

i-Game

Building a community for the co-creation of games with high impact on innovation, sustainability, social cohesion, and growth

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D2.8 Legal analysis IT with policy recommendations

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Abstract

D2.8 explores the legal and ethical consideration of video games from an IT perspective and provides a set of recommendations to the sector for a legal and ethical-design culture in the video game industry, a set of recommendations for policy-makers and present the work conducted for legal requirements identification for the i-Game community and co-creation



platform.

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Executive Summary

Video games have transformed from a niche sector into the biggest sector from the entertainment industry, shaping culture, economy, and technology. Despite this success, video games appeared to have been under the radar of EU policymakers with a sector traditionally governed by a set of horizontal rules not specific to gaming (data protection, consumer law, IP, children's rights) completed by a strong presence of industry self-regulation. The deliverable also explores the legal and ethical-design culture in the video game industry.

Chapter 1 delivers an analysis of the legal and ethical considerations to video games. It also reflects the importance of safety for game design. Safety is indeed a fundamental aspect of gaming, for player's well-being but also for the sector's success. The chapter explores the intersection of video games and fundamental rights, aiming to understand how human rights principles shape and impact gaming design. It then analyses sector-specific and EU secondary legislations, examining how these legal frameworks govern various aspects of gaming. The discussion will further address the industry's self-regulation mechanisms, highlighting the role that voluntary standards and practices have for the sector. Finally, the chapter delves into the ethical dimensions of gaming, reflecting on the broader societal and moral considerations that influence and are influenced by the gaming sector. For each section of this chapter, the deliverable explores how the principles and frameworks discussed can be implemented within the i-Game community and co-creation platform. Practical guidance for game developers is also provided all along focusing on how these considerations can be integrated from the earliest design stages. Chapter 1 delves into the following legal and ethical considerations: Human rights (1.1.); Children's rights (1.2); Data protection and privacy (1.3); Consumer protection (1.4) including game revenues streams, dark patterns; Content and behaviours moderation (1.5) including illegal and harmful content, streaming and influencers considerations, gender based violence in the gaming sector, virtual world and metaverse considerations; gaming self-regulation (1.6); and ethical consideration (1.7).

Chapter 2 presents the Gaming and Regulation Working group, is a multi-stakeholders initiative launched by the STERN Centre for Business and Human Rights, part of New York University (NYU). The aim of the working group is to advance constructive regulation of the video games industry. The working group brings together regulators, representatives of the gaming industry, and civil society researchers on a weekly basis to discuss and achieve consensus on concrete regulatory measures needed to address harms in online gaming, from child grooming to violent extremist radicalisation. The working group through Mariana Olaizola Rosenblat (NYU, STERN) also recently joined the Global Online Safety Regulators Network as official observers. Two KUL CiTiP researchers are part of this initiative, namely Noémie Krack (i-Game) and Martin Sas (PROGRESS). The working group has recently prepared submissions to the European Commission and Ofcom in response to their call for feedback on the implementation of researcher data access provisions. Submissions highlighting the specificities of the gaming sector.

Chapter 3 provides guidance on how design games can implement ethical and legal requirements at early stages of their development and even from their inception onwards. The guidance was inspired by the numerous guidelines found during the desk research for this deliverable. These guidelines will evolve as the project progresses as further research on IP and AI considerations of games will be part of forthcoming i-Game deliverables. They will



enrich the recommendations. These guidelines should not be considered as a checklist or exhaustive.

Chapter 4 provides several policy recommendations. These recommendations highlight the need to acknowledge the role of the gaming sector, leverage industry self-regulation, support smaller gaming businesses, promote interdisciplinarity in game design, enhance education and workforce diversity in the gaming industry, support research on video games and the gaming sector, address content moderation challenges specific to games, deliver age-appropriate design guidance, and conduct a comprehensive EU regulatory fitness check about the ability of the relevant regulatory framework to address gaming challenges and risks.

Chapter 5 explains how the legal requirements applicable to the project's activities are structured, developed, and provided to partners. The section reports on the workflow and provides an overview of the identified legal requirements. The full list of requirements is documented internally and is available exclusively to i-Game partners. The process is iterative, meaning the list of legal requirements will evolve as the platform develops and new features are designed. In line with i-Game's commitment to ethical game design from its inception, the platform will also offer materials and resources to help users understand the various legal considerations associated with video games.

Chapter 6 concludes the deliverable by outlining ways forward, including how future i-Game deliverables will further develop the project's legal and ethical research. This includes analyses on intellectual property (D3.6 in Month 24) and artificial intelligence (D4.8 in Month 34). The chapter emphasises the need for more tailored regulatory approaches to address the unique characteristics of video gaming. A coherent, long-term European strategy is essential to ensure fair benefits for all stakeholders, support EU-based companies and start-ups, and tackle critical challenges in the industry.



Abbreviations and Acronyms

AI Artificial Intelligence

ACB Australian Classification Board
ADR Alternative Disputes Resolution

Art. Article

AR Augmented Reality

AVMSD Audiovisual Media Services Directive

BIK The European strategy for a better internet for kids

BIK+ The new European strategy for a better internet for kids

CDSM Directive on Copyright in the Digital Single Market

CJEU Court of Justice of the European Union

Classificação Indicativa

COE Council of Europe
CRA Cyber Resilience Act

CRD Consumer Rights Directive

CSAED Child Sexual Abuse and Exploitation Directive

CSAM Child Sexual Abuse Material

D. Deliverable

DDoS Denial of service attack

Dir. Directive

DEI Diversity, Equity, and Inclusion

DPIA Data Protection Impact Assessment

DSA Digital Services Act

EC European Commission

ECFR EU Charter of Fundamental Rights

ECHR European Convention on Human Rights

EDPB European Data Protection Board

EGDF European Data Protection Supervisor
EGDF European Game Developer Federation

EP European Parliament

ESRB Entertainment Software Rating Board

EU European Union

FoE Freedom of Expression
FoT Freedom of thought

FRIA Fundamental Rights Impact Assessment
GDPR General Data Protection Regulation

Gen Al Generative Al

GPSD General Product Safety Directive



GPSR General Product Safety Regulation

GRAC Game Rating and Administration Committee in South Korea

HRIA Human Rights Impact Assessment

IGA In game purchasesIP Intellectual Property

ISFE Interactive Software Federation of Europe

M. Month

MR Mixed Reality
MS Member States

NLF New Legislative Framework

NYU New York University

Ofcom UK Office for Communication

PEGI Pan European Game Information

PLD Product Liability Directive
RED Radio Equipment Directive

RITEC Responsible Innovation in Technology for Children

STEAM Science, Technology, Engineering, Arts, Mathematics

TEU Treaty of the European Union

TFEU Treaty on the Functioning of the European Union

TR Technical Requirements

UCPD Unfair Commercial Practices Directive

UK United Kingdom

UNCRC United Nations Convention on the Rights of the Child

UNDHR Universal Declaration of Human Rights

UNICEF United Nations Children's Fund

UNOCT/UN United Nations Office of Counter-Terrorism/United Nations Counter-

CCT Terrorism Centre

USK Unterhaltungssoftware Selbstkontrolle

VLOPs Very Large Online Platforms

VLOSEs Very Large Online Search Engines

VR Virtual Reality

WIPO World International Intellectual Property Organisation

XR Extended Reality



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INTRODUCTION

Video games have transformed from a niche sector into a global industry shaping culture, economy, and technology. The video game industry has become the largest entertainment sector globally, driven by rapid technological advancements and is now larger than the music, movie, and television industries combined. Globally, the video game industry generated over \$200 billion in 2024 and has a projected market value of \$312 billion in 2027.

This fast progression can be explained by shifts from traditional one-time game purchase towards new game business models such as free-to-play, play-to-earn, and pay-to-play⁴, the apparition of mobile and cloud gaming, the rise of gaming platforms and esports, and virtual reality also contributed to this significant growth.⁵ This digital shift has introduced millions of new people to video games.⁶

The COVID-19 pandemic further accelerated the industry's growth with a significant rise in the number of European gamers. During periods of isolation, online multiplayer games provided a source of entertainment, relaxation, and social connection.⁷ Since then, over half of the European population (aged between 6 to 64) is playing video games regularly.⁸

Additionally, young adults are a gamer's group highly sought after by advertisers, who see them as valuable consumers. As a result, advertisers are increasingly willing to invest heavily in targeting gamers, further enhancing the sector's profitability, and encouraging its expansion.

Despite this success, the video game industry appears to be "largely unknown and even denigrated by public authorities, who sometimes remain unaware of its assets." ¹⁰ However, this perception is gradually shifting, with video games gaining recognition in cultural and

¹ DLA Piper, 'Video Games Laws of the World A Global Guide' (2024).

² Krishan Arora, 'The Gaming Industry: A Behemoth With Unprecedented Global Reach' *Forbes* (17 November 2023) https://www.forbes.com/councils/forbesagencycouncil/2023/11/17/the-gaming-industry-a-behemoth-with-unprecedented-global-reach/> accessed 23 December 2024.

³ Jon Wakelin and Alex Baker, 'Top 5 Developments Driving Growth for Video Games' (*PwC*, 16 January 2024) https://www.pwc.com/us/en/tech-effect/emerging-tech/emerging-technology-trends-in-the-gaming-industry.html accessed 23 December 2024; PricewaterhouseCoopers, 'Perspectives: Global Entertainment & Media Outlook 2024–2028' (*PwC*, 16 July 2024) https://www.pwc.com/gx/en/issues/business-model-reinvention/outlook/insights-and-perspectives.html accessed 23 December 2024.

⁴ Nicole Willing, 'Free-to-Play (F2P)' (*Techopedia*, 12 September 2023) https://www.techopedia.com/definition/27039/free-to-play-f2p accessed 1 July 2024.

⁵ Alex Roberts and Verity Egerton-Doyle, 'Games and Interactive Entertainment - Legal Trends in 2024' (*Linklaters*, 17 January 2024) https://www.linklaters.com/en/knowledge/publications/alerts-newsletters-and-guides/2024/january/15/gaming-legal-trends-in-2024 accessed 1 July 2024.

⁶ ECORYS and KEA, *Understanding the Value of a European Video Games Society: Final Report for DG CNECT.* (Publications Office of the European Union 2023) https://data.europa.eu/doi/10.2759/332575 accessed 13 December 2024.

⁷ ibid.

⁸ ibid.

⁹ Wakelin and Baker (n 3).

¹⁰ Loïse Lyonnet and David Rabineau, 'The Video Games Industry in Europe: Current Situation, Issues and Prospects' (Foundation Robert Schuman - The Research and Studies Centre on Europe, 31 October 2023) https://www.robert-schuman.eu/en/european-issues/724-the-video-games-industry-in-europe-current-situation-issues-and-prospects">https://www.robert-schuman.eu/en/european-issues/724-the-video-games-industry-in-europe-current-situation-issues-and-prospects accessed 3 July 2024.



creative policy discussions.¹¹ While the European Union has yet to establish a harmonised definition of video games in EU legislations¹², the Court of Justice of the European Union (CJEU) stated in a decision that video games are creative, unique and complex work composed of a combination of technology and creative work.¹³ Indeed, the artistic and creative efforts involved in video game development set it apart as a creative industry rather than merely a technological product.¹⁴ Calls emerged from video games publishers and developers representatives to not categorise video games into the audio-visual sector but rather make it a unique category given the specificity of the sector.¹⁵ The perception of video games as merely a form of entertainment is gradually fading and more and more the artistic value of the medium is also taken into account, for instance with museums now including video games in exhibitions.¹⁶

The "complex nature of video games is reflected in the breadth of the regulatory framework applicable to the industry". The Specific and dedicated "video game regulation" remains sparse, with relevant provisions scattered across various legal domains, including consumer protection, data protection, intellectual property rights, and children's rights. Regulating the industry within the European Union poses additional challenges due to the interplay of diverse national laws with EU legislations including (regulation and directives), and the rapidly evolving nature of gaming including the apparition of gaming platforms and gaming streaming platforms, underlining the importance of platform regulation.

¹¹ ECORYS and KEA (n 6).

¹² ibid

¹³ The CJEU stated that "video games ... constitute complex matter comprising not only a computer program but also graphic and sound elements, which, although encrypted in computer language, have a unique creative value which cannot be reduced to that encryption. In so far as the parts of a videogame, in this case, the graphic and sound elements, are part of its originality, are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29." Source: Nintendo Co Ltd and Others v PC Box Srl and 9Net Srl [2014] ECJ Case C-355/12.

¹⁴ ECORYS and KEA (n 6).

¹⁵ Video Games Europe, '2023 All About Video Games - European Key Facts' (Video Games Europe 2023) https://www.videogameseurope.eu/publication/2023-video-games-european-key-facts/ accessed 13 December 2024.

¹⁶ Connor Parissis, 'Video Games Are an Art Form - Honi Soit' (*Honi Soit*, 19 August 2018) https://honisoit.com/2018/08/video-games-are-an-art-form/ accessed 7 January 2025; ECORYS and KEA (n 6).

¹⁸ Pieter Jan Declerck and Nadia Feci, 'Mapping and Analysis of the Current Regulatory Framework on Gambling(-like) Elements in Video Games – a Report in the Framework of the "Gam(e)(a)Ble" Research Project' (2022) https://www.gameable.info/_files/ugd/7f91ff_85f1844b8b144f33a7589dea8d2155f3.pdf.



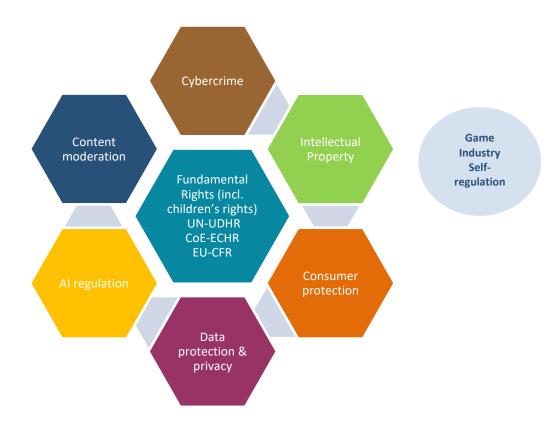


Figure 1. Selection of relevant legal frameworks applicable to the gaming sector

This deliverable will explore the legal and ethical considerations associated with video games from an IT perspective. Special attention will be paid to children's rights, human rights, moderation of illegal content (including under the Digital Services Act), consumer protection, data privacy and games specific (self-)regulation.

Chapter 1 analyses the legal and ethical considerations to video games from an IT perspective. It explores fundamental rights, children's rights, data protection, consumer protection, content moderation, gaming self-regulation and the ethical and societal dimensions of games. Chapter 2 presents the gaming and regulation working group, a multi-stakeholders initiative launched by the STERN Centre for Business and Human Rights, part of the New York University where i-Game is represented through the participation of N. Krack.

Chapter 3 contains guidance for the gaming workforce on how design games can implement ethical and legal requirements at early stages of their development and even from their inception onwards.

Chapter 4 provides some recommendations for policy makers based on the analysis conducted in Chapter 2.

Chapter 5 maps the current status of the legal requirements relevant for the i-Game platform. The legal requirements will evolve as the project evolves as they are heavily relying on the feature's developed and governance decisions. However, throughout the process, KUL will provide legal and ethical support including guidelines and recommendations on how to implement these requirements in the platform's design to guide the project partners in their tasks.

Chapter 6 concludes this deliverable.



1 IT CONSIDERATIONS FOR VIDEO GAMES: A LEGAL AND ETHICAL PERSPECTIVE

This chapter will deliver an analysis of the legal and ethical considerations to video games. It will also reflect about the impact of game design on individuals and society.

Safety is a fundamental aspect of gaming, for player's well-being but also for the sector's success. Safety will be a core focus of this deliverable. In-game threats or risks can reach "far beyond the virtual environment and inflict real harm on players' mental health as well as physical safety. Beyond individual harms, online gaming platforms face risks of collective harm at the societal level." While safety is also a key consideration in EU legal and policy technology related initiatives, none is providing a joint, harmonised, common definition of it. Safety seems to be loosely defined and looks like a compound concept composed of the following considerations cybercrime, content moderation (violence online, hate speech, spread of illegal content, disinformation), data protection, manipulation risks, consumer protection, respect to fundamental rights, principles & values, and the protection of vulnerable groups.

For instance, safety is included in the European Declaration on Digital Rights and Principles for the Digital Decade. The declaration mentions "commitments to protect individuals, businesses, and public institutions from cybercrime, including data breaches and cyberattacks, and safeguarding digital identities from theft or manipulation. But also to hold accountable those who undermine online security, compromise the integrity of the European digital environment, or promote violence and hatred online." In 2023, the EC released its communication entitled "An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition", setting out the strategy and proposed actions on virtual worlds and Web 4.0. This strategy aimed to prepare the transition from Web 3.0, which is the third generation of the World Wide Web. The safety of web users and EU fundamental rights and values are described as key challenges for the future and the need to have a robust legal framework is underlined.

This chapter begins by exploring the intersection of video games and fundamental rights, aiming to understand how human rights principles shape and impact gaming design. It then analyses sector-specific and EU secondary legislations, examining how these legal frameworks

¹⁹ Mariana Olaizola Rosenblat and others, 'Feedback from the Working Group on Gaming and Regulation at NYU Stern Center for Business and Human Rights on the Delegated Regulation on Data Access Provided for in the Digital Services Act.' (*European Commission - Have your say*, 10 December 2024) accessed 11 December 2024.

²⁰ European Commission, European Declaration on Digital Rights and Principles for the Digital Decade 2022 [COM/2022/28 final].

²¹ Jean De Meyere and Noémie Krack, 'Virtual Worlds, Real Risks: Exploring User Safety in the Metaverse under the Digital Services Act' (The Chair for the Responsible Development of the Metaverse (MetaverseUA Chair) 2024) https://catedrametaverso.ua.es/wp-content/uploads/2024/10/Virtual-worlds-real-risks-exploring-user-safety-in-the-metaverse-under-KRACK-DE-MEYERE.pdf.

²² European Commission, Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition 2023 [COM(2023) 442/final].



govern various aspects of gaming. The discussion will further address the industry's self-regulation mechanisms, highlighting the role that voluntary standards and practices has for the sector. Finally, the chapter delves into the ethical dimensions of gaming, reflecting on the broader societal and moral considerations that influence and are influenced by this dynamic sector.

For each section of this chapter, the deliverable explores how the principles and frameworks discussed can be implemented within the i-Game community and co-creation platform. Specific attention will be given to providing practical guidance for game developers, focusing on how these considerations can be integrated from the earliest design stages.

Disclaimer

Video games trigger numerous ethical and legal questions including on safety, this deliverable will not address all of them nor will it do so extensively. Rather it provides a selection of the most relevant questions in relation to i-Games in order to establish legal requirements which will be embedded in the future development of the community and co-creation platform.

1.1 Human rights

Games can serve as powerful enablers of fundamental rights, offering platforms for free expression, creativity, and social interaction. They are key tools for exercising key fundamental rights such as freedom of expression, freedom of association, the right to education and development and also the right's child to play.²³ In addition, games can even focus on human rights in their gameplay, narrative, and game mechanics providing meaningful experiences that raise awareness about fundamental rights and social issues, inspiring players to think critically and empathetically.²⁴ However, these benefits come with significant challenges and concerns, particularly regarding the protection of other fundamental rights including data protection, children's rights, the protection of intellectual property, and freedom of expression.

1.1.1 Human rights legal frameworks

At the international level, the Universal Declaration of Human Rights (UDHR), adopted by the United Nations in 1948, is a milestone in the recognition of human rights, offering a comprehensive list of civil, political, economic, social, and cultural rights that should be upheld by its signatories.

On the European level, the European Convention on Human Rights (ECHR), established in 1950 under the Council of Europe, is a regional treaty that safeguards human rights within Europe. The Council of Europe is composed of 46 Member States (MS).²⁵

The European Union (EU), composed of 27 Member States, is founded on strong commitments to promote, and protect human rights, democracy, and the rule of law in its internal and

²³ Martin Sas, 'Protecting Gamers' Privacy in Online Games: A Risks Analysis from a Data Protection and Children Rights Perspective - KU Leuven First Doctoral Seminar' (May 2024) https://kuleuven.limo.libis.be/discovery/fulldisplay/lirias4158387/32KUL_KUL:Lirias accessed 1 July 2024.

²⁴ Yash, 'The Relationship Between Video Games and Human Rights' (*Effective Laws*, 28 December 2024) https://effectivelaws.com/video-games-and-human-rights/> accessed 10 January 2025.

²⁵ Council of Europe, 'Our Member States' (*The Council of Europe in brief*) https://www.coe.int/en/web/about-us/our-member-states accessed 6 January 2025.



external action. Fundamental rights and principles are therefore enshrined in EU primary law: the founding treaties²⁶ and the ECFR. The EU adopted in 2000 the EU Charter of Fundamental Rights (ECFR)²⁷, which became legally binding with the Treaty of Lisbon in 2009.

While the ECHR and ECFR are two different legal instruments, responding to different legal orders, the level of protection offered by the ECHR is a minimum level, the EU cannot go below but it can provide for more protection in the exercise of its autonomy.²⁸

1.1.2. Fundamental rights and gaming

In 2008, the Council of Europe released human rights guidelines for online game providers.²⁹ The guidelines underline the importance of maintaining gamers' safety, privacy, and freedom of expression. They also stress the need to incorporate human rights considerations into game design and marketing.

Data protection and right to privacy

The right to privacy is enshrined in Article 12 UNDHR, Article 8 ECHR, Articles 7 and 8 ECFR. The right to privacy and data protection are two distinct rights but in the digital environment they are often intertwined.

The right to privacy protects individuals from arbitrary interference in their personal life, including their family, home, communications, and reputation, ensuring they can control their personal information and maintain their dignity and autonomy.

The right to data protection entitles individuals to choose what information will be or will not be divulged to others and better protect and inform them about the processing of their personal data. The aim is to elaborate safeguards against mass surveillance, general and undifferentiated collection of personal data.³⁰ At the EU level, its protection has been developed by secondary EU legislation, previously the Directive 95/46/CE354³¹ now replaced by the famous General Data Protection Regulation (GDPR).

The right to privacy and the right to data protection are crucial in the context of video games, as gaming platforms or gaming companies can collect vast amounts of personal data from players, including their personal information to constitute their profile, their behaviours, preferences, and interactions in games.³² These data can be used for in-game personalisation (game mechanisms adaptation), games monetisation, targeted advertising, or shared with third parties. Safeguarding privacy could help to foster trust between gamers and developers,

²⁶ The Treaty of the European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU).

²⁷ EU Charter of Fundamental Rights.

²⁸ Koen Lenaerts, 'The EU Charter of Fundamental Rights : Scope of Application and Methods of Interpretation', De Rome à Lisbonne: les juridictions de l'Union européenne à la croisée des chemins (Bruylant 2013).

²⁹ Council of Europe and Interactive Software Federation of Europe, 'Human Rights Guidelines for Online Games Providers' https://rm.coe.int/16805a39d3>.

³⁰ Digital Rights Ireland Ltd v Minister for Communications, Marine and Natural Resources and Others and Kärntner Landesregierung and Others [2014] ECJ Joined Cases C-293/12 and C-594/12.

³¹ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data 1995 (OJ L 281) pp.31.

³² Martin Sas, Maarten Denoo and Jan Tobias Mühlberg, 'Informing Children about Privacy: A Review and Assessment of Age-Appropriate Information Designs in Kids-Oriented F2P Video Games' (2023) 7 Proc. ACM Hum.-Comput. Interact. 390:425.



promoting a secure and ethical gaming environment, this has also a commercial potential impact with gamers or partners of gamers making more conscious choices when it comes to the impact of product and service on their fundamental rights.

Freedom of expression

Freedom of expression (FoE) is protected by Article 19 of the UNDHR, Article 10 of the European Convention on Human Rights (ECHR) and Article 11 of the ECFR.

Freedom of expression protects both those who share and those who receive information, covering not just agreeable or neutral ideas but also those that may offend, shock, or disturb.³³ This protection extends to the content, form, and methods of communication³⁴, recognising that pluralism, tolerance, and open-mindedness are essential for a democratic society. In today's digital age, the internet plays a vital role in ensuring access to diverse information and enabling participation in political and societal debates.³⁵ Freedom of expression serves multiple functions, including the discovery of truth, personal self-fulfilment, democratic participation, and the critique of authority.³⁶

Games benefit from freedom of expression as they express ideas and should be protected as a medium for cultural expression.³⁷ Some authors point though that video games show some particularities as they are not only the expression of the designer but also of the players which is materialised through play; even though actions in games should not be considered as the action they represent.³⁸ Participation of game users in video games with participation in e.g. multiplayer video games, user generated content can enable them to make creative expression, design creative objects, avatars and form bonds with other gamers.³⁹ While solo players with no interaction with other players can be considered as private, when gameplay or game features (such as interactions features) are used to intentionally attack or harass others, it can fall under the scope of illegal expressions according to existing laws. Determining this, though, can be challenging due to the context of the behaviour and the uncertainty surrounding the player's intent.⁴⁰ In such cases, legal approaches used to address humour, and satire may offer useful insights.

