



# The European regulation of porn platforms before and after the Digital Services Act

Gergely Gosztonyi <sup>a\*</sup>, Szonia Ruszkai <sup>a</sup> and Gergely Ferenc Lendyai <sup>b</sup>

<sup>a</sup>Faculty of Law, Eötvös Loránd University (ELTE), Budapest, Hungary; <sup>b</sup>Faculty of Law, Pázmány Péter Catholic University, Budapest, Hungary

This article analyzes pornographic content distribution platforms from a media law perspective, particularly focusing on platform governance. The article reviews the regulatory history of porn platforms, the impact of the Digital Services Act (DSA) on these platforms, and the regulatory and practical challenges they encounter. The study assesses the extent to which the DSA amends existing regulations and norms, aiming to identify solutions to address legal gaps. Methodologically, the research is grounded in a comprehensive interdisciplinary literature review and legal analysis. We argue that while the DSA is a significant step forward in ensuring the safe use of platforms, it remains insufficient in adequately addressing the complexities of porn platforms. Although transparency and fundamental rights mechanisms are positive initiatives, their effectiveness and applicability are questionable. We propose the involvement of civil society in the regulation of porn platforms and the harmonization of national regulatory frameworks, and encourage global cooperation and awareness-raising campaigns.

#### **ARTICLE HISTORY**

Received 16 November 2024 Accepted 25 February 2025

#### **KEYWORDS**

platform regulation; Digital Services Act; porn; pornographic content; media law

#### I. Introduction

It is perhaps not an exaggeration to say that online pornography has become part of everyday life for people in the twenty-first century, whether they are adolescents or minors (Paulus et al. 2024), religiously affiliated groups (Short, Kasper, and Wetterneck 2015), or even a native tribe with internet access (Nicas, Suner, and Surdam 2024). Research shows that exposure to pornographic content is prevalent regardless of age, especially among men. A study by Rafael Ballester-Arnal et al. (2022) shows that nearly 80% of adult men watch or have some form of exposure to pornographic content, and young men aged 25 years or under watch pornography at least weekly. In itself, widespread access to and exposure to such content would not necessarily raise a regulatory dilemma. However, unlike other highly popular online platforms (such as popular search engines or email services), the unparalleled ease of access to pornography has

**CONTACT** Gergely Ferenc Lendvai gergelyflendvai@gmail.com

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

<sup>\*</sup>Present Address: Digital Authoritarianism Research Lab, Faculty of Law, Eötvös Loránd University (ELTE), Budapest,

 $<sup>\</sup>ensuremath{\texttt{©}}$  2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

been claimed to have had various adverse effects on its users. For example, increased pornography consumption has adverse effects on men's sexual and relationship satisfaction (Malki et al. 2021) and can significantly increase the risk of relationship conflict (Bennett-Brown and Wright 2022), and porn addiction (the concept of which is controversial but generally refers to a problematic relationship with pornographic content) can have much more severe consequences (Taylor 2019; Bőthe et al. 2024). In the fight against the spread of pornography, the legislature should address several problems. These include a complete ban on child abuse images, digital child protection, the issue of pornographic content published without consent, and the regulation of video-sharing platforms whose primary purpose is the sharing of pornographic content posted by users.

Given the implications, the regulatory dilemma becomes much more of a regulatory imperative, that is, a kind of imperative for a rigorous framework to manage the distribution and consumption of such content on online platforms. This management remit does not imply absolute prohibition – instead, it is more likely to cover issues of deletion and reporting of problematic content, limiting access by minors or greater transparency. In this article, we seek to examine pornographic content from the perspective of platform regulation, particularly in the context of the Digital Services Act (DSA; also referred to as the Regulation). The study aims to critically analyze the regulatory environment for pornographic sites before the DSA, examine the specific provisions of the DSA that apply to pornographic sites, highlight the challenges these platforms face in complying with the DSA, and make recommendations for more effective regulation.

This article is structured around three main themes. First, we provide an overview of the regulation of pornographic sites before introducing of the DSA. Here, we highlight the fragmented and often inconsistent regulatory approaches that have characterized the surveillance of pornographic content online, laying the groundwork for understanding the need for a unified framework such as the DSA. The second theme looks at regulating platforms under the DSA, particularly very large online platforms (VLOPs), focusing on transparency, content moderation, complaint handling, and systemic risk provisions. In the third section, we describe challenges that pornographic platforms – in particular, VLOPs distributing pornographic content – face in complying with the DSA and make recommendations on how to better regulate pornographic sites. In this context, we acknowledge that a more nuanced approach that considers the specific characteristics and consumption patterns of pornographic content is essential for effective regulation, and we also call for increased cooperation between regulators, platforms, and civil society to develop best practices and knowledge sharing.

# II. Attempts to regulate porn websites before the DSA

In this section, we review the liability rules that applied to online platforms before the DSA, demonstrating the legal fragmentation and inconsistency that almost clearly led to the potential for platforms to grow into tech mammoths, 'new governors of digital expression' (Balkin 2018). The European Union (EU) framework for digital services was primarily laid down in 2000 with the Directive on Electronic Commerce (ECD)<sup>2</sup> and theoretically in the European Convention of Human Rights (Johnson 2014). Although the latter sets the general clauses, it was the ECD which set out the principles applicable to providing information society services. This ECD introduced EU-wide restrictions on the liability

of intermediary service providers for content provided by third parties. The ECD lays down that internet intermediary service providers cannot be held liable for illegal content posted by their users if they are unaware of these infringements. The ECD emphasizes the concept of the so-called safe harbour protection (Friedmann 2013), which ensures that intermediaries are not liable if they are unaware of illegal activity or information and, if they become aware of it, take immediate steps to remove or block access to it (De Streel et al. 2020).

