

Yoti's response to the public consultation on the Online Safety (Basic Online Safety Expectations) Determination 2021

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Summary / About Yoti

1. This response is made by Yoti Australia Pty Limited (ABN 49 634 795 841) a wholly owned subsidiary of Yoti Holdings Ltd (registered in England and Wales with company number 09537047) and Yoti Ltd (registered in England and Wales with company number 08998951) together referenced in this submission as "Yoti".
2. Yoti owns and operates a free digital identity app and wider online identity platform that allows organisations to verify who people are, online and in person. This could be using the Yoti app, which allows individuals to share verified information about themselves on a granular basis or it could be using Yoti's 'embedded' services which allow organisations to add a white label identity verification flow into their website or app. It could also be using Yoti's authentication algorithms such as facial recognition, age estimation, voice recognition or lip reading.
3. Yoti has a team of around 350 based in London UK, with offices in Bangalore, Los Angeles, Melbourne and Vancouver. There have been almost 11 million installs of the Yoti app globally, following its launch in November 2017. Similarly, over 500 million checks have been conducted using the Yoti age estimation algorithm since 2019.
4. Yoti holds the ISO 27001 certification and continues to be audited every year. Further, Yoti is certified to SOC 2 Type 2 for its technical and organisational security controls by KPMG. The SOC 2 standard is an internationally recognised security standard. Yoti also holds the Age Verification Certificate of Compliance, issued by the BBFC, the Seal of Approval from the FSM¹ and has also been certified by the KJM² in Germany. Yoti is certified to the publicly available specification PAS:1296 Age Checking.
5. If there are any questions raised by this response, or additional information that would be of assistance, please do not hesitate to contact Yoti at:

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6. Yoti is happy for this response to be published.

¹ <https://www.fsm.de/de/fsm.de/yoti>

² <https://www.kjm-online.de/service/pressemitteilungen/meldung/kjm-bewertet-yoti-age-scan-als-technisches-mittel-positiv>

Recommendations

Yoti would recommend that the following changes be made to the Expectations as currently drafted in the Online Safety Bill (**in bold**):

Division 2 - Expectations regarding safe use

6 Expectations - provider will take reasonable steps to ensure safe use

Reasonable steps that could be taken

(3) Without limiting subsection (1) or (2), reasonable steps for the purposes of this section could include the following:

- (a) implementing age assurance techniques to detect, support and protect minors;**
- (b) developing and implementing processes to detect, moderate, report and remove (as applicable) material or activity on the service that is or may be unlawful or harmful;**
- (c) if a service or a component of a service (such as an online app or game) is targeted at, or being used by, children (the children's service)—ensuring **age assurance measures are in place to allow** the default privacy and safety settings of the children's service **to be** robust and set to the most restrictive level;**
- (d) ensuring that persons who are engaged in providing the service, such as the provider's employees or contractors, are trained in, and are expected to implement and promote, online safety;**
- (e) continually improving technology and practices relating to the safety of end-users;**
- (f) ensuring that assessments of safety risks and impacts are undertaken, and safety review processes are implemented, throughout the design, development, deployment and post-deployment stages for the service.**