While FoE is a pillar for democracy, it is not an absolute right and can be limited under strict conditions (proportionality test). Therefore, appropriate information shall inform users to protect against arbitrary content moderation decisions which might harm game user's freedom of expression. In addition, when it comes to children protection, it is legitimate that access to some information/content can be limited through parental controls, age rating system and so forth.⁴¹

³³ Handyside v the United Kingdom [1976] ECtHR 5493/72.

³⁴ Autronic AG v Switzerland [1990] ECtHR §47.

³⁵ Ahmet Yildirim v Turkey ECtHR §54.

³⁶Eric Barendt, *Freedom of Speech* (2nd edition, Oxford University Press 2016) https://academic.oup.com/book/1532 accessed 18 April 2024.

³⁷ Kristine Jørgensen and Torill Elvira Mortensen, 'Whose Expression Is It Anyway? Videogames and the Freedom of Expression' (2022) 17 Games and Culture 997.

³⁸ ibid.

³⁹ Declerck and Feci (n 18).

⁴⁰ Jørgensen and Mortensen (n 37).

⁴¹ Declerck and Feci (n 18).



Freedom of thought

Freedom of thought (FoT) is protected by Article 18 UNDHR, Article 9 ECHR and Article 10 ECFR. All of these articles also enshrine the right to freedom of religion. Freedom of thought has so far not been significantly researched or often used.⁴² Its interpretation in the 21st Century appears crucial in light of interference attempts, disinformation, manipulative patterns, or technologies. The author S. McCarthy-Jones worked on giving shape to freedom of thought by identifying three constitutive elements, namely the rights: (1) not to reveal one's thoughts, (2) not to be penalized for one's thoughts, and (3) not to have one's thoughts manipulated. He further urges to protect FoT to secure mental autonomy.

When it comes to gaming, freedom of thought is challenged by dark patterns practice, nudging techniques and how they can impede someone's ability to make autonomous decisions and develop their own thoughts. Additionally, gaming influencers and toxicity online can trigger influence considerations too. More on these aspects will be developed as part of Sections 2.3, 2.4, 2.5 on privacy, consumer protection and content moderation. More recently questions around the use of VR and its influence on freedom of thought also started to emerge.⁴³

Non-discrimination

The right to non-discrimination is a fundamental principle enshrined in several international human rights instruments. The UNDHR, under Article 2, guarantees that everyone is entitled to the rights and freedoms set forth in the declaration, without discrimination of any kind. Similarly, Article 14 ECHR ensures that the enjoyment of the rights and freedoms outlined in the Convention is free from discrimination. Article 21 ECFR also prohibits discrimination based on various grounds, including gender, race, ethnicity, and disability.

In the context of gaming, these rights are vital, as biases in games—such as stereotypes, gender roles, and racial portrayals—can perpetuate exclusion and inequality. Furthermore, digital access and inclusivity are essential for non-discrimination in gaming; players need access to technology, including computers/consoles, the internet, and the necessary digital skills. The cost of hardware and internet connectivity can create a barrier to entry for many individuals, disproportionately affecting marginalised communities/individuals and limiting their participation in online gaming and esports. More research and work on games and inclusivity will be conducted by the I-Game partner Raising the Floor which will explore this dimension in the project. The gender dimension of games and gaming will be further elaborated in Section 1.5.5.

1.1.3 Fundamental Rights Impact Assessment

The Human or Fundamental Rights Impact Assessment (HRIA or FRIA) is becoming a key tool for businesses to address their human rights responsibilities in digital projects, products, and

⁴² Simon McCarthy-Jones, 'The Autonomous Mind: The Right to Freedom of Thought in the Twenty-First Century' (2019) 2 Frontiers in Artificial Intelligence https://www.frontiersin.org/journals/artificial-intelligence/articles/10.3389/frai.2019.00019/full accessed 3 January 2025.

⁴³ Marc Jonathan Blitz, 'The Right to an Artificial Reality? Freedom of Thought and the Fiction of Philip K. Dick' [2021] Michigan Technology Law Review < Michigan Technology Law Review >.



services.⁴⁴ "HRIA can be defined as a process for identifying, understanding, assessing and addressing the adverse effects of a business project or business activities on the human rights enjoyment of impacted rights holders".⁴⁵ The Danish Institute for Human Rights developed a guidance and toolbox for those working, designing and developing digital projects, products and services and willing to conduct a HRIA. A HRIA can be divided in 5 steps.



Figure 2. HRIA steps as defined by the Danish Institute for Human Rights

Using HRIA into game development or game experience design (for instance in online gaming platforms) can enhance ethical standards and users safety. It can help to assess how game content and mechanics might impact players' rights, develop features that protect players' rights and engage with stakeholders in the process, in order to design the best product or service possible.

Guidance

- Conduct HRIA/FRIA of games and involve various types of stakeholders while doing it.
- Have interdisciplinary discussions when designing a game including with legal professionals to already warn about the legal and ethical issues around certain of the game features.

i-Game:

 Freedom of expression: i-Game community and game co-creation platforms must be informed about what is allowed in terms of content and behaviours in the services, informed about potential restrictions and guidance on remedies against the

⁴⁴ The Danish Institute for Human Rights, 'Guidance on Human Rights Impact Assessment of Digital Activities' (2020) https://www.humanrights.dk/files/media/document/A HRIA of Digital Activities - Introduction_ENG_accessible.pdf?utm_source=chatgpt.com>.

⁴⁵ ibid.



restrictions. (More will be developed in Section 1.5 on content and behaviours moderation).

- The resource material section of the platform will contain information about games and fundamental rights considerations for games.

1.2 Children's rights

1.2.1 Introduction

Children are an important part of video games consumers/users. Indeed, 25 % of video game players are children (less than 18 years old), 70% of children aged between 6 and 10, and 83% of children aged 11-14 play video games. 46 While online games, and the digital environment in general, offer great potential for children, they also present significant risks. They can make children vulnerable to addiction, to commercial influence or exploitation and to exposure to inappropriate content. Children can be subject to harassment and cyberbullying while playing video games. This can have severe impacts on their mental health and emotional well-being. There is also a need to protect children from exposure to and involvement in Child Sexual Abuse Material (CSAM) production and mitigate the risks of grooming by potential predators. Children⁴⁷ are considered as active holders of rights in the digital environment. They deserve specific protection which has been achieved in specific cornerstone legislation, as part of sectoral legislations, as part of policy non-binding initiatives (such as guidelines, recommendations) and as part of self-regulation.

1.2.2 Fundamental legal frameworks

Protecting children's rights and ensuring their safety online has been enshrined specifically within the United Nations Convention on the Rights of the Child (UNCRC). 49 Adopted in November 1989, the Convention is mandatory for the signatory States and has a broad scope as it is the most ratified international instrument to date. All EU Member States have ratified it. The convention has also been an inspiration for many national or regional implementations of children's rights despite its direct application. Core children's rights principles include:

- the right to development,
- the right to non-discrimination,
- the best interests of the child and
- the right of the child to express his or her views.

Specific children's rights are also crucial in this gaming context such as

- the right to play and
- the right to safety (to live and develop healthily).

At the European level, both the EU and the Council of Europe (CoE) have created their own children's rights framework inspired by the UNCRC.

The Council of Europe flagship instrument is the European Convention on human rights (ECHR) which while not necessarily focusing on children, applies to them, nevertheless. Beyond the

⁴⁶ Video Games Europe, '2023 All About Video Games - European Key Facts' (n 15).

⁴⁷ According to Art. 1 of the UN Convention on the Rights of the Child, a child, means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier".

⁴⁸ Declerck and Feci (n 18).

⁴⁹ United Nations, UN Convention on the Rights of the Child (UNCRC).



European Convention on Human Rights (ECHR) and its case law, the CoE has introduced legal frameworks addressing children's economic and social rights⁵⁰, as well as protection from sexual exploitation⁵¹.

While the EU Charter of Fundamental Rights (ECFR) focuses on human rights more generally, it also includes children's rights and therefore enshrines those in the EU primary law (the EU institutional/constitutional level). The following articles of the ECFR are of particular relevance: Article 14 on the right to education, Article 24 on the rights of the child and Article 32 on the prohibition of child labour and the protection of young people at work. The child's best interests must be a primary consideration in actions taken by public authorities or private institutions. The Charter is binding on EU MS within the scope of the EU law. In addition, the protection of children's rights has also been integrated as a general objective of the EU in another primary law instrument which is the Treaty on the European Union (TEU).⁵²

1.2.3 Secondary EU legal frameworks

The EU law is based on a system of transferred competences. This allows the EU to act on behalf of all Member States to create uniform laws, ensuring consistency across the bloc. Competences may be exclusive (only the EU can legislate), shared (both the EU and Member States can act), or supportive (the EU complements national actions). The process is guided by principles like subsidiarity, ensuring the EU intervenes only when Member States cannot effectively achieve objectives alone, and proportionality, limiting EU actions to what is necessary.⁵³ Specific protection for children can also be found in **secondary EU legislations**. For instance, the General Data Protection Regulation (GDPR)⁵⁴ and the Digital Services Act (DSA)⁵⁵.

Recently, the Nordic Data Protection Authorities recently issued their Principles on Children & Online Gaming with specific guidance for data protection controllers processing children's data in gaming environments. ⁵⁶ In the gaming context, this implies an age verification system (also triggering in itself privacy challenges) ⁵⁷ and additional layers of protection of personal data for children. Specific children protection is split across the different instruments

⁵⁰ European Social Charter (Revised) 1996 (CETS).

⁵¹ Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse 2007 (CETS).

⁵² Article 3 (3) TEU, Consolidated version of the Treaty on European Union.

⁵³ See Title 1 TEU.

⁵⁴ European Commission, 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 Directive 95/46/EC (General Data Protection Regulation) 2016 [2016/679] 1.

⁵⁵ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Text with EEA relevance) 2022 (OJ L).

⁵⁶ Nordic Data Protection Authorities, 'Nordic Data Protection Authorities Principles on Children & Online Gaming' (2024)

< https://www.datatilsynet.dk/Media/638544622578121029/Principle%20on%20Children%20and%20Online%20Gaming%20june24.pdf>.

⁵⁷ Martin Sas and Jan Tobias Mühlberg, 'Trustworthy Age Assurance? A Risk-Based Evaluation of Available and Upcoming Age Assurance Technologies from a Fundamental Rights Perspective.' (The Greens/EFA in the European Parliament 2024) https://www.greens-efa.eu/files/assets/docs/age_assurance_v2.1.pdf.



impacting the gaming sector, they will be addressed in each of the following sections.

1.2.4 Self-regulation

In addition to legislation, self-regulation in gaming has a particular importance given the lack of specific hard regulation. Self-regulation refers to the industry's voluntary efforts to establish and enforce its own rules and guidelines. When it comes to children's protection, a perfect example of self-regulation is the Pan European Game Information (PEGI) initiative which provides age and content ratings and symbols. Another example is PEGI's counterpart in the US, the Entertainment Software Rating Board (ESRB). Self-regulation in gaming often covers mechanisms like age ratings, content warnings, and parental controls play. These aspects and the importance of self-regulation in the gaming sector will be further explored in Section 1.6.

1.2.5 Policy initiatives - nonbinding measures.

Moreover, international institutions have put children and gaming on their **policy** agenda, developing non-mandatory guidelines and specific initiatives on the topic.

Council of Europe

The 4th CoE's Strategy on the Rights of the Child (2022-2027) recognises the unique challenges posed by children growing up in a digital age. ⁵⁸ It identifies access to and safe use of technologies for all children as one core pillar of the strategy. The Strategy found out that many digital products are not designed with children's rights or safety in mind, leading to inadequate considerations of their needs. Children face significant risks online, including exposure to harmful content, cyberbullying, hate speech, privacy violations, misinformation, and overuse of digital platforms, which can result in isolation and various health issues. The implications of artificial intelligence (AI) for children remain poorly understood, leaving potential risks and opportunities unaddressed. Additionally, digital divide persists, particularly affecting children with disabilities, minorities, migrants, and those from low-income households. The Strategy also highlighted that children's participation in shaping digital environments is limited, with their voices often excluded from regulation, design, and innovation processes. This underscores the need for child-centred and sensitive approaches that balance protection, privacy, and active engagement in the digital world.

The CoE has also developed instruments on topics like business and human rights, internet rights, children's digital rights, and one especially on human rights in online gaming. These human rights in online gaming guidelines were developed in 2008 in collaboration with the Interactive Software Federation of Europe (ISFE) are addressed to online game providers. They "stress the importance of gamers safety and their right to privacy and freedom of expression and, in this connection, the importance for the gaming industry to be aware of the human rights impact that games can have." ⁵⁹

UNICEF

The United Nations Children's Fund (UNICEF) published in 2020 a set of recommendations for the online gaming industry, "designed to guide and support online gaming companies through a process of incorporating child rights considerations throughout

Council of Europe, 'Strategy for the Rights of the Child (2022-2027)' https://www.coe.int/en/web/children/strategy-for-the-rights-of-the-child.

⁵⁹ Council of Europe and Interactive Software Federation of Europe (n 29).



their business activities"60. In collaboration with LEGO, UNICEF worked on the "Responsible" Innovation in Technology for Children (RITEC)" project. The project consulted children worldwide⁶¹ to map "how the design of children's digital experiences affects their well-being and provides guidance on how informed design choices can promote positive well-being outcomes".62 The project has developed a RITEC Design Toolbox which provides recommendations, practical tools and tips for game designers to support children's well-being for the pre-adolescence or tweens age group (8-12 years old).⁶³ The toolbox is not a checklist as a single game cannot meet all of children's needs, for this reason the RITEC framework can/should be used in combination with other methods, approaches and guidelines.⁶⁴ The toolbox is addressed to various stakeholders active in game creation including product designers, visual effect professionals, researchers, management, and trust and safety staff. RITEC identified 11 digital play drivers which are deep interests, needs, and desires important for children. The project found that the "more the digital play experience matched specific children's personal drivers, the more positive impact it had on their well-being."65 They include for instance the desire to create, the need to explore, construct and express identities, the desire to collect, curate and classify.

The RITEC-8 Framework presents eight dimensions that can support children's well-being in games namely: 1) safety and security; 2) diversity, equity, and inclusion; 3) autonomy; 4) competence; 5) emotions; 6) relationships; 7) creativity; and8) identities. The toolkit provides for concrete recommendations on how to meet these dimensions.

⁶⁰ UNICEF, 'UNICEF Publishes Recommendations for the Online Gaming Industry on Assessing Impact on Children' (16 June 2020) https://www.unicef.org/partnerships/unicef-publishes-recommendations-online-gaming-industry-assessing-impact-children accessed 2 January 2025.

⁶¹ They worked with 787 children, focusing on those aged 8–12 years, in 18 countries (Albania, Australia, Brazil, Bulgaria, Chile, China, Cyprus, Indonesia, Iraq, Jordan, Pakistan, South Africa, Taiwan, Tanzania, Tunisia, the UK, Uruguay, the USA).

UNICEF and RITEC, 'Game Design Features & Children's Well-Being Card Deck' (2024) https://www.unicef.org/childrightsandbusiness/media/1116/file/RDT-CardsMobile.pdf.

UNICEF, 'RITEC Design Toolbox' (14 November 2024) https://www.unicef.org/childrightsandbusiness/workstreams/responsible-technology/online-gaming/ritec-design-toolbox accessed 2 January 2025.

⁶⁴ UNICEF, 'FAQs RITEC Design Toolbox' https://www.unicef.org/childrightsandbusiness/reports/ritec-design-toolbox-faqs.

⁶⁵ UNICEF and RITEC (n 62).



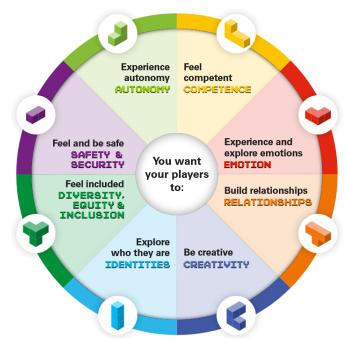


Figure 3. The RITEC-8 Framework Dimensions Visual



Autonomy

Children freely choose how to engage with digital play, and experience feelings of agency, choice and freedom while playing.



Competence

Digital play experiences contribute positively towards children's perceptions of their effectiveness, ability and skills, facilitating a sense of mastery.



Emotions

Digital play experiences allow children to experience and recognize a range of emotions, and provides opportunities to learn how to regulate them.



Relationships

Digital play experiences facilitate social connection with others and a sense of belonging.



Creativity

Digital play experiences encourage children to engage curiously and use their imagination to build, invent and experiment.



Identities

Digital play experiences provide children with opportunities to explore, construct and express facets of themselves and others.



Diversity, equity and inclusion

Digital play experiences are designed to represent diverse children and childhoods and serve the access needs of as many different children as possible.



Safety and security

Children feel safe and are kept safe while engaging in digital

Figure 4.The RITEC-8 framework's dimensions explained 66

The RITEC toolbox also has a list of game design features and how to implement recommendations into concrete game design action.

⁶⁶ Source of both images: https://www.unicef.org/innocenti/reports/responsible-innovation-technology-children



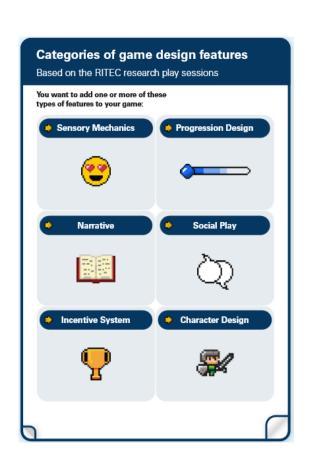




Figure 5. RITEC game design features categories and full list



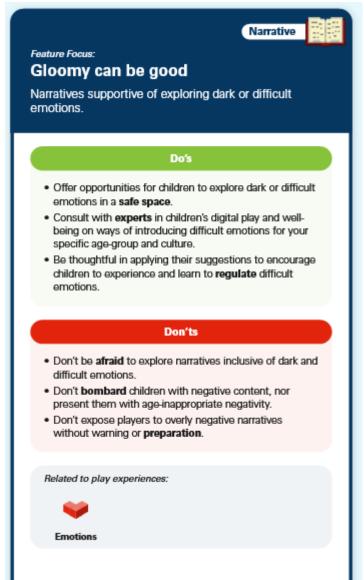


Figure 6. RITEC Example on how a specific feature can be integrated in game design

UNICEF underlined that gaming companies "have the creative freedom and potential to create diverse and inclusive worlds that can break stereotypes and norms, where adult and child players alike can feel seen, represented and safe to be themselves". They also add about the RITEC Project that complying with these design guidelines will enable better digital play products, an engaged, appreciative and trusting audience, and long-term development of brands positioning them as game leaders.

⁶⁷ UNICEF, Milka Pietikäinen and Josiane Galea Baro, 'Children's Rights and Online Gaming: Industry Toolkit on Advancing Diversity, Equity and Inclusion.' (United Nations Children's Fund (UNICEF) 2023) https://www.unicef.org/media/145601/file/%20Children's%20Rights%20and%20online%20gaming%20:%20Industry%20toolkit%20on%20advancing%20diversity,%20equity%20and%20inclusion.pdf.

⁶⁸ UNICEF, 'The Business Case for Designing for Children's Well-Being in Digital Play' (September 2024) https://www.unicef.org/childrightsandbusiness/reports/business-case-designing-childrens-well-being-digital-play.



The European Union strategy for a Better Internet for Kids

The European Strategy for a Better Internet for Kids (BIK) was adopted by the EU in 2012.⁶⁹ Already at that time, the issues around advertising and overspending in online games was underlined. While these considerations remain valid today, the digital environment has considerably evolved since then including the video games sector. A new strategy (BIK+) was thus adopted in May 2022.⁷⁰ The strategy will "ensure that children are protected, respected and empowered online in the new Digital Decade, in line with the European Digital Principles." The strategy is composed of three pillars namely:

- 1. Safe and age-appropriate digital experiences.
- 2. Digital empowerment and skills
- 3. Active digital participation

The strategy is accompanied by a "Child-friendly version" available in all EU languages.⁷¹ This version consists of a leaflet composed of 10 colourful pages with icons, visually appealing explanations with simple text.

The first pillar of the strategy mentions that the EC will be working with online platforms to create an EU code of conduct on age-appropriate design also named the "BIK Code" which will build on the new rules of the Digital Services Act (DSA). A special group the EU Code of conduct on age-appropriate design was set up to support the EC by gathering resources on age-appropriate design, drafting the Code, and creating a monitoring system with key performance indicators (KPIs) and a baseline to evaluate its implementation.⁷² Their first meeting took place in July 2023 but no code has been released so far. In the strategy, only social media platforms are listed as illustrations for online platforms, but we call policymakers not to forget the gaming sector and in particular gaming platforms as they will require specific adjustments.

Even so, as the strategy itself acknowledged that online gaming became a major online activity of children. It further indicates that "age-appropriate online gaming can support constructive educational and participatory activities online, develop digital skills and competences, and bring other societal benefits (e.g. therapy and culture)". The strategy also recognises how industry-led efforts play an important role in ensuring a safe gameplay environment to protect

⁶⁹ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, European Strategy for a Better Internet for Children 2012.

⁷⁰ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Digital Decade for children and youth: the new European strategy for a better internet for kids (BIK+) 2022 [COM/2022/212 final].

⁷¹ European Commission, 'Child-Friendly Version of European Strategy for a Better Internet for Kids (BIK+)' (21 June 2022) https://digital-strategy.ec.europa.eu/en/library/child-friendly-version-european-strategy-better-internet-kids-bik accessed 24 December 2024.

⁷² European Commission, 'Special Group on the EU Code of Conduct on Age-Appropriate Design' https://digital-strategy.ec.europa.eu/en/policies/group-age-appropriate-design accessed 24 December 2024.

⁷³ European Commission COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A Digital Decade for children and youth (n 70).



children while also promoting healthy gameplay habits.⁷⁴ Indeed, the gaming industry has been active with self-regulation especially age appropriate logos which will be presented in Section 1.7. The strategy further adds that these industry efforts should "also include a safe-by-design approach to the development of digital products and services targeting minors."⁷⁵

The strategy was accompanied with the Better Internet for Kids **Portal**⁷⁶, described as the one stop shop about online child safety. The portal contains numerous resources for different target groups (teacher, parents) research results, guides, and events.



Figure 7. Screen shot from the BIK Portal

For instance, the portal includes guides to apps used by children and teenagers. The guides use accessible language and include information on the age limit, the safety components of the app, and list relevant resources for parents. For instance, when it comes to gaming apps, the guide included Roblox, Pokémon Go, Steam, Minecraft, Fortnite, Candy Crush Saga.

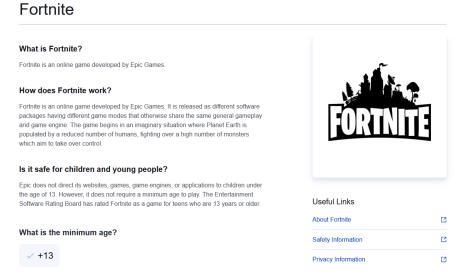


Figure 8. Image from the BIK+ Platform - Guide to Apps

Later on, the EC invited at an EP plenary stated that "Member States and the video game

⁷⁴ European Parliament, 'Verbatim Report of Proceedings - Consumer Protection in Online Video Games: A European Single Market Approach (Debate) - Tuesday, 17 January 2023' https://www.europarl.europa.eu/doceo/document/CRE-9-2023-01-17-ITM-007_EN.html accessed 24 December 2024.

⁷⁵ European Commission COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A Digital Decade for children and youth (n 70).

⁷⁶ European Commission, 'Better Internet for Kids Portal' https://better-internet-for-kids.europa.eu/en-accessed 24 December 2024.



industry to be involved in the implementation of the three pillars of the strategy."⁷⁷ BIK also released a check-list with concrete guidelines for content providers and producers to create positive online content.



Figure 9. Image from BIK+ Infographics about the Guide to positive online content⁷⁸

More recently, to celebrate the 2nd anniversary of the BIK+ strategy, the European Commission released some initiatives.

⁷⁷ European Parliament (n 74).

