

Telefónica Open Gateway

Online age verification: Compliance and business opportunities with Open Gateway

A trusted solution that enables digital platforms to verify users' legal age, reduce risk and improve experience, leveraging the secure infrastructure and scalability of mobile carriers worldwide.

1. Open Gateway Age Verification: executive summary

The global regulatory environment is rapidly evolving towards the requirement to verify users' age on digital platforms, especially on adult content sites and social networks where minors are present. The UK has implemented the Online Safety Act 2023, threatening fines of up to £18 million or 10% of global turnover and the possibility of blocking services.

Against this backdrop, Open Gateway - Age Verification is positioned as a strategic solution for companies seeking to comply with these obligations in a way that enhances user experience and privacy over other options.

The API allows for real-time verification of a user's legal age through telco signals, without exposing the user's personal data, thus ensuring privacy and regulatory compliance. This translates into direct advantages for platforms: reduced friction in the user experience, lower legal risk, multinational compliance with a single integration and global scalability thanks to carrier interoperability.

The implementation is already making strides in different markets.

- In the UK, major carriers launched the API in August, with very successful takeup.
- In Spain and the EU, the solution would complement the government's Cartera Digital [Digital Wallet], acting as a second line of defence against circumvention attempts.
- In Brazil, where new laws require strict age controls on social networks, local carriers can help by facilitating mass verification.

In short, Open Gateway - Age Verification offers companies a fast, secure and scalable means of complying with international regulations, minimising legal and reputational risks, improving the user experience, and tapping into an interoperable standard that works across multiple markets. Supported on the infrastructure and trust of mobile carriers, it becomes a trusted global enabler for the digital economy, allowing platforms to focus on their business while complying with growing regulatory requirements.

2. Comprehensive Guide to Global Age Verification Compliance: Protecting Minors and Unlocking Value for Businesses

The United Kingdom recently enacted the **Online Safety Act 2023**, which aims to bolster the protection of minors on the internet. This law, overseen by the <u>regulator Ofcom</u> imposes **strict age verification obligations** on online platforms that offer adult content or that may pose a danger for children. In particular, **as of 17 January 2025** commercial pornographic sites must implement **"robust age controls"** to prevent access by minors.

This requirement extends to all websites and apps accessible from the UK that host pornographic content or other material harmful to children, even if the company operates from abroad. The "I'm over 18, click to enter" notice is no longer enough: ticking a self-declaration box is no longer acceptable under the new regulation.

Ofcom adopted a technology-**neutral**, principles-based approach, defining that age verification methods should be *"technically accurate, robust, reliable and fair"*. Codes of practice and guidelines have been published for companies to comply with their *"safety duties"*. For example, Ofcom lists up to **seven (non-exhaustive) "highly effective" age verification methods** which it considers valid, including:

- 1. E-mail verification.
- 2. Authentication with mobile carriers.
- 3. Facial age estimation, etc.

At the same time, it **rejects weak methods** such as simple self-declaration or payment checks without actual confirmation of the user's legal age.

In addition to oversight, Ofcom has broad inspection and sanctioning powers. Companies failing to comply face fines of up to £18 million or 10% of their global turnover. In addition, in serious cases, the regulator can ask the courts to block access to infringing services. This combination of clear obligations, staggered deadlines and strong sanctions makes for one of the strictest regulatory frameworks in the world for online age verification.

"Companies that fail to comply face fines of up to £18 million, 10% of their global turnover or blocking of services."

3. The impact of age verification on the marketplace

The application of these rules in the UK is already having a noticeable impact on platforms, users and the digital ecosystem itself. **Major online pornography sites have stated that they will comply with the new UK rules,** incorporating advanced age verification mechanisms. In fact, since early 2025, many adult content providers have started to implement "age assurance" solutions on thousands of sites, in response to Ofcom's compliance programme and formal warnings.

In this regard, the regulator reported "a positive industry response", with numerous providers implementing robust age controls following their notifications. In parallel, Ofcom opened investigations against those who did not respond or did not show compliance plans. In fact, as of July 2025, it had examined 34 sites for possible non-compliance, and in total there were 11 formal investigations underway by mid-summer 2025. This demonstrates a clear change of attitude in the industry, which is now taking child protection very seriously in order to avoid fines in the millions plus reputational damage.