Supporting evidence

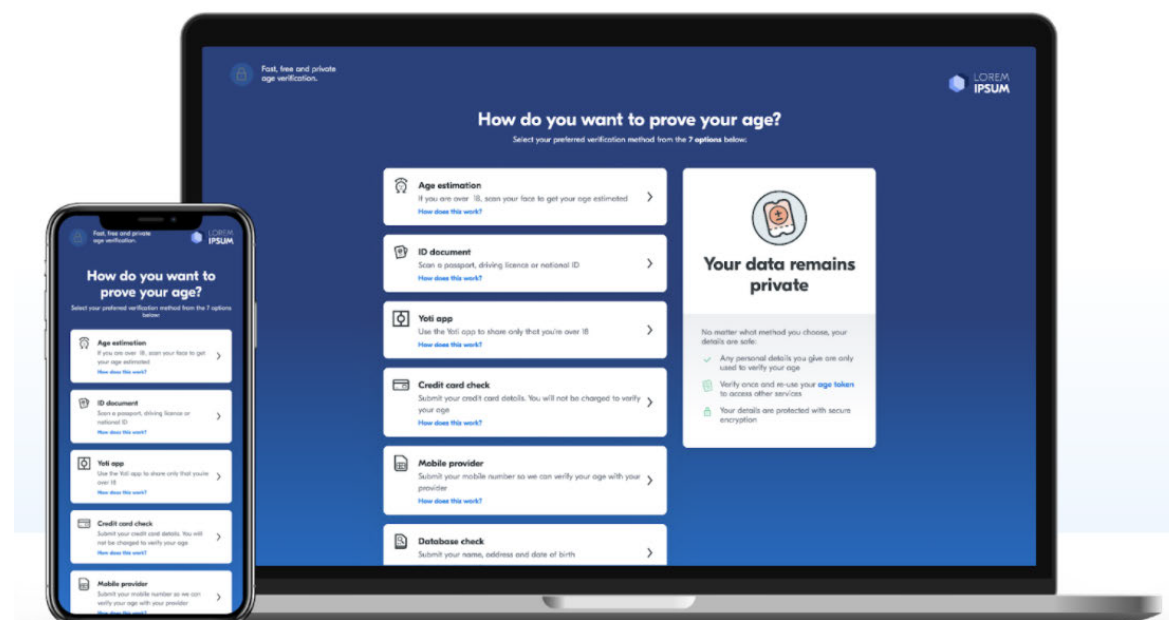
Yoti - Background information

Yoti is a company registered in England & Wales which owns and operates a free digital identity app and wider online identity platform that allows organisations to verify their age online and in person. The platform has been designed to enable relying parties to meet requirements such as to ensure under 18s do not normally access age inappropriate content.

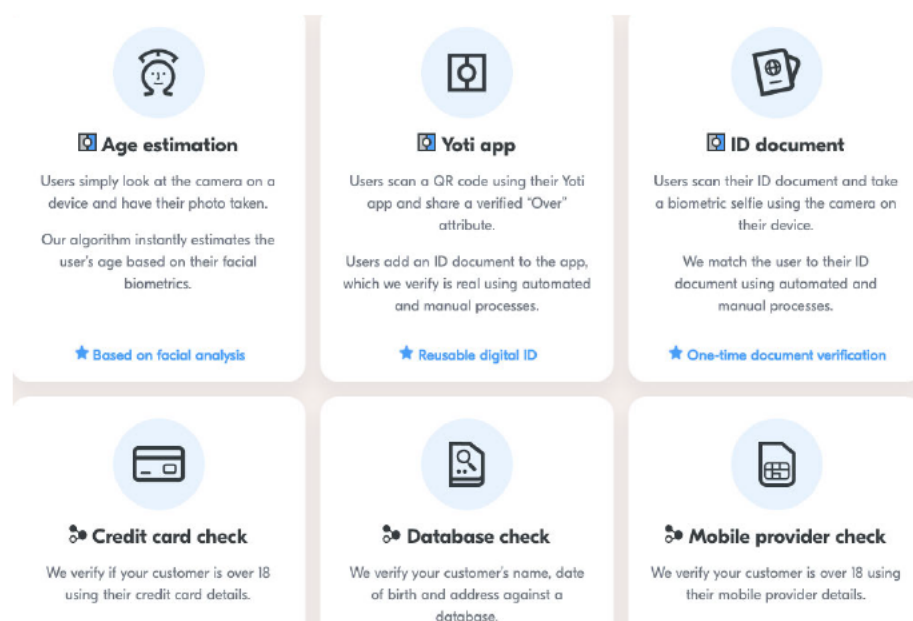
Yoti has been live since November 2017 and has already surpassed 10 million installs globally. Yoti has undertaken over 500 million age checks using the Yoti age estimation algorithm since February 2019. Yoti has organised and participated in a number of roundtables across the globe (including in the UK, Germany and France) for regulators and NGOs to understand its age checking approaches.

Yoti provides age verification services to global social media platforms, adult content websites, online gaming sites, e-commerce sites and physical retailers.

We have developed an age portal so that organisations large and small can integrate and access a wide range of age checking approaches, through one simple integration, in just a couple of hours. This enables organisations which operate globally to assign the appropriate methods to each jurisdiction and undertake A/B testing with users.