⁷⁸https://better-internet-for-kids.europa.eu/sites/default/files/2024-09/POCC-2019_Infographic-industry.pdf



First, an age assurance tool which is a self-assessment questionnaire for industry.⁷⁹ Age assurance enabling to determine if someone is old enough to use digital services.

Second, the BIK Policy Monitor Report for 2024 has been published.⁸⁰ The monitor (formerly the BIK Policy Map) has tracked European countries' efforts to support children's and young people's digital experiences since 2014. Its primary goal is to compare and share knowledge on policies and initiatives that enhance children's safety and well-being online in line with BIK+. Besides Finland which had a National Game Week, no other MS initiatives reported in the monitor focused so far on video games specifically in 2024.

Safety by design

There are additional initiatives from the video game sector to ensure child protection. For instance, *Seize the Controls* is a campaign launched by Video Games Europe, designed to provide tips and tools for parents, grandparents, teachers, and supervisors to ensure a safe and responsible gaming experience. ⁸¹ The website offers guidance on checking PEGI ratings to confirm games are age-appropriate, using parental controls to manage settings, and setting limits within games, such as restricting time spent playing or communication with other players. It also encourages shared gaming experiences by playing together and provides advice on how to start meaningful conversations with children about gaming habits and online safety.

Child Age-Appropriate Game Design

Child appropriate design is becoming a major topic in research discussions. UK's research investigated the design features enhancing or undermining children's digital play and provided recommendations for digital products and services used by children. The research found out that child rights-respecting design features contributed to children's enjoyment of digital play. It also advocated for more participation of children as design partners of products or services available to them which is a recurring claim found in the literature when it comes to children, safety, and game. In addition, some researchers advocate for a change of perspective in video games design, shifting from focusing solely on maximising player engagement to designing mechanisms to encourage disengagement, enabling children to leave the game easily and autonomously and which could reduce family tensions linked to play time and promote a healthier relation to games. ⁸³

The Children and Age-Appropriate Game Design (or "Child Appropriate Game Design" (CAGD) for short) is a project exploring how ideas about "age appropriateness" impact how digital

⁷⁹ European Commission, 'BIK Age Assurance Self-Assessment Tool for Digital Service Providers' https://better-internet-for-kids.europa.eu/en/news/new-launch-bik-age-assurance-self-assessment-tool-digital-service-providers accessed 24 December 2024.

⁸⁰ B O'Neill and V Dopona, 'The Better Internet for Kids (BIK) Policy Monitor Report 2024' (European Schoolnet 2024) https://better-internet-for-kids.europa.eu/sites/default/files/documents/167024/7159869/BIK%20Policy%20Monitor%20Report%202024.pdf.

⁸¹ Video Games Europe, '#SeizeTheControls' (2024) http://www.seizethecontrols.eu/ accessed 13 December 2024.

⁸² Sonia Livingstone, Kjartan Ólafsson and Kruakae Pothong, 'Digital Play on Children's Terms: A Child Rights Approach to Designing Digital Experiences' [2023] New Media & Society 14614448231196579.

⁸³ Meshaiel Alsheail, Dmitry Alexandrovskz and Kathrin Gerling, 'Designing for Disengagement: Challenges and Opportunities for Game Design to Support Children's Exit From Play' (arXiv, 27 March 2023) http://arxiv.org/abs/2303.15400 accessed 28 January 2025.



games are designed, regulated, and played.⁸⁴ The project focuses on Canada, the UK, and the US. The project will provide recommendations for the industry and policy makers on age-appropriate design with children's rights at the centre of the research.

Livingstone and Sylwander have questioned the use of fixed age limits for age-appropriate design and for regulating children's access to digital technologies. ⁸⁵ The authors consider that age is not a criteria considering children's evolving capacities and the diversity of their contexts and call for interdisciplinary research to develop fairer and more effective strategies for designing and regulating the digital environment for children.

On age-appropriate design, the UK Information Commissioner Office (ICO) Code of practice for online services on age-appropriate design, is seen as a landmark instrument. The Code, based on consultations with various stakeholders, sets 15 standards and explains how the GDPR applies in the context of children using digital services.⁸⁶ These standards range from:

- Prioritising the bests interests of the child
- Conducting a data protection impact assessment (DPIA) about children
- Ensuring data minimisation and granular consent choices
- Creating privacy friendly privacy settings
- Ensuring transparent child-friendly privacy documentation
- Providing transparency to the child about parental control features and monitoring
- Providing age-appropriate content and services
- Avoiding nudging techniques
- Having geolocalisation features switched off by default
- Restricting profiling to strict conditions and prevent using data in a detrimental way for children
- Establishing robust security measures preventing breaches and misuses

Research on the code's wording and implementation showed that "while the codes provide a solid foundation for the design of age-appropriate online spaces for children, there are still areas of uncertainty and challenges with implementing them in the context of specific interactive digital media." Franqueira et al. study concluded that some ICO criteria are not always clear and actionable, analysis of Twitch, YouTube and TikTok has shown that The promotion of in-app purchases remains an unresolved problem. They suggest adding additional steps to the DPIA including a risk mitigation step and conducting specific research on the applicability of the code to different types of services and features.

⁸⁴ CAGD, 'Child Appropriate Game Design' (Child Appropriate Game Design) https://kidsplaytech.com/">accessed 24 January 2025.

⁸⁵ Sonia Livingstone and Kim R Sylwander, 'There Is No Right Age! The Search for Age-Appropriate Ways to Support Children's Digital Lives and Rights' (2025) 19 Journal of Children and Media 6.

⁸⁶ ICO, 'Age-Appropriate Design Code: A Code of Practice for Online Services

⁸⁷ Thomas D Grace, Christie Abel and Katie Salen, 'Child-Centered Design in the Digital World: Investigating the Implications of the Age-Appropriate Design Code for Interactive Digital Media', Interaction Design and Children IDC '23 (2023).

⁸⁸ Virginia NL Franqueira, Jessica A Annor and Ozgur Kafali, 'Age Appropriate Design: Assessment of TikTok, Twitch, and YouTube Kids' (arXiv, 4 August 2022) http://arxiv.org/abs/2208.02638 accessed 28 January 2025.



Guidance

- Clearly identify game audience and design games using the relevant guidance for child appropriate design :
 - For age-appropriate design and specific design feature for instance from RITEC
 8
 - Or from positive online content from BIK+
 - Child appropriate design
- Provide key transparency information about the game for children and for the parents.

I-Game Community and Game co-creation Platform

- Clearly determine who will be using the i-Game Community and co-creation Platform and if children will be allowed in the platform. For now, it seems not to be the case.
- Provide training material, resources or key information on children's rights and protection for people using the platform to create games that will involve children as end-users/target users of their games.

1.3 Data protection & privacy

The shift from traditional one-time physical game purchase to digital forms of playing games, has had a core impact on gamer's data protection and privacy. As video games increasingly integrate online features and personal interactions, safeguarding data protection and privacy has become a critical concern, ensuring that players' personal information and digital experiences remain safe. Video game developers and publishers can now collect "a variety of data from their users and players." This data includes not only what players "like to play, but what they read online, who they play with, and what makes them spend money". Data is crucial for game companies, allowing them to analyse player behaviour and preferences to enhance products and develop targeted strategies for in-game purchases and player retention. This data collection has therefore contributed to personalised game design, experiences and data driven monetisation.

The right to data protection is a fundamental right in the EU. The data collection and personal data collection is triggering the application of data protection regulations including the general Data Protection Regulation (GDPR)⁹³ and the e-Privacy Directive⁹⁴. Privacy risks can arise from

⁸⁹ David Hoppe, 'Elements of Video Game Law' (*Gamma Law (Media-Technology-Innovation*), 5 June 2020) https://gammalaw.com/video-game-law/, https://gammalaw.com/video-game-law/> accessed 15 November 2024

⁹⁰ Joshua Foust and Joseph Jerome, 'A Guide to Reining in Data-Driven Video Game Design' (*Brookings*, 25 June 2021) https://www.brookings.edu/articles/a-guide-to-reining-in-data-driven-video-game-design-privacy/ accessed 1 July 2024.

⁹¹ Roberts and Egerton-Doyle (n 5).

⁹² Foust and Jerome (n 92).

⁹³ European Commission 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 Directive 95/46/EC (General Data Protection Regulation) (n 54).

⁹⁴ Consolidated text: Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) 2009 (OJ L) 37.



these invasive techniques, such as the behavioural tracking, geolocalisation or even data-driven manipulation.⁹⁵ Players often do not fully understand neither the reach of the tracking techniques used, nor their privacy implications. Data could be used to build psychographic profiles of players, or through microphone and camera activation, gather voice or facial expression correlated with game components.⁹⁶ The amount and the sensitivity of data collected raises concerns, especially when it comes to data security and third-party transfers. If the game involves children players, additional protection and different rules apply.

The e-privacy Directive safeguard the confidentiality of electronic communications data including data generated through in-game communication features such as voice chats, video calls, and instant messaging systems that players use while gaming. The e-privacy not only applies to standalone communication services but also to those embedded as secondary (or ancillary) features within applications, like video games.⁹⁷

The GDPR is the EU horizontal legislation on data protection, it establishes rules on how personal data of individuals within the EU is collected, processed, and stored. The regulation's territorial scope has been broadly designed to ensure a high level of protection, indeed the GDPR applies to processing of personal data of data subjects who are in the Union regardless of the controller or a processor location. The GDPR contains key data protection principles (lawfulness, purpose limitation, data minimisation, accuracy, storage limitation, accountability, integrity and confidentiality), legal basis for data processing, data subject's rights.

The GDPR provides specific protection for children acknowledging their vulnerability and the need for special safeguards. ⁹⁹ While the GDPR does not define what a child is, article 8 of the GDPR sets the age of digital consent at 16, allowing member states to lower it to 13. If the digital consent age threshold is not met, parental consent must be obtained and controllers "shall make reasonable efforts to verify in such cases that consent is given or authorised by the holder of parental responsibility over the child, taking into consideration available technology"¹⁰⁰. Additionally, data controllers own an information obligation (article 12) according to which users must receive information about personal data processing in a clear, concise, and accessible way. For children, Recital 58 specifies that the language must be simple enough for them to easily understand. The GDPR gives special protection to children in relation to marketing. Although direct marketing may be considered a legitimate interest, the best interests of the child must prevail. ¹⁰¹ The GDPR does not prohibit profiling children, if there is no decision based solely on automated processing that produces legal effects or significantly affects the child. However, the regulation provides "little clarity as to the actual implementation and impact of a number of provisions that may significantly affect children

⁹⁵ Sas, 'Protecting Gamers' Privacy in Online Games' (n 23).

⁹⁶ Foust and Jerome (n 92).

⁹⁷ ECORYS and KEA (n 6).

⁹⁸ Article 3, GDPR.

⁹⁹ Recital 38, GDPR.

¹⁰⁰ Article 8§2, GDPR.

¹⁰¹ Article 21 and recitals 38 and 47, GDPR.



and their rights, leading to legal uncertainty for data controllers, parents and children."102

Data protection is essential for game developers, publishers and also gaming platforms. They indeed collect player personal data for a number of different activities: setting up a gaming account, purchasing games, in-game behaviour, tracking and profiling of game player type, communication in the game.

Dark patterns and data protection are also closely linked especially when consent is collected. The European Data Protection Board released a set of guidelines on GDPR's interpretation about deceptive design patterns, but the guidelines are only addressed to social media platform interfaces not gaming platforms. ¹⁰³

The i-Game project will closely follow the findings of the PROGRRES research project¹⁰⁴, which establishes a privacy rating for online games, following a right-based risk evaluation system.

With the rise of free-to-play (F2P) games, acquiring, retaining, and monetising gamers personal data has become a key concern for game providers raising significant privacy risks. Game designers should provide players with clear and accessible information about data practices, this can be particularly challenging when addressing children due to the complexity of privacy information and limited literacy of both children and their parents. 105

To assist game designers, researchers conducted a review of age-appropriate privacy communication strategies recommended by data protection authorities, child protection organisations, and scientific literature, to identify best practice in privacy design.

Valerie Verdoodt, Children's Rights and Commercial Communication in the Digital Era: Towards an Empowering Regulatory Framework for Commercial Communication (Intersentia 2020) https://www.cambridge.org/core/books/childrens-rights-and-commercial-communication-in-the-digital-era/E3209083FBBF350EC16B2506D6312E54 accessed 10 August 2022.

¹⁰³ EDPB, 'Guidelines 03/2022 on Deceptive Design Patterns in Social Media Platform Interfaces: How to Recognise and Avoid Them - Version 2' (2023).

¹⁰⁴ 'Privacy Rating for Online Games - Feasibility of a Rights-Based Risk Evaluation System (PROGRRES)' (*Faculteit Rechtsgeleerdheid en Criminologische Wetenschappen*) https://www.law.kuleuven.be/citip/en/research/phdresearch/ongoing/phd-martin-sas accessed 2 July 2024.

¹⁰⁵ Sas, Denoo and Mühlberg (n 32).



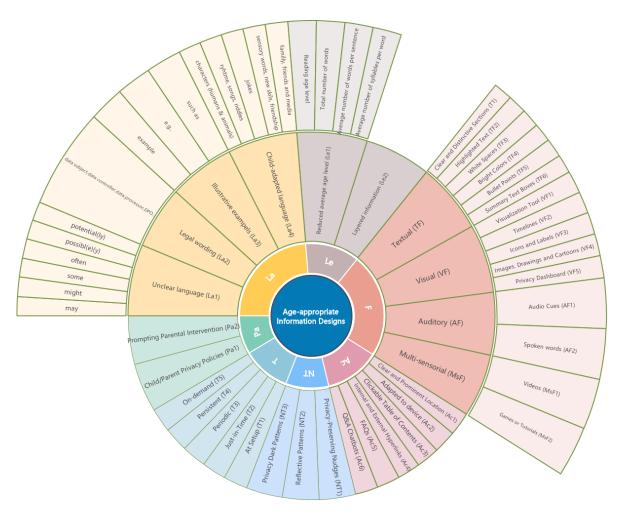


Figure 10. Visualization of the age-appropriate information design strategies from M. Sas, M. Denoo and J.T. Mühlberg research¹⁰⁶

The research identified the following best practices to convey privacy information including using child adapted language, illustrative examples, structuring the information in layers, having digestible layout with colours, symbols, bullet points, summary of the main points, including dashboard, cartoons, tutorials. The location of the privacy information also matters, it must be in a clear and prominent location, adapted to device, having hyperlinks FAQs or Q&A chatbots were also identified as positive. On the contrary, unclear language and heavy legal wording should be avoided.

Guidance

- Video game companies must establish a privacy policy and be transparent about the
 data they collect from players, the purposes of collection, any potential data transfers,
 and the process in case of a data breach.
- Follow age-appropriate information design for privacy documents.
- Provide both a formal legal version of privacy policies and a more engaging version with gamified, visually appealing elements.
- Ensure secure data storage and enable data subjects to easily exercise their rights through a layered and granular approach within the game, including the ability to opt

¹⁰⁶ ibid.



out of certain processing activities.

I-Game Community and Game co-creation Platform

- A background note on privacy and data protection was shared with i-Game partners to raise awareness, facilitate collaboration, and support discussions on the project's data management plan.
- The platform will collect personal data from its users, and a privacy policy will be drafted. This policy will aim to incorporate age-appropriate design elements, as some best practices are relevant regardless of the audience's age.
- Developers creating games through the i-Game platform may design games that process users' personal data, including data from children. Special attention will be given in the training materials to the involvement of children and the legal implications from a privacy perspective.

1.4 Consumer protection

Video game users are digital consumers whose rights need protection. The goal is to ensure game consumers have safe interaction with games, devices, and platforms. Given the growing popularity of video games among individuals under 18, safeguarding minors is also an essential component of consumer protection. Indeed, while adults are considered as normal consumers, children and teenagers are considered as vulnerable consumers and deserve specific protection. Numerous consumer protection considerations arise in the realm of gaming, such as unfair commercial practices, exposure to gambling, and economic exploitation. This deliverable supports the following quote: "the protection of consumer rights in video games is viewed as mutually beneficial to both the game producers and the consumers, for it ensures a healthy market environment." 110

1.4.1 Consumer rights

The Consumer Rights Directive (CRD)¹¹¹ is a key component of EU consumer protection, harmonising rules on information requirements and withdrawal rights across member states. Game developers, as traders, must provide consumers with essential details, such as product characteristics, pricing, system requirements, and warranty terms, before forming a digital content contract.¹¹² Consumers generally have a 14-day right of withdrawal, allowing them to cancel purchases without reason, although this depends on the contract's classification.

¹⁰⁷ ECORYS and KEA (n 6).

Article 5 (3) UCPD. Commission Notice – Guidance on the interpretation and application of Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market (Text with EEA relevance) 2021 [C/2021/9320] 1.

¹⁰⁹ Sas, 'Protecting Gamers' Privacy in Online Games' (n 23).

¹¹⁰ ECORYS and KEA (n 6).

¹¹¹ Consolidated text: Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (Text with EEA relevance)Text with EEA relevance 2022. ibid.

¹¹² ECORYS and KEA (n 6).



Contracts for downloadable games typically qualify as digital content, while online games in a cloud environment are considered digital services. ¹¹³ In-game purchases often fall under digital content contracts, but premium features expanding the online environment may qualify as new digital services. ¹¹⁴

1.4.2 Game revenue streams

Traditional **one-time purchase** is not anymore the only way to play video games. A substantial part of video games are now **free-to-play**. Therefore, "while the game designers do not charge the player to join the game, it is designed to bring in revenue from advertisements or in-game sales."¹¹⁵

Mobile video games often use **in-game advertising (IGA)** as a revenue source, especially in freemium and free-to-play models without in-app purchases. This approach is common for games designed for phones or tablets. While some of the IGA can be 'static' (permanent fixtures) others can be 'dynamic' meaning they change based upon player behaviours. Tracking tools, like cookies and location data are used to deliver targeted ads. To be considered lawful, these practices must comply with the applicable privacy laws, making developers, publishers, and their legal teams responsible for adherence to regulations. Section 1.3) The extensive data collection discussed in the section above can also lead to hyper-personalization raising consumer protection.

The **in-game purchases** can enable access to some game areas, upgrade characters abilities, outlooks, get some rewards or buy tools. Microtransactions seem like extremely profitable features for gaming companies and in game monetisation schemes are getting more sophisticated. Games can involve real money, but also virtual currencies, which can trick players into spending more and losing sight of the actual financial costs of in-game purchases. In-game currencies today fall into two categories: those used exclusively within the game and those that can be exchanged for real-world money. The latter also known as "premium" in-game currency, bought with real money via credit cards or other methods, is a common monetisation tool in freemium games for purchasing resources or cosmetic items. Its popularity has led to the rise of online exchanges where users can trade currencies from different games, similar to real-world currency exchanges.

With the development of in-game purchases, it seems gaming and **gambling** are becoming increasingly blurred especially through the presence of loot boxes, social casino games or "skin betting." "**Social casino games**" also known as "virtual casino games" are "a subgenre of social

¹¹³ ibid.

¹¹⁴ ibid.

¹¹⁵ Willing (n 4).

¹¹⁶ Hoppe (n 91).

¹¹⁷ ibid.

¹¹⁸ Willing (n 4).

¹¹⁹ ECORYS and KEA (n 6).

¹²⁰ Foust and Jerome (n 92).

¹²¹ Like the coins collected in Super Mario. These currencies remain in the game and can be used to purchase ingame items, they cannot be converted into real currencies.

¹²² Hoppe (n 91).

¹²³ ibid.



gaming which allow players to play casino style social games based on real money versions of the games (e.g. playing with cards or dice, or slot machines)". 124 Skin **betting/gambling** are ingame items which provide "cosmetic alterations to a player's weapons, avatar or equipment used in the game and are valued by reference to their rarity, aesthetics, utility and popularity". 125 These items can be won in bets.

The collective term "**loot boxes**" refers to "one or more game elements incorporated into a video game, in which the player acquires game items in a seemingly random manner, which may or may not involve a cost. These items can be very diverse in nature, ranging from characters or objects to emotions or special characteristics."¹²⁶ Aware of the potential danger of this monetisation technique, the European Parliament (EP) released a report exposing loot boxes' behavioural effects and risks. The report argues that lootboxes shouldn't only be addressed from gambling regulation but also consumer protection to better address problematic practices and minimise harms.¹²⁷ Especially, since research showed that while many regulations are applicable to gambling and gaming, the landscape is fragmented, some of the frameworks overlap complicating their implementation in practice.¹²⁸ In the UK, the charity GambleAware expressed high concerns about the normalisation of gambling-like activities for children through games and lootboxes, their research showed that children reported themselves having their online space saturated with content blurring the line between gaming and gambling.¹²⁹ This exposure at an early age, can lead to an increased risk of experiencing gambling harm later in life.¹³⁰

The UCPD¹³¹ aims to prevent unfair commercial practice and in 2021 the EC released a guidance on the interpretation and application of the UCPD with a specific section focusing on gaming.¹³² The guidance underlined the concerns related: to vulnerable consumers namely children and teenagers, gaming content with gambling elements.

Research showed that "children are less likely to notice and understand the commercial intent of advertisements in games, as compared to more direct advertisements on television." The

¹²⁴ Declerck and Feci (n 18).

¹²⁵ UK Gambling Commission, 'Virtual Currencies, eSports and Social Casino Gaming – Position Paper' (2017) https://www.gamblingcommission.gov.uk/about-us/page/virtual-currencies-esports-and-social-gaming-discussion-paper.

Gaming Commission, 'What Are Loot Boxes?' https://gamingcommission.be/en/gamingcommission.be/en/gamingcommission/fag/fags-on-new-developments/what-are-loot-boxes accessed 1 July 2024.

¹²⁷ Annette Cerulli-Hamrs and others, 'Loot Boxes in Online Games and Their Effect on Consumers, in Particular Young Consumers' (European Parliament's Committee on Internal Market and Consumer Protection 2020) https://www.europarl.europa.eu/RegData/etudes/STUD/2020/652727/IPOL_STU(2020)652727_EN.pdf.

¹²⁸ Declerck and Feci (n 18).

Tom Gerken, 'Top-Selling Mobile Games Breaking Rules on Loot Boxes' (29 November 2024) https://www.bbc.com/news/articles/c748ww9y9nno accessed 28 January 2025.

¹³¹ Consolidated text: Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (Text with EEA relevance)Text with EEA relevance.

¹³² Commission Notice – Guidance on the interpretation and application of Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market (Text with EEA relevance) (n 98).

¹³³ Francisco Lupiáñez-Villanueva and others, 'Study on the Impact of Marketing through Social Media, Online



UCPD prohibits to pressure children to buy products or persuade adults to make purchases on their behalf.¹³⁴

In-game promotions and advertisements must clearly distinguish commercial elements from gameplay to avoid being misleading and transparency about these purchases must be provided (characteristics, conversion in real currency), both to avoid misleading practices. Game companies also started to think about game monetisation, and an indie game studio started the Ethical Game Monetisation Initiative. Their game therefore stem away from harmful monetisation practices and comply with the following rules:

- No pre ordering options
- No in-game advertisements, no microtransaction advertising pop-ups
- No micro transactions affecting gameplay
- All game currencies can be obtained exclusively by gameplay
- No Non-Fungible Token (NFT) integration as it create artificial scarcity and there are no clear proof that it benefits players
- No real-money auction house

The research of E. Petrovskaya also delivered ethical guidelines for the gaming sector on microtransactions. Summarising her work, C. Hodent et al. reported that Petrovskaya recommends the following: "Players should have the autonomy to decide whether to engage in a microtransaction without fear that not doing so will impede their game progress. They should receive value for their purchase, and what they will receive should be transparent. Finally, developers should refrain from using player data to target microtransactions or profile players inclined toward purchasing them." 138

1.4.3 Dark Patterns

The use of personalised persuasive techniques to manipulate players into increased engagement and spending, often through "dark patterns," is becoming more prevalent in F2 play games.¹³⁹ Dark patterns can be described as "tricks used in websites and apps that make you do things that you didn't mean to, like buying or signing up for something".¹⁴⁰ Questions

Games and Mobile Applications on Children's Behaviour' (Study for the European Commission 2016) Final Report https://commission.europa.eu/publications/study-impact-marketing-through-social-media-online-games-and-mobile-applications-childrens-behaviour en>.

¹³⁴ Point N°28 in Annex I of the UCPD.

Articles 6 & 7 UCPD and their interpretation in Commission Notice – Guidance on the interpretation and application of Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market (Text with EEA relevance) (n 98).

