

Briefing Paper HOUSE BILL 1593

Age - not identity - verification

The essence of age verification (AV) is proving your age without disclosing your identity. HB1593 requires AV before accessing pornographic content. The latest version being proposed to the Judiciary Committee is an extremely well written Bill, which takes account of the discussions at the Supreme Court in January of a similar bill from Texas, for which we await the judgement but fully expect AV to meet the requirements of strict scrutiny applied to matters relating to the 1st Amendment. Indeed, HB 1593 pre-empts a number of constitutional concerns raised by other federal courts by, for example, only applying to the adult content within a site, not the site as a whole, and being clear that the use of a Virtual Private Network does not create a means of circumventing the obligation on the website to keep children from being exposed to obscene and harmful content.

This is not particularly hard to do from a technical perspective. If we can put a man on the moon, then we can use the latest cryptographic techniques, such as zero knowledge proof, to share the fact that a user is 18 or older with a website in a reliable way, without that user being identifiable by the site.

The AV sector was first established to address a new British law requiring age verification for pornography online. The adult websites realized their customers would be reluctant to share passports, drivers' licenses etc. with them directly, so a number of independent third-party providers were created, who would check the age of a user, and then simply tell the adult site "yes" or "no" without revealing any personal data.

Since then, AV providers have innovated to create many new ways to prove your age. As well as uploading documents, and a selfie image to compare to the photo in the document, users could provide details so the electoral roll or credit reports could be checked. Supplying an email address or cell phone number is also sufficient to ascertain if the user is an adult, based on where those same details have been used elsewhere – children don't check mortgage rates online very often, or sign up to utiltiies.

A range of age estimation tools have also been developed. Facial age estimation creates a mathematical map of the user's face, and then AI compares that map to millions of maps from people whose ages are already known, to estimate the age with surprisingly accurate results – the state of the art is a mean average error of +/- 1 year. Voice estimates are not far behind. And the latest method asks users to make shapes with their hands on video, and these can predict if they are an adult or a minor with 99% certainty.

Now if you want to impose an exact legal minimum age, then estimation is not sufficient for a user who is celebrating their 18th birthday. They'll need to find some ID. But for users over, say, 23, then statistically there is only the smallest of chances if they are estimated to look over 23 that they are still under 18 – results are probably just as reliable as any verification method.

Many of these processes can be completed on the user's own smartphone, so no personal data need leave the palm of their hand. Any personal data used for age assurance – the term that covers both verification and estimation, is always immediately deleted, unless there is a legal reason not to do so. This is standing legal requirement in Europe under GDPR data protection laws, but many US states have included this requirement in their own AV bills.



As a result of some EU data protection authorities demanding even greater privacy protection, the use of privacy-enhancing technologies (PET) can be mandated, making it impossible for the adult site to identify the user or for the AV provider to know which sites the user then visits. And the AV industry has also developed interoperability, allowing users to prove their age once and then re-use the same check across multiple websites (see www.euCONSENT.eu).

Age verification is quick – most of these methods take seconds – and cheap – the UK government estimates 12 cents per check per user per year, but predicts the price will fall through innovation and competition.

It can be hard to enforce against websites based overseas, but the UK's approach is to have powers to require that key business services are withdrawn from non-compliant sites – payment, hosting, search, advertising etc.

Some argue that the use of Virtual Private Networks undermines these state laws, but this overlooks the fact that no laws create an exception for kids who use VPNs. The obligation remains on the adult sites to keep children from those states off their platforms. So the sites would need to use the same technology already used to ensure bets can only be placed by customers located in states which permit online gambling – these use more than easily altered IP addresses for their due diligence on the user's location e.g. wifi networks, GPS, cell tower connections.

We would be pleased to provide further information and respond to any specific questions

Iain Corby

Executive Director

iain@avpassociation.com