

# Game Design: No Child's Play

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A CHILDREN'S RIGHTS ANALYSIS OF THE EU'S REGULATORY  
FRAMEWORK GOVERNING (ONLINE) (VIDEO)GAMES

Kim Schuurman (SNR: 4583086)

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N. PURTOVA

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## I. INTRODUCTION

### I.I GAME DESIGN AND CHILDREN'S RIGHTS

The (online) videogaming industry has expanded significantly over the past decades, with children being a key consumer group.<sup>1</sup> Recently, gaming practices in relation to children have been the subject of extensive debates. These debates focused on concerns about the possibility of developing a gaming addiction and the negative effects of violent games upon children's development, as well as on the benefits of games being employed in an educational setting and providing children with an enjoyable activity. The importance of having an adequate framework in place that protects and promotes children's rights is increasingly acknowledged at various levels.<sup>2</sup> The UN's General Comment No.25 refers similarly to the impact games may have on children's rights, primarily so in the context of health concerns and grooming practices.<sup>3</sup> Children, and their rights, are thus significantly affected by the games they play. Still, there is very little research as of yet on the different ways that (online) games may affect children, particularly outside the scope of health-related concerns (e.g. gaming addiction).<sup>4</sup> Further research is thus required.

From a child's rights perspective, the interest of the child is a leading principle. This means that any research into the effect of online games on children must include both the positive aspects – such as the possibilities for learning, socialising and simply having fun – as well as the negative or harmful aspects that might endanger children's rights. There are many aspects to (online) games and many different ways in which they interact with or affect children's rights. They can positively reinforce children's right to leisure, play and culture (Article 31 CRC), as well as their right to information (Article 17 CRC) and offer a platform to make their opinions heard (Article 12 CRC). Online games furthermore offer opportunities for social interactions, forming bonds with other players and learning.<sup>5</sup> However, there are drawbacks as well. Though there is a lack of empirical evidence, an often-encountered concern is that games may result in a gaming disorder,<sup>6</sup> which would impede the child's right to health (Article 24 CRC) and endanger their development (Article 6 CRC). Furthermore, games may require monetary transactions – either when obtaining the game as a whole or at a later stage within the game itself. This would thus involve certain economic gains or profits for the gaming company, which might be extracted through unjust advantages. This could result in the economic exploitation

<sup>1</sup> 'A Digital Decade for Children and Youth: The New European Strategy for a Better Internet for Kids (BIK+) | Shaping Europe's Digital Future' <<https://digital-strategy.ec.europa.eu/en/library/digital-decade-children-and-youth-new-european-strategy-better-internet-kids-bik>> accessed 4 July 2022.

<sup>2</sup> See, among others: UNICEF Office of Research- Innocenti, 'The Online Gaming Industry and Child Rights: Opportunities and Challenges for Children and the Industry' (Child Rights and Business Unit 2019) <<https://www.unicef-irc.org/article/1926-the-online-gaming-industry-and-child-rights.html>> accessed 2 March 2023; Claire Bessant, 'Children, Public Sector Data-Driven Decision-Making and Article 12 UNCRC' (2022) 13 European Journal of Law and Technology <<https://www.ejlt.org/index.php/ejlt/article/view/872>> accessed 9 January 2023; Annette Cerulli-Harms, 'Loot Boxes in Online Games and Their Effect on Consumers, in Particular Young Consumers' (Policy Department for Economic, Scientific and Quality of Life Policies 2020); José P Zagal, Staffan Björk and Chris Lewis, 'Dark Patterns in the Design of Games'; A.J. van Rooij and others, 'Behavioral design in video games' (Trimbos Instituut 2021) AF1965 <<https://www.trimbos.nl/aanbod/webwinkel/af1965-behavioral-design-in-video-games/>> accessed 6 March 2023; Simone van der Hof and others, "'Don't Gamble With Children's Rights'—How Behavioral Design Impacts the Right of Children to a Playful and Healthy Game Environment" (2022) 4 Frontiers in Digital Health <<https://www.frontiersin.org/articles/10.3389/fgdth.2022.822933/full>> accessed 13 June 2022; UNICEF, Online Gaming and Children's Rights: Recommendations for The Online Gaming Industry on Assessing Impact on Children (April 2020) <<https://www.unicef.org/partnerships/unicef-publishes-recommendations-online-gaming-industry-assessing-impact-children>> accessed 6 March 2023; European Parliament resolution of 18 January 2023 on consumer protection in online video games: a European single market approach (January 2023) 2022/2014(INI)

<sup>3</sup> Committee on the Rights of the Child, 'General Comment No. 25 (2021) on Children's Rights in Relation to the Digital Environment' (UNICEF 2021) CRC/C/GC/25 paras 95 & 122 <<https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-25-2021-childrens-rights-relation>> accessed 16 February 2023.