¹³⁶SmithAndCherryApps, 'Ethical Game Monetization Initiative (EGMI)' https://www.smithandcherryapps.com/egmi accessed 24 January 2025.

¹³⁷ Elena Petrovskaya, 'Ask the Players! Player-Centric Principles as Guidelines for Ethical Microtransactions' (2024) 2 ACM Games 18:1.

¹³⁸ Celia Hodent, Fran Blumberg and Sebastian Deterding, 'Ethical Games: Toward Evidence-Based Guidance for Safeguarding Players and Developers' (2024) 2 ACM Games 7:1.

¹³⁹ Martin Sas, 'Unleashing Generative Non-Player Characters in Video Games: An Al Act Perspective', Proceedings of the 2024 IEEE Gaming, Entertainment, and Media Conference (GEM); (2024) https://kuleuven.limo.libis.be/discovery/fulldisplay/lirias4158392/32KUL_KUL:Lirias accessed 1 July 2024. ibid.

¹⁴⁰ Harry Brignull, Deceptive Patterns: Exposing the Tricks Tech Companies Use to Control You (Testimonium Ltd



arise about the taxonomy of dark patterns, e.g. whether the concept focuses on user interface design or includes system design. ¹⁴¹ Dark patterns are crafted to exploit user vulnerabilities, such as cognitive biases, nudging players into making choices they would not typically consider, often for profit-making purposes. ¹⁴² It is important to underline that Dark patterns present both data protection and consumer protection considerations and challenges. It is therefore of ultimate importance that the respective authorities for overseeing these sectoral pieces of legislation collaborate together to avoid loopholes or conflicting approaches to address dark patterns.

When it comes to gaming and dark patterns, the following elements are of interest: loot boxes, grinding & dynamic adjustment of the game difficulty level of the game. Grinding in gaming is "the act of repeating an activity over and over to increase rewards or the possibility of rewards. These rewards can be anything from a rare drop to a constant influx of experiences and anything in between." The initiative Dark Pattern Games, maps mobile games presenting dark patterns into four categories: (1) temporal dark patterns, (2) monetary dark patterns, (3) social dark patterns, (4) psychological dark patterns.

In the EU, dark patterns are covered by a patchwork of different legal frameworks: the Unfair Commercial Practices Directive¹⁴⁴, the GDPR, the DSA, the Digital Markets Act (DMA)¹⁴⁵ and, to some extent, the AI Act¹⁴⁶.¹⁴⁷ This latest piece of legislation will prohibit manipulative AI practices. It remains to be explored if and which dark patterns fall under this category. There is currently a call from the European Parliament to reassess the European Commission's classifications of dark patterns, as current legislation may overlook certain addictive design elements, particularly those used in video games.¹⁴⁸ Stronger safeguards are needed against abuses by these manipulative practices.

The Unfair Commercial Practices Directive (UCPD) can be helpful for fighting:

¹⁴¹ Yi, 'Gaming the Mind: Unmasking "dark Patterns" in Video Games' (*Internet Policy Review*, 6 February 2024) https://policyreview.info/articles/news/unmasking-dark-patterns-video-games/1739 accessed 1 July 2024.

¹⁴² ibid.

^{2023).}

Plarium, 'What Are Grinding Games?' (plarium.com, 31 January 2024) https://plarium.com/en/glossary/grinding-games/ accessed 1 July 2024.

¹⁴⁴ Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (Unfair Commercial Practices Directive) (Text with EEA relevance)Text with EEA relevance 2022.

¹⁴⁵ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance) 2022 (OJ L).

¹⁴⁶ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act)Text with EEA relevance. 2024.

¹⁴⁷ Inge Graef, 'The EU Regulatory Patchwork for Dark Patterns: An Illustration of an Inframarginal Revolution in European Law?' (3 April 2023) https://papers.ssrn.com/abstract=4411537> accessed 1 July 2024.

¹⁴⁸ Committee on the Internal Market and Consumer Protection, 'Draft Report on Addictive Design of Online Services and Consumer Protection in the EU Single Market' (European Parliament 2023) https://www.europarl.europa.eu/doceo/document/IMCO-PR-750069_EN.pdf>.



- Aggressive Practices: certain in-game tactics, like microtransactions during critical moments, manipulative ads, or targeting vulnerabilities, may constitute aggressive or exploitative practices under UCPD.
- **Hidden Marketing**: in-game advertisements and promotions must be clearly distinguishable from gameplay to avoid misleading consumers.
- Misleading 'Free' Labels: games with required in-app purchases cannot be marketed
 as "free." Only games where in-app purchases are genuinely optional can use the
 "free" label, assessed case by case.

Recent EU policy and legal initiatives on gaming and consumer protection.

Video games are on the radar of EU policymakers. Several initiatives were released the past years and focused on video games.

In May 2022, the European Commission initiated a fitness check (also known as RETIFT) to evaluate whether existing EU consumer laws (like the CRD and UCPD) are adequate for addressing fairness in the digital environment. Topics of the fitness check included loot boxes, in-game currencies, digital addiction, and dark patterns. In November 2022, the European Parliament released a resolution on e-sport and video games. The resolution calls for support to the European video games sector, with training, research and funding opportunities, calls for better transparency on loot boxes, to consider legislative measures about in-game monetisation such as "luck-based game elements and 'pay-to-win' systems, taking into account all possible means to protect players that are most vulnerable to aggressive designs, such as minors". The constant of th

In January 2023, the European Parliament released a report entitled: "Consumer Protection in Online Video Games – A European Single Market Approach". The report called: for a unified EU regulatory framework for online video games to ensure consistent consumer protection across Member States, particularly for minors, for clear policies on in-game purchases and refunds, for considering measures like default disabling or banning paid loot boxes to protect minors and prevent market fragmentation.

In response, the European Commission reminded about the importance of proper enforcement of existing consumer laws (CRD, UCPD), which already address many issues in video games. The EC also highlighted the role of the Consumer Protection Cooperation Network in resolving issues like ensuring app stores provide upfront information about ingame purchases and their costs and avoiding misleading "free-to-play" labels.

1.4.4 Product safety

The consumer protection framework for video game users in the EU is supported by various product safety regulations. Free movement of goods is a complex area of regulation and is

¹⁴⁹ European Commission, 'Digital Fairness – Fitness Check on EU Consumer Law' (*European Commission - Have your say,* 14 June 2022) https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13413-Digital-fairness-fitness-check-on-EU-consumer-law_en accessed 24 December 2024.

¹⁵⁰ European Parliament, Resolution of 10 November 2022 on esports and video games (2022/2027(INI) 2022. ¹⁵¹ ibid

¹⁵² European Parliament resolution of 18 January 2023 on consumer protection in online video games: a European single market approach (2022/2014(INI)) 2023.



one of the pillars of the EU single market. This section will only brush a selection of what is relevant for video games. To facilitate compliance, the European Commission delivered a Blue Guide on the implementation of EU product rules. However, it is only valid for legislation up until 2022 and since then, a key legislation was adopted (see sections below), a revised version might be adopted later on.

The **New Legislative Framework (NLF)** ensures product safety through market surveillance, conformity assessments. The NLF for product safety was initially composed of Regulation (EC) No 765/2008¹⁵⁴ and Decision No 768/2008/EC¹⁵⁵ both establishing the framework for safety and compliance of industrial products. Since then, the Regulation was amended several times including by Regulation (EU) 2019/1020 which improves and modernises market surveillance, A consolidated version 2019/2020 is available in EUR-Lex. ¹⁵⁶ The NLF focuses on "essential or other legal requirements, product standards, standards and rules for the competence of conformity assessment bodies as well as for accreditation, standards for quality management, conformity assessment procedures, CE marking, accreditation policy, and lately market surveillance policy including the control of products from third countries." ¹⁵⁷

Directives like the **Radio Equipment Directive (RED)** regulates the safety and electromagnetic interference of radio equipment such as Wi-Fi, RFID, and Bluetooth devices including the video games consoles.

The **General Product Safety Directive (GPSD)**¹⁵⁸ address risks not covered by specific regulations.

These legislations apply to video games especially both hardware and software but also to augmented reality (AR), virtual reality (VR), XR (extended reality) of video games components. These new immersive technologies will impact the future of gaming and safety online. In the GPSD uncertainties remained about the applicability of GPSD to standalone software or embedded software's. In addition, and in light of technological progresses including AI, connected devices and online marketplace, the Directive needed to be updated and amended. The General Product Safety Regulation (GPSR) has repealed the GPS Directive in May 2023. The shift towards a Regulation as legislative instrument will

 $^{^{153}}$ European Commission, Commission notice The 'Blue Guide' on the implementation of EU product rules 2022 (Text with EEA relevance) 2022 [2022/C 247/01].

¹⁵⁴ Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (Text with EEA relevance) 2008 (OJ L) 30.

¹⁵⁵ Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC (Text with EEA relevance) 2008 (OJ L 218) 82.

¹⁵⁶ Consolidated text: Regulation (EU) 2019/1020 of the European Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products and amending Directive 2004/42/EC and Regulations (EC) No 765/2008 and (EU) No 305/2011 (Text with EEA relevance)Text with EEA relevance 2024.

¹⁵⁷ European Commission notice The 'Blue Guide' on the implementation of EU product rules 2022 (Text with EEA relevance) (n 137).

¹⁵⁸ Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety (Text with EEA relevance) 2002 [2001/95/EC].

¹⁵⁹ ECORYS and KEA (n 6).

 $^{^{160}}$ Regulation (EU) 2023/988 of the European Parliament and of the Council of 10 May 2023 on general product



ensure a consistent harmonisation across Europe, regulations being directly applicable across all EU MS as from December 2024.

GPSR will ensure the health and safety of EU consumers. A safe product is defined as any product which, under normal or reasonably foreseeable conditions of use, including the actual duration of use, does not present any risk or only the minimum risks compatible with the product's use, considered acceptable and consistent with a high level of protection of the health and safety of consumers". ¹⁶¹ Economic operators are responsible for ensuring products are safe, conducting risk analyses, and maintaining technical documentation before market release. For instance, products must include identifying information to ensure traceability. The GSPR sets specific obligations for distinct economic operators including manufacturers, authorised representatives, importers, distributors.

If a product is found to be dangerous, operators must take corrective actions, notify authorities via the Safety Business Gateway, and cooperate in addressing the issue. Online marketplaces must register with Safety Gate, appoint a contact point, and implement internal safety processes. The Regulation introduces Safety Gate, a system with three components: a rapid alert system for dangerous products (Safety Gate Rapid Alert System), a public web portal for complaints and information (Safety Gate Portal), and a business gateway for compliance and reporting obligations. ¹⁶²

For video games, the GPSR brings important clarifications including the inclusion of software (both embedded and as standalone) in the scope meaning that "all video games devices such as consoles, as well as VR headset and video game software (including games themselves) are all now potentially within the scope of the Regulation and are required to meet the above mentioned product safety requirements". ¹⁶³

1.4.5 Cybersecurity of products and services

When it comes to **cybersecurity**, the protection of consumers has been ensured by the introduction of common cybersecurity rules for digital products and ancillary services in the **Cyber Resilience Act (CRA**). ¹⁶⁴ The CRA is an EU Regulation, which entered into force on December 2024, that protects consumers and businesses buying software or hardware products with a digital component. ¹⁶⁵ Cybersecurity risks of a product are often less visible than normal product safety components. Therefore, a new EU instrument was needed to fill these gaps and ensure due care to this dimension in products circulating in the EU internal market. The requirements imposed by CRA to economic operators will help consumers to take cybersecurity into account when selecting a product. ¹⁶⁶ The regulation establishes

safety, amending Regulation (EU) No 1025/2012 of the European Parliament and of the Council and Directive (EU) 2020/1828 of the European Parliament and the Council, and repealing Directive 2001/95/EC of the European Parliament and of the Council Directive 87/357/EEC (Text with EEA relevance) 2023 1.

¹⁶¹ Article 3 (2) GPSR.

¹⁶² Chapter VI GPSR – Articles 25 to 27.

¹⁶³ ECORYS and KEA (n 6).

¹⁶⁴ Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) No 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act) (Text with EEA relevance) 2024.

¹⁶⁵ Article 1 CRA.

¹⁶⁶ European Commission, 'Cyber Resilience Act' (*Shaping Europe's digital future*, 10 December 2024) https://digital-strategy.ec.europa.eu/en/policies/cyber-resilience-act accessed 2 January 2025.



requirements which cover the entire product lifecycle, from design and development to maintenance. In addition, certain critical products must undergo third-party assessments before being sold in the EU. The CRA applies to all products connected to devices or networks, except for specific exclusions like certain open-source software¹⁶⁷ or products already regulated (e.g., medical devices, aviation, cars)¹⁶⁸. Products meeting CRA standards will bear the CE marking. CE marking is a well-known symbol signifying that the product manufacturer declares that the product meets all the legal requirements for CE marking and can be sold throughout the EEA, and therefore by compliance meets high safety, health, and environmental protection requirements.¹⁶⁹

Cybersecurity is a significant concern for the video game industry, as it faces challenges similar to those in many other sectors.¹⁷⁰ Recent incidents have underscored the vulnerabilities within the gaming landscape, "while some of these attacks aimed to overload and crash the gaming servers through a DDoS (denial of service attack)¹⁷¹, and some targeted company secrets and IP, many specifically targeted each company's player base".¹⁷² In 2024, the gaming sector experienced an unprecedented level of bot activity which seemed to coincide with major gaming sales events but also an increase in web attacks against games.¹⁷³

These cyberattacks highlight the need for robust cybersecurity measures to protect both video gaming companies and their players. Especially since the gaming community seems to face security risks because of its culture of sharing and collaboration which does not always align well with strict cybersecurity practices.¹⁷⁴ For example, activities like modding (customising games) and botting (using automated tools), which make games more enjoyable, can also be used by hackers to launch attacks.¹⁷⁵

1.4.6 Product liability

The EU Product Liability Directive (PLD) dates back from 1985 but has been one of the cornerstones of the EU product safety framework. 176 It established a "system of strict liability,

¹⁶⁷ Article 24- 25 CRA.

¹⁶⁸ Recitals, 27, 28 and Article 2 CRA.

¹⁶⁹ European Commission, 'CE Marking' https://single-market-economy.ec.europa.eu/single-market/ce-marking_en accessed 2 January 2025.

¹⁷⁰ ECORYS and KEA (n 6).

¹⁷¹ "A DDoS (Distributed Denial of Service) attack consists of overloading a server by sending it a very large number of requests for pages. The server cannot cope with this high demand, making the website or email traffic unavailable for some time, until the attack ceases or is stopped." Source: Centre for Cyber security Belgium, 'DDOS Attacks Continue to Cause Inconvenience' (*Centre for Cyber security Belgium*, 11 October 2024) https://ccb.belgium.be/en/news/ddos-attacks-continue-cause-inconvenience accessed 2 January 2025.

ESET, '11 of the Biggest Gaming Data Breaches in 2022' (*ESET*, 20 July 2022) ESET, '11 of the Biggest Gaming Data Breaches in 2022' (*ESET*, 20 July 2022) ESET, '11 of the Biggest Gaming Data Breaches in 2022' (*ESET*, 20 July 2022) ESET, 20 July 2022) ESET, 20 July 2022)

¹⁷³ Tricia Howard, 'Take Cover: Securing Games Truly Is a Battle Royale' (*Akamai*, 31 July 2024) https://www.akamai.com/blog/security-research/2024-games-security-trends-is-a-battle-royale accessed 2 January 2025.

¹⁷⁴ ibid.

Shannon Williams, 'Cyber Threats Surge in Gaming Industry through 2024' (SecurityBrief UK) https://securitybrief.co.uk/story/cyber-threats-surge-in-gaming-industry-through-2024 accessed 2 January 2025.

 $^{^{176}}$ Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative



i.e. liability without fault, for producers when a defective product causes physical or material damage to an injured person. The producer is liable for damage caused by a defect in his/her product provided that the injured person proves the damage, the defect and the causal relationship between defect and damage."¹⁷⁷ Interestingly, the Directive's regime did not repeal the national product liability legislations, therefore it added to the existing national rules on liability. The victim could choose the grounds on which to file the action.

However, a lot has changed since then and in a view to remove divergences between the legal systems of Member States that may distort competition and affect the movement of goods within the internal market, a new Directive has been proposed by the European Commission and has now been adopted. The new Directive now indicates that Member States shall not maintain or introduce, in their national law, provisions diverging from the Directive unless provided so. Directive 2024/2853 also aims to ensure that the rules are fit to address digitalera challenges. The Directive "expands the definition of "product" to include software, AI, and digital services, as well as imposing compliance on economic operators such as fulfilment service providers and distributors of defective products. It means that not only developers but also distributors and platforms hosting video games could face liability for defective products.

The extension to software¹⁸¹ has sparked concerns for video games representation associations. They opposed a generalised inclusion of standalone software in the definition of 'product' as reducing a video game to 'software' which would not reflect the complex nature of video games as ruled by the CJEU (see supra).¹⁸² They argued that setting horizontal broad liability rules for very different kinds of products that can be deployed in multiple scenarios and for a wide range of use does not reflect the various degree of risks that these uses can trigger, ultimately imposing a disproportionate burden on the gaming sector.¹⁸³ They had asked that complex works which are composed both of software and other copyrighted material, such as video games, are not considered as products within the meaning of the Directive.

In addition, the Directive now extends liability into integrated or interconnected digital services critical to a product's functionality. The Directive holds platforms accountable when they assume roles "beyond mere intermediation – such as manufacturer, importer, authorized

provisions of the Member States concerning liability for defective products 1985 29.

¹⁷⁷ European Commission notice The 'Blue Guide' on the implementation of EU product rules 2022 (Text with EEA relevance) (n 137).

¹⁷⁸ Directive (EU) 2024/2853 of the European Parliament and of the Council of 23 October 2024 on liability for defective products and repealing Council Directive 85/374/EEC (Text with EEA relevance) 2024.

¹⁷⁹ Article 3, Directive 2024/2853.

¹⁸⁰ Massimiliano Masnada, Ambra Paciti and Cecilia Canova, 'EU Introduces Comprehensive Digital-Era Product Liability Directive' (*Hogan Lovells*, 22 November 2024) https://www.hoganlovells.com/en/publications/eu-introduces-comprehensive-digitalera-product-liability-directive accessed 13 January 2025.

¹⁸¹ Article 4, (1) and Recital 6, Directive 2024/2853.

¹⁸² Video Games Europe and European Games Developer Federation, 'Video Games Europe & EGDF Observations on the Proposal to Review the Product Liability Directive (2022/0302(COD))' https://www.videogameseurope.eu/wp-content/uploads/2023/10/Product-Liability-Directive-Proposal-VGE-EGDF-position-paper-22.03.23.pdf.

¹⁸³ ibid.



representative, fulfilment service provider, or distributor of a defective product."¹⁸⁴ If the platform is being used for a mere intermediary then the Digital Services Act (DSA) (see Section 1.5) governs it. For video games, this means that gaming online platforms, multiplayer services, and downloadable content, face potential increasing liability.

Legal overlaps with the AI Act, as well as existing cybersecurity and data protection regulations will be key to research and monitor. Further research on the topic is needed to ensure that the EU legal framework is well connected avoiding gaps and conflicts.

Guidance

- Consumer Transparency
 - Provide Clear Information: Ensure consumers have clear details about product characteristics, costs, system requirements, and refund policies before purchase.
- If there are in-Game Purchases:
 - Clearly explain the costs, characteristics, and implications of in-game purchases, including the use of virtual and premium currencies.
- No Misleading or Manipulative practices:
 - No hidden costs: Avoid labelling games with required in-app purchases as "free." Only genuinely optional purchases can justify such labelling.
 - Distinguish Ads: Separate commercial elements from gameplay to prevent misleading players, especially children.
 - Avoid aggressive tactics like exploitative microtransactions or dark patterns to nudge players into spending.
 - Avoid manipulative design practices that exploit cognitive biases or create addiction.
 - Do not blur gaming and gambling lines through loot boxes, "pay-to-win" mechanics, or skin betting.

I-Game Community and Game co-creation Platform

- I-Game will set clearly in their terms and conditions what can users expect from the platform in clear and simple terms.
- The Platform will contain training material and resources raising awareness about the consumer protection considerations of games.

1.5 Content and behaviours moderation

Video games now offer online multiplayer modes¹⁸⁵, games community spaces and virtual marketplaces, enabling players to interact, communicate, and trade in real time. However, these interactions raise significant challenges in moderating content and behaviours. Game players can be exposed to a number of safety risks while playing. It can include exposure to harmful or illegal content, cyberbullying or harassment or other cyber-attacks, such as

¹⁸⁴ Masnada, Paciti and Canova (n 182).

¹⁸⁵ Popular Multiplayer Game include World of Warcraft, Minecraft, Fortnite, League of Legends.



doxxing¹⁸⁶ grooming¹⁸⁷, stalking¹⁸⁸, ransomware.¹⁸⁹

Now gaming platforms serve as online places enabling players to access, purchase, and play video games. Additionally, live-streaming platforms like Twitch and international gaming competitions (e-sports) have popularised watching others play, drawing audiences in the millions. 190

All of these evolutions of the gaming sector are triggering questions around the liability and accountability of the gaming sector. Questions particularly relevant for the i-Game project since it moves towards the creation of community and co-creation platforms where teams could meet collaborators and design together games through a co-creation process.

1.5.1 Lex Generalis - the DSA and Gaming providers?

The EU regulatory framework on content moderation is increasingly complex and has been tailored by platform type, content nature, and legal instruments (hard law, soft law, or self-regulation). ¹⁹¹ It includes horizontal rules (e.g., the e-Commerce Directive and Digital Services Act) applicable to intermediary services providers and specific rules like the AVMSD for ondemand and Video-Sharing Platforms. This baseline framework is supplemented by targeted "lex specialis" ¹⁹² for illegal (e.g., terrorism, child abuse sexual material, hate speech) and harmful content (disinformation).

¹⁸⁶ Kidas, 'Toxic Gaming Behavior: Doxxing' (*Kidas*, 30 April 2021) https://getkidas.com/toxic-gaming-behavior-doxxing/ accessed 22 November 2024.

Megan, 'Gaming and Grooming: How Minecraft and Fortnite Could Be Dangerous' (*The Innocent Lives Foundation*, 14 February 2019) https://www.innocentlivesfoundation.org/gaming-and-grooming-how-minecraft-and-fortnite-could-be-dangerous accessed 22 November 2024.

¹⁸⁸ Safety Net Project, 'Online Gaming: Survivor Privacy Risks & Strategies' (*Safety Net Project*, 2017) https://www.techsafety.org/onlinegaming> accessed 22 November 2024.

¹⁸⁹ Sas, 'Protecting Gamers' Privacy in Online Games' (n 23).

¹⁹⁰ Mariana Olaizola Rosenblat, 'Gaming The System: How Extremists Exploit Gaming Sites And What Can Be Done To Counter Them' (*NYU Stern Center for Business & Human Rights*, 21 October 2024) https://bhr.stern.nyu.edu/publication/gaming-the-system-how-extremists-exploit-gaming-sites-and-what-can-be-done-to-counter-them/ accessed 22 November 2024.

¹⁹¹ Noémie Krack, Lidia Dutkiewicz and Emine Ozge Yildirim, 'Al4Media D6.2 Report on Policy for Content Moderation' (2023) https://www.ai4media.eu/reports/report-on-policy-for-content-moderation-d6-2/.

¹⁹² In case of conflict of laws of equal importance, the lex specialis shall be the one applicable as the most close to the subject regulated. Anja Lindroos, 'Addressing Norm Conflicts in a Fragmented Legal System: The Doctrine of Lex Specialis' (2005) 74 Nordic Journal of International Law 27.



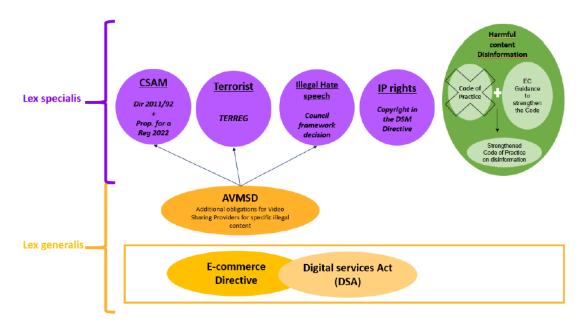


Figure 11. Overview of the EU content moderation landscape¹⁹³

The DSA was adopted to strive towards a <u>safer</u> online environment. The regulation, which fully entered into force in February 2024, is the new regulatory cornerstone for intermediary services providers, including platforms. The DSA revises and complements the e-commerce Directive from 2000. The DSA upholds and refines the liability exception regime for intermediary services providers, complements it with a set of asymmetric due diligence obligations increasing accountability for digital players, and sets up a whole new enforcement institutional structure.