Age verification for a digital world



Yoti was the first organisation certified to the British Board of Film Certification (BBFC)'s Age Verification Certificate scheme, which was put in place to regulate the provision of age verification services under the UK's Digital Economy Act 2017, part 3. This required Yoti's age verification services to adhere to very high standards for privacy and data security. Yoti has also been awarded the seal of approval from the German Association for Voluntary Self-Regulation of Digital Media Service Providers (FSM)³ to provide age verification services in Germany. Yoti age services have also been reviewed by Germany's KJM⁴. Yoti's Age Estimation has been reviewed by the UK's [Age Check Certification Scheme](#)⁵.

Users can perform age verification using the Yoti Digital ID app, which allows individuals to share verified information about themselves on a granular basis or it could be using Yoti's 'embedded' services which allow organisations to add a fully integrated identity verification flow into their website or app. It could also be using Yoti's authentication algorithms such as age estimation. These verification options can be integrated as standalone solutions, or via the Yoti age verification portal offering more choice to the end users and configuration options to organisations.

In all verification scenarios, Yoti calculates if the user meets the minimum age requirement to access the website.

If the Yoti Digital ID app is used, an individual will scan a Yoti QR code with the Yoti app to share their age attribute. Then Yoti generates a hashed age token, which tells the website that the user is over the required age. The token and Yoti's record of the individual's age, or

³FSM is a non-profit association. More information available at: <https://www.fsm.de/de/fsm.de/yoti>

⁴'Kommission für Jugendmedienschutz' or 'Commission for the Protection of Minors in the Media' https://www.kjm-online.de/service/pressemitteilungen/meldung?tx_news_pi1%5Bnews%5D=4890&cHash=e45ae6dfeee26fcd23d10c6994b7a9ef

⁵ <https://www.accscheme.com/media/2ntishhf/age-estimation-results-executive-summary.pdf>



characteristic as over an age threshold, only last for the browsing session and do not identify the individual personally. Further, no personal information is shared with the adult site beyond the age attribute, making this a private and secure solution. The user's interaction with the website itself remains entirely anonymous.

If Yoti's fully integrated identity verification solution is used, the end user scans or uploads their ID document straight from their web browser or mobile app. An age is computed from the date of birth included in their ID document, and used to establish whether the person is old enough to pass the age verification test.

If the user uses Yoti's age estimation algorithm, users simply look into their phone's camera or their computer's webcam, and Yoti Age Scan will estimate their age. There is no unique recognition or authentication. The image is captured and securely transmitted to Yoti's server using 256-bit encryption. Then, Yoti's algorithm gives a result in approximately 1.5 seconds. The image is immediately deleted from Yoti's servers and no record of the user is retained. The only output is an anonymous, hashed age token, used to determine if they are old enough to access the age-restricted content material.

More on Yoti's approach to privacy, ethical oversight and accuracy can be found in Yoti's [white paper on age estimation](#).

Recommendations on further engagement and benefits for the Australian economy

Yoti recommends the inclusion in the Bill of robust, protective age assurance measures as reasonable steps to help meet the Expectation regarding safe use. This is because we believe the societal benefits will significantly outweigh the low costs associated with this technology. This will help fulfill the original Online Safety Act's objective of allowing children and vulnerable people to continue to participate in the online space, and be sure to enjoy content that is suitable for them.

Age estimation technology has evolved to enable people who may not own, have access to or do not wish to use an identity document to prove their age, or that they are over or under a certain age, in a privacy preserving manner.

We therefore recommend that the Members of Parliament and the Commissioner should further consult with age assurance industry members such as Yoti to develop a better understanding of how they can deliver the Act's objectives by using age assurance.

That consultation should recognise the valuable role of both age verification and age estimation methods in helping platforms meet the Act's Expectations. We would also recommend that Members and the Commissioner gather input on the standards and approaches already available in the market as well as those that will be enabled through participation in the Australian Government's upcoming Trusted Digital Identity Framework..



Many areas of the economy will benefit if privacy protecting age checks are made available to consumers, such as the retail, gambling, and online content sectors among others. This would also represent an opportunity to create a broader, standardised Australian approach to age assurance.

The inclusion of the technology to provide age gating at 13+/-, 18 +/- in the framework would support the Commonwealth Government's wider policy aims of preventing underage access to age restricted content, goods and services and enable the design of more age appropriate online services. This would ensure younger citizens can make the most of the digital world and thrive online.