The ECD on combating sexual abuse, sexual exploitation of children, and child pornography<sup>3</sup> requires EU Member States to take effective action to remove websites that contain or distribute child pornography (Buono 2020). The ECD also allows Member States to block access to such sites, subject to appropriate safeguards. It also stresses that the emergence of new technologies increases the severity of the problem, and Recital 3 draws the attention of Member States to the need to address these challenges.

Over the past decade, the popularity of video-sharing platforms such as YouTube has grown significantly, prompting the EU to amend and tighten the rules on liability for usergenerated content. Recognizing this, the European Commission (EC) considered that further action was needed to tackle illegal content, leading to the amendment of the Audiovisual Media Services Directive (AVMSD) in November 2018.<sup>4</sup> However, this did not fully address the problems related to video-sharing platforms, as inconsistencies remained between the provisions of the AVMSD. According to the Directive, the concept of a video-sharing platform service does not impose editorial responsibility for user-generated content on these providers. At the same time, Recital 47 states that they are not responsible for certain content, but it is unclear which content they should be accountable for.

Furthermore, it would have been necessary to distinguish more clearly between videosharing platform services and similar information society services providing audiovisual content. The main shortcoming of the AVMSD remains that although video-sharing platforms specifically designed to promote pornographic content fall within the definition of a video-sharing platform, many argue that they should represent an independent category of platforms (Sorbán 2023). However, it is essential to underline that the AVMSD requires platforms to take appropriate measures to protect children, including establishing and operating age-verification systems.<sup>5</sup>

The EU has made the fight against child sexual abuse a priority in its 2020 strategy. In line with this, the EC set itself the goal to update the related Child Sexual Abuse Directive of 2011.6 The fact that MindGeek, a conglomerate that includes Pornhub, has been accused on several occasions of breaching that Directive underlines the need for specific rules for platforms specializing in pornographic content. It is alleged that the platform hosts a large number of videos documenting rape and that women are fighting to prevent the re-uploading of footage of them being sexually assaulted without their consent, often as children (Farooqui 2021).

Deepfake videos hit the internet in 2017, and a 2019 study by Amsterdam-based cybersecurity research institute DeepTrace quickly revealed that around 96% of them contain non-consensual pornographic material (Ajder et al. 2019). A solution to the proliferation of deepfake and pornographic content published without consent (revenge porn) could be theoretically addressed by the General Data Protection Regulation (GDPR)<sup>7</sup> (Winter and Salter 2019; Gosztonyi and Lendvai 2023; Lendvai and Gosztonyi 2024; Mania 2024). Its application could be based on the fact that deepfake or revenge porn recordings contain identifiable personal data about a natural person whose disclosure the data subject has not consented to (Lussier 2022). According to Article 17(1) of the GDPR, the user has the right to obtain from the controller the erasure of personal data relating to him or her without undue delay and the controller has the obligation to erase personal data without undue delay where the personal data have been unlawfully processed. This process is a time-consuming and often ineffective means of combating the proliferation of deepfake and revenge porn content, and victims typically shy away from seeking redress. Furthermore, enforcing the right to erasure is extremely difficult, as the procedures are costly and victims often do not achieve the desired result. In addition, protection against re-uploading is not guaranteed (Mania 2024), so the GDPR cannot provide adequate protection against this type of illegal content.

# III. A brief overview of the DSA obligations for online giants

The DSA, published on 27 October 2022, is the latest part of the aforementioned regulatory environment. The Regulation is the first to take a holistic approach to regulating the internet environment internationally, following the ECD, focusing on online platforms and their more transparent operation (Turillazzi et al. 2023). In its approach, the DSA focuses on fundamental rights in the online space, transparency and the protection of users, with the indirect aim of promoting European digital sovereignty. Some argue that the new EU regulation is a 'breakthrough regulation' while others say that the DSA could pose a challenge for the platforms concerned and that its regulation of content hosting is not comprehensive (Rojszczak 2023).

This section briefly describes the rules that apply specifically to porn platforms. To do this, it is first necessary to clarify the conceptual basis. The DSA classifies platforms in a specific way: online platforms are hosting services that essentially store and publicly distribute information at the request of users (if this is their core service);<sup>8</sup> one subset of this larger category is VLOPs, which have an average of at least 45 million active users per month in the EU.<sup>9</sup> As the regulation is hierarchical in nature – in the words of Martin Husovec (2023a), 'discriminatory' – obligations are determined according to the platform's size (or numerical popularity). However, this type of regulation is controversial concerning pornography sites, as it seems impossible to determine how many people in the EU consume pornographic content, both by official and research methods. This is important to underline because only a tiny fraction of porn sites, once 'platformized', are VLOPs, which are subject to specific, stricter obligations (Figure 1).