Personal scope - different type of providers with different due diligence obligations

The DSA, being an asymmetric regulation, creates several layers of due diligence obligations for the different providers targeted by the regulation namely intermediary services¹⁹⁴, hosting

lmage from the Al4Media D6.2 Report on Policy for Content Moderation' adapting and updating the figure designed in Directorate-General for Internal Policies of the Union (European Parliament) and others, Online Platforms' Moderation of Illegal Content Online: Laws, Practices and Options for Reform (Publications Office of the European Union 2020), https://www.ai4media.eu/reports/report-on-policy-for-content-moderation-d6-2/. Article 3 (g) DSA: « intermediary service' means one of the following information society services:(i)a 'mere conduit' service, consisting of the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network; (ii)a 'caching' service, consisting of the transmission in a communication network of information provided by a recipient of the service, involving the automatic, intermediate and temporary storage of that information, performed for the sole purpose of making more efficient the information's onward transmission to other recipients upon their request. (iii) a 'hosting' service, consisting of the storage of information provided by, and at the request of, a recipient of the service.



services¹⁹⁵, online platforms¹⁹⁶, and Very Large Online Platforms (VLOPs)¹⁹⁷ and Very Large Online Search Engines (VLOSEs)¹⁹⁸. The obligations based on the provider's categorisation add to each other meaning the last category must comply with all the different due diligence obligations outlined. There is also an additional set of obligations for online platforms and VLOPs allowing consumers to conclude distance contracts with traders.

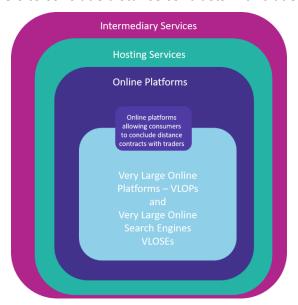


Figure 12. DSA architecture for due diligence obligations further developed and based on EC's illustrations.

DSA and the gaming sector

The applicability of the DSA will need to follow a case-by-case analysis as the categorisation was established with social media platforms in mind not gaming platforms. Therefore, a lot will depend on the functionalities of the gaming service provider. Indeed, to the extent that game providers and platforms are considered "intermediary service providers", game providers and platforms could be held liable for the conduct of their users in games. Gaming platforms seem to fall in the scope of hosting services and only some games/gaming platforms will fall under the online platforms category. However most of DSA relevant due diligence

¹⁹⁵ As defined in Article 3 (g) DSA, see footnote above.

¹⁹⁶ Article 3 (i) DSA defines online platforms as "a hosting service that, at the request of a recipient of the service, stores and disseminates information to the public, unless that activity is a minor and purely ancillary feature of another service or a minor functionality of the principal service and, for objective and technical reasons, cannot be used without that other service, and the integration of the feature or functionality into the other service is not a means to circumvent the applicability of this Regulation".

¹⁹⁷ They are online platforms reaching the number of average monthly active recipients of the service in the Union equal to or higher than 45 million and are officially designated as such by the European Commission. Article 33 §1, DSA.

¹⁹⁸ They are online search engines reaching the number of average monthly active recipients of the service in the Union equal to or higher than 45 million and are officially designated as such by the European Commission. Article 3 (j) DSA defines online search engines as "an intermediary service that allows users to input queries in order to perform searches of, in principle, all websites, or all websites in a particular language, on the basis of a query on any subject in the form of a keyword, voice request, phrase or other input, and returns results in any format in which information related to the requested content can be found".

¹⁹⁹ Rosenblat and others (n 19).



obligations apply to online platforms and very large online platforms (VLOPs) categories. For instance, the following provisions would be extremely beneficial for safety on gaming platforms: the protection against dark patterns (Art. 25 DSA), advertisement transparency (Art. 26), specific protection of minors and of their personal data (Art. 28). Yet, the criteria defining the online platforms and the VLOPs' categories seem not to apply to many online games, leaving them outside the regulation's scope.²⁰⁰

Online platforms

Online games platforms could be considered as "online platforms" only if they store information and disseminate it to the public at the player's request. Only games that allow players to publicly share information with the game's audience would be considered as online platforms and see the DSA obligations apply to them. Description of the online community features of the gaming platforms as long as it is not "a minor and purely ancillary feature of another service or a minor functionality of the principal service". Public dissemination must be a central design feature for a game to be considered an "online platform," while features like chat or comment sections are viewed as minor functions.

Some say, this could apply to "video game networks such as Xbox Live and PlayStation Network, but also to games featuring important in-game interactions." However, "private communications, like team chats (in opposition to a general chat), friend lists²⁰⁶, or private guilds, where information is shared with a limited number of people determined by the player would be out of the DSA scope (Recital 14 DSA)." ²⁰⁷

Roblox is likely to qualify as an online platform under the DSA because its core functionality involves the creation and dissemination of user-generated games.²⁰⁸ Players can create games, share them publicly to reach a large audience, and provide information about the game's features and design for storage on the platform.

VLOPs

Because of the specific risks that they pose, VLOPS and VLOSES are subject to an additional set of rules including the systemic risks assessment and mitigation that their service may cause.²⁰⁹ When it comes to video games, most of the safety risks identified throughout this deliverable can fall under the scope of the systemic risks (illegal content, privacy risks,

²⁰⁰ Sas, 'Protecting Gamers' Privacy in Online Games' (n 23).

²⁰¹ Martin Sas, 'Online Games in the Crosshair: Is the DSA Protecting Players? - Part 2' (*CiTiP blog*, 30 May 2024)

^{2 &}lt;https://www.law.kuleuven.be/citip/blog/online-games-in-the-crosshair-is-the-dsa-protecting-players-part-2/> accessed 2 July 2024. ibid.

²⁰² Sas, 'Online Games in the Crosshair' (n 203). ibid.

²⁰³ Article 3 (i), DSA defining online platforms.

²⁰⁴ Sas, 'Online Games in the Crosshair' (n 203).

²⁰⁵ ECORYS and KEA (n 6).

Epic Games, 'How to Add Friends in Fortnite' https://www.epicgames.com/help/en-US/c-category_Fortnite/c-Fortnite_Accounts/how-to-add-friends-in-fortnite-a000084891 accessed 14 January 2025.

²⁰⁷ Sas, 'Online Games in the Crosshair' (n 203).

²⁰⁸ ibid.

²⁰⁹ Section 5 and in particular Articles 34 and 35, DSA for the systemic risks assessment and mitigation obligation.



consumer protection, children's right, human rights).²¹⁰ However, for these provisions to apply the game must fall under the category of online platform and have a minimum of 45 million monthly active players in the EU and be designated as a VLOP by the EC. So far, "no online games satisfy such a high threshold, this may however change in the future."²¹¹ The EU legislator missed the opportunity to comprehensively regulate harmful practices in other digital services, including video games, which fall outside its current scope and are not otherwise regulated under EU law.²¹²

Online marketplaces

While it seems video game providers have already adopted measures against illegal activities in market places, the DSA now imposes "Know Your Business Customer" (KYBC) obligations for the online gaming platforms falling within its scope. The DSA imposes trader's traceability, compliance by design interfaces for traders ensuring that they provide easy product safety information and pre-contractual information and imposes on platform to inform purchasers of the illegality of the product/services when becoming aware of it (Articles 30, 31 and 32 DSA). However, even if "certain games integrate in-game marketplaces where players can trade items, similarly to real marketplaces which are covered by the DSA (see recital 13). Nonetheless, in-game marketplaces only share limited information like item types, prices, and user pseudonyms, which may not suffice to qualify the game as an online platform."

On the DSA applicability to Games, M. Sas and S. van der Hof concluded that despite its name, the DSA (Digital Services Act) does not cover all digital services. Digital games, depending on their features, are often not considered online platforms and thus lack the protections provided by the DSA, even though players face comparable risks. In some cases, other EU laws, such as the GDPR and the UCPD, provide protection, but the DSA itself offers additional safeguards in areas like advertising, recommender systems, and dark patterns. A risk assessment obligation for digital services beyond VLOPs could help mitigate risks created by games to vulnerable users, particularly children, in line with international and EU rights standards.

i-Game and the DSA

The i-Game community and game co-creation platform will certainly fall under the category of intermediary services as a hosting provider and need to comply with the relevant obligations. However, its classification as an online platform remains uncertain due to the exemption provided for micro and small enterprises under the DSA. Micro and small enterprises are defined in the EC Recommendation 2003/361/EC where depending on the staff headcount and the company's turnover or total balance sheet, the medium, small or

²¹⁰ Article 34 (1), DSA.

²¹¹ Martin Sas and Simone van der Hof, 'Digital Games, a Missed Target of the Digital Services Act?' [2025] to be published in Auteurs & Media (A&M).

²¹² ibid.

²¹³ ECORYS and KEA (n 6).

²¹⁴ Sas, 'Online Games in the Crosshair' (n 203).

²¹⁵ Sas and van der Hof (n 213).

²¹⁶ Article 19, DSA.



micro category will apply.²¹⁷ The rationale behind this exemption was to avoid disproportionate burdens on these stakeholders.

The i-Game platform currently funded by the EU is for now a research project developing a non-lucrative platform and not a company. It does therefore not qualify as a micro or small enterprise and cannot benefit from the exemption. However, one can wonder if in a teleological interpretation of Art. 19 would mean that small scale projects like i-Game could benefit as well from this exemption if developed for non-profit?

While during the DSA negotiations, some called for a not-for-profit educational and scientific repositories, digital archives, and libraries exemption. The adopted text does not include a specific research exemption which leaves the question of the applicability of the online platform's obligation contained in the DSA open for now.

I-Game's future will depend on the project's outcomes, success and the strategies developed once EU funding concludes.

1.5.2 Lex specialis Content moderation

The EU horizontal content moderation landscape is completed by a set of lex specialis²¹⁹ rules for sensitive content (e.g., terrorism, child abuse, hate speech, and disinformation).

Illegal content

Terrorist Content

The EU Internet Forum, established in 2015, fosters collaboration among EU governments, the internet industry, and partners to combat online terrorism.²²⁰ It led to the creation of a shared database of hashes in 2016 for tracking and removing terrorist content from platforms. The EU Internet Referral Unit (IRU), part of Europol's Counter-Terrorism Centre, identifies and reports terrorist content to online service providers, supporting internet investigations.²²¹

The EU adopted the Counter-Terrorism Directive in 2017, imposing on Member States to take the necessary measures to ensure the prompt removal of, or with appropriate safeguards block access to, online content constituting a public provocation to commit a terrorist offence. As the Directive focused on MS and not platforms, it was completed by a voluntary system

²¹⁷ Medium-sized enterprises: Employ fewer than 250 people and have a turnover of up to €50 million or a balance sheet total not exceeding €43 million; Small enterprises: Employ fewer than 50 people and have a turnover or balance sheet total of up to €10 million; Micro enterprises: Employ fewer than 10 people and have a turnover or balance sheet total of up to €2 million. Source: Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (Text with EEA relevance) (notified under document number C(2003) 1422) 2003.

²¹⁸ Science Europe and others, 'On the Exemption of Not-for-Profit Educational and Scientific Repositories, Digital Archives and Libraries from the Digital Services Act' https://zenodo.org/records/7043062 accessed 23 December 2024; Goda Naujokaityté, 'Research Community Calls for Non-Profits to Be Exempt from Upcoming EU Digital Rules' (*Science Business*, 5 April 2022) https://sciencebusiness.net/news/research-community-calls-non-profits-be-exempt-upcoming-eu-digital-rules accessed 23 December 2024.

²¹⁹ In case of conflict of laws of equal importance, the lex specialis shall be the one applicable as the most close to the subject regulated. Lindroos (n 176).

European Commission, 'European Union Internet Forum (EUIF)' https://home-affairs.ec.europa.eu/networks/european-union-internet-forum-euif_en accessed 9 February 2023.

²²¹ Europol, 'EU IRU Transparency Report 2019' (*Europol*) https://www.europol.europa.eu/media-press/newsroom/news/eu-iru-transparency-report-2019> accessed 10 February 2023.



with guidelines and recommendations that was deemed insufficient.²²² Therefore, in September 2018, the European Commission proposed the Regulation on preventing the dissemination of terrorist content (TERREG)²²³, marking a shift to directly impose obligations on hosting service providers. These include proactive measures, such as automated detection tools, and a requirement to remove terrorist content within one hour of an order by a national authority. However, it faced criticism for potentially conflicting with the e-Commerce Directive's prohibition on general monitoring, altering liability exemptions, and for its broad definition of terrorist content, which could impact free expression and human rights.²²⁴

The proposal led to the adoption of Regulation 2021/784, which became applicable in June 2022. There is now a 1-hour window for action upon order receipt for hosting providers, a push towards a more proactive role from hosting providers and hence leading towards more algorithmic moderation, a lack of differentiation between the size of the company and concerns around the transparency of private and law enforcement collaboration.²²⁵

There is a growing body of literature showing how online games platforms and related spaces (streaming for instance), with their large user base, are being used and exploited for spreading violence and extremism. Events like the 2019 Christchurch attack and the 2022 Buffalo attack have heightened awareness among researchers and policymakers about the connection between gaming and extremism. ²²⁶

The United Nations Office of Counter-Terrorism/United Nations Counter-Terrorism Centre (UNOCT/UNCCT) reported how gaming and extremism intersect from a negative but also positive perspective. This includes the issue of exploitation of gaming spaces by terrorists and violent extremists but also the prosocial benefits of gaming, and the potential for the use of gaming to prevent and/or counter violent extremism. The report identified in-game chats in particular to stand out as the space where toxic content is encountered most prominently. The report emphasizes that collaborating with gaming communities and empowering them with their gaming experience to counter extremisms is essential.

L. Schlegel and R. Kowert explored in their book the increase in the use of games and game adjacent spaces, such as Discord, Twitch, Steam, and DLive for the dissemination of extremist

²²² Flavia Giglio, 'The New Regulation on Addressing the Dissemination of Terrorist Content Online: A Missed Opportunity to Balance Counter-Terrorism and Fundamental Rights?' (*CITIP blog*, 14 September 2021) https://www.law.kuleuven.be/citip/blog/the-new-regulation-on-addressing-the-dissemination-of-terrorist-content-online/> accessed 3 February 2023.

²²³ Proposal for a Regulation of the European Parliament and of the Council on preventing the dissemination of terrorist content online A contribution from the European Commission to the Leaders' meeting in Salzburg on 19-20 September 2018, 2018 [COM/2018/640 final].

²²⁴ Lidia Dutkiewicz and Noémie Krack, 'All Eyes Riveted on the Trilogue Closed Doors of the Proposal for a Regulation on Preventing the Dissemination of Terrorist Content Online [Part I]' (*CITIP blog*, 24 November 2020) accessed 16 November 2022.
²²⁵ Krack, Dutkiewicz and Yildirim (n 193).

United Nations Office of Counter-Terrorism, Linda Schlegel and Armarnath Amarasingam, 'Examining the Intersection Between Gaming and Violent Extremism' https://www.un.org/counterterrorism/sites/www.un.org.counterterrorism/files/221005_research_launch_on_gaming_ve.pdf.

²²⁷ ibid.



propaganda, radicalisation, recruitment, and mobilisation.²²⁸ The book examines the latest counterterrorism strategies, highlighting innovative methods for preventing and countering violent extremism within the gaming sector. It also analyses the challenges and controversies surrounding these efforts, identifying gaps in knowledge that impede effective implementation.

In addition, the Report from the New York University (NYU) Centre for Business and Human Rights recommends concrete steps the gaming and gaming-adjacent industries should take to counter exploitation of their sites and services for extremisms purposes and avoid serious harm to users and society.

IP infringing material

Online platforms have enabled widespread content sharing but created challenges in assessing the lawfulness of copyright-protected uploads, sparking disputes between platforms and rightsholders over usage conditions and fair remuneration. The EU Directive 2019/790/EC on Copyright in the Digital Single Market (CDSM) was adopted to clarify legal uncertainties, promote licensing agreements, and harmonise copyright laws across EU Member States.

This specific aspect will be extensively explored and covered in our forthcoming i-Game Deliverable 3.6 "Legal analysis IP with policy recommendations" due in M.24 of the project.

Child sexual abuse material

In 2004, several Council's decisions²³⁰ were adopted to introduce minimum harmonisation on the most serious offense related to child sexual abuse and exploitation, they were followed by the Child Sexual Abuse and Exploitation Directive (CSAED) in 2011.²³¹ The CSAED set minimum rules for criminal offences and sanctions, requiring Member States to ensure the prompt removal or blocking of child pornography websites. In response to evolving terminology, the term "child pornography" was replaced with "child sexual abuse material" (CSAM).

The EU also adopted an interim CSAM regulation in 2021, addressing challenges related to e-privacy and CSAM detection by communication services like WhatsApp.²³² However, the regulation faced criticism for lacking adequate privacy safeguards and transparency. The

²²⁸ Linda Schlegel and Rachel Kowert (eds), *Gaming and Extremism : The Radicalization of Digital Playgrounds* (Taylor & Francis 2024) https://directory.doabooks.org/handle/20.500.12854/134019 accessed 13 January 2025.

²²⁹ Krack, Dutkiewicz and Yildirim (n 193).

²³⁰ Council framework Decision 2004/68/JHA of 22 December 2003 on combating the sexual exploitation of children and child pornography 2003 (OJ L); Council Decision of 29 May 2000 to combat child pornography on the Internet 2000 (OJ L); Decision No 854/2005/EC of the European Parliament and of the Council of 11 May 2005 establishing a multiannual Community Programme on promoting safer use of the Internet and new online technologies (Text with EEA relevance) 2005 (OJ L).

²³¹ 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 2011.

²³² Regulation (EU) 2021/1232 of the European Parliament and of the Council of 14 July 2021 on a temporary derogation from certain provisions of Directive 2002/58/EC as regards the use of technologies by providers of number-independent interpersonal communications services for the processing of personal and other data for the purpose of combating online child sexual abuse (Text with EEA relevance) 2021 (OJ L).



European Parliament's released amendments aimed to clarify technology use and legal bases. ²³³

In May 2022, the EU proposed a new CSAM regulation, aiming to replace voluntary detection with mandatory obligations for service providers, addressing inefficiencies in reporting and detection.²³⁴ The proposal seeks to harmonise rules and improve the detection and removal of CSAM across platforms. However, the proposal has faced significant criticisms from scholars, EU legislators, and civil society, focusing on concerns about privacy, data protection, and proportionality. Critics argue that the proposal infringe on fundamental rights, including the right to privacy, by implementing mass surveillance practices through mandatory scanning of messaging services like WhatsApp and Instagram. The European Data Protection Board (EDPB) and European Data Protection Supervisor (EDPS) also highlighted concerns about the intrusiveness of detection technologies, error rates, and legal uncertainties, suggesting that these could lead to false positives and undue harm.²³⁵ Because of these tensions and critics, the proposal, in January 2025, is still on the table of the EU co-legislators and thus the interim Regulation has been extended until 3 April 2026.

There seems to be increasing evidence that child sexual abuse material and grooming practices are presents in games.²³⁶ For instance, in 2024, Bloomberg reported on a serious issue within Roblox, a popular gaming platform, highlighting the platform's failure to adequately protect children from grooming and exploitation by predators.²³⁷

Hate Speech

In May 2016, the European Commission collaborated with major platforms like Facebook, Microsoft, Twitter, and YouTube to create a "Code of Conduct on countering illegal hate speech online." This initiative aimed to combat the spread of illegal hate speech by ensuring that platforms remove or disable harmful content within 24 hours of receiving a notification. Instagram, Snapchat, Dailymotion, **Jeuxvideo.com**, TikTok, Rakuten Viber and **Twitch** are now also signatories of the code. ²³⁹

However, the Code was criticised to leave platforms too much power to decide the legality of

²³³ Charlotte Somers, 'The Proposed CSAM Regulation: Trampling Privacy in the Fight against Child Sexual Abuse?' (*CITIP blog*, 3 January 2023) https://www.law.kuleuven.be/citip/blog/the-proposed-csam-regulation-trampling-privacy-in-the-fight-against-child-sexual-abuse/> accessed 20 January 2023.

²³⁴ Proposal for a Regulation of the European Parliament and of the Council laying down rules to prevent and combat child sexual abuse 2022 [COM(2022) 209 final].

²³⁵ 'EDPB-EDPS Joint Opinion 04/2022 on the Proposal for a Regulation of the European Parliament and of the Council Laying down Rules to Prevent and Combat Child Sexual Abuse | European Data Protection Board' https://edpb.europa.eu/our-work-tools/our-documents/edpbedps-joint-opinion/edpb-edps-joint-opinion-042022-proposal_en accessed 20 January 2023.

²³⁶ Rosenblat and others (n 19).

²³⁷ Olivia Carville and Cecilia D'Anastasia, 'Roblox Is Fighting to Keep Pedophiles Away and Not Always Winning' *Bloomberg* (22 July 2024) https://www.bloomberg.com/features/2024-roblox-pedophile-problem/ accessed 13 January 2025.

²³⁸ European Commission, 'The EU Code of Conduct on Countering Illegal Hate Speech Online' accessed 13 January 2025.

²³⁹ ibid.



content, acting as regulators instead of courts, which could lead to censorship. 240

To address these concerns, it seems the European Commission and IT companies are in the process of revising the Code.²⁴¹ In addition, the EC invited the Council to extend EU crime definitions to hate speech and hate crimes in order to provide further legal clarity. However, since then the file has been stuck on the Council's hands as it has not reached unanimity required to adopt a decision extending the list of crimes.²⁴²

The ADL Centre for Technology & Society released a report in June 2024 outlining how hate and harassment in gaming have become so widespread that many players now consider it normal.²⁴³ The report is based on a wide survey conducted in the US that showed how this issue particularly affects younger players, with 75% of those aged 10-17 experiencing harassment while gaming. The report also showed that women and Black or African American gamers were the most harassed because of their identity in online multiplayer games.

Hate speech has a concrete impact on the video game sector as according to research around 20% of players (adults and teens) are spending less money in online game spaces because of the hate and harassment they encounter.²⁴⁴

Harmful content

While the previous sections addressed illegal content, the following address harmful content, which is content detrimental but per se illegal.

Disinformation

The EU and some of the biggest tech companies (Facebook, Google, Twitter, Mozilla, and Microsoft) as well as members of the advertising industry agreed on a Code of Practice on Disinformation in 2018.²⁴⁵ "The Code is a soft law tool described as a voluntary, self-regulatory mechanism, with several commitments made by the signatories".²⁴⁶ In September 2020, the European Commission assessed the Code of Practice on Disinformation, which had some positive impacts, such as reducing monetisation incentives for disinformation and introducing labels for political ads.²⁴⁷ However, significant shortcomings were identified, including

online/> accessed 13 January 2025.

Barbora Bukovská, 'The European Commission's Code of Conduct for Countering Illegal Hate Speech Online'.
 Pub Affairs Bruxelles, 'Commission Advances towards an Enhanced Code of Conduct on Countering Illegal Hate Speech Online' (*PubAffairs Bruxelles*) https://www.pubaffairsbruxelles.eu/eu-institution-news/commission-advances-towards-an-enhanced-code-of-conduct-on-countering-illegal-hate-speech-

²⁴² European Parliament, 'Proposals to Extend the List of EU Crimes to All Forms of Hate Crime and Hate Speech Legislative Train Schedule' (*European Parliament*, December 2024) https://www.europarl.europa.eu/legislative-train/theme-a-new-push-for-european-democracy/file-hate-crimes-and-hate-speech">accessed 13 January 2025.

²⁴³ ADL Centre for Technology and Society, 'Hate Is No Game: Hate and Harassment in Online Games 2023' (*ADL Anti-Defamation League*, 2 June 2024) https://www.adl.org/resources/report/hate-no-game-hate-and-harassment-online-games-2023 accessed 22 November 2024.

²⁴⁵ European Commission, '2018 Code of Practice on Disinformation' (16 June 2022) https://digital-strategy.ec.europa.eu/en/library/2018-code-practice-disinformation accessed 13 January 2025.

²⁴⁶ Krack, Dutkiewicz and Yildirim (n 193).

²⁴⁷ European Commission, 'Disinformation: EU Assesses the Code of Practice and Publishes Platform Reports on Coronavirus Related Disinformation' (*European Commission - European Commission*, 10 September 2020) https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1568> accessed 13 January 2025.



fragmented implementation, limited participation, lack of key definitions, and weak enforcement.