In parallel, **traffic and user behaviour** have also been affected. A 2024 study by New York University found that after mandatory verifications were introduced, **traffic to such websites dropped substantially, while searches for VPNs and unregulated platforms sky-rocketed.** This points to a portion of users will attempt to circumvent controls through anonymisation tools or by migrating to services that do not enforce the measures, a side effect that concerns regulators.

However, it should be noted that the vast majority of the public supports these measures: Ofcom polls show that 80% of British adults are in favour of age checks on pornographic sites to protect minors, suggesting that the potential inconvenience to the adult user is socially justified by the safety benefit to the child.

3.1 Social Networks and Potentially Harmful Apps under the Spotlight

Beyond the pornographic sector, the **regulatory impact has reached mainstream platforms.** Networks and apps with potentially harmful content or under-age users have also tightened their controls in the UK. For example, **social networks such as Bluesky**, **Reddit**, **Discord**, **Grindr or X (Twitter)** started to introduce **age verification mechanisms for British users** in order to **block adult or harmful content to minors**.

"The Open Gateway solution allows for frictionless age verification, even without additional user input, reducing abandonment and hassle."

This includes verifying the declared date of birth or requiring proof of age to access certain forums or sensitive features. This change involves **operational costs** (integrating new technologies, contracting specialised providers, customer support for failed verifications, etc.) and potentially some **loss of young users** who will no longer be able to register or log in as before.

However, failure to do so would pose a risk to these companies, because Ofcom has made it clear that it **will not hesitate to sanction** services that fail to comply with child monitoring obligations. At the **reputational** level, companies that align themselves with child protection can strengthen their image of social responsibility, while those that are perceived as lax may face public criticism and pressure from advertisers or business partners.

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Undoubtedly, the UK digital market —and exponentially future markets— is undergoing a major **cultural and operational shift**: online age verification has gone from being virtually non-existent to becoming a **new mandatory standard** with impacts on the **user experience**, **registration and login flows** (now more complex), compliance costs and **competitive dynamics** (as sites that invest in good systems may be better able to retain their adult audience than those with more cumbersome processes).

4. Regulatory comparison between Spain, Germany and Brazil

Concerns about protecting children on the internet are not unique to the UK. A number of countries are legislating or implementing **age verification frameworks**, albeit with different approaches and at different paces.

The situation in **Spain, Germany and Brazil** is briefly analysed below:

Spain

Although Spain still does not have a specific law requiring online age verification, the political debate has gained momentum.

In 2024, the government announced a comprehensive Child Online Protection Bill after warning of an "epidemic of minors accessing pornography". While it is being approved, the country is promoting EU-supported pilot initiatives: in May 2025, the European Commission chose Spain to lead a European age verification project. In addition, the authorities are cooperating in international operations, such as EU investigations of large pornographic platforms under the DSA regulation.

"Shared information is minimised: the carrier validates the age and only reports a true/false result, without revealing personal data."

As a whole, Spain is moving towards a framework aligned with the European strategy for "privacy by design" technology solutions. Between 2025 and 2026, it is expected to consolidate a regulation requiring age controls on social networks, adult content and online gambling, complementing the regulation of digital services.

Germany

A trailblazer in the protection of minors in digital media, Germany has had a Interstate Treaty for the Protection of Minors in Media (JMStV in its German initials) since 2002, which obliges sites with pornographic or violent content to use age verification systems approved by the KJM. Traditionally, these controls were very strict —such as face-to-face or video call verifications— although in recent years more streamlined digital methods based on electronic ID cards or verified databases have been accepted. Nevertheless, the country is still committed to "robust" identity verification, even more demanding than the British one.

Enforcement has been patchy, with many international sites resisting implementation. In 2020, regional regulators initiated proceedings to block large platforms (Pornhub, xHamster, YouPorn) for not filtering for minors, and in 2021 the courts upheld this power, setting a precedent that forced several giants to negotiate. Although the financial penalties are lower than in the UK, service blocking acts as the main deterrent.

