industry members and discourage AI innovation and investment in Canada. Conversely, a lack of appropriate safeguards may undermine public trust and confidence in the industry. A targeted and risk-based approach is required to balance protection with innovation and promote Canadian competitiveness. Currently, the Government of Canada continues to assess the risks and the options to address the mental health impacts of these technologies, but it has proven difficult to regulate in this area due to rapid technological advancement, limited data, economic considerations, and enforcement challenges.

CONSIDERATIONS

Impacts of LLMs on Youth

Emerging evidence suggests youth may be especially susceptible to potential mental and physical harms associated with LLMs as they are still developing essential critical thinking skills. These risks can be heightened for youth who experience challenges with social cues, emotional regulation, or impulse control. However, conversational AI also offers unique opportunities for cognitive and socio-emotional growth when designed with developmental safeguards. AI powered chatbots provide a judgment-free environment for youth to practice communication, which is particularly beneficial for neurodivergent youth or those with social anxiety. In educational contexts, AI powered tools offer personalized learning that adapts to a child's individual needs. Overall, the evidence shows both potential benefits and risks of youth interaction with chatbots.

Information on the impacts of LLMs on mental health, particularly for youth, is rapidly growing. The rapid adoption of these technologies and their integration into platforms such as social media have outpaced research. Overall, the evidence shows both potential benefits and risks associated with youth LLM use. However, much of the available data is anecdotal, and there is little long-term or large-scale data available. While experts are calling for precautionary safeguards and enhanced monitoring, there remains a need for more comprehensive data and additional evidence to inform possible approaches.

Enforcement Realities

The current generation of LLMs were developed and are operated by multinational companies in the USA and China and their services are delivered digitally across borders. These tools are increasingly being embedded in social media, search engines, educational tools, and consumer products. This makes it challenging to identify the regulated parties and apply Canadian requirements. Additionally, Canadian users may access services globally using platforms stationed outside of Canada where Canadian legislation cannot be easily applied.

Opportunities to Leverage Existing Regulations

There are opportunities to leverage existing regulations to address some risks associated with LLMs. Health Canada's Consumer Product Safety Program and the Canada Consumer Product Safety Act can be used to address certain AI-enabled products targeted at youth through the general prohibition on the supply of consumer products that pose a danger to human health and safety. Additionally, the Competition Act may serve useful to address false and misleading advertising related to LLMs and AI. However, these regulations were not created specifically to address AI and LLMs, as such, their scope may be limited. Finally, the Criminal Code could also be applied for instances of neglect causing harm by AI companies. The potential consequence of receiving penalties under these existing regulations could be seen as a deterrent for the industry encouraging their compliance given the impact it could have on their reputation.

International Regulatory Approaches

International approaches to AI and LLM regulation continue to evolve. Recently, the European Union (EU) developed the Artificial Intelligence Act (AI Act). Broadly, the AI Act requires industry to ensure their products do not cause harm to consumers, and to prove that they are able to monitor the functionality of their AI tools. The United States does not currently have any LLM specific regulations in place. However, they have signalled its economic importance through both executive orders and an action plan intended to expedite the development of artificial intelligence and cement the U.S. as the global leader in the technology.

Stakeholder Reactions and Engagement

There is a variety of stakeholders that may be impacted or implicated by regulations in this area from (but not limited to) toy manufacturers, health-care providers, to the education system. Additionally, there is a high likelihood of significant public interest. The chosen approach should be informed by input from stakeholders, and an engagement plan will be necessary to effectively gather their feedback throughout the regulatory development lifecycle. Should ISED proceed with the development and implementation of new regulations, the publication of a Notice of Intent to signal that the Government of Canada is seeking to regulate in this area would provide an important opportunity for stakeholders to provide early feedback.

RECOMMENDATION

Option 1 (Non-regulatory Approach):

Actively monitor industry self regulation, leverage industry commitments to report potentially dangerous behaviour to law enforcement and encourage compliance with existing voluntary standards. Additionally, leverage existing regulations, where applicable, enhance public awareness through a public education campaign, and increase research and monitoring. This approach would promote industry self regulation, including adoption of existing voluntary safety standards through Codes of Practice (e.g., ANSI/CAN/UL 3115) and additional commitments that call on industry to address the risks associated with LLMs by flagging and redirecting concerning searches, reporting user behaviour of significant concern to law enforcement, and taking other steps to protect users from harm. Finally, ISED would commission external research on the mental health impact of LLMs through the Canadian Council of Academies while continuing to monitor international approaches internally.

While this approach offers less immediate protections than comprehensive regulation, a lighter touch facilitates AI sector growth in Canada (as committed in the 2025 Federal Budget) while ensuring vigilance with regards to the associated risks. This approach allows industry to demonstrate their efforts to reduce harm through self-regulation without placing undue burdens or stifling growth. The Government of Canada also retains the ability to regulate in the future when more evidence is available, including lessons learned from the EU's AI Act and regulatory approaches from other jurisdictions. Additionally, this approach is unlikely to cause conflict with international allies. Through investments in public education and additional research, ISED will respond to public concern, increase awareness risks posed by LLMs, and gather additional data to help to fill the current gaps in evidence and provide a more fulsome foundation for more potential regulatory regimes in the future.

Option 2 (Regulatory Approach):

Develop comprehensive regulations modelled after the EU AI Act, design a public education campaign, and increase research and monitoring capacity. Like the EU, Canada would require industry to prove their products do not cause harm to consumers. Regulations would classify LLMs and AI powered tools into several risk categories and set out requirements for industry based on the risk level. These risks range from an unacceptable risk (such as threat to safety of individuals are banned) to minimal or no risk (such as AI-enabled games or spam filters). This approach is more comprehensive than Option 1 and would require additional investment but would align Canadian regulations with the European approach. However, there is potential that regulations fail to address the specific risks posed by LLMs as there is limited evidence available.

Option 3 (Status Quo Approach):

Delay new steps, requirements, and regulations until more information is available to inform the necessary approach. During this time, ISED would continue to monitor this issue and regulatory approaches in other jurisdictions. This option maintains the status quo, requires no additional investment, and does not risk compromising innovation and competitiveness. This approach also allows for future regulation when more evidence is available. It does risk that Canada would be seen in the public eye as not prioritizing the potential risk to Canadians.

It is recommended that ISED receive support to proceed with Option 1: Leverage existing legislation and self-regulations complemented by enhanced public education and research.

NEXT STEPS

Should the Minister support Option 1, ISED would:

- Engage industry and key stakeholders to promote adoption of voluntary safety standards and identify opportunities for additional commitments related to the detection and reporting of concerning user behaviour, particularly where there may be risks of self-harm or violence.
- Develop a public awareness strategy in collaboration with relevant federal partners to educate Canadians, parents, educators, and youth on the benefits and potential risks associated with LLM use, including responsible use practices.
- Commission independent research through the Canadian Council of Academies to assess the mental health impacts of LLMs, identify evidence gaps, and provide recommendations to inform future policy development.
- Establish an interdepartmental monitoring framework with relevant federal organizations to track emerging evidence, technological developments, incidents of concern, and international regulatory approaches.
- Report back to the Minister within 24 months with findings from stakeholder engagement, research activities, and international developments, including an assessment of whether additional regulatory measures should be considered.