In 2021, the Commission issued guidance for a revised Code²⁴⁸, leading to the strengthened Code in 2022²⁴⁹, with 34 signatories. The DSA will also play a role in mitigating disinformation, through a co-regulatory scheme enshrined in the Regulation and through various accountability measures even if some of the connection to the voluntary Strengthened Code needs further clarification.²⁵⁰

It seems that "the vast communication networks embedded within games can be leveraged for disinformation campaigns, sometimes involving foreign interference aimed at destabilising societies or influencing political processes." However, we also see more and more games raising awareness about disinformation and its mechanisms. For instance, the game "Bad News" exposes the tactics and manipulation techniques that are used to mislead people and is used to build cognitive resistance against manipulation. 252

Guidance

- Special attention should be paid to the communication features of games.
- Game users should be empowered to easily report while in-game illegal and harmful content or behaviours.
- Respect between the privacy and freedom of expression of players by avoiding overpolicies area and involve game communities for features design.
- Explore community-driven solutions
 - Enhance structured and multi-stakeholders dialogue on content moderation in games with horizontal aspects but also specific focus per topic as the one size fits all approach does not work in content moderation they might require specific targeted measures.
 - Support various approaches to content moderation issues including bottomup from gamers as it will ensure support from the gamer community and quicker implementation
 - Consult with gamers, particularly those frequently targeted for abuse, to inform safety measures and address their unique concerns.
- Foster positive and constructive behaviours²⁵³
 - Leverage "player dynamics" strategies to promote prosocial behaviours within games. Reward players for sportsmanship and positive conduct using in-game incentives, such as honour points or exclusive items.
 - o Shift from reactive to proactive approaches, designing games and systems

²⁴⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, European Commission Guidance on Strengthening the Code of Practice on Disinformation 2021 [COM/2021/262 final].

²⁴⁹ 'The 2022 Code of Practice on Disinformation' https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation accessed 13 January 2025.

²⁵⁰ Krack, Dutkiewicz and Yildirim (n 193).

²⁵¹ Rosenblat (n 192).

²⁵² Gusmanson, Tilt and Cambridge Social Decision-Making Lab, 'Bad News - Play the Fake News Game!' (*Bad News v2*) https://www.getbadnews.com/books/english/> accessed 13 January 2025.

²⁵³ Rosenblat (n 192).



- that foster healthy, thriving digital communities.
- Encourage gaming celebrities and popular streamers to engage in counterspeech.

I-Game Community and Game co-creation Platform

- The i-Game Terms & Conditions will contain information on the allowed and prohibited content and behaviour on the platform, it will contain information on content moderation decisions.
- A specific content reporting mechanism will be designed to be easily accessible for users.
- The platform will incentivise users to adopt positive and constructive aspects in their games development.

1.5.3 Content and Behaviours

Video games are not only about the content but also the behaviours. The limitations of traditional content moderation legislation with virtual or interactive settings is explored in the paper "Virtual Worlds, Real Risks: Exploring User Safety in the Metaverse under the Digital Services Act," presented at the International Congress Towards a Responsible Development of the Metaverse conference. Indeed, virtual worlds and metaverse hosts "multitude content forms including posts, chats, behaviours, avatars, outlook, world elements, user-generated content and so forth." Virtual Reality (VR) adds complexity by enabling verbal and non-verbal interactions like voice, gestures, gaze, and facial expressions. ²⁵⁴ The content virtual world can be often ephemeral and context-dependent, leaving no traces, which complicates evidence gathering and reporting. ²⁵⁵ The ephemerality of content is also a reality on video games platforms including real-time communication, in game behaviours which are also not stored for long by platforms. ²⁵⁶

These considerations create challenges for effective and lawful content moderation. Moderation decisions would be different to address a content than a behaviour as it cannot be taken down given its ephemerality. This underscores the importance of embedding safety by design and incorporating interdisciplinary consultations, including input from vulnerable groups, for developing effective and inclusive moderation practices.²⁵⁷

Content moderation in the metaverse faces challenges surpassing those of traditional online platforms due to its immersive and diverse nature, necessitating innovative safety approaches that respect freedom of expression.²⁵⁸ While the EC has pointed out to the DSA as one the

²⁵⁴ Guo Freeman and others, 'My Body, My Avatar: How People Perceive Their Avatars in Social Virtual Reality', *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (Association for Computing Machinery 2020) https://dl.acm.org/doi/10.1145/3334480.3382923 accessed 16 May 2024.

²⁵⁵ Europol, 'Policing in the Metaverse: What Law Enforcement Needs to Know. An Observatory Report from the Europol Innovation Lab', (European Union Agency for Law Enforcement Cooperation 2022) https://www.europol.europa.eu/publications-events/publications/policing-in-metaverse-what-law-enforcement-needs-to-know accessed 28 May 2024.

²⁵⁶ Rosenblat and others (n 19).

²⁵⁷ Louise Donovan, "A Wake-up Call": After Alleged Metaverse Rape, Calls to Protect Women and Girls Grow' (*The Fuller Project*, 22 January 2024) https://fullerproject.org/story/a-wake-up-call-after-alleged-metaverse-rape-calls-to-protect-women-and-girls-grow/ accessed 28 May 2024.

²⁵⁸ De Meyere and Krack (n 21).



appropriate tool to frame content moderation in the metaverse and ensure user safety²⁵⁹research showed that its application to the metaverse is inadequate.²⁶⁰ Even if the DSA promotes transparency and accountability, it does not address the virtual world or metaverse's unique individual-level risks or its immersive and ephemeral features.

1.5.4 Streaming, influencing, and gaming

Gaming live streaming is now part of the entertainment horizon and is also becoming of growing importance for the video games industry. Fan communities and video streams playing a central role in game development and marketing include the Gameplay records, videos, and live streams. Games streams and recordings of which are heavily linked to the power of influencers. A report from November 2024, unveiled that gamers are spending more time watching videos about gaming on YouTube and Twitch than playing games themselves.

Streamers broadcast their gaming activities on platforms such as Twitch or YouTube Live and interact with their audience in real time. Research observed that video games live streaming enabled the emergence of gaming communities and celebrity streamers, which are impacting relationships between individuals, corporations, and the broader gaming ecosystem. Streaming can be used to review a certain game but game streaming can also boost game's visibility and lifespan. In addition, streams of game design and programming, create opportunities for broader access to industry expertise and knowledge sharing. However,

²⁵⁹ European Commission Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition (n 22).

²⁶⁰ De Meyere and Krack (n 21).

²⁶¹ Article 3 h, DSA.

²⁶² De Meyere and Krack (n 21).

²⁶³ European Games Developer Federation, 'The Future of Audiovisual Media Service Directive (AVMSD) (2024)' (EGDF - European Games Developer Federation, 24 April 2020) https://www.egdf.eu/documentation/7-balanced-protection-of-vulnerable-players/audiovisual-media-service-directive/the-future-of-audiovisual-media-service-directive-avmsd/ accessed 14 January 2025.

²⁶⁴ ibid.

Rhys Elliott, 'The Case for In-Game Video Platforms - Closing the Direct-to-Consumer Gap' (MIDiA research 2024) https://www.midiaresearch.com/reports/the-case-for-in-game-video-platforms-closing-the-direct-to-consumer-gap accessed 14 January 2025.

²⁶⁶ Mark R Johnson and Jamie Woodcock, 'The Impacts of Live Streaming and Twitch. TV on the Video Game Industry' (2019) 41 Media, Culture & Society 670.

²⁶⁷ ibid.

²⁶⁸ Blackboa, 'Ethical Considerations in Live Streaming Gaming Content' (*Medium*, 9 April 2021)



live streaming of games raises considerable ethical and legal considerations.

Gambling streams are particularly concerning when it comes to youth exposure to gambling.²⁶⁹ A UK study identified a correlation between watching gambling streams and self-reported problem gambling, though causality is unclear.²⁷⁰ The question of territoriality also arises, as gambling could be considered illegal depending on the jurisdiction and type of currency used, but what "if the gambling website is hosted in one location, the streamer in another, and the viewers are located around the world, which local, national and international laws apply?".²⁷¹

Content moderation is challenged by the live interactions and chats that video game streaming offers but also the content contained in the video games streamed. Games with certain age or content ratings could be streamed without proper context or warnings, and may be unsuitable for certain audiences. Especially since, the age restrictions are not robust and seem to be easily bypassed, exposing minors to mature or inappropriate content.²⁷² In addition, the live interactions make it more difficult for moderation systems and moderators to prevent illegal or harmful content from being spread through streaming and chats. This brings back the question of gaming platform and streaming platforms accountability and liability.

Let us also not forget that video games are a complex work protected by **intellectual property**, hence live streaming of such games raises copyright infringement considerations as streamers are communicating to the public these IP protected works. The question arises whether streaming could fall under a copyright exception. Research shows that video gaming companies seems not to use their intellectual property rights linked to the video games streamed since streaming represents free advertising²⁷³ and boosts a game's longevity or even revives some old ones.²⁷⁴ However, game rights holders have varied approaches to streaming and monetisation. Some video games companies allow both commercial and non-commercial use while others prohibit monetization as a commercial use entirely.²⁷⁵ In addition, certain rights holders view monetisation as non-commercial or permit it under specific conditions, such as through partner programs. These differing policies reflect a balance between protecting intellectual property and leveraging the marketing benefits of streaming.

https://blackboa.medium.com/ethical-considerations-in-live-streaming-gaming-content-21af0402c7a3 accessed 9 January 2025.

²⁶⁹ Brett Abarbanel and others, 'Gambling Live Streams on Twitch: What Are They and Why Do They Matter?' (*The Conversation*, 15 September 2021) http://theconversation.com/gambling-live-streams-on-twitch-whatare-they-and-why-do-they-matter-167005> accessed 9 January 2025.

²⁷⁰ David Zendle, 'Beyond Loot Boxes: A Variety of Gambling-like Practices in Video Games Are Linked to Both Problem Gambling and Disordered Gaming' (2020) 8 PeerJ e9466.

²⁷¹ Abarbanel and others (n 253).

²⁷² Nadia Feci, 'Gamers Watching Gamers: The AVMSD Soon the One Calling the Shots?' (*CiTiP blog*, 18 December 2018) https://www.law.kuleuven.be/citip/blog/gamers-watching-gamers-the-avmsd-soon-the-one-calling-the-shots/ accessed 4 January 2024.

²⁷³ W Michael Schuster and John T Holden, 'Copyright and Joint Authorship as a Disruption of the Video Game Streaming Industry' (Social Science Research Network, 23 January 2021) https://papers.ssrn.com/abstract=3771877> accessed 9 January 2025.

²⁷⁴ Johnson and Woodcock (n 268).

²⁷⁵ Ondřej Woznica, 'Streaming Video Games: Copyright Aspects' (Doctoral dissertation, Master thesis, Masaryk University 2020) https://is.muni.cz/th/oi23a.



Streamers may need to obtain licenses to broadcast certain games or use specific in-game content, especially if they monetize their streams. In addition, questions around the copyright aspect of streamers recorded gameplay also arise. It seems that they could benefit from copyright protection, but subject contractual limitations imposed by game companies.²⁷⁶

Indeed, the **influence** of streams and streamers is another dimension to consider since live streaming can be sponsored. The audience can sponsor the video by transferring money and influence what the streamer would want to cover based on streams engagement and revenues. Gaming companies can also sponsor streamers to play certain games too and the disclosure of this sponsorship may not always be transparently conducted.

In the EU, the Audiovisual Media Services Directive (AVMSD)²⁷⁷, sets the framework for regulating video-sharing platforms and on-demand audiovisual services, which include streaming platforms used for video game content such as Twitch, YouTube Gaming, and Facebook Gaming. The AVMSD is implemented at the national level, specific rules and enforcement vary across EU Member States.

According to the AVMSD, platforms must take appropriate measures to protect minors from harmful content, must have rules to tackle illegal content, have user friendly mechanisms to report content, ensure visibility and prominence of European content under certain circumstances. "For game-streamers to enter the scope, seven elements need to be present. The provided audiovisual service has to have (1) an economic character, (2) the principal purpose of the service (or a dissociable section) needs to be devoted to (3) providing programmes (4) under the creators own editorial responsibility and (5) to the general public (6) in order to inform, entertain or educate and (7) by means of electronic communications networks."²⁷⁸ If they fall in the scope, they must respect the promotions and sponsorships, must comply with transparency and fairness requirements related to advertisements contained in the AVMSD.

The AVMSD complements the DSA obligation for intermediary services providers including hosting services and platforms on horizontal content moderation rules.

Guidance:

- Gaming platforms and streaming platforms should not reward controversial behaviour from influencers, by granting visibility according to algorithms recommendations and ranking.²⁷⁹
- Brands and sponsors should lead the way and use their power to shift mentalities and behaviours from toxic discourses to ethical, constructive, and positive ones in order, stop sponsoring toxic influencers.²⁸⁰

²⁷⁶ Schuster and Holden (n 275).

²⁷⁷ Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending 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) in view of changing market realities 2018 69.

²⁷⁸ Feci (n 274).

²⁷⁹ Katie Salen Tekinbas, 'Raising Good Gamers: Envisioning and Agenda for Diversity, Inclusion, and Fair Play.' (Connected Learning Aliiance Irvine CA 2020) https://www.raisinggoodgamers.com/rgg-report.

²⁸⁰ ibid.



1.5.5 Gender based violence and gaming

Gender based violence in games is challenging to assess in light of the numerous forms of violence present in games and to the difficulty to detect some forms of gender violence. The gaming sector faces a significant gender gap, with women underrepresented in the workforce and often marginalised in-game portrayals. Despite being a substantial portion of the EU gaming community, women players frequently encounter gender-based violence, undermining their experiences and participation in online spaces. This section delves into the issue.

UNESCO and the Eight Goals One Foundation released a report on the Gender Equality Quest in Video Games.²⁸² The report presents a global overview of gender dynamics in gaming. The report outlines how for many years, women, girls, and LGBTQIA+ individuals have faced exclusion and marginalisation within the gaming world due to persistent gender-based discrimination, harmful stereotypes, and targeted misogynistic hate speech.

Gender-based violence and gender issues can manifest in different ways within gaming environments. First, in how women are portrayed in games, including their depiction as characters, their roles in narratives, gameplay dynamics, and in-game interactions with characters. Second, in the experiences of women as game players and participants in gaming communities, such as in streaming, chat platforms, blogs, and in-game interactions, where they often face harassment and exclusion. Third, in the representation of women within the gaming workforce, highlighting challenges related to underrepresentation, workplace inequality, and bias in the industry.

Women represented in games

While it seems that representation in games has become an important topic for developers so they can make their games more relatable and appealing to a wider range of players²⁸³, the UNESCO report showed that 6% of protagonists in best-selling video games from 1985-2022 are women.²⁸⁴

Besides a lack of representation, games can also contain gender-based violence, which extends beyond physical violence against women characters to include issues like sexualisation, misogynistic speech, silencing, and reinforcing negative gender stereotypes. Understanding these forms of violence requires examining the game's context and gameplay. To support this assessment, U. Friman developed "a model through which digital game character representations can be examined and analysed. The model is based on five-character construction themes: 1. presence, 2. background and role, 3. participation and goals, 4. speech, and 5. gendering. The model also locates the character construction process

²⁸¹ Antonio Rodrigues and Nevena Sicevic, 'Gender-Based Violence against Women Characters' (*We in Games Finland*, 16 December 2021) https://weingames.fi/gender-based-violence-against-women-characters/ accessed 25 November 2024.

UNESCO and others, 'The Gender Equality Quest in Video Games' (2024) https://unesdoc.unesco.org/ark:/48223/pf0000391949 accessed 10 January 2025.

²⁸³ ECORYS and KEA (n 6).

²⁸⁴ UNESCO (n 284)

²⁸⁵ Taina Myöhänen, 'Gender-Based Violence in Games: Game Developers' Perspectives' (*We in Games Finland*, 22 June 2022) https://weingames.fi/gender-based-violence-in-games-game-developers-perspectives/ accessed 25 November 2024.



to the interactions between characters and between the characters and the player."²⁸⁶ These elements enable to analyse the representation of women within games, a crucial factor to consider as research happens to show that the exposure to violent content has been linked to increased aggression.²⁸⁷

Women shaping games

In 2023, only 24.4 of the EU video games industry workforce were women.²⁸⁸ This is problematic since the individuals developing technology play a pivotal role in shaping its design, functionality, and purpose. Their perspectives, experiences, and decisions directly impact how technology and games are conceptualised, including the features, narratives, and user interactions they prioritise.

Research indicates that the lack of diversity in the video gaming industry has contributed to online harassment within both the industry and player communities.²⁸⁹ Without decisive action, this issue risks perpetuating the cycle of underrepresentation, driving marginalised employees out of the workforce due to a hostile and unwelcoming environment. Already 10 years ago, with the movement #1ReasonWhy, women started to speak out about the reasons why there was so little female presence in the workforce and voiced the many forms of sexism they would face in the industry.²⁹⁰ Women reported being judged by different standards unrelated to their professional achievements, having their expertise overlooked, and experiencing silencing or dismissal that undermines their sense of belonging in the gaming community.²⁹¹

To solve this gender gap, many measures are needed including supporting women in Science, Technology, Engineering, Arts, Mathematics (STEAM) disciplines and related positions. For this reason, UNICEF and the Global Video Game Coalition have recently partnered to open career pathways for girls in the video game and tech sector.²⁹² They aim by empowering girls, particularly in developing regions, to build careers in rapidly expanding, high-paying fields such as video gaming and technology. Thomas Davin, Director of UNICEF underlined how multisectoral collaborations can lead to transformative social impact around the globe.²⁹³ Furthermore, it seems that the most important ingredient in making real, systemic change, is

²⁸⁶ Usva Friman, 'From Pixel Babes to Active Agents – How to Fix the Lack of Diversity in Female Digital Game Characters' (*Carnegie Mellon University, ETC Press*, 2 October 2022) https://press.etc.cmu.edu/articles/pixel-babes-active-agents.

²⁸⁷ UNESCO and others (n 284).

²⁸⁸ Video Games Europe, '2023 All About Video Games - European Key Facts' (n 15).

Rachel Kowert and Eve Crevoshay, 'Harassment of Game Makers: Prevalence and Impact' (F1000Research, 20 January 2023) https://f1000research.com/articles/11-1518 accessed 29 January 2025.

²⁹⁰ Mary Hamilton, '#1reasonwhy: The Hashtag That Exposed Games Industry Sexism' The Guardian (28 November 2012) https://www.theguardian.com/technology/gamesblog/2012/nov/28/games-industry-sexism-on-twitter accessed 29 January 2025.

²⁹¹ Amanda Ochsner, 'Reasons Why: Examining the Experience of Women in Games 140 Characters at a Time' (2019) 14 Games and Culture 523.

²⁹² UNICEF, 'UNICEF and the Global Video Game Coalition Partner to Open Career Pathways for Girls in the Video Game and Tech Sector' (6 November 2024) https://www.unicef.org/innovation/press-releases/unicef-and-global-video-game-coalition-partner-open-career-pathways-girls-video-game-accessed 29 January 2025.

²⁹³ ibid.



change coming through leadership.²⁹⁴

Women playing games

Research showed that women are more game consumers than producers.²⁹⁵ There are indeed around 55 million women playing games in Europe representing 43.5 % of EU players.²⁹⁶ While gender based violence in games dates back from 30 years ago²⁹⁷, multiplayer mode, interactive features, virtual worlds, gaming and streaming platforms have considerably challenged gamer's safety including those of women. A recent UK report showed how 59% of gamers who are women and girls have experienced some form of toxicity from male gamers. Online abuse can take the following forms: threats of rape (14%), sexual harassment (30%), receipt of inappropriate content (30%), verbal abuse (42%).²⁹⁸

Nevertheless, women gamers also face challenges in their participation in games. In her PhD, Usva Friman showed how "women encounter significant gender-based barriers to their game cultural participation and agency, leading them to suffer from misogynistic discrimination and harassment, limit their participation for their safety, or even opt out entirely from certain game cultural activities. Most women participating in the study reported their gender having affected their gaming, mostly in negative ways. Supportive social environments appear central to women's gaming." ²⁹⁹

Research found out that esports and competitive gaming are dominated by toxic meritocracy and hegemonic (geek) masculinity, leaving women with very limited opportunities for participation, both in presence and in roles within the field.³⁰⁰

The European Parliament underlined this gender gap and indicated how getting more women into video games and esports should be treated as a strategic priority.³⁰¹ The EP resolution continues by stating that "in spite of the efforts that have been made in terms of an accurate, equal and non-stereotypical representation of women in video games, progress must continue

Women in Games, 'The Women in Games Guide: Building a Fair Playing Field' (2022) https://www.womeningames.org/the-women-in-games-guide-building-a-fair-playing-field/.

²⁹⁵ Usva Friman, 'Gender and Game Cultural Agency in the Post-Gamer Era: Finnish Women Players' Gaming Practices, Game Cultural Participation, and Rejected Gamer Identity' (Tampere University 2022) https://www.utupub.fi/handle/10024/176585> accessed 13 December 2024. ibid.

²⁹⁶ Video Games Europe, '2023 All About Video Games - European Key Facts' (Video Games Europe 2023) https://www.videogameseurope.eu/publication/2023-video-games-european-key-facts/ accessed 13 December 2024.

²⁹⁷ Arno Lodder, 'Professor Kim Barker: Online Violence Against Women Gamers – A Reflection on 30+ Years of Regulatory Failures' (ALTI Amsterdam, 1 March 2024) https://alti.amsterdam/online-violence-against-women-gamers-a-reflection-on-30-years-of-regulatory-failures/ accessed 20 January 2025.

Women in Games, 'Over Half of Women Gamers Experience Online Abuse - New Research' (Women in Games, 4 April 2024) https://www.womeningames.org/over-half-of-women-gamers-experience-online-abuse-new-research/> accessed 25 November 2024.

²⁹⁹ Friman (n 297).

Maria Ruotsalainen and Friman Usva, "There Are No Women and They All Play Mercy": Understanding and Explaining (the Lack of) Women's Presence in Esports and Competitive Gaming' (Conference of Digital Games Research Association 2018) http://www.digra.org/wp-content/uploads/digital-library/DiGRA_Nordic_2018_paper_31.pdf.

³⁰¹ European Parliament Resolution of 10 November 2022 on esports and video games (2022/2027(INI) (n 135). ibid.



and go hand in hand with attaining greater equality for women in all positions in the value chain, as well as progress on the fight against sexual abuse and discrimination". ³⁰²

Guidance:

- Ensure a diversity in the workforce of the video game design and development
- If not possible, ensure a proper training for staff members and an assessment of this component by quality check staff.
- Use video games to promote a diverse gender representation and promote healthy gameplay and narrative avoiding misogynist, stereotypical gender's representation, and women's objectification.

i-Game:

- Explore how to ensure diversity in the team members for game co-creation. For
 instance, by having a diversity-badge in the platform if the team designing the game is
 diverse and inclusive to reward this effort.
- Set up a supportive environment with reporting mechanisms in the co-design process.
- Design an awareness raising material on the gender dimension of video games for the teams to access in the material/resources repository within the platform.

1.5.6 Virtual world and Metaverse

i-Game was represented by a paper and presentation from J. de Meyere and N. Krack at the International Congress Towards a Responsible Development of the Metaverse, in Alicante on 13 and 14th June 2024. The following section reports on some of their findings, more can be found in their paper which was selected as one of the 12 best papers out of the conference and will be soon published as part of a special issue of the Interactive Entertainment Law Review. Review.

The video game industry has faced considerable growth and technological progresses which are impacting the sector and how games are played, including the integration of virtual reality to video games.³⁰⁵ The EU defines virtual world as "persistent, immersive environments, based on technologies including 3D and extended reality (XR), which make it possible to blend physical and digital worlds in real-time, for a variety of purposes such as designing, making simulations, collaborating, learning, socialising, carrying out transactions or providing entertainment".³⁰⁶ Virtual reality (VR) allows players to immerse themselves in a game by

³⁰² European Parliament Resolution of 10 November 2022 on esports and video games (2022/2027(INI) (n 135). ibid.

³⁰³ De Meyere and Krack (n 21).

³⁰⁴ The aim of the Interactive Entertainment Law Review is to serve as a peer-reviewed hub for legal analysis of interactive entertainment, video games, virtual / augmented / mixed realities, social media, and all related and emergent forms of digital interactive entertainment. More here : https://www.elgaronline.com/view/journals/ielr/ielr-overview.xml

³⁰⁵ Creative Words, 'Video Games and Virtual Reality: Everything to Know' (*Creative Words s.r.l.*, 20 January 2023) https://creative-words.com/en/video-games-and-virtual-reality-everything-to-know/ accessed 13 January 2025.