First, it is worth reviewing the main rules that apply to online platforms. In general, providers of intermediary services – and therefore, by implication, porn platforms – are subject to the contract provisions. Porn platforms are required under the DSA to designate a single point of contact for electronic communication with the relevant Member States' authorities, the EC, and the European Board for Digital Services. <sup>10</sup> In addition to the 'institutional' communication facility, platforms will also be required to designate a contact point, which, ad similiter, will create an option for users to contact the platform concerned. <sup>11</sup>

Perhaps one of the most critical provisions regarding user protection is the rules on contractual terms in Article 14. As Husovec (2023b, 26) writes, the 'impenetrable jargon in the terms and conditions will not be the provider's advantage anymore'. This claim is not without reason. Article 14 requires that contract terms provide users with

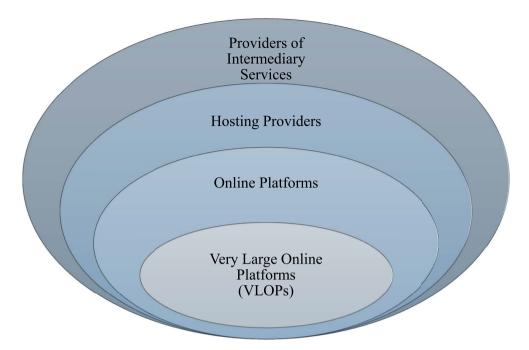


Figure 1. The structure of platform regulation in the DSA. Source: Authors own edit.

meaningful information about the services and the mechanisms for restrictions (such as content aggregation). While the literature is very scarce in this respect, it is essential to underline the practical importance of this provision, as the question of what is the basis for content to remain up and, most importantly, who can upload content is particularly relevant in the case of porn platforms (cf. Quintais, Appelman, and Fathaigh 2023). Including this in the general conditions does not, of course, solve the problems that have existed for decades with porn content, but it could, as a first step, have a positive impact, even from a fundamental rights point of view. Article 15 is also of particular importance in the research on porn platforms, requiring these providers to submit transparency reports at least once a year, providing detailed information on their content management activities and on the restrictions and complaint-handling practices applied. As hosting providers, porn platforms are subject to additional requirements, in particular regarding content management. Prominent among these rules is the mandatory establishment of a notification and action mechanism in Article 16 - which follows the notice-and-takedown system of the ECD - that obliges platforms to create a platform where they can report content they consider illegal in an easily accessible and user-friendly manner.

It should be noted that the Regulation also introduces guarantee provisions specifically for online platforms. Article 23 is relevant in this respect; service providers can suspend users who frequently provide illegal content and whistleblowers who regularly make unsubstantiated reports. Platforms must respond to notifications substantively – Articles 17 and 24 require them to provide detailed reasons for the decision, in both form and substance, in response to the notifications received. Finally, the provisions for reporting suspected offences on porn platforms should be underlined. The presence of criminal offences on these platforms is well documented; however, research shows that 'extreme'

pornographic content (abuse, violence) is rarely found on the platforms available (Carrotte, Davis, and Lim 2020), and reporting such videos is highly problematic and not user-friendly (De Angeli et al. 2023). This conflict is addressed by Article 18, which requires hosting providers to report to the competent law enforcement/judicial authority if they become aware or suspect that content that may constitute a criminal offence has been uploaded to the platform. About complaint handling, Article 20, which is now only and specifically applicable to service providers operating an online platform, obliges pornographic platforms to establish an internal complaint handling system. The internal complaints handling system is a mechanism for interaction with the platform for users subject to some form of restriction or prohibition. Such restrictive measures under Article 20(1) may include, for example, the removal or 'invisibility' (also known as 'shadowbanning' or 'shadow blocking') of content, the prohibition or restriction of the provision of a service (such as access to a platform), the restriction or termination of an established account, or, as a particularly relevant issue for porn platforms (see DeLacey 2024), the suspension or restriction of monetization. Those against whom the platform has taken such action may, therefore, complain about the measures and, under the rules on justification under Article 17 earlier, the platform must respond in a substantive, timely, and detailed manner.

In addition to the aforementioned provisions, the largest porn platforms are subject to additional obligations. However, beyond the previous definition, it is also worth looking at who the 'giants' are in practice under the Regulation. In the list of VLOPs registered by the EC under Article 33(6) of the DSA (last updated on 12 July 2024 at the time of writing), the vast majority of VLOPs can currently be broken down into three broad categories:

- social media platforms (such as Instagram, Facebook, TikTok);
- shopping and services platforms (e.g. Amazon, Booking, Temu) and various app stores; and
- porn sites.

There are four porn giants: Pornhub and Stripchat, registered in Cyprus, and XVideos and XNXX, registered in the Czech Republic.<sup>12</sup> The largest of these is XVideos, with an average of 160 million monthly active users. The following are the rules that apply specifically to these four giant porn platforms.

As regards contractual terms and conditions, it should be stressed that under Article 14(6), it is not sufficient for these four giant porn platforms to comply with the rules on general contractual terms and conditions. Still, they must publish their contractual terms and conditions in the official language of the Member State in which they offer their services. However, the most critical parts of the VLOPs concern the words of the Regulation, the management, assessment, and mitigation of risks. The concept of risk is not found in the body of the Regulation, but the preamble to the DSA can provide guidance for interpretation. Recital 76 stresses that the largest platforms may involve social risks and that their impact and size predispose them to more obligations. The preamble consistently uses the term 'systemic risks', which implies that risks are not ad hoc, individual risks but, rather, systemic risks or risks that are directly or indirectly linked to the use of the platform. Systemic risks are grouped into four categories in Recitals 80–83:

(1) Systemic risk distributes illegal content. This category includes content such as child sexual abuse content, illegal hate speech, and the misuse of services for other criminal



