



Yoti Response Response to Canada Senate Bill S-210

30 May 2024



Yoti Submission to [Canada Bill S-210](#): An Act Limiting Young People's Online Access to Sexually Explicit Material

Executive Summary

This submission addresses the imperative need for Canada Bill S-210, aimed at limiting young people's online access to sexually explicit material. Given the prevalence of online content, the protection of minors is paramount. This document will argue for the efficacy, privacy protection, and necessity of age verification and age estimation systems, refuting common misconceptions and providing evidence from various jurisdictions to support the bill.

1. Introduction

The proliferation of the internet has led to unprecedented access to information and services. However, this access has also exposed minors to harmful content, particularly sexually explicit material. Canada Bill S-210 proposes a legislative framework to mitigate this risk by enforcing age verification mechanisms. This submission outlines the benefits and feasibility of such measures, drawing on global precedents and technological advancements.

2. The Case for Age Verification and Age Estimation

2.1 Current Practices and Efficacy

Independent age verification and estimation providers, such as Yoti, have conducted over 1 billion checks in the past year alone, primarily to confirm users are over the age of 18. These checks span various sectors, including online services, gambling, and social media platforms. Age assurance (spanning age verification and age estimation) is performed at scale, effectively, anonymously, inclusively, and at low cost. For instance, technologies such as facial age estimation and reusable digital identity have proven successful in ensuring compliance without compromising user privacy.

2.2 International Standards and Audits

Age verification providers are independently audited¹ against approved [international standards](#) (eg [PAS 1296:2018](#) and the [IEEE standard](#)²), ensuring accurate results and secure processing of personal data. The audits confirm that personal data is not retained post-verification, aligning with privacy laws and regulations.

3. Addressing Common Concerns

¹ <https://accscheme.com/>

² https://www.youtube.com/watch?v=oT2MDEsg7_c



3.1 Surveillance Misconceptions

Contrary to misconceptions, age verification, meeting the aforementioned standards does not involve surveillance. Only the age attribute (e.g., over 18) is shared with the requesting site, not the full details of personal identities. This process respects user consent and minimizes data sharing, ensuring that individuals' privacy is maintained.

3.2 Identity Verification Myths

There is a false notion that all age verification methods require repeated identity verification or sharing of identity documents each time an age check is required. In reality, various options cater to different user preferences, including methods that do not rely on repeated resharing of identity documents. For instance, facial age estimation does not necessitate the sharing of identity documents, only the age attribute. Reusable digital identity apps enable the data minimised sharing of just an 18 plus age attribute.

3.3 Service Access and Inclusivity

It is incorrect to claim that age verification restricts adult access to services. The process is quick, typically taking about a second, and does not deter adults from accessing the services they are entitled to. Furthermore, inclusive options exist that do not require ownership or use of ID documents, such as facial age estimation.

4. Evidence from Global Implementations

4.1 France and Germany

The French data protection regulator, CNIL, 2023³, has supported facial age estimation without biometric recognition as a viable method to block access to minors to adult content.

Similarly, in Germany, Yoti's Facial Age Estimation has been approved by the co regulatory body [FSM](#) since 2020 and the regulatory body KJM⁴ Commission for Youth Media Protection (included on the KJM Raster or list of approved age assurance approaches), highlighting its effectiveness in protecting minors. We are happy to provide the full official transcript of the independent evaluation, undertaken by independent experts for the FSM.

'Martin Drechsler, Director of FSM

"The innovative (facial age estimation) mechanism that Yoti has developed opens up new paths for modern and effective protection of minors in Germany. The approach can also give positive impulses to content providers and open up new ways of cooperation – which we as FSM are happy to support".

4.2 United Kingdom

³ <https://www.cnil.fr/fr/controle-de-lage-pour-laces-aux-sites-pornographiques>

⁴ <https://www.kjm-online.de/presse/pressemitteilungen/kjm-bewertet-yoti-age-scan-als-technisches-mittel-positiv/>



The UK Home Office conducted trials on age verification technologies⁵, concluding that age estimation is effective in preventing minors from purchasing age-restricted products. In December 2022, the U.K. Home Office published the results from trials it conducted of various age verification and age estimation technologies to prevent minors from purchasing age-restricted products at supermarket checkouts. During the trial, no underage customers purchased age restricted items when using the new Yoti age verification technology. The Home Office concluded that “uptake of age estimation technology at self-scan checkouts suggests that there is appetite for digital age assessment.” Office for Product and Standards, U.K. Home Office, *Key learning from the trial* (Dec. 30, 2022),

Ofcom addresses age assurance in Volume 4: How to mitigate the risk of illegal harms – the illegal content Codes of Practice:

18.78 We therefore provisionally consider that services should only be in scope of this measure if they have existing means of identifying child users, whether that is a form of age assurance or another method.