³⁰⁶ European Commission Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition (n 22).



controlling characters with their own body movements. The EU pointed out that "virtual worlds in video games already provide spaces where millions of people can create and monetise content and explore and have meaningful interactions." ³⁰⁷

However, virtual worlds and metaverse success is strongly connected to the safety of user's experience, some users reported that online abuse might drive them to quit. The concept of safety in metaverses is complex due to their immersive and interactive nature, encompassing physical, mental, and social considerations. Risks in metaverses are diverse, ranging from physical threats like cybersickness or device manipulation to mental health concerns such as harassment and addiction. Social threats include the spread of disinformation, extremist recruitment, and normalisation of abusive behaviours.

In addition, the type of experience offered in metaverses, through XR, VR AR or Mixed Reality (MR) or simply a desk experience, will offer each different type of specific risks.

The immersive nature of metaverses intensifies these risks, blurring the lines between virtual and real experiences.³¹⁰ Users often perceive their avatars as extensions of themselves, which can heighten the psychological impact of virtual offences.³¹¹ Legal and ethical questions regarding avatar accountability and the status of digital identities remain unresolved, further complicating enforcement.

Anonymity in metaverses exacerbates accountability issues, while existing laws struggle to address virtual offences that lack physical components. Jurisdictional challenges persist, with agencies like Interpol and Europol calling for new protocols to tackle crimes in virtual environments.³¹²

The wide range of users and experiences in metaverses, from children to professionals, demands tailored safety measures. The development of virtual worlds and metaverse have outpaced legal and regulatory frameworks. The EC pointed to the DSA and DMA as constitutive of robust legal framework to address the challenges of the metaverse, however the research contained in the article and presented in Section 1.5.3 showed how the DSA provisions were ill equipped to address their specific challenges.

³⁰⁷ ibid.

³⁰⁸ Guo Freeman and others, 'Disturbing the Peace: Experiencing and Mitigating Emerging Harassment in Social Virtual Reality' (2022) 6 Proceedings of the ACM on Human-Computer Interaction 85:1.

³⁰⁹ Emmie Hine and others, 'Safety and Privacy in Immersive Extended Reality: An Analysis and Policy Recommendations' (27 September 2023) https://papers.ssrn.com/abstract=4585963 accessed 22 May 2024.

³¹⁰ Mary Anne Franks, 'The Desert of the Unreal: Inequality in Virtual and Augmented Reality' (2017) 51 U.C.D. L. Rev. 499.

³¹¹ Freeman and others (n 310).

Andrew Potter, 'A Rape in Cyberspace, Revisited' (nevermind, 12 February 2024) https://nevermindgenx.substack.com/p/a-rape-in-cyberspace-revisited?utm_medium=reader2 accessed 27 May 2024; Michal Gromek, 'Are We Ready For Avatars Reporting Sexual Harassment In The Metaverse Police Stations?' (Forbes) https://www.forbes.com/sites/digital-assets/2023/05/08/are-we-ready-for-avatars-reporting-sexual-harassment-in-the-metaverse-police-stations/ accessed 28 May 2024; Nancy Jo Sales, 'A Girl Was Allegedly Raped in the Metaverse. Is This the Beginning of a Dark New Future?' The Guardian (5 January 2024) https://www.theguardian.com/commentisfree/2024/jan/05/metaverse-sexual-assault-vr-game-online-safety-meta> accessed 27 May 2024; Europol (n 239).



Guidance:

- For companies: While future regulations may address safety in the metaverse, the
 article recommends companies to adopt safety-by-design practices proactively to
 mitigate abuse and harassment, which deter users. Incorporating interdisciplinary
 approaches into metaverse development ensures more thoughtful and effective
 design and commercial success.³¹³
- For policymakers: While the gaps need to be fixed in the current legislations, it might take some time and as the new EU tech regulatory batch has increased considerably in the last years, now it is also time to enforce. A co-regulatory model, like that in the Digital Services Act (DSA), offers a potential solution. Under this approach, platforms are held accountable for adhering to rules they establish in compliance with regulations. This method could enhance safety while reducing legislative burdens for both companies and regulators. However, it has its critics, and further research is needed to determine its suitability for the metaverse context.³¹⁴

i-Game:

If a metaverse of virtual reality elements would be embedded in the project, specific
attention to user safety will be dedicated, going beyond the legal framework but
analysing the risks and negative impact it could have on users or players of the game
co-created within i-Game. Material could be developed to raise awareness on the
specific challenges for user safety that virtual worlds and metaverse represent.

1.5.7 Trust and Safety

Trust and Safety is a term often used to designate the team within a platform that handles the legal, ethical and policy aspects of the business, they are a crucial part of the staff workforce to ensure gamers safety. The Digital Thriving Playbook contains a section mapping the Trust and Safety organisations including those focusing deeply on trust and safety in gaming. Among the list, the Gaming Safety Coalition drew our attention. Launched in 2024, it aims to create more robust, safer, and more resilient gaming environments and improve player and moderator well-being within gaming communities.

The coalition released guidance on content moderation best practices.³¹⁶ The guidance outlines that since gaming platforms increasingly resemble social hubs, trust and safety teams must adopt moderation practices that safeguard users while prioritising the **well-being of the moderators** themselves. Moderators hold a key role for the success of effective content moderation therefore the following measures are put forward: recruiting trained professionals with empathy and resilience, providing mental health support, and fostering compassionate leadership ensures sustainable moderation efforts. Gaming platforms should build "**Multimodal Safety Strategies."** Effective moderation requires platform-wide safety

³¹³ De Meyere and Krack (n 21).

³¹⁴ ibid.

³¹⁵ Digital Thriving Playbook, 'Organizations Supporting Trust & Safety in Gaming' (*Digital Thriving Playbook*) https://digitalthrivingplaybook.org/guide/organizations-supporting-trust-and-safety-in-gaming/ accessed 8 January 2025.

Gaming Safety Coaliation, 'Tipsheet: Content Moderation Best Practices' (2024) https://gamingsafetycoalition.com/gaming-content-moderation-whitepaper/.



measures embedded into game design, engaging users with features like gamification and proactive risk assessments.

Additionally, while **AI tools** have become essential for scaling moderation in light of the mass of content and behaviours online, specific caution should be paid to these tools, they must be fair and unbiased whether developed in-house or bought from third-parties. They should use diverse datasets, address biases, and foster collaboration in AI research. Indeed, while AI has become inevitable to support content moderation efforts, it comes with its sets of challenges and limitation from a technical perspective (including lack of contextual interpretation, the lack of quality, diversity, and inclusivity in the data used) and fundamental rights perspective (freedom of expression, right to privacy and data protection, non-discrimination). Moderation teams can step them up to flag or delicate issues for human review, creating a "human-in-the-loop" approach.

Not part of the guidance, exploring **alternative content moderation approaches** like end-user or community moderation could complement traditional content moderation methods. It seems that end-users have a higher confidence in distributed moderation than centralised moderation as the moderators are closer to them.³¹⁸ However, shortcomings arise there too as end-user moderators lack expertise, relevant training, can be sensitive to their own bias, and they might not adopt a consistent approach with the decisions they take.³¹⁹

Although not a perfect and standalone solution, community moderation can help by engaging players to support safe interactions and reinforce platform guidelines. Additionally, rewarding ethical behaviour within the community can encourage positive engagement and further enhance moderation efforts.³²⁰

Guidance:

- Design platform wide safety (through all features available)
- Design engaging safety features through gamification
- Foster proactive safety by design (such as in game reporting tools)
- Ensure protection of moderators (through thoughtful recruitment, mental health support and management)
- Do not provide support to influencer or visibility if they hold toxic behaviours and harmful or illegal speech.
- Design reward in games for positive and constructive behaviours.
- Careful investigate AI choice and use because of technical limitations and fundamental right impacts
 - Go for fair AI design (in house or through check/comparative if it comes from third party)

i-Game community and co-creation platform

Carefully design the platform architecture for content moderation as members of the

³¹⁷ Krack, Dutkiewicz and Yildirim (n 193).

³¹⁸ Joseph Seering and others, 'Moderator Engagement and Community Development in the Age of Algorithms' (2019) 21 New Media & Society 1417.

³¹⁹ Krack, Dutkiewicz and Yildirim (n 193).

³²⁰ Salen Tekinbas (n 281).



community and co-creation platform will engage with each other's.

- Think and design reporting mechanisms and a content moderation governance structure.
- Perhaps design a gamified way for users to engage with trust and safety and explore alternative moderation schemes or moderation roles within a project.

1.6 **Gaming self-regulation**

Traditionally, the gaming sector has had a lower level of specific regulation.³²¹ Self-regulation hence is quite important for the sector and focuses on minor protection, parental controls, and content moderation.³²²

In the EU, there are prominent video game organisations. Namely, the *Interactive Software Federation of Europe* (IFSE) focusing on game publishers, the *European Game Developer Federation* (EGDF) focusing on game developers and *Video Game Europe* both representing video games publishers and developers including Activision Blizzard, Electronic Arts, Nintendo, Roblox, and Ubisoft.³²³ They are advocating for the interests of their members, and fostering self-regulation and e- standards across the industry.

Games ratings are developed by self-regulation bodies including PEGI (Pan European Game Information)³²⁴ and ESRB³²⁵ (Entertainment Software Rating Board) which are both prominent rating systems that provide age-appropriate content labels for games in Europe and North America, respectively. Other game rating bodies exist locally such as the Unterhaltungssoftware Selbstkontrolle (USK) in Germany, the Australian Classification Board (ACB) in Australia, the Game Rating and Administration Committee (GRAC) in South Korea, and Classificação Indicativa (ClassInd) in Brazil, and Taiwan's Game Software Rating Regulations (GSRR). These rating authorities/bodies created or for some are now part of the International Age Rating Coalition which provides a streamlined age classification process for digital games and mobile apps.³²⁶ Through a single questionnaire about a gaming product's content and interactive elements, IARC's tool generates region-specific ratings based on participating authorities' standards. PEGI and ESRB are "are promoted and funded by the video game industry through their associations and entrusted to independent bodies for their implementation."³²⁷ Some underline how the lack of democratic representation and

³²¹ Janina Hoppstädter and others, 'Report on the Key Findings from the Theme Development Workshop "Trusted AI: The Future of Creating Ethical & Responsible AI Systems" (AI Network of Excellence (AI NoE) 2023) https://www.vision4ai.eu/tdw-trusted-ai/, ibid.

³²² ECORYS and KEA (n 6).

³²³ Video Games Europe, 'Our Membership' https://www.videogameseurope.eu/about/our-membership/ accessed 6 January 2025.

³²⁴ PEGI, 'PEGI Age Ratings' https://pegi.info/page/pegi-age-ratings accessed 2 July 2024.

³²⁵ Entertainment Software Rating Board, 'About ESRB' (*ESRB Ratings*) https://www.esrb.org/about/ accessed 2 July 2024.

³²⁶ IARC, 'About the International Age Rating Coalition' https://www.globalratings.com/about.aspx accessed 23 January 2025.

³²⁷ Damiano Felini, 'Beyond Today's Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements' (2015) 10 Games and Culture 106.



transparency in PEGI's governance process raises questions of legitimacy. 328

PEGI system is a standardised rating framework that assigns age labels and content descriptors to video games. Its main purpose is to evaluate and convey the suitability of a game for players within specific age groups. This evaluation is based on the content within the games, such as violence, strong language, drug references, or fear-inducing elements.

PEGI's Code of conduct is a set of guidelines and rules on how video games should be rated and marketed in order to offer a consistent age rating approach and protect minors from unsuitable content for their age. The Code is used in more than 40 countries (including all EU member States) and has so far classified more than 40,000 games and millions of apps. Report shows that "79% of parents with children that play video games are aware of the PEGI age rating labels, and 76% of them use the PEGI label to make an informed decision when considering buying a video game for their children". The Code is a voluntary instrument, some even point out that oftentimes the language used within the Code is soft such as "best efforts" or "recommends". Whether this voluntary age rating system is legally mandated depends on the individual MS legislation on age rating.



Figure 13. PEGI content description and age labels³³¹

Since 2023, the PEGI Code of Conduct includes improved standards for safe online gameplay (Art. 9) and in-game monetisation (Art. 8).³³² Article 8 provides that signatories should ensure transparency in purchase options, prohibit illegal gambling, and provides clarity around transactions to promote responsible monetisation practices in gaming.



Figure 14. PEGI new icon representing in-game purchases and related text mentioning random items

³²⁸ Khalid Ezat Azam, "'That's PEGI, the American System!": Perceptions of Video Game Age Ratings among Families in Norway' (2023) 45 Media, Culture & Society 1156.

³²⁹ Video Games Europe, '2023 All About Video Games - European Key Facts' (n 15).

³³⁰ Declerck and Feci (n 18).

³³¹ Video Games Europe, '2023 All About Video Games - European Key Facts' (n 15).

³³² ibid.



In addition to Article 8 of PEGI's Code of Conduct, Video Games Europe indicates that their members also provide: tools to manage limit or block purchases, have transactions kept separate from gameplay, establish refund policies, early information of in-game currency discontinuation, prohibit players from entering in-game content unauthorised trading. ³³³ Article 9 of the PEGI's Code of Conduct provides that terms of service must clearly prohibit harmful or illegal behaviours, such as abuse, harassment, racism, or content inciting violence

harmful or illegal behaviours, such as abuse, harassment, racism, or content inciting violence or self-harm. Consequences for violations must be specified, and precautions must protect children from inappropriate content. Gaming companies must quickly remove harmful usergenerated content, provide accessible, user-friendly tools for reporting inappropriate content, review, and address reports diligently and objectively which are in line with the DSA obligations analysed above. In addition, article 9 also talks about health as it calls companies to advise players to take regular breaks during gameplay to support well-being. PEGI also developed an online system for harassment protection.³³⁴

Researchers working on game ratings in Canada have criticised how the ratings are an industry-made classification system which are ill-equipped to address gaming issues. Their analysis showed that the criteria used are somehow subjective or vague and are under inclusive. Already in 2009, research showed how the approach focusing on content-based risks was inadequate for online games and how new approaches taking into account "contacts" and "behaviours" should be considered by game rating criteria and evaluation especially in the case of children involved. BEGI's code still focuses very much on the content even if there has been some updates to the code in 2023, only limited regulation of interactive elements was added. Risks linked to user-generated content in games and interactions between players are not yet considered. San

There seemed to be discrepancies between criteria used for the ratings between ESRB ratings and PGI ratings for instance, highlighting the need for consistency.³³⁸ For instance, a study showed how 60.6% of all games labelled with loot box presence warning by either the ESRB or PEGI were not labelled by the other. ³³⁹ This was mainly explained by the fact that ESRB refused to apply the label retroactively.

In addition, parental and children literacy on game rating appears essential. A Norwegian study shed light on the paradox of a pan-European system widely regarded as a success, yet whose understanding and legitimacy among end users remain poorly understood.³⁴⁰

One can wonder whether setting-up the ratings regimes and authorities constituted a way to

³³³ Video Games Europe, 'Understanding In-Game Purchases' (*Video Games Europe*) https://www.videogameseurope.eu/responsible-gameplay/empowering-players-manage-spending-in-videogames/> accessed 6 January 2025.

³³⁴ ECORYS and KEA (n 6).

³³⁵ Sara M Grimes, Darshana Jayemanne and Seth Giddings, 'Rethinking Canada's Approach to Children's Digital Game Regulation' (2023) 48 Canadian Journal of Communication 142.

³³⁶ Sonia Livingstone, Children and the Internet (1st edition, Polity 2009).

³³⁷ Damiano Felini, 'Beyond Today's Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements' (2015) 10 Games and Culture 106.

³³⁹ Leon Y Xiao, 'Beneath the Label: Unsatisfactory Compliance with ESRB, PEGI and IARC Industry Self-Regulation Requiring Loot Box Presence Warning Labels by Video Game Companies' 10 Royal Society Open Science 230270. ³⁴⁰ Khalid Ezat Azam, '"That's PEGI, the American System!": Perceptions of Video Game Age Ratings among Families in Norway' (2023) 45 Media, Culture & Society 1156.



avoid dedicated regulation imposed on the sector.³⁴¹ While age rating systems testify of the industry's commitment in addressing risks, these systems still have significant limitations that require improvement. D. Felini, suggests an alternative rating/classification model that considers both the positive and negative aspects of video games, as well as the skills required and developed through gameplay.³⁴² The model features a five-point evaluation grid: the game's genre and its positive aspects, the recommended age, negative content, gameplay modes (single-player/multiplayer), and descriptive keywords. The goal of this new classification is to provide better information to parents and avoid misleading them. Additionally, it could be made available online via smartphones using QR codes.

More research on game ratings is needed including on the relevance of their criteria, their impact on gamers including on children.

Parental controls are also another aspect of gaming self-regulation aimed at better protecting children while playing. They enable parents to select which games children are allowed to play, control, and monitor purchases, control the time spent, the features activated such as the level of interaction and communication, the data exchanges. Parental controls constitute crucial tools for children's well-being. US research demonstrated how excessive screen time in children is linked to poorer quality sleep, poorer performance at school and an increase in aggressive behaviour. An Italian study had similar results and highlighted the importance of having a consistent and communicative parental control, rather than simply restrictive control, for promoting adolescents' well-being. Indeed, research showed how restrictive controls can be experienced as surveillance or punishment tools negatively impacting the children-parents relationship.

In the table below you can find links towards parental controls from a selection of gaming infrastructures (consoles & game stores).

Consoles

Smartphone, tablets, and streaming

Nintendo Switch

Sony PlayStation 3

Sony Playstation 4

Sony Playstation 5

Xbox One X/S

Xbox Series X/S

Xbox 360

Wii U

Table 1. Links to parental control from a selection of gaming infrastructures

 $^{^{341}}$ Damiano Felini, 'Beyond Today's Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements' (2015) 10 Games and Culture 106

³⁴² ibid.

³⁴³ Douglas A Gentile and others, 'Protective Effects of Parental Monitoring of Children's Media Use: A Prospective Study' (2014) 168 JAMA Pediatrics 479.

³⁴⁴ Luca Milani, Serena Grumi and Emanuela Confalonieri, "Can I Play That?" Parental Monitoring About Video Games and Developmental Outcomes' (Social Science Research Network, 21 February 2022) https://papers.ssrn.com/abstract=4039877> accessed 28 January 2025.

³⁴⁵ Wang G and others, 'Protection or Punishment? Relating the Design Space of Parental Control Apps and Perceptions about Them to Support Parenting for Online Safety' (2021) 5 Proceedings of the ACM on Human-Computer Interaction 1



Independent research on the effectiveness, prominence and user friendliness of game parental control should be conducted especially involving parents and children.

Another component of self-regulation are the **Games** and **App stores** like Google Play Store, Apple's App Store, and Steam. They enforce their own Terms and Conditions (T&C), setting guidelines for content and conduct on their platforms, ensuring games meet specific standards before being distributed. However, for ratings "Apple's App Store uses its own system while content ratings on Google Play Store are provided by the IARC." ³⁴⁶ In addition, since stores and platforms can add layers of moderation beyond PEGI, this can create further confusion for gamers and parents.³⁴⁷

In addition, research showed how lootboxes in mobile games are a far more pressing issue than in consoles or PC but that ratings in Apps stores do not meet the expectations.³⁴⁸ A recent UK investigation from the BBC, on lootboxes and the Google Play Store, showed that a significant portion of games containing loot boxes are not disclosing this in their advertisements.³⁴⁹

1.7 Ethical and Societal Dimension of Games

The ethical and societal dimensions of Video Games are highly linked to their social and cultural value. "The digital nature of gaming and its ability to involve players in the story and, to some extent, in the artistic content of the experience, makes it an important media form in contemporary society. Many video games with high artistic standards explore new ways of emotionally engaging people.". 350

As already mentioned, the video game industry became the largest entertainment sector globally and is a highly lucrative sector. There is a tension between commercial success and artistic expression in the video game industry. Creating a video game is highly expensive, leading video games developers and publishers to focus on remakes or sequels of proven successes.³⁵¹ Therefore to support the artistic and positively socially impactful value of video games is important. The business side of the sector must not exclude the ethical and societal benefit that games can vehicle.

Culture support

Being a form of expression and art in itself but games can also incorporate elements of art in the game helping to safeguard and promote cultural heritage. The integration of cultural heritage in video games can enhance public awareness, boost tourism, and foster a deeper connection with historical and cultural sites and works.³⁵² Video games also have educational

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³⁴⁶ Jonathan Harrop, 'How to Get Age Ratings for Mobile Games: A Guide to International Rating Systems' (Digital Turbine, 20 August 2020) https://www.digitalturbine.com/blog/how-age-ratings accessed 28 January 2025.

³⁴⁷ Khalid Ezat Azam, "'That's PEGI, the American System!": Perceptions of Video Game Age Ratings among Families in Norway' (2023) 45 Media, Culture & Society 1156.

³⁴⁸ Leon Y Xiao, 'Beneath the Label: Unsatisfactory Compliance with ESRB, PEGI and IARC Industry Self-Regulation Requiring Loot Box Presence Warning Labels by Video Game Companies' 10 Royal Society Open Science 230270.
³⁴⁹ Tom Gerken, 'Top-Selling Mobile Games Breaking Rules on Loot Boxes' (29 November 2024)
https://www.bbc.com/news/articles/c748ww9y9nno accessed 28 January 2025.

³⁵⁰ ECORYS and KEA (n 6).

³⁵¹ ibid.

³⁵² ibid.



potential, engaging younger audiences with heritage and teaching them about preservation.³⁵³

• Education support

Video games are increasingly used in education as they offer engaging, non-traditional learning methods that increase motivation, improve attention, and support the development of various skills.³⁵⁴ Video games enable students to experience and learn by actively engaging with content, rather than relying on traditional, passive methods. Multiplayer games, in particular, are effective for instance for practicing language skills, by providing authentic communication contexts and reducing anxiety through virtual avatars.³⁵⁵ Video games can be offered to solve skill gaps and promote play for learning.

Social enabler and community builder

Video games are a "highly socially interactive environment" with "opportunities for strong friendships and emotional relationships." ³⁵⁶ It enables people to connect with peers, play together (being in the same room or online), through in-game interaction or outside such as in forums, in streaming, and so forth. Video games interactions are rooted in fundamental social needs for connection, communication, and recognition.

• Identity – a compound effect

Some people can identify themselves as a gamer³⁵⁷, it comes with a shared experience, interests, languages, codes, and events. The "gamer" identity is a moving concept including individuals and groups that create, play, read about, and speak of video games (broadly speaking and no matter the format or support).³⁵⁸

Research developed theories according to which identity is essential to game-based learning.³⁵⁹ This is why immersiveness through storytelling, avatars, or characters is a key part of games to establish identity. Research showed how gamer identity is composed of four key aspects³⁶⁰: (1) In-game identification, gamers identify with characters, roles, or elements in

³⁵⁴ ibid.

³⁵³ ibid.

³⁵⁵ ibid.

³⁵⁶ Helena Cole and Mark D Griffiths, 'Social Interactions in Massively Multiplayer Online Role-Playing Gamers' (2007) 10 Cyberpsychology & Behavior: The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society 575.

³⁵⁷ Research actually developed a gamer identity scale assessing the extent to which an individual self-identifies as a gamer. The scale is based on behavioral intent, time spent playing video games, esports team membership, and age. Brian Yim and others, 'The Gamer Identity Scale: A Measure of Self Concept as a Video Gamer' (2023) 138 Computers in Human Behavior 107476.

³⁵⁸ Daniel Muriel, 'Video Games and Identity Formation in Contemporary Society', *The Oxford Handbook Digital Media and Sociology* (Oxford University Press 2022) https://www.researchgate.net/publication/376030068_Video_Games_and_Identity_Formation_in_Contemporary_Society accessed 7 January 2025.

³⁵⁹ James Gee, 'Learning Theory, Video Games, and Popular Culture', *The International Handbook of Children, Media and Culture* (SAGE Publications Inc 2008) http://www.scopus.com/inward/record.url?scp=84856742859&partnerID=8YFLogxK accessed 7 January 2025.

 $^{^{360}}$ Jingyang Ai, Beth Cross and Carole Bignell, 'The Construction of Gamer Identity in Narratives about Video



the game. (2) Social community expansion, gaming fosters connections and belonging within gaming communities. (3) Restorative effect, gaming provides emotional or psychological relief, helping gamers recharge. (4) Meaning recognition, gamers derive personal meaning and understanding from their gaming experiences. These aspects enrich gamers' personal and learner identities, offering skills, perspectives, or motivation that can enhance their performance and engagement in formal education.³⁶¹

In addition, video games have the power to shape and reshape individuals' "fundamental aspects of their symbolic and material configuration such as their identity, gaze, body, and agency". "Gaming culture can be exclusionary and discriminatory by reproducing bias and societal inequity, intersectional work is necessary to make sure all gamers can be included and benefit from games. This can be achieved by fostering diversity, equity and inclusion.