<sup>4</sup> A Tuijnman, R Andree and AJ van Rooij, 'Risico's, Voordelen En Regulering van Games' [2021] Utrecht <<https://repository.wodc.nl/handle/20.500.12832/3127>> accessed 1 March 2023.

<sup>5</sup> Innocenti (n 2) 10.

<sup>6</sup> 'Addictive Behaviours: Gaming Disorder' <<https://www.who.int/news-room/questions-and-answers/item/addictive-behaviours-gaming-disorder>> accessed 3 May 2023.

of the child (Article 32 CRC). In contemporary times, where many games are played online and information on the gamer is gathered by various parties, the child's privacy (Article 16 CRC) might be jeopardised as well.

One specific way in which (online) games might cause harm would involve the design choices made within the games.<sup>7</sup> Design choices refer to the choice(s) made by game developers when creating the content and rules of a game.<sup>8</sup> Game companies usually have several motives when designing a game: legal compliance, commercial gains and monetisation, ensuring enjoyment for the gamer.<sup>9</sup> All of these may influence the specific design of the game. Games are ideally designed to provide the gamer with an immersive experience where each 'level' becomes a bit more difficult. This approach retains the gamer's attention and ensures they continue to enjoy playing the game, while training their gaming skills.<sup>10</sup> The design of a game is not, however, always focused on providing the gamer with an enjoyable experience.<sup>11</sup> Particularly where the commercial gains of the game company outweigh the gamer's interests in having a good time. The game's design might then be focused solely on persuading the gamer into making (monetary) decisions that benefit the game company, while possibly harming the gamer him or herself.<sup>12</sup> A game may, for example, be offered for 'free'. This means that there are no initial costs when installing the game, but the player's personal information is usually sold to third parties, as a way for the game company to create revenue.<sup>13</sup> Gamers may also be coerced into buying additional features that are said to enhance game play. If this is not clearly communicated to the gamers – or indicated in a transparent manner – the game's design can then be said to be misleading, economically and socially manipulative or even inducing harmful behaviours.<sup>14</sup> Young people are deemed to be especially vulnerable to such designs, as they are still developing and (might) lack the maturity and capacity to determine whether a particular design might be harmful.<sup>15</sup> Though there has been some contemporary research on the issue of design choices, manipulation and (technological) innovation, there remains a lack of evidence as to the specifics of the matter.<sup>16</sup>

## I.II RELEVANCE OF THE RESEARCH

Design choices seem to affect a variety of dilemmas prominent within the gaming context. They have an impact on the privacy of players, due to the usage of their personal data. Players do not always know what design choices there are and how these may elicit them into the money-making schemes of game designers. And even if they are aware of these design choices, they might still be tricked into spending (more) money or providing personal data due to the opacity of the game's design. There may, at times, thus also be a lack of transparency and imbalance between the game company and the gamer. Another much debated issue would be the so-called loot boxes, which are virtual items in video games that offer the player randomised in-game

<sup>7</sup> Innocenti (n 2); 'UNICEF Publishes Recommendations for the Online Gaming Industry on Assessing Impact on Children' (*UNICEF Global Development Commons*) <<https://gdc.unicef.org/resource/unicef-publishes-recommendations-online-gaming-industry-assessing-impact-children>> accessed 2 March 2023.

<sup>8</sup> VT Visch and others, 'Persuasive Game Design: A Model and Its Definitions' [2013] CHI 2013: Workshop Designing Gamification: Creating Gameful and Playful Experiences, Paris, France, 27 April-2 May 2013 <<https://repository.tudelft.nl/islandora/object/uuid%3A23ad5ef4-fbf3-4e9c-8815-1edf9da40456>> accessed 30 March 2023.

<sup>9</sup> Innocenti (n 2).

<sup>10</sup> Ernest Adams, *Fundamentals of Game Design: Fundamentals of Game Design* (2nd edn, New Riders 2010); Zagal, Björk and Lewis (n 2); Lisa Raith and others, 'Massively Multiplayer Online Games and Well-Being: A Systematic Literature Review' (2021) 12 *Frontiers in Psychology* <<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.698799>> accessed 16 April 2023.

<sup>11</sup> See, among others: Innocenti (n 2); A.J. van Rooij and others (n 2); Tuijnman, Andree and Rooij (n 4); Annette Cerulli-Harms (n 2); David Zendle, Rachel Meyer and Nick Ballou, 'The Changing Face of Desktop Video Game Monetisation: An Exploration of Exposure to Loot Boxes, Pay to Win, and Cosmetic Microtransactions in the Most-Played Steam Games of 2010-2019' (2020) 15 *PLOS ONE* e0232780.

<sup>12</sup> Hof and others (n 2).

<sup>13</sup> Nenad Tomić, 'Economic Model of Microtransactions in Video Games' (2019) 1; Zendle, Meyer and Ballou (n 11).

<sup>14</sup> A.J. van Rooij and others (n 2) 5.

<sup>15</sup> See, among others: *ibid* 21; Innocenti (n 2) 24.