Services that do estimate whether users are likely to be children use a range of tools (subject to applicable data protection and privacy laws), these include:

Facial biometric age estimation – where a user’s face is analysed and an age estimation is based upon the user’s features.

Age verification using hard identifiers – This can include asking a user to input credit card details, open banking or capturing information from a photo-ID document uploaded by the user.

The UK’s Online Safety Act also includes provisions for age assurance to prevent child grooming on adult and social media platforms.

The UK Information Commissioner’s Office invited Yoti and its facial age estimation to the ICO Sandbox ahead of the UK Age Appropriate Design Code; link attached to the [Exit Report](#),⁶ ‘Yoti’s participation in the Sandbox has given the ICO a valuable opportunity to gain insights into the UK’s innovative age assurance sector and how age assurance providers are working to develop tools to children and young people online operationalise the advice in the ICO’s Children’s code’ and concluding ‘Yoti’s age estimation tool has demonstrated that it is, in some contexts, possible to use biometrics to make a decision about an individual or treat them differently without using that biometric data for the purpose of uniquely identifying that person’ and ‘that Yoti’s age estimation tool will not result in the processing of special category data.’

4.3 United States

In the US, platforms like Instagram and Facebook⁷ have adopted facial age estimation to verify user ages, ensuring minors do not access inappropriate services. This demonstrates the growing acceptance and efficacy of age verification technologies in large-scale applications.

⁵ <https://rasg.org.uk/wp-content/uploads/2023/11/RASG-Sandbox-Evaluation.pdf>

⁶ https://ico.org.uk/media/for-organisations/documents/4020427/yoti-sandbox-exit_report_20220522.pdf

⁷ Erica Finkle, *Bringing Age Verification to Facebook Dating*, META NEWSROOM (Dec. 5, 2022), <https://about.fb.com/news/2022/12/facebook-dating-age-verification/>.



⁸In November 2022, Instagram rolled out age assurance using facial age estimation in order to check that users are the age they claim to be when trying to change the age on their social media account.⁹ Similarly, Facebook announced it would use facial age estimation to prevent users under 18 years old from accessing its Facebook Dating service.¹⁰ This broad adoption can be attributed to the advances in technology rapidly increasing effectiveness of age estimation without the need for facial recognition/identification of individuals.

The recently published [NIST benchmark](#) provides scientific certainty for businesses and regulators that facial age estimation is an accurate, fair and privacy-preserving age assurance solution, with a sample of over 11 million images. This comes at a time when there is increasing legislation globally demanding that organisations effectively check the age of their users. The independent NIST evaluation¹¹ demonstrates our commitment to developing world-class technology that improves online safety and creates age-appropriate experiences.

The extract below from the Utah AG Office is clearly supportive of facial age estimation as an approach. (Defendants' memorandum in opposition to plaintiffs' motion for preliminary injunction, Case case no 2:23-CV- 0028)

36. The value of Age Estimation, as described more fully below, for both Content Providers and consumers is that it often does not require consumers to submit personal information other than a photograph or voiceprint.

48. SB 287's age verification requirement need not require users to supply any private and sensitive information. For example facial age estimation can be undertaken without any documentary evidence and either on a SASS (software as a service) basis or entirely on a user's own device'.

5. Technological Advancements and Cost Efficiency

Age verification technologies have advanced significantly, allowing for quick and accurate verification processes. These technologies can operate on a Software as a Service (SaaS) basis or entirely on user devices, ensuring privacy and security. The cost of these services is also decreasing due to innovation and competition, making them accessible for widespread implementation.

6. Conclusion

The implementation of Canada Bill S-210 is crucial for protecting minors from harmful online content. Age verification technologies offer a feasible, effective, and privacy-respecting solution. This submission has outlined the benefits and addressed common concerns, drawing on global examples to support the necessity of this legislation. We urge the Canadian government to adopt and enforce these measures to safeguard young people in the digital age.