- offences. It also includes illegal activities such as selling prohibited products, including dangerous or counterfeit products. The systemic risk element, in this case, exists when illegal content reaches a broad audience quickly.
- (2) Systemic risk negatively affects fundamental rights. This category covers potential or actual adverse effects on fundamental rights. By fundamental rights, we mean basic rights such as human dignity, freedom of expression, privacy, data protection, nondiscrimination, and children's rights. These can be at risk from manipulative algorithm design, misuse of services, and online interfaces that exploit or addict minors.
- (3) Systemic risk impacts democratic processes. This includes potential or actual negative impacts on democracy, civil discourse, electoral integrity, and public security that may result from the platforms' content and information management.
- (4) Systemic risk threatens public health and welfare. This category refers to risks arising from the design or use of platforms that negatively affect public health, minors, and mental well-being or contribute to gender-based violence. It also includes risks from coordinated disinformation campaigns and user interface design that could lead to potentially addictive behaviour.

Of these four categories, the first and fourth are the most relevant for porn sites, and in some cases, the third category is systemic risk. In dealing with these risks, two primary obligations (risk assessment and mitigation) have been imposed on VLOPs in Articles 34 and 35 of the DSA.

The risk assessment can be described as a duty of care, as VLOPs are required to identify, analyze, and assess systemic risks arising from the design, operation, and use of their services on an annual basis, in particular 'prior to deploying functionalities that are likely to have a critical impact on the risks identified pursuant to this Article'. <sup>14</sup> In assessing risks, VLOPs should consider factors such as algorithmic systems, for example the design of recommendation programmes, content moderation practices, enforcement of terms and conditions, the display of advertisements and data management, and - the most significant for porn sites - negative impacts related to gender-based violence and the protection of minors. In addition, it is vital to assess how services can be manipulated, that is, whether they can be used to distribute illegal or harmful content.

In addition to assessing risks, VLOPs are also responsible for mitigating the risks identified.<sup>15</sup> Risk mitigation refers to the reasonable, proportionate, and effective mitigation measures that VLOPs must implement to address systemic risks, focusing on safeguarding fundamental rights. The range of measures is vast; 16 they include adapting service design, terms and conditions, content moderation processes and algorithmic systems, strengthening internal processes for detecting risks, and promoting cooperation with trusted whistleblowers and other service providers. One measure to be highlighted about pornographic content is Article 35(1)(j), which requires platforms to implement specific measures to protect children's rights, such as age verification and the provision of tools for minors to report abuse or seek help if necessary (Figure 2).

To guarantee the compliance of porn platforms, the Regulation applies a different approach. Under Article 56, the Member State where the service provider is established has exclusive competence to enforce the Regulation, except for VLOPs, where this competence is transferred to the EC. The Digital Services Coordinators, which are one or more competent authorities in each Member State to be responsible for the supervision of

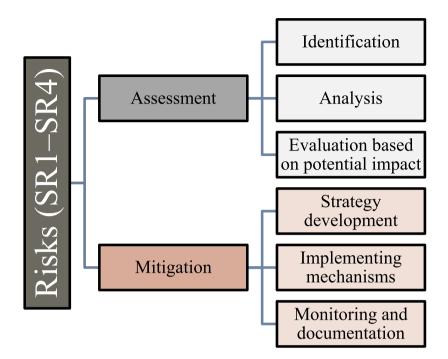


Figure 2. Risk regulation for VLOPs in the DSA. Source: Authors' own edit.

providers of intermediary services and enforcement of the DSA, have significant powers under the Regulation to direct the providers of intermediary services; for example, to request information without undue delay, to conduct on-site investigations of suspected infringements where appropriate, and to seek explanations from the representative of the provider concerned, or even its staff, to investigate suspected infringements. To ensure enforcement, Digital Services Coordinators can accept and make binding compliance commitments from service providers, order the cessation of infringements, impose fines or penalties, and, in the case of serious infringements, request the intervention of the judicial authority. In severe cases, for example, where an infringement persists after measures have been taken, the Digital Services Coordinators must ask the national judicial authority to restrict access to services temporarily. The Member State may also apply a system of sanctions against the platform. The maximum fine for non-compliance with the Regulation under Article 52(3) shall be 6% of the global annual turnover of the relevant intermediary service provider in the previous financial year and 1% in the case of incomplete, incorrect, or misleading information, provision of information, and response.

For VLOPs, including the four giant porn platforms mentioned earlier, the EC's powers are more extensive. On the one hand, the EC charges VLOPs an annual monitoring fee, placing a not-inconsiderable financial burden on the large platforms. On the other, together with the digital service coordinator of the place of establishment, the EC may also request access to data from the VLOPs concerned to verify compliance, as well as to the different referral schemes and related mechanisms they use.<sup>17</sup> In addition, the providers of online giant platforms will be required to undergo an annual independent audit at their own expense. This obligation will enable VLOPs to assess compliance with specific regulatory obligations and commitments made under codes of conduct and crisis

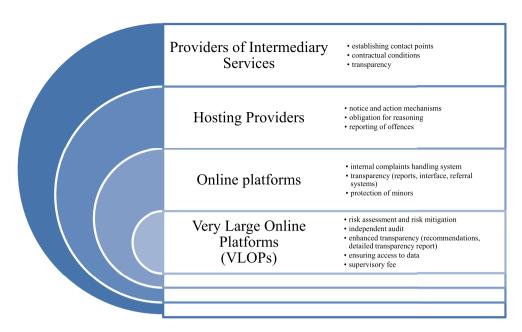


Figure 3. Summary of the provisions specific to porn platforms under the DSA. Source: Authors' own edit.

