



National Standard of Canada Standards Proposal

Proposed Standard Title:

Age-verification methods using human biometrics

Proposed Scope:

This proposed standard aims to specify minimum requirements for to the design and use of age verification methods using biometrics.

The term 'biometrics' includes any kind of physical attribute or signal generated from human bodies.

Strategic Need:

Identify the strategic need of key stakeholders and confirmation expressing the need.

This includes consideration for:

- a. The strategic need of key stakeholder (e.g. legislator, industry, government, consumers);*
- b. The type of standard (international, regional, domestic standards and harmonization need);*
- c. Addressing up-to-date vs outdated standard to ensure latest innovative/technology/safety features available for businesses;*
- d. If the standard is intended to support national/regional/international certification programs;*
- e. If there is stakeholder intention to transition to different standard;*
- f. The type of maintenance (periodic, continuous, stabilized, best before date); and*
- g. The use of "CAN" descriptor.*

There are a range of technical protection measures to verify one's age online ranging from ineffective to intrusive. For example, simply asking for your date of birth or that you are over the age of majority online are ineffective methods. How does a service provider know whether you are telling the truth? On the other extreme, there are techniques that collect biometric information and determine your 'age' based on characteristics using AI algorithms. A picture of a child's face online seems quite worrying.

Online access to adult content, services, transactions or interactions puts minors at risk of physical and mental harm. Existing age restrictions are ineffective and cybercrimes against children are rising: 9,441 children in 2020 were victimized from reported cybercrimes, up 200% from 2014 (Statistics Canada, 2022).



The Canadian federal Bill S-210 introduces age-verification requirements for adult websites but it does not extend to the dominant digital platforms children access that expose them to adult content including gambling, violence, guns, hate speech, sexual content, and more. These trends compel the need for a broader application of age verification technologies. As examples:

- Recent investigations uncovered sexually explicit content on gaming platforms geared toward children online.¹
- Virtual reality apps restricted to adults are, in practice, an online seeking ground for sexual predators to exploit young children.²
- Live streaming content is a click away for children – from livestreamed abuse of children³ to the heinous acts displayed real-time in raw, uncensored form online of the Freedom Convoy protest.⁴
- Online ads going unchecked targeting children with harmful content.⁵
- Public and private chat spaces luring vulnerable young children into indecent acts;⁶ and
- So-called ‘challenge’ videos going viral on social media that kill children.⁷

In reviewing Bill S-203 (now S-210), the Office of the Privacy Commissioner of Canada beckoned the need to establish technical safeguards for age-verification technologies. The proposed standard is crucial as [Bill S-210](#) progresses through Parliament as it will define best practices in the fields of age verification and privacy protection to support the legislation when age-verification methods are prescribed. The need is also evident for industry and consumers considering continuous usage of age-verification dependent products.

Need for Availability in Both of Canada’s Official Languages:

- Do stakeholders need the standard published in both official languages?*
- Do users of the standard need the standard published in both official languages?*
- Do authorities having jurisdiction need the standard published in both official languages?*
- Are there health and safety related needs for the standard to be published in both official languages?*

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¹ <https://www.cbc.ca/news/entertainment/roblox-game-children-1.6357158>

² <https://www.washingtonpost.com/technology/2022/02/07/facebook-metaverse-horizon-worlds-kids-safety/>

³ <https://www.ctvnews.ca/sci-tech/pure-evil-how-the-pandemic-has-given-rise-to-online-child-exploitation-livestreamed-abuse-1.5745970>

⁴ <https://www.youtube.com/watch?v=E-7nz7vw4vM>

⁵ <https://www.wired.com/story/activists-facebook-allows-drug-ads-target-teens/>

⁶ <https://www.abc.net.au/news/2022-02-19/discord-chat-warning-after-canadian-groomed-australian-girl/100843882>

⁷ <https://www.usatoday.com/story/life/health-wellness/2021/04/27/tiktok-challenge-kills-12-year-old-how-peer-pressure-has-evolved/4853507001/>



For adoptions, is there availability of the regional/international standard or other deliverable from the source?

For adoptions, is there an agreement with the source committee to facilitate official translation?

Geographical Representation Considerations:

Identify the Canadian geographical representation appropriate to the subject area covered by the standard.