Australia would be world leading if it took this proactive stance and could avoid many downstream discussions across multiple government departments, if each one has to work out ways to undertake age assurance.

Examples of international frameworks which embrace age assurance technology

The Digital Identification and Authentication Council of Canada (DIACC) has been considering creating a specific profile for age under DIACC, called 'anonymous identity attributes', as no personal information is required. DIACC are considering other attributes which also fall into this category, such as location.

The EU Consent Project is reviewing interoperable approaches to age verification and parental consent; which Yoti is actively involved in.

There are ten countries around the world who are reviewing age gating approaches to regulate access to adult content: Canada, France, Germany, Ireland, Italy, New Zealand, Philippines, Poland, South Africa and the UK.

In the United Kingdom, there are currently two regulatory sandboxes reviewing aspects of age. The Home Office Sandbox is reviewing innovative age approaches for the retail of alcohol, including age estimation technology at check-out terminals. The ICO Sandbox has been preparing solutions for the new Age Appropriate Design or Children's Code. There is also a proposal for a scheme specifically for age, within the DCMS Trust Framework.

US Senators have written openly to the tech platforms requesting them 'to extend to children and teens in the United States any privacy protections you implement in the United Kingdom'. Children's Codes have also been developed in Ireland and the Netherlands.

Recommendations on the Commissioner's guidance in determining reasonable steps

One of the elephants in the room has been the ease to circumvent age gating and parental consent mechanisms or provide tokenistic weak age gating approaches - such as tick boxes or self assertion of age or reliance on second-hand or historic checks or knowledge based checks which can be shared or traded.

If the spirit of the Online Safety Act is to be followed, then social media sites and platforms should be required to consider the best interests of the child, and review which approaches are deemed too weak to offer appropriate safeguards. This means the Bill must request strong age assurance measures be in place before users can access specially restricted content to uphold one of the Act's key principles: that the rules and protection we enjoy offline should also apply online.

The same tools that tech companies are offering to platforms can also be employed by the eSafety Commissioner to audit the effectiveness and ease to circumnavigate age gating approaches. The likelihood of children accessing illegal content or being exposed to harmful content will be greatly reduced once the use of robust age verification technology is widely adopted.

There has been a clear evolution of methods of age verification as the market has evolved over the last years. There is already a Publicly Available Standard for Age Checking (PAS1296:2018) which we would recommend that the Commissioner's guidance refer to and require adherence. This guidance should also consider the work currently being done to develop the next international standard⁶ for age checking (ISO/IEC JTC/SC 27 / WG 5 PWI 7732) which reflects the evolution and maturity of this market.



In the case of age estimation approaches that rely on the use of artificial intelligence, we also recommend that the Commissioner's guidance include a number of additional requirements, which may incur cost:

- Transparency clearly showing the accuracy of algorithm (MAE - mean absolute error) across age, skin tone and gender as well as false positives and false negatives,

⁶ (ISO/IEC JTC/SC 27 / WG 5 PWI 7732)



- Ethical sourcing of consented data set,
- Independent Bias review,
- Understandability or use of plain English, so the demographic using the technology can understand the approach used, the terms and the privacy policy, following the [Unicef Policy Guidance](#)⁷ and meeting the UK's Age Appropriate Design Code,
- Standards based - meeting PAS 1296:2018, as the current standard. In future there will be a transition path to the upcoming ISO Age Checking Standard, and
- Participation in benchmarking, where this service is available.

We would also exhort policy-makers to keep abreast of the work being undertaken by Baroness Kidron, Member of the UK House of Lords, and the [Age Assurance \(Minimum Standards\) Bill](#), currently at second reading stage there and is widely supported by the age verification industry.

Yoti would be delighted to collaborate with Members of Parliament and the Commissioner on further developing this guidance. Yoti has also recently delivered evidence to the UK Parliament's Digital, Culture, Media and Sport Sub-committee on Online Harms and Disinformation. We would be delighted to also do so before the Minister and other Members.

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<https://www.unicef.org/globalinsight/media/1171/file/UNICEF-Global-Insight-policy-guidance-AI-children-draft-1.0-2020.pdf>