Note: The list is not exhaustive, for example rules on online advertising or crisis response protocols are not included.

protocols. Following the audit, platforms are required to address the non-compliance identified and report on corrective actions within a specified timeframe (Figure 3).

# IV. Difficulties in practical implementation and proposals to improve the effectiveness of the DSA

The difficulties in regulating online pornography stem from many factors, such as changing norms about sexuality, the influence of mass media and advertising, or simply the fact that it is now technically easy to communicate through images. However, the biggest challenge for regulation is arguably technological development. The rapidly changing and evolving technological environment has allowed pornographic content to spread very rapidly.

Clare McGlynn, Woods, and Antoniou (2024, 217) 'overall, while this is a multifaceted field, the ubiquity of pornography online, prevalent on dedicated websites and social media, reproduces violent, abusive content, while reinforcing sexist and racist attitudes. The concern is that the pornography industry, given its considerable role in people's lives, perpetuates a culture that normalises and minimises these harms'. Other implementation difficulties include the likely high latency of the number of active porn users, as well as the fact that, according to one study, only 16% of the websites analyzed have an accessible privacy policy and 4% have a banner indicating consent to cookies (Ikram et al. 2016).

Another unresolved problem is the almost unhindered access by juvenile users to various pornographic platforms. An external identification system, independent of the platforms, would most likely solve this problem. One potentially effective solution

could be the provision in the UK's Online Safety Act 2023, which requires that platforms' age-verification systems must be of such a kind, and used in such a way, that it is highly effective at correctly determining whether or not a particular user is a child. One of the secure verification methods could be a porn certificate (aka 'porn ID'), which could be purchased, for example, at the local post office and consists of a 16-digit code. If the user can enter the code on the adult website, they can browse. The media regulatory authority in North Rhine-Westphalia, Germany (Landesanstalt für Medien, NRW) had wanted to have German internet service providers block the most visited porn sites or introduce strict age controls by the end of 2023. In France, the Judicial Court of Paris postponed its final decision on blocking porn sites in 2023 for non-compliance with age verification until the Supreme Administrative Court issues a procedure for doing so. As the EU proposal interpreting the AVMSD rules was not felt to be sufficiently clear, at the very end of 2023 the Spanish Authority for the Supervision and Control of the Audiovisual Market (Comisión Nacional de los Mercados y la Competencia, CNMC) launched a public consultation on the criteria for age-verification systems on video-sharing platforms (De Ampuero Castellanos 2023). Under a Canadian bill, it would be a criminal offence punishable by a fine of up to Can\$500,000 for a porn platform to allow persons under age 18 years to access commercially sexually explicit material unless the organization has an age-verification system in place. However, there are questions about the effectiveness of this type of age verification, as users can easily circumvent such checks by providing false information and using technologies such as virtual private networks (VPNs) or the anonymous Tor browser (Thurman and Obster 2021).

We summarize the aforementioned with proposals that could help bring the online porn industry under regulation and strike a balance between safety and accountability and the protection of fundamental rights.

# V. From porn ID to harmonization and cooperation – policy recommendations

#### a. Porn ID

Accurate age verification on porn platforms is still unresolved - just look at the inadequacy of the yes or no answer to the question 'Are you over 13?' on most platforms. The self-reported date of birth is inadequate when it does not require any accurate verification. It is clear from the practice of EU Member States that there is still a long way to go to find a uniform solution to this question. A porn ID could be issued on presentation of documents proving identity or a bank card. However, it should be stressed that, if poorly implemented, this could also lead users to less regulated, grey or black-market sites which do not require a porn ID (Stardust et al. 2024). It should also be underlined that this alone would not be able to solve the question and could also have privacy concerns and challenges of implementation.

# b. Child pornography, revenge porn, deepfake porn - creating accessible and user-friendly reporting

Under the notification and action mechanism of the DSA described earlier, platforms must allow the reporting of information that the whistleblower considers to be illegal content.

If the platform becomes aware of such content, it must act 'in a timely, diligent, non-arbitrary and objective manner'18 to make a decision regarding the information that is the subject of the notification. In addition, hosting providers must report to the competent law enforcement/judicial authority if they become aware or suspect that content that may constitute a criminal offence has been uploaded to the platform. The most common such content may relate to child pornography, revenge porn, and deepfake porn.

# c. Systematic processing and analysis of transparency reports

Online platforms should also do their utmost to identify and remove problematic content correctly. The DSA makes it mandatory for all intermediary service providers to publish a report on content moderation at least once a year, which must be 'in a machine-readable format and in an easily accessible manner'. 19 The justifications can be found and searched in the DSA Transparency Database but the amount of data included is such that they can only be interpreted based on a thorough and competent analysis. Member State authorities should be required to process and analyze the practices of platforms on a mandatory basis – even if the EC has the power under the DSA to supervise and enforce the Regulation for VLOPs.

# d. Further EU harmonization of the legal environment

Although not strictly limited to porn platforms, further harmonization of the regulation of video-sharing platforms would facilitate both enforcement by supervisory bodies and compliance by the service providers concerned. Although some social media platforms have been automatically covered by the AVMSD since the 2018 amendment, despite the non-binding guidance issued by the EC, it is still not entirely clear which social media platforms will not be covered by the legislation. For this reason, the standardization of the AVMSD and DSA rules on video-sharing platforms is undoubtedly still a task ahead for the EC, the unveiling of which could also simplify the action on porn platforms. In addition, in the context of pornography, 'a comprehensive strategy, considering modes of creation, distribution, possession, and content, is critical' (McGlynn, Woods, and Antoniou 2024, 28). At the same time, it should be stressed that the enactment of more and more and even stricter and stricter legislations is often not a way to the solution, but a possibility to reach an over-regulated legal landscape that should be avoided.