Geographic representation may consider factors such as:

- a. Industry (e.g. petroleum in petroleum producing provinces);
- b. Reference in regulation (if a regulation exists in a province); or
- c. Commodity characteristics and social impact (e.g. heating oil for northern climates).

The standard would be of national interest and scope. There would be impact and interest across many sectors of the Canadian economy who provide age restricted products, commodities and services such as alcohol, tobacco, cannabis, gambling, lottery, adult web content.

There are entities that would be potential stakeholders operating under the umbrella of [Digital ID & Authentication Council of Canada \(DIACC\)](#).

Reference in regulation:

- [Collection and Verification of Biometric Information- Government of Canada](#)
- [Guidance for Authentication of Remote Biometrics- Digital Governance Standards Institute Council](#) (draft).

Trade:

Identify how the standard meets the needs of the marketplace and contributes to advancing trade in the broadest possible geographical and economic contexts.

For example:

- a. Facilitate Canadian innovation to lead internationally;
- b. Support the objectives of "One standard, one test, accepted everywhere";
- c. Support the objectives of "First to Market"; or
- d. Foster international/ regional/ national alignment of requirements.

In 2017, the United Kingdom became the first country to enforce [mandatory age verification](#). France passed a similar bill in 2020 to implement a nationwide [age verification system](#) for pornography websites. Close to three dozen states in the U.S. have already introduced or passed age-verification-related bills for adult websites. The U.S. federal government is now prioritizing it, too.



Age verification tools can assist to prevent child users from accessing some sites and apps. This is critical, given an alarming increase in online child exploitation across Canada. For instance, as reported by the [Canadian Centre for Child Protection](#), the number of online sexual luring cases involving children has increased tenfold in the last five years. In fact, a significant scale of cases remains unreported. Several incidents of teenage suicide caused by cyber-harassment have shocked the nation in recent years.

The United Nations has regularly urged states to strengthen protections for children, mentioning child sexual exploitation “as a global emergency.” Unfortunately, Canada [ranks 30th](#) out of 38 wealthy countries when it comes to the well-being of children and youth under 18, according to a 2020 report.

While safety and security focused projects have examined cybersafety in general, this proposed standard explicitly focuses on the role of age verification in facilitating cybersafety. Age-gated content today is easily bypassed. For example, children can enter any birthdate rather than their own birthdate to access a cannabis website and parental controls can be bypassed through third-party devices. This proposed standard will explore how best to implement age-verification in a manner that is privacy preserving, secure, equitably accessible, and easy-to-use. Age verification is an important tool in online safety that sets appropriate guardrails to limit children’s risks of harms from exposure to age-gated content and transactions.

This proposed standard aims to:

- a. Facilitate the adoption of age-verification technologies in Canada,
- b. Support the Canadian industry by establishing defined standards for age-verification,
- c. Encourage biometrics-based age-verification innovation by Canadian researchers, and
- d. Ensure compatibility of Canadian regulations on age-verification with international standards.

Canada is lagging behind other jurisdictions when it comes to protecting young persons’ online; while other countries are unveiling comprehensive strategies to mitigate this crisis more effectively,⁸ like in the UK’s House of Lords in advancing the Age-Appropriate Design Code⁹, our solutions in Canada must be designed for no less than the contemporary world our children face daily.

⁸ <https://www.washingtonpost.com/technology/2022/02/16/kids-online-safety-act-unveiled-blackburn-blumenthal/> and <https://www.protocol.com/bulletins/senate-kids-online-safety-act>

⁹ <https://www.theguardian.com/technology/2021/sep/02/uk-childrens-digital-privacy-code-comes-into-effect>



Relevant existing documents at the international, regional and national level:

- [IEEE STD 2089-2021](#), IEEE Standard for an Age Appropriate Digital Services Framework Based on the 5Rights Principles for Children
- [BSI /PAS 1296:2018](#), Online age checking
- United Nations (UN) Convention on the Rights of the Child
- OECD Recommendations on Children in the Digital Environment to preserve young persons' rights
- [ISO/IEC 27566](#), Information security, cybersecurity, and privacy protection – Age assurance systems.
- [ISO/IEC 7732](#), Information security, cybersecurity and privacy protection – Age Assurance System – measurement and testing
- [Pan-Canadian Trust Framework \(PCTF\)](#)