A medium for awareness raising and constructive change vector

Video games can be used to address social issues and raise awareness about global challenges. There is a growing trend advocating for using games to pass important messages, drive behavioural or thinking change, and educate gamers on socially important matters. They can be used as tools for social representation and social diversity, bringing to the audience underrepresented stories and cultures.³⁶⁴

Initiatives such as Games for change, Raising Good Gamers, Thriving in Games, Games 4 Sustainability are examples of this movement.

Games for Change, foster collaborations between game developers and social innovators to create games with meaningful social impacts. Because cultural and linguistic context matter, Game for Change also has specific initiatives and networks in regions and countries: Latin America, Asia Pacific, Africa, Turkey. Games for Change has a learning program, organises a yearly festival, curates a list of the best social impact games and immersive experiences through their Directory.

The initiative "Raising Good Gamers" focused on the issue of online toxicity with children players and involved a wide range of gaming stakeholders to develop responses. They engage with designers, technologists, activists, researchers, funders, academics, parents, and educators. The goal of RGG is to create a sustainable movement that can change the culture of online gaming for everyone. The initiative organised TED talks from students, workshops and delivered a report on envisioning an agenda for diversity, inclusion, and fair play³⁶⁵.

Thriving in Games Group, previously known as the Fair Play Alliance, is a non-profit regrouping games studios and organisations from worldwide. Its mission is to "drive positive change in online gaming by promoting thriving communities, combating harmful behaviours, and empowering everyone with the tools and knowledge to create inclusive and welcoming

Game Playing and Formal Education Learning Experiences' (2023) 31 Research in Learning Technology https://journal.alt.ac.uk/index.php/rlt/article/view/2852 accessed 7 January 2025.

³⁶¹ ibid.

³⁶² Muriel (n 360).

³⁶³ Salen Tekinbas (n 281).

³⁶⁴ ECORYS and KEA (n 6).

³⁶⁵ Salen Tekinbas (n 281).



spaces."³⁶⁶. The advocate that safe and inclusive online gaming is a shared responsibility. They organise online gaming experience where volunteer developers and researchers "combine the latest research in human behaviour with practical game-development expertise to provide industry-leading resources and support".³⁶⁷ They also delivered practical guides, research reports, case studies and expert advice and organised Fair Play Summit and from 2025 Thriving Players Summit.³⁶⁸ They also designed a lively Digital Thriving Playbook with practical guidance on how to make spaces better for everyone. The Playbook is a dynamic instrument composed of various sections each fulfilling a need from the audience:

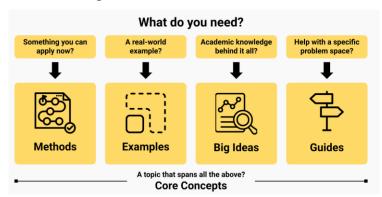


Figure 15. Visual from the Guide on how to use the Digital Thriving Playbook

Interestingly, the core concepts of Digital Thriving are used as labels to tag each piece of content uploaded in the Digital Thriving Playbook enabling easy retrieval of resources on the following core concepts: Accessibility, Belonging, Collaboration, Community Management, Creativity, Diversity, Equity and Inclusion (DEI), Digital Thriving, Disruptive Behaviours, Group Dynamics, Mastery, Measurement, Productive Behaviours, Prosociality, Tools, Trust, Trust and Safety, Values, and Well-being.

A lot of these core concepts are in line with the i-Game orientations. For instance, productive behaviours are "the kinds of actions you want to see in digital spaces. They help bring out the best in individuals, groups, and communities" ³⁶⁹.

³⁶⁶ Thriving in Games Group, 'Who Is Thriving in Games Group?' (*Thriving in Games Group*) https://thrivingingames.org/about/ accessed 7 January 2025.

³⁶⁸ Thriving in Games Group, 'Resources' (*Thriving in Games Group*) https://thrivingingames.org/resources/ accessed 8 January 2025.

Weszt Hart, 'Introduction to Productive Behaviors' (*Digital Thriving Playbook*, 25 June 2024) https://digitalthrivingplaybook.org/big-idea/introduction-to-productive-behaviors/ accessed 8 January 2025.



Productive behaviors include:

- Amenability Balancing personal interests with a dedication to a group or community.
- Assertiveness Protecting the integrity of the whole (self, group, or community).
- Creativity Producing something that is both original and useful.
- Inclusion Cultivating a sense of belonging and empowerment.
- Mastery Getting increasingly better at something challenging.
- Prosociality Acting in ways that benefit others.
- Resilience Withstanding hardship or challenging situations.
- Sociability Forming and maintaining healthy relationships of various types and intensities.

To foster productive behaviors, developers should consider:

- Your values If your company doesn't value productive behaviors, you aren't likely to support them well.
- Intrinsic motivation Don't give people busywork, give them tasks they feel good about completing. Internal rewards are more powerful than external ones.
- Situational design Undesired behavior is quite often due to situational factors. What is your design doing to produce undesired behaviors?
- <u>Proactive design</u> Systems that induce productive behaviors are tough and expensive to retrofit onto finished products. Begin thinking about them early in your game's development.
- Measurement Determine what productive behaviors you want to see and how you'll know you're seeing them.

Figure 16. Screenshots from H. Weszt piece on Productive behaviours³⁷⁰

Another initiative, Games4Sustainability³⁷¹, is more oriented towards the professionals willing to use games in their activities. The platform helps academics, trainers, NGOs, teachers, students, and other people interested in implementing sustainability games in their activities. The platform is composed of a Gamepedia, a catalogue of games matching the UN Sustainable Development Goals and a blog on sustainability and serious games.

Health and Well-being

There is a growing recognition of both the positive and negative impacts of video games on health and well-being. Obesity, addiction, mental health problems due for instance to harassment, toxicity have been often identified as negative consequences of gaming. On the other hand, video games with social components, like cooperative and competitive multiplayer games, encourage positive interactions and increase enjoyment. Exergames, which require physical interaction, are particularly effective in promoting physical health, such as cardiovascular health, balance, and fitness, especially during the pandemic.

Advices for gamers

Additionally, the Cybersmile Foundation³⁷³ has released a set of concrete and practical advice for video games players to address issues arising from in game such as dealing with abusive players, dealing with game rage, how to develop teamwork skills, how to ensure personal security in games and so forth.

Research Initiatives

Ethical Games

Collaborative initiatives are also on the agenda, with the Ethical Games initiative led by game industry, academia, and gamers. They released a draft version of a code of conduct for game developers promoting ethical practices within the gaming industry and guidance for gaming companies on how to ensure the benefit of game industry workers.³⁷⁴ Their first conference

³⁷⁰ ibid.

^{&#}x27;Games4Sustainability - Sustainability through Serious Games' (Games4Sustainability) https://games4sustainability.org/ accessed 8 January 2025.

³⁷² ECORYS and KEA (n 6).

³⁷³ A US and UK based non-profit committed to digital wellbeing and tackling all forms of bullying and abuse online.

³⁷⁴ Ethical Games, 'Code of Ethics for the Game Industry' (*Ethical Games*) http://ethicalgames.org/ accessed 2 July 2024.



happened in January 2024. and results and insights from this event are contained in the following article "Ethical Games: Toward Evidence-Based Guidance for Safeguarding Players and Developers." 375

Guidance:

Achieving ethical and positive societal dimension

- Foster interdisciplinarity for game design
- Enhance onboarding and immersiveness for better learning and impact
- Foster serious games
- Rebalance profit and ethical/societal benefits of video games
- Do not provide support to influencers promoting toxic content or behaviours
- Use child centred design
- Provide support for creative, inclusive, and well though games (financial and human)
- Rethink and update content moderation
- Ensure diversity and inclusivity in the developers teams and game elements (narrative, characters)
- Promote game mechanisms for stimulating good behaviours and curb negative ones

Follow the results and progress of ethical Game initiatives - stay up to date



Figure 17. Selection of ethical Games initiatives

i-Game community and co-creation platform

The platform will contain materials and resources to raise awareness to the i-Game Community members about ethical considerations of games. In addition, links towards ongoing and past ethical initiatives will be provided.

³⁷⁵ Celia Hodent, Fran Blumberg and Sebastian Deterding, 'Ethical Games: Toward Evidence-Based Guidance for Safeguarding Players and Developers' (2024) 2 ACM Games 7:1.



UNIVERSITY

2. GAMING AND REGULATION WORKING GROUP

Noémie Krack from KU Leuven, CiTiP and working on i-Game is now part of the Gaming and Regulation Working group. The working group is a multi-stakeholders initiative launched by the STERN Centre for Business and Human Rights, part of New York University (NYU).³⁷⁶ The working group is made up of ten members, including five members from civil society or academia, four members from the gaming industry, and one member from a regulatory body. The working group through Mariana Olaizola Rosenblat (NYU, STERN) also recently joined the Global Online Safety Regulators Network as official observers.



CENTRE FOR IT & IP I AW

Figure 18. Overview of the Gaming and Regulation Working Group Participants

Noémie joins Martin Sas, another CiTiP PhD researcher. Both are working on gaming research projects, respectively i-Game and PROGRRES. They bring respective expertise to the working group on EU regulations. Noémie on freedom of expression, content moderation, DSA, AI regulation and Martin Sas on privacy, data protection, dark patterns, age-appropriate design, and the DSA.

The aim of the working group is to advance constructive regulation of the video games industry. The working group brings together regulators, representatives of the gaming industry, and civil society researchers on a weekly basis to discuss and achieve consensus on concrete regulatory measures needed to address harms in online gaming, from child grooming to violent extremist radicalisation.

Besides weekly meetings, the working group has prepared submissions to the European Commission and Ofcom in response to their call for feedback on the implementation of researcher data access provisions. The working group is poised to provide input to other regulatory bodies as needed. A web page is currently under construction which will showcase the mission of the group, its members and acknowledge relevant funding including i-Game research grant.

The European Commission has opened its draft delegated act on data access on platform's data for vetted researchers for feedback in November 2024.³⁷⁷ The gaming and regulation

³⁷⁶ NYU Stern Center for Business & Human Rights, 'Working Group on Gaming and Regulation' (10 December 2024) https://bhr.stern.nyu.edu/category/working-group-on-gaming-and-regulation/ accessed 29 January 2025.

³⁷⁷ European Commission, 'Have Your Say - Delegated Regulation on Data Access Provided for in the Digital Services Act' (*European Commission - Have your say*, 31 May 2023) <a href="https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13817-Delegated-Regulation-on-data-access-provided-for-in-the-Digital-data-access-provided-for-in-the-Digita



working group submitted a written feedback containing the following elements. 378

Firstly, the contribution highlighted how the impact of the DSA access request regime is limited because of the scope of the DSA itself. As explored in Section 1.5.1, gaming platforms are falling in the scope as intermediary services but only a few will be classified as "online platforms" and none for now can be considered as "VLOP". Access to data on these risks is thus limited, hindering effective independent research on gaming.

Secondly, it seems independent researchers are currently able to obtain very limited information from gaming services providers and in general transparency practices are lagging behind compared to social media platforms. It is therefore extremely hard to assess the prevalence and nature of harm and to build evidence-based conclusions. For instance, only Roblox and Steam have public APIs.

Thirdly, the gaming ecosystem presents unique data access challenges due to its reliance on ephemeral content like real-time communications and in-game behaviours, which are not stored long-term. The contribution highlights the need for access to different types of data: persistent data (user accounts and user-generated content), ephemeral data (real-time communications and gameplay), moderation and enforcement data, systemic risk assessments, and experimentation data.

Fourthly, it also suggests secure data access mechanisms that providers can use before sharing the data with researchers, including: encrypted sharing, pseudonymisation, and anonymisation, aggregate data to support research and mitigate risks while ensuring privacy and technical feasibility. Providers can implement technical measures to control data access, for instance through an API with specific permission, virtual laboratory within their infrastructure. While privacy and security are key for ethical research, they should not be a waiver for refusing access completely. Rather a balanced data access framework, granting access to researchers according to security standards, would help improve accountability and safety in online gaming.

The Working Group is currently preparing a submission to the United Kingdom (UK) regulator for the communication services (Ofcom) call for evidence about researcher's access to information from regulated online services.³⁷⁹

Services-Act en> accessed 14 January 2025.

³⁷⁸ Rosenblat and others (n 19).

³⁷⁹ Ofcom, 'Call for Evidence: Researchers' Access to Information from Regulated Online Services' (www.ofcom.org.uk, 28 October 2024) https://www.ofcom.org.uk/online-safety/illegal-and-harmful-content/call-for-evidence-researchers-access-to-information-from-regulated-online-services/ accessed 14 January 2025.



3. GUIDANCE

These guidelines below are inspired and based on the research conducted for this deliverable including the numerous guidelines consulted in this research effort. These guidelines will evolve as the project progresses as further research on IP and AI consideration of games will enrich the below recommendations. These guidelines should not be considered as a checklist or be fully exhaustive.





ETHICAL CHANGE THROUGH LEADERSHIP

- · Position your company with an internal charter reflecting company values and commitments to ethical game development, inclusivity, diversity, and interdisciplinary collaboration.
- · Protect and prioritise gaming workforce wellbeing by
 - o ensuring proper training and development
 - o providing adequate staffing and resources

AI & GEN AI TOOLS

ASSESSMENT

Al and Gen Al tools are increasingly used for games design. Issues with

the outputs arise with bias.

leadership and development teams

should pay attention to the tools they used, whether they are developed in

house or from third party), especially

(diverse, inclusive), the biases risks of

possible. A quality control by a diverse team must be operated by

actively wok to reduce job precarity in the

DESIGN TEAM

- background, and perspectives. A diverse team broader audience.

COLLABORATIONS







ADAPT TO THE GAME AUDIENCE

Ensure the game content is age-appropriate and implement adapted and relevant safeguards and privacy measures from the design stage. Ensure that appropriate design is enshrined in all carefully check what is re-used in the game (pre-existing works) elements related to the game including the legal documentation cultural, linguistic context.

BACKGROUND CHECK





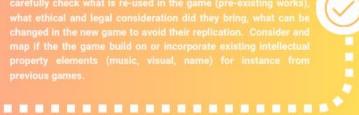
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RESPECTFUL REPRESENTATION OF WOMEN

Ensure diversity and avoid stereotypes in the game characters, non playable characters and interaction with the gamer. sexualisation of women in games both in the game play, the presence, the narrative, the actions of characters and interactions with the gamers.

CONSULT COMMUNITIES, **RESEARCH & CIVIL SOCIETY**

Violence, harrassment and safety issues can manifest in many different ways in game. Make sure to consult under-represented or vulnerable groups of gamers to have their opinion on the academics and civil society working on game safety for advices. This will help to map the



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.................. GAMERS' WELL-BEING BY DESIGN

- · Avoid practices that encourage addiction
 - Reaching out to disengaged players who have not connected and invite to reconnect
 - multiplayer gameplay).
- . Encourage healthy gaming habits:
 - Actively encourage players to take breaks and through in-game messaging or mechanics.



19 ENSURE CONSUMER PROTECTION



PROMOTE & REWARD PRODUCTIVE **BEHAVIOURS**

Design game mechanics that reward teamwork, empathy, and ethical decision-making. Set up incentives for constructive engagement, such as badges or rewards. Do not bring visibility or partnership, or sponsorship to influencers with toxic speech and behaviours.



SET UP ROBUST REPORT MECHANISMS

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4. POLICY RECOMMENDATIONS

Building on the analysis conducted in Section 1, this section elaborates recommendations for policymakers.

Table 2. Policy recommendations



Recognise the Role of the Gaming Sector

Acknowledge the significant role of the gaming sector in people's lives and the broader entertainment industry. With millions engaging as players or spectators, ensure that the legal and ethical challenges and risks for game users are addressed to prevent games from falling into a regulatory blind spot. Policymakers can Policy Priorities for game development and design steering the sector's development and reward ethical, societally positive, and constructive games.



Leverage Industry Gaming Self-Regulation

Build on the sector's strong tradition of self-regulation by fostering closer collaboration with industry initiatives to address ethical concerns and systemic risks effectively.



Support Smaller Gaming Structures

Assist smaller gaming companies and studios in navigating the complex regulatory landscape. Provide guidance on adapting existing regulations to their services and technological innovations, ensuring fair and accessible compliance mechanisms.



Promote Interdisciplinarity in Game Design

Encourage the development of games with positive societal impact by establishing awards, labels, and funding schemes. Prioritise initiatives that foster diversity in gameplay, inclusivity, and diversity in narratives.



Enhance Education and Workforce Diversity in Games

Strengthen educational programmes aimed at upskilling the gaming workforce, with a particular focus on women and underrepresented groups in the gaming community. A more diverse developer base will contribute to greater representation and inclusivity in games.



Support research about video games and the gaming sector

The gaming sector and video games are still associated with assumptions or myths, more independent and robust research is needed to build evidence on the challenges present in the gaming sector. Policy Makers can consult various stakeholders to define a Strategic Research Agenda about games and the gaming sector. This corpus of research will foster and support better policy making and the sector's self-initiatives including best practices. For instance, on the relation between toxicity such as gender-based violence, extremisms, disinformation, and gaming.



Address Content Moderation Challenges with Gaming

Explore solutions to the challenges posed by the ephemeral nature of gaming content, which complicates content and behaviour moderation. Multi-stakeholders consultation is necessary to adopt a tailored approach and support dialogue (gamers, developers, regulators, gaming communities) to address content moderation challenges. Support industry-wide coalitions to establish robust standards for content moderation and behavioural management in gaming environments. Virtual worlds and the metaverse



constitute additional moderation challenges and the applicability of relevant regulation should be further studied and gaps addressed.



Deliver Age-Appropriate Design Standards or Code

Foster research on age-appropriate design. Develop and implement official standards or a code of practice to ensure age-appropriate design in video games. This includes age-appropriate design for in-game features, for privacy settings and documentation, game monetisation mechanics, content reporting and related information. This can be built from self-regulation initiatives such as PEGI and its latest Code update. While this seems to be in the EU pipeline, it has not been delivered yet.



Conduct a Comprehensive EU Regulatory Fitness Check for Gaming

Evaluate the adequacy of existing regulations applicable gaming and associated platforms, including gaming platforms, game streaming platforms, and the development of metaverse activities. Address challenges like DSA application to the gaming sector, content ephemerality, behaviour moderation, and virtual world-specific risks to ensure safety, fairness, and accountability in these evolving environments. Before adopting new regulatory instruments, consider and explore potential co-regulatory schemes, existing legislation enforcement and interpretation.



Enhance cooperation between relevant sectoral authorities

Video games encompass a wide range of sectoral or horizontal legislations. Some of the risks and challenges for gamers are transversal and fall under the mandate and scope of various authorities, especially the data protection and consumer protection authorities. Cooperation between these authorities should be fostered to increase the effectiveness of enforcement actions against dark patterns and addictive design in games both raising data protection and consumer considerations.



5. LEGAL REQUIREMENTS FOR I-GAME

Through a continuous analysis of the relevant legal framework, KUL provides and will provide legal and ethical support during the entire duration of the i-Game project. To guide the project partners in their tasks, KUL will map the relevant legal requirements applying to the project activities and provide guidelines and recommendations on how to implement these requirements in the platform's design.

To address legal and ethical requirements, a collaborative document outlining the relevant legal considerations was created and presented to the consortium. This document serves as a centralised resource for discussing the legal aspects of the i-Game co-creation process, offering a structured framework to guide decision-making. It also functions as a reference for informing technical partners about legal requirements that might require a technical implementation of the platform. By aligning the document with ongoing discussions, a collaborative approach is followed to address upcoming and new legal considerations arising as the platform evolves. The legal requirements have so far been structured based on a user's journey within the i-Game platform to provide clarity and relevance for all partners. The full legal requirements list and document is an internal document and is only accessible to project's partners.

A privacy policy and terms and conditions (T&C) will be drafted. These documents will leverage methods associated with age-appropriate design—such as the use of logos, bold text, clear structuring, hyperlinks, and narrative explanations—to ensure they are understandable and accessible to future users. The T&C will comply with the requirements of the Digital Services Act, including establishing a single point of contact. They will define in detail what is permitted and prohibited on the platform, outline how content is moderated, specify potential moderation decisions, and address the intellectual property (IP) dimension of the co-creation process.

For content hosted on the platform, a user-friendly and easily accessible notice-and-action mechanism will be established to allow users to report illegal content or violations of the T&C. Reports will trigger an automatic notice receipt confirmation, which will include redress options. An internal procedure will be in place to ensure notices are handled in a timely, diligent, and objective manner. Any content moderation decisions will be accompanied by a clear statement of reasons. Additionally, the platform will publish an annual transparency report detailing the content moderation activities undertaken during the relevant period.

Special attention will be given to the co-creation process, particularly the management of background and foreground IP. Dedicated documents will be developed and accessible within the platform to facilitate collaboration among teams and clarify IP-related matters.

Since the i-Game Community and game co-creation platform is still in its inception phase and therefore the list of already mapped requirements will evolve as the project progresses. This could involve adapting, removing, or adding certain legal requirements as needed.

Given the unique ethical and legal considerations surrounding the use of AI and generative AI tools, these technologies will be carefully examined to ensure compliance with applicable regulations, including the AI Act where relevant.

In line with i-Game's commitment to ethical game design from the inception, the platform will also provide materials and resources to raise awareness about the various legal considerations associated with video games. This proactive approach supports the development of games that are both innovative and ethically grounded. The feasibility of a gamified approach to this learning journey is currently explored.

The legal requirements will evolve alongside the platform's design, with some being added or updated as needed, ensuring an iterative and collaborative process that adapts to the platform's development. If some of these legal requirements necessitate technical implementation and technical requirements,



the mention (TR) is then clearly indicated in the table each time for easy implementation by relevant partners. The following table shows how the list of legal requirements is currently structured; the document is internal and only i-Game partners have access to it.

Table 3. Structure of the preliminary mapping of legal requirements for i-Game

Numbering	Legal requirement	Implementation Partners who should be involved
A.	Platform Governance	
В	Entry - Sign up – registration	
C.	Content hosted by the community and platform	
	Content in i-Game can take many forms.	
	 Repository of content used for games co-creation 	
	- Games co-created	
	 Interaction between the teams, chats, messages 	
	- Content from the user's portfolio	
D.	Co-creation process and outputs	



6 CONCLUSION

The video game industry is a dynamic and complex sector that intersects with numerous legislative frameworks and ongoing initiatives from industry and civil society to address legal and ethical considerations. While this deliverable could not comprehensively cover all relevant issues in video games and the gaming sector, it provides a broad overview of the legal and ethical dimensions of video games from an IT perspective. Future deliverables will expand on this foundation, offering analyses of the following legal aspects: intellectual property (D3.6 in Month 24) and artificial intelligence (D4.8 in Month 34).

The analysis revealed that video games have been somewhat under examined by regulators, often addressed through a fragmented legal framework not focused on gaming. While certain legislations effectively tackle specific issues, others fail to address the unique challenges and harms within the gaming sector. This gap highlights the need for more tailored regulatory approaches to address the distinct characteristics of video gaming. This need is especially pressing given that the gaming sector has become the largest entertainment industry in terms of profits. However, its commercial and cultural significance has not yet been adequately matched by attention from policymakers, despite increased interest in recent years through specific the commission of studies and release of reports from EU policymakers, including the landmark report "Understanding the Value of a European Video Games Society." 380

A coherent, long-term European strategy is essential to ensure fair benefits for all stakeholders, support EU actors and start-ups, and address critical challenges. The rapid growth and profitability of the gaming industry necessitate a thoughtful approach to fostering a healthy and ethical gaming environment. This should include incentivising developers and publishers to centre legal and ethical compliance by design since the very early start of a game design, combat illegal content, toxicity and harmful behaviours in games and gaming platforms, prioritising child-centred design in games targeted at younger audiences, and ensuring diversity and inclusivity in the sector.

Through a combination of legislative action, self-regulation, and collaboration among stakeholders, the video game sector can continue to innovate while promoting an inclusive, ethical, and sustainable environment for all participants. The *i-Game* project will aim to raise awareness about the numerous ethical and legal topics discussed in this report by developing materials for the future *i-Game* community and co-creation platform users.

³⁸⁰ ECORYS and KEA (n 6).



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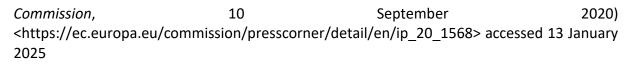
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