# e. International cooperation

International cooperation plays a crucial role in regulating pornographic platforms, ensuring ethical standards, user safety, and legal compliance across borders. The EU's emphasis on transparency, age verification, and content moderation could influence global standards, encouraging other regions to adopt similar frameworks. This could be described as the Brussels Effect (Bradford 2020). Collaborative efforts between governments, regulatory bodies, and industry stakeholders are essential to harmonize laws, protect users, and address challenges like non-consensual content, privacy breaches, and online exploitation on a global scale. However, international cooperation can be hampered by a



number of factors: firstly, the very significant differences between the legal systems of different countries (suffice it to say that the EU regulation most often targets US and Chinese VLOPs); secondly, the different ways in which regulation is enforced; and, thirdly, the growing power of platform owners, even at the expense of the states.

# f. Closer cooperation between the players in the platform governance triangle

To use Robert Gorwa's (2024) term, it can be argued that all three actors in the 'platform governance triangle' should be involved in the process, as the parties are destined to cooperate. It seems clear that neither the States, the 'tech mammoths', nor the civil society, academia, or users will be able to solve the problem of online pornography on their own. Also, to make it even complex, inclusion of porn workers as key stakeholders is also a must. Excluding them could result in legislation that oversimplifies or misunderstands the realities of their work (Lee and Sullivan 2016). There is a necessity of including their voices, that could play a critical role in shaping policies that balance safety and accountability with respect for their rights. A more nuanced and holistic approach is essential for effective regulation. In this context, stakeholders can collaborate to develop best practices underpinned by knowledge sharing based on mutual trust.

# g. Digital literacy and education

Pornography is not inherently harmful; rather, its impact depends on factors like context, consumption patterns, and the viewer's level of critical engagement. Ethical, consensual adult content can serve as a medium for sexual exploration, education, and personal expression. However, potential risks arise when individuals lack digital literacy and the ability to critically analyze media. Comprehensive sex education, coupled with digital literacy programmes, can equip individuals with the skills necessary to differentiate between realistic and distorted portrayals of sex. By fostering critical engagement, such education promotes healthier attitudes towards sexuality, relationships, and consent while mitigating the influence of harmful stereotypes.

### VI. Conclusion

In 2024, 147 zettabytes of data were expected to be generated by internet traffic, more than half of which would be video (Duarte 2024). Around 30% of the videos transmitted contain pornographic content, which means that the global porn industry could generate roughly \$100–120 billion a year (Fleming, Muhr, and Shadnam 2024). It is an industry that can no longer be dealt with by simply banning it. Solutions must be found to ensure that systemic risks are addressed without unnecessarily stigmatizing adult users or porn workers.

Hermetic regulation of the safe use of porn platforms is unlikely, perhaps even impossible. The volume of the traffic, the easy availability, and accessibility may further reinforce the scepticism that could imply that they are not and cannot be meaningfully regulated. Nevertheless, we have attempted to dispel this scepticism in this article, if only in part. In our study, we surveyed the previous regulations on pornographic platforms, considered and analyzed in detail the relevant rules of the DSA, and highlighted the difficulties that legislators may encounter in regulating such platforms. We have also paid particular attention to making suggestions beyond descriptive and analytical analysis, which we hope will be helpful to the academic community and practitioners involved in the legislative process.

The regulatory environment analysis shows that the governance of pornographic platforms is fragmented and inconsistent, which also highlights the need for a single regulatory framework that harmonizes the rules. Until this is in place, both porn and non-porn platforms will struggle with the illegal content that is uploaded to them.

In conclusion, we believe that the DSA, despite having made significant progress in addressing online platforms, is still not able to adequately and fully address the specific challenges posed by pornographic content. In our view, a nuanced approach to regulating porn platforms is needed that balances safety and accountability with the protection of fundamental rights – and we trust that this approach will be reflected in both national and international regulation.

### **Notes**

- 1. Regulation (EU) No 2022/2065 of the European Parliament and of the Council of 19 October 2022 on the single market for digital services and amending Directive 2000/31/EC (Digital Services Regulation) PE/30/2022/REV/1, OJ L 277, 27 October 2022, 1-102.
- 2. Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on Electronic Commerce), OJ L 178, 17 July 2000, 1-16.
- 3. Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011 on combating the sexual abuse, sexual exploitation of children and child pornography, and replacing Council Framework Decision 2004/68/JHA. OJ L 335, 17 December 2011, 1-14.
- 4. Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending, in the light of changing market conditions, Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive). PE/33/2018/REV/1, OJ L 303, 28 November 2018, 69-92.
- 5. AVMSD Article 28b(3)(f).
- 6. Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011 on combating the sexual abuse and sexual exploitation of children and child pornography, and replacing Council Framework Decision 2004/68/JHA. OJ L 335, 17 December 2011, 1–14.
- 7. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Regulation (EC) No 95/46/EC (General Data Protection Regulation). OJ L 119, 4 May 2016, 1-8.
- 8. DSA Article 3(i).
- 9. DSA Article 33(1); (4).
- 10. DSA Article 11: Article 61.
- 11. DSA Article 12.
- 12. In the first round (25 April 2023) of VLOP designations, none of the 17 giant platforms was primarily an adult content provider: porn platforms were only designated in the second round (20 December 2023) and the fifth round (10 July 2024). With the exception of the giant porn platforms, all VLOPs are registered in the following European countries: Ireland, the Netherlands, Luxembourg, and Germany.
- 13. DSA Recital 79.
- 14. DSA Article 34(1).
- 15. DSA Article 35.