⁹ Ryan Morrison, *Instagram rolls out age verification for UK users*, TECH MONITOR (Nov. 7, 2022), <https://techmonitor.ai/technology/ai-and-automation/instagram-age-verification-uk>.

¹⁰ Erica Finkle, *Bringing Age Verification to Facebook Dating*, META NEWSROOM (Dec. 5, 2022), <https://about.fb.com/news/2022/12/facebook-dating-age-verification/>.

¹¹ <https://docs.google.com/document/d/19SdmS7RTKHDipnuEDquKzQQAGjhtWA1Umqxe-kmyjTA/edit>



Analysis and Recommendations

1. Introduction to Age Verification Technologies

Age verification and estimation technologies¹² have evolved to address the need for protecting minors from inappropriate content while maintaining user privacy. These technologies include facial age estimation, validation of payment cards, and digital ID checks - from reusable digital identity apps and transaction digital identity verification.

1.1 [Facial Age Estimation](#)¹³

[Facial age estimation](#)¹⁴ uses algorithms to analyze facial features and estimate age. This method is non-intrusive and does not require the storage of personal information, making it a privacy-friendly option. For instance, Yoti's Facial Age Estimation technology has been approved in multiple jurisdictions for its accuracy and effectiveness.

1.2 Payment Card Validation

Validating a payment card involves checking if the cardholder meets the age requirement without storing personal details. This method is straightforward and leverages existing financial infrastructures. Additional authentication may be required to assess that the person presented the card is in fact the owner of the card.

1.3 Digital ID and Document Checks, via independent third party operators, such as Yoti

Reusable digital ID checks and document verification involve authenticating identity documents to confirm age. These methods are robust and widely accepted. In each instance only the age attribute, which is data minimised, is shared with the relying party.

Reusable Digital ID - Yoti offers a free app which lets users prove their age or identity. To create a Digital ID, users add a government-issued photo ID - like a passport or driving licence. Once created, they can then share specific information instead of sharing unnecessary details - e.g. or only an 18+ proof of age. The reusable Digital ID app can be used as proof of age, without sharing other details. Because the age has been verified against their ID document, with a face match, liveness detection and document authenticity check, this gives the highest level of confidence that the age is correct

2. Privacy and Security Considerations

¹² <https://www.yoti.com/wp-content/uploads/2024/03/Age-assurance-approaches-scaled.jpg>

¹³ <https://www.youtube.com/watch?v=6KCUO2vIn3M>

¹⁴ <https://www.yoti.com/blog/yoti-age-estimation-white-paper/>



Privacy and security are critical in age verification processes. Independent audits ensure compliance with international standards, confirming that personal data is processed securely and not retained after verification.

2.1 Data Minimization

Data minimization is a core principle in age verification and age estimation, where only the necessary age attribute (e.g., over 18) is shared, not the full identity. This minimizes the risk of data breaches and misuse.

2.2 Anonymization

Anonymization techniques ensure that the age verification process does not link to any personal information, preserving user anonymity while ensuring compliance with age restrictions.

3. Refuting Misconceptions

3.1 Surveillance

Age verification does not equate to surveillance. The process does not track or monitor users' activities but simply verifies age attributes. This distinction is crucial.

3.2 Is a document required?

Not all age verification methods require identity documents. Options like facial age estimation offer inclusive and non-intrusive alternatives that respect user privacy while meeting regulatory requirements.

3.3 Is this too much friction for consumers

Age verification does not hinder adult access to services. The process is designed to be quick and seamless, ensuring that legitimate users can access services without significant delays. A facial age estimation is undertaken in circa one second.

4. Case Studies and Global Examples

France: CNIL's Support for Age Estimation

The [CNIL](https://www.cnil.fr/fr/controle-de-lage-sur-les-sites-web-la-cnil-invite-developper-des-solutions-plus-efficaces-et)¹⁵ has endorsed age estimation methods that do not rely on biometric recognition, distinguishing these from more invasive techniques. This approach balances effectiveness with privacy, making it suitable for widespread adoption.

Germany: FSM and KJM Approvals

¹⁵ <https://www.cnil.fr/fr/controle-de-lage-sur-les-sites-web-la-cnil-invite-developper-des-solutions-plus-efficaces-et>



In Germany, the FSM and KJM¹⁶ have approved Yoti's Facial Age Estimation, recognizing its role in protecting minors. This approval highlights the method's compliance with stringent privacy and effectiveness standards.