With the global regulatory wave, Germany is strengthening its framework, combining legal rigour with complex implementation due to its federal structure. It is expected to adopt common standards with the EU and the UK, and for major players to apply equivalent systems to avoid being blocked. For telcos, this development opens up an opportunity: the new solutions approved by the KJM already include digital integrations where carriers can add value in verification and security.

Brazil

Between 2023 and 2025, the debate on child online protection intensified in Brazil, driven by media cases and the new government's agenda. In August 2025, Congress passed a ground-breaking law to protect children and adolescents on social media, imposing strict obligations on social media platforms: immediate removal of child abuse content, mandatory parental supervision for children under 16 and much more thorough age verification checks. The law prohibits age self-declaration and requires the use of up-to-date age assurance technologies. Penalties will be severe —fines of up to 50 million reais (around 9 million euros), suspension or blocking of service— and the law will come into force after a period of adaptation, most likely in 2026.

"A single API implementation can cover users in multiple countries and carriers, reducing costs and technical complexity."

The text has a broader scope than the British law, as it includes all social networks and services with a youth presence, not only those with adult content. In a country with more than 200 million inhabitants and high mobile penetration, scalable, low-friction systems —such as phone number-based verification or CPF— can be particularly effective.

We can see that, despite local differences, the UK, Spain/EU, Germany and Brazil are moving in the same direction: imposing age verification systems that go beyond mere user declaration, with significant penalties for non-compliance. The UK stands out for the severity of its fines and the immediacy of enforcement in 2025; Spain and the EU are working on privacy-friendly tools (such as identity applications) and are expected to harmonise their obligations under the European DSA framework; Germany is reinforcing its traditional age-control culture with new cross-border blocking capabilities; and Brazil is becoming a benchmark for extending regulation to social networks and strengthening the legal role of parents.

Together, these jurisdictions comprise a substantial share of global internet users, which makes it foreseeable that platforms will opt for unified and scalable solutions rather than tailoring a different system per country. There is also a growing need for international standards and sectoral cooperation, as Ofcom has pointed out, to avoid a scattered patchwork of requirements. In this context, initiatives such as the GSMA Open Gateway alliance or multi-industry forums will be crucial in developing interoperable technological responses that function in multiple markets while respecting the particularities of each regulatory framework.

5. Age Verification API: Open Gateway's Frictionless, Scalable Solution

In this regulatory and market context, **Open Gateway - Age Verification** has emerged as an innovative solution with a strong differential value. Open Gateway is an initiative of the **GSMA** (Global System for Mobile Communications Association) launched in 2023 to exhibit network capabilities through **open and standardised APIs** that enables developers and enterprises to use telco functionalities —such as authentication, location or service quality— as a service.

Within this catalogue, **Telefónica and other carriers** have promoted a specific **Age Verification API (KYC Age Verification)**, aimed at digital services that need to verify the legal age of their users in a way that is simple, secure and globally scalable.

The **Age Verification API** allows a provider (e.g. a website, app or online platform) to query the user's mobile network in real time to determine whether the user is of the required age, usually 18 years or older. It is based on existing telco signals: the carrier knows whether that line is associated with an adult (from its customer records and additional signals such as line type, parental controls, etc.). The API returns a **true/false** response about the user's age eligibility without revealing personal data such as name or exact age. In this way, it complies with the principles **of data minimisation and privacy by design.**

"Open Gateway complements government and private tools, filling usability and outreach gaps for digital platforms."

The main competitive advantage is its **frictionless experience**. In many cases, the user does not need to enter any additional data: if browsing from their mobile network, authentication can be transparent, as the network recognises the line and responds directly. This contrasts with traditional methods that require the uploading of documents or taking selfies.

Thus, Open Gateway fills a gap: it offers a fast and reliable way to verify age, reducing abandonment and hassle, making it ideal for platforms with a high user volume, such as social networks or streaming services.