- 16. DSA Article 35(1).
- 17. DSA Article 40.
- 18. DSA Article 16 (6).
- 19. DSA, Article 15(1).

## **Disclosure statement**

No potential conflict of interest was reported by the authors.

# **Funding**

Gergely Gosztonyi was supported by the ADVANCED\_24 funding scheme of the Ministry of Culture and Innovation of Hungary from the National Research, Development and Innovation Fund. Gergely Ferenc Lendvai was supported by the Hungarian State Eötvös Scholarship; Magyar Tudományos Akadémia; Tempus Közalapítvány.

#### **ORCID**

Gergely Gosztonyi http://orcid.org/0000-0002-6551-1536 Szonja Ruszkai http://orcid.org/0009-0007-5948-9890 Gergely Ferenc Lendvai http://orcid.org/0000-0003-3298-8087

#### References

Ajder, Henry, Giorgio Patrini, Francesco Cavalli, Laurence Cullen, and Deeptrace. 2019. 'The State of Deepfakes: Landscape, Threats, and Impact.' Report. *Deeptrace*, September. https://regmedia.co. uk/2019/10/08/deepfake report.pdf.

Balkin, Jack M. 2018. 'Free Speech in the Algorithmic Society. The New School of Big Data, Private Regulation and the Regulation of Expression.' *Columbia Law Review* 118: 1188.

Ballester-Arnal, Rafael, Marta García-Barba, Jesús Castro-Calvo, Cristina Giménez-García, and Maria Dolores Gil-Llario. May 14, 2022. 'Pornography Consumption in People of Different Age Groups: An Analysis Based on Gender, Contents, and Consequences.' Sexuality Research and Social Policy 20 (2): 766–779.

Bennett-Brown, Margaret and Paul J. Wright. May 11, 2022. 'Pornography Consumption and Partnered sex: A Review of Pornography use and Satisfaction in Romantic Relationships.' *Current Addiction Reports* 9 (3): 109–113.

Bőthe, Beáta, Léna Nagy, Mónika Koós, Zsolt Demetrovics, Marc N. Potenza, and Shane W. Kraus. February 27, 2024. 'Problematic Pornography use Across Countries, Genders, and Sexual Orientations: Insights from the International Sex Survey and Comparison of Different Assessment Tools.' *Addiction* 119 (5): 928–950.

Bradford, Anu. 2020. The Brussels Effect: How the European Union Rules the World. Oxford: Oxford University Press. doi:10.1093/oso/9780190088583.001.0001.

Buono, Laviero. October 22, 2020. 'Editorial ERA Forum 3/2021: Eu strategy for a More Effective Fight Against Child Sexual Abuse.' *ERA Forum* 21 (3): 361–364.

Carrotte, Elise R., Angela C. Davis, and Megan Sc Lim. January 26, 2020. 'Sexual Behaviors and Violence in Pornography: Systematic Review and Narrative Synthesis of Video Content Analyses.' Journal of Medical Internet Research 22 (5): e16702.

De Ampuero Castellanos, Santiago. 2023. 'Public Consultation on Age Verification Mechanisms for Video Sharing Platforms – Spain.' *Lexology*, December 19, 2023. https://www.lexology.com/library/detail.aspx?g=f24f7695-e6c8-430e-baf5-28457e472bfa.