United Kingdom: [Home Office Sandbox Trials](#)

The UK [Home Office's trials on age verification technologies](#) found that facial age estimation effectively prevents minors from accessing age-restricted products. This evidence supports the broad implementation of this technology for other age restricted goods and services..

United States: Social Media Platforms

US-based platforms like Instagram and Facebook have successfully integrated facial age estimation to verify user ages. This demonstrates the scalability and effectiveness of age verification technologies in protecting minors online.

A wide range of adult content platforms around the world are already integrated with Yoti; including Aylo, XHamster, Only Fans, FanCentro, Adultwork, MYM.

- [OnlyFans](#)¹⁷: The platform introduced our facial age estimation technology to protect children and ensure underage users cannot access the platform.
- [Lockwood Publishing](#): creating exclusive 18+ areas in their Avakin Life game (use facial age estimation to ensure only adults can access these areas).

5. Technological Advancements and Implementation

5.1 Innovation in Age Verification & Age Estimation

Technological advancements have significantly improved the accuracy and efficiency of age verification and estimation methods. Innovations like AI-driven facial age estimation provide reliable and quick verification processes, enhancing user experience and compliance. Organisations such as Yoti curate a range of age assurance services in addition to facial age estimation and digital identity checks - spanning checks to e-ID, open banking, mobile network operators, credit reference agencies. This enables platforms to access a wide range of options to present to their consumers, via one straight forward integration, which takes just a few hours.

5.2 Cost Efficiency



The cost of age verification services is decreasing due to technological advancements and competition. For example, the UK government estimates the cost at around 12 cents per check, with expectations for further reductions.

6. Legislative Support and Implementation

6.1 Supporting Legislation

Legislation like Canada Bill S-210 is essential for creating a safe online environment for minors. By mandating age verification, the bill aligns with global efforts to protect young users from harmful content.

6.2 Implementation Strategy Recommendations

A phased implementation strategy, incorporating stakeholder feedback and technological advancements, can ensure the effective rollout of age verification systems. Collaboration with technology providers and regulatory bodies is crucial for success.

We would encourage collaboration in the [Global Online Safety Regulators Network](#), the working group of international data protection regulators on age assurance and support of the international age assurance standards (IEEE P2089.1 and PWI 7732).

7. Conclusion

The necessity of Canada Bill S-210 cannot be overstated. Age verification technologies provide a robust solution for protecting minors online while respecting user privacy. This submission has outlined the benefits, addressed common concerns, and presented global evidence to support the bill. Implementing these measures will significantly enhance online safety for young Canadians.

This submission supports the need for and benefits of Canada Bill S-210, advocating for the adoption of age verification technologies to protect minors from sexually explicit material online.



About Yoti

[Yoti](#) is a digital identity company that makes it safer and easier for people to prove who they are. Founded in April 2014, we started by creating a secure Digital ID app which gives people a safer and instant way to prove their identity, with no need to show identity documents or share an excessive amount of personal data. Yoti now provides verification solutions across the globe, spanning identity verification, age verification, age estimation, eSigning and authentication. We're a team of over 400 people, working together to shape the future of digital identity.

We're committed to making the digital world safer for everyone. Our seven ethical principles guide us in everything we do and we're held accountable by our independent Guardian Council, whose minutes we publish. With an award-winning social purpose strategy, we're always looking for new ways to explore what (digital) identity means globally. The journey isn't one we're making alone, but with the help of policy advisers, think tanks, researchers, humanitarian bodies and everyday people.

What we are doing and why:

- Transforming the way individuals can prove their age and identity
- Increasing security and privacy of personal data
- Helping to create age-appropriate experiences and safer communities online
- Creating the most reliable and comprehensive identity verification solutions
- Shaking up the way we sign documents

Technology as a force for good - Yoti was founded on seven business principles which guide our actions. Yoti is also a founding UK B Corp meaning we aim to balance profit with purpose.

Security credentials - We regularly commission external audits of our business and have been certified to meet some of the world's most stringent security standards, such as ISO 27001 and SOC2 Type II. We are also certified by the UK Government under the [UKDIATF](#)¹⁸ (UK Digital Identity & Attributes Trust Framework).

A transparent, open approach - Yoti regularly publishes white papers to build trust and understanding of our technology.