Another differential value is its **inherent reliability and security:** mobile carriers have been handling sensitive data for decades and comply with strict telecommunications and data protection regulations. When a telco validates age, it relies on official registration data (e.g. in many countries a document must be presented to obtain a SIM card) or on existing verification schemes (such as the 18+ filters in the UK). This lends **confidence to regulators and platforms,** acting as a trusted third party that carries outs verification.

For companies, it also **streamlines the technical integration:** instead of dealing with each carrier separately, Open Gateway offers a **common interface supported by multiple telcos worldwide.** This allows a developer to implement the API once and verify the age of users from different countries and carriers in the same format, thus reducing costs and technical complexity.

From the user's perspective, it is also more trustworthy to share the confirmation with their carrier, an entity which they already have a contractual relationship with, rather than having to upload their ID on every unknown website. In addition, it **mitigates the risk of data overexposure**, as their ID is not transmitted or stored on each website; the information used is already held by the carrier for legitimate purposes and only the necessary result is communicated.

1.1 Summary of Competitive Advantages of Open Gateway - Age Verification:

- **1. Ultra low friction:** transparent or one- or two-click process, vs cumbersome manual steps in other methods.
- 2. **Privacy by design:** the information exchanged is minimised (a simple verified age flag) and the data remains in the telco's custody, reducing leakage points.
- **3.** Global scalability: supported by **72 mobile carrier groups covering 80% of the world's mobile connections.** This means that an international platform can cover large regions by activating the API with the adhering carriers.
- **4. Flexible integration:** Standardised API (defined in the **CAMARA** open-source framework and aligned with the MT Forum) that allows for easy adoption by developers. It can be complemented by other telco APIs (e.g. Number Verification, Know Your Customer or Line Tenure).
- 5. Real-time and network reliability: the query is resolved in milliseconds by taking advantage of the high availability of network signalling, without relying on the user except for initial consent.
- 6. Complementarity with other methods: Open Gateway is not intended to fully replace other solutions, but rather to add a signal that enhances existing solutions.

1.2 Age Verification Deployment Pathway

With regard to the **implementation roadmap**, specific progress can already be seen in the target markets. In addition, with the support of the GSMA, this industry initiative will bring consistency, avoiding each telco from having to develop its own, fragmented solutions, and accelerate adoption by UK platforms seeking low-friction verification methods for their users.

- **United Kingdom:** From August 2025, the age verification APIs launched jointly by the big four carrier -Virgin Media O2 (Telefónica), Vodafone, BT/EE and Three. Thanks to this collaboration, any developer can now verify the age of a UK mobile user through a unified interface, regardless of their SIM carrier.
- **Spain:** Telefónica has been a major driver of these APIs. Although in Spain the government's Cartera Digital [Digital Wallet] will be a component to consider, the carrier Age Verification API can complement this ecosystem.
 - For example, if a minor tries to circumvent the government app by browsing without integration, telco verification can act as a second line of defence. In addition, this solution can be combined with other APIs to cover additional scenarios and ensure more comprehensive control.

• **Brazil:** The "digital adultification" bill made rapid progress in 2025, and the Senate passed it on **27 August 2025.** Telefónica (Vivo) is working on making this API commercially available.

Brazil, with tens of millions of minors active on social media, will be a scenario where social media platforms will need to verify age on a massive scale. Local carriers have an advantage: since 2020 it is mandatory to register one's CPF (tax number) when activating a mobile line, which ensures that they now have the identity and age of most mobile phone holders.

In conclusion, Open Gateway - KYC Age Verification presents itself as a strategic solution to today's regulatory demands. It offers a technology that stands out for its speed and simplicity, complementing other initiatives —both governmental and private— and filling gaps in usability and reach. Its competitive advantage lies in relying on the infrastructure and trust of mobile carriers, providing digital platforms with a compliance pathway that optimally balances security and the user experience.

In terms of implementation, the roadmap is based on industry-industry collaboration, with telcos coming together through the GSMA Open Gateway and technology companies such as TikTok, AWS or Google. This ensures that the solution keeps pace with changing needs evolve and has a multinational presence. In key markets such as the UK, Spain, Germany and Brazil —where Telefónica has a presence— Open Gateway not only ensures local compliance, but also positions the company as a trusted global enabler in the digital economy.



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