- De Angeli, Antonella, Mattia Falduti, Maria Menendez-Blanco, and Sergio Tessaris. January 17, 2023. 'Reporting Non-Consensual Pornography: Clarity, Efficiency and Distress.' *Multimedia Tools and Applications* 82 (9): 12829–12858.
- De Streel, Alexandre, et al. 2020. Online Platforms' Moderation of Illegal Content Online. Law, Practices and Options for Reform. Luxembourg: European Parliament.
- DeLacey, Hannah. 2024. 'The Boundaries of Business and Pleasure: How Personal, Social, and Legal Factors Influence Webcam Models' Boundaries.' *The Journal of Sex Research, February* 16: 1–14.
- Duarte, Fabio. 2024. 'Amount of Data Created Daily (2024).' *Exploding Topics* (blog), June 13, 2024. https://explodingtopics.com/blog/data-generated-per-day.
- Farooqui, Salmaan. 2021. 'Pornhub Parent Company MindGeek Faces U.S. Lawsuit Over Exploitation Allegations.' *CBC*, June 17, 2021. https://www.cbc.ca/news/canada/montreal/pornhub-mindgeek-lawsuit-exploitation-1.6070058.
- Fleming, Peter, Sara Louise Muhr, and Masoud Shadnam. June 20, 2024. 'The Business of Pornography: Contributions from Organization Studies—Introduction to the Special Section.' *Organization* 31 (5): 741–751.
- Friedmann, Danny. December 19, 2013. 'Sinking the Safe Harbour with the Legal Certainty of Strict Liability in Sight.' *Journal of Intellectual Property Law & Practice* 9 (2): 148–155.
- Gorwa, Robert. 2024. *The Politics Of Platform Regulation: How Governments Shape Online Content Moderation*. Oxford: Oxford University Press. doi:10.1093/Oso/9780197692851.001.0001.
- Gosztonyi, Gergely and Gergely Ferenc Lendvai. 2023. 'Deepfake. A Multifaceted Dilemma in Ethics and Law.' *Journal of Information Ethics* 32: 109.
- Husovec, Martin. 2023a, January 1. 'The DSA's Scope Briefly Explained.' SSRN Electronic Journal. doi:10.2139/ssrn.4365029.
- Husovec, Martin. 2023b. 'Will the DSA Work?' In *Putting the DSA Into Practice*, edited by Joris van Hoboken et al., 26. Berlin: Verfassungsblog gGmbH.
- Ikram, Muhammad, Narseo Vallina-Rodriguez, Suranga Seneviratne, Mohamed Ali Kaafar, and Vern Paxson. 2016. 'An Analysis of the Privacy and Security Risks of Android VPN Permission-Enabled Apps.' Roceedings of the 2016 Internet Measurement Conference (Association for Computing Machinery 2016, New York), November 10. doi:10.1145/2987443.2987471
- Johnson, Paul. July 3, 2014. 'Pornography and the European Convention on Human Rights.' *Porn Studies* 1 (3): 299–320.
- Lee, Jiz and Rebecca Sullivan. July 27, 2016. 'Porn and Labour: The Labour of Porn Studies.' *Porn Studies* 3 (2): 104–106.
- Lendvai, Gergely Ferenc and Gergely Gosztonyi. 2024. 'Deepfake y desinformación ¿Qué puede hacer el derecho frente a las noticias falsas creadas por deepfake?' *IDP Revista De Internet Derecho Y Política* no. 41 (April 15, 2024). doi:10.7238/idp.v0i41.427515
- Lussier, Natalie. 2022. 'Nonconsensual Deepfakes: Detecting and Regulating the Rising Threat to Privacy.' *Idaho Law Review* 58: 353.
- Malki, Kinda, Christoffer Rahm, Katarina Görts Öberg, and Peter Ueda. September 12, 2021. 'Frequency of Pornography Use and Sexual Health Outcomes in Sweden: Analysis of a National Probability Survey.' *The Journal of Sexual Medicine* 18 (10): 1735–1751.
- Mania, Karolina. 2024. 'Legal Protection of Revenge and Deepfake Porn Victims in the European Union: Findings from a Comparative Legal Study.' *Trauma, Violence, & Abuse* 25 (1): 117–129.
- McGlynn, Clare, Lorna Woods, and Alexandros Antoniou. June 5, 2024. 'Pornography, the Online Safety Act 2023 and the Need for Further Reform.' *Journal of Media Law* 2 (2): 211–239. doi:10. 1080/17577632.2024.2357421.
- Nicas, Jack, Rebecca Suner, and James Surdam. 2024. 'How Internet Access Is Transforming Life in This Amazon Tribe.' June 3. https://www.nytimes.com/video/world/americas/100000009494114/how-internet-access-is-transforming-life-in-this-amazon-tribe.html.
- Paulus, Frank W., Foujan Nouri, Susanne Ohmann, Eva Möhler, and Christian Popow. March 1, 2024. 'The Impact of Internet Pornography on Children and Adolescents: A Systematic Review.' L Encéphale 50 (6): 649–662. doi:10.1016/j.encep.2023.12.004.
- Quintais, João Pedro, Naomi Appelman, and Ronan Ó Fathaigh. July 11, 2023. 'Using Terms and Conditions to Apply Fundamental Rights to Content Moderation.' *German Law Journal* 24 (5): 881–911.



- Rojszczak, Marcin. December 15, 2023. 'The Digital Services Act and the Problem of Preventive Blocking of (Clearly) Illegal Content.' Institutiones Administrationis 3 (2): 44-59.
- Short, Mary B., Thomas E. Kasper, and Chad T. Wetterneck. 2015. 'The Relationship Between Religiosity and Internet Pornography Use.' Journal of Religion and Health 54 (2): 571-583.
- Sorbán, Kinga. September 1, 2023. 'An Elephant in the Room—EU Policy Gaps in the Regulation of Moderating Illegal Sexual Content on Video-Sharing Platforms.' International Journal of Law and Information Technology 31 (3): 171–185.
- Stardust, Zahra, Abdul Obeid, Alan McKee, and Daniel Angus. June 1, 2024. 'Mandatory age Verification for Pornography Access: Why it Can't and Won't 'Save the Children.' Big Data & Society 11 (2): 1–17. doi:10.1177/20539517241252129.
- Taylor, Kris. July 14, 2019. 'Pornography Addiction: The Fabrication of a Transient Sexual Disease.' History of the Human Sciences 32 (5): 56–83.
- Thurman, Neil and Fabian Obster. May 4, 2021. 'The Regulation of Internet Pornography: What a Survey of Under-18s Tells us About the Necessity for and Potential Efficacy of Emerging Legislative Approaches.' Policy & Internet 13 (3): 415–432.
- Turillazzi, Aina, Mariarosaria Taddeo, Luciano Floridi, and Federico Casolari. January 2, 2023. 'The Digital Services act: An Analysis of its Ethical, Legal, and Social Implications.' Law, Innovation and Technology 15 (1): 83–106.
- Winter, Rachel and Anastasia Salter. October 17, 2019. 'DeepFakes: Uncovering Hardcore Open Source on GitHub.' Porn Studies 7 (4): 382-397.