<sup>16</sup> Tuijnman, Andree and Rooij (n 4).

rewards of uncertain in-game and real-world value.<sup>17</sup> The literature suggests that there is a link between these loot boxes and gambling behaviour, though there is not sufficient research to establish causal relations.<sup>18</sup> Though they form only a small part of the online gaming issue, loot boxes are particularly illustrative for the problems incumbent. The design aspects of online games are generally not accounted for in national or regional legislation and countries differ significantly in how they regulate this.<sup>19</sup> There are no rules on the monetisation strategies that are incorporated in the games, nor on the contents of the games or even the health-related aspect of games – following from, for example, concerns regarding gaming addiction(s). The industry has certain self-regulatory mechanisms, but there is as of yet little insight into their effectiveness.<sup>20</sup> Various existing European regulations might also be applied to (online) games and their designs, such as the Consumer Rights Directive 2011, the Unfair Commercial Practices Directive 2005 and the Unfair Terms in Consumer Contracts Directive 1993, as well as the General Data Protection Regulation and the new Digital Services Act. Next to the fact that the area is thus highly fragmented, it is also questioned to what extent these regulations are actually applicable to the peculiarities of (online) games and whether they are able to resolve any negative effects design choices might have on children's rights.<sup>21</sup>

The lack of in-depth research into this topic has meant that there is not sufficient information available to inform policy choices or to set up official best practices – either by the state or within the gaming industry itself. What (soft law) measures have been taken, such as content classification, age ratings and parental controls, are not always effective and even run the risk of negatively impacting children's participation rights.<sup>22</sup> The contemporary generation of under-eighteens has grown up with the digital environment and are well-versed in braving the online world. Many of the existing instruments place, however, primary responsibility for protecting children's rights with the parents. Children, though more vulnerable due to their still developing capacities, might then be sidelined. General Comment No.25 specifically urges State Parties to enact the necessary measures, including legislation, regulation and policies, to prevent violations of children's rights. Given that the matter of game design is an issue that more and more jurisdictions are struggling with,<sup>23</sup> it would be logical to approach the matter at the EU level. That such an approach at the EU level could be fruitful is seen in the experience with (European) consumer and data protection laws, which often relate to protection from economic exploitation and the protection of privacy rights. The GDPR has shown that such a legislative approach can be useful in ensuring a better protection of these rights, being the most comprehensive data protection document at a global level.<sup>24</sup> Relying upon legislation to protect children's rights specifically can thus prove useful, particularly where the legislation focuses on online gaming. Within this context, it is deemed

<sup>17</sup> Leon Y Xiao, 'Which Implementations of Loot Boxes Constitute Gambling? A UK Legal Perspective on the Potential Harms of Random Reward Mechanisms' (2022) 20 *International Journal of Mental Health and Addiction* 437, 437.

<sup>18</sup> Gabriel A Brooks and Luke Clark, 'Associations between Loot Box Use, Problematic Gaming and Gambling, and Gambling-Related Cognitions' (2019) 96 *Addictive Behaviors* 26; David Zendle, Rachel Meyer and Harriet Over, 'Adolescents and Loot Boxes: Links with Problem Gambling and Motivations for Purchase' (2019) 6 *Royal Society Open Science* 190049; '2014/478/EU: Commission Recommendation of 14 July 2014 on Principles for the Protection of Consumers and Players of Online Gambling Services and for the Prevention of Minors from Gambling Online Text with EEA Relevance', vol 214 (2014) <<http://data.europa.eu/eli/reco/2014/478/oj/eng>> accessed 8 March 2023.

<sup>19</sup> Loot boxes, for example, are only expressly prohibited in The Netherlands, Belgium and Slovakia. See, Tuijnman, Andree and Rooij (n 6) and Cerulli-Harms (n 2).

<sup>20</sup> Tuijnman, Andree and Rooij (n 4); A.J. van Rooij and others (n 2).

<sup>21</sup> Simone van der Hof and others, 'The Child's Right to Protection against Economic Exploitation in the Digital World' (2020) 28 *The International Journal of Children's Rights* 833; Daniel L King and others, 'Unfair Play? Video Games as Exploitative Monetized Services: An Examination of Game Patents from a Consumer Protection Perspective' (2019) 101 *Computers in Human Behavior* 131.

<sup>22</sup> Innocenti (n 2); Tuijnman, Andree and Rooij (n 4); A.J. van Rooij and others (n 2).

<sup>23</sup> Innocenti (n 2); Rob Fahey Contributing Editor, 'The EU Sets Its Sights on Game Regulation | Opinion' (*GamesIndustry.biz*, 20 January 2023) <<https://www.gamesindustry.biz/the-eu-sets-its-sights-on-game-regulation-opinion>> accessed 3 May 2023; 'Protecting Gamers and Encouraging Growth in the Video Games Sector | News | European Parliament' (18 January 2023) <<https://www.europarl.europa.eu/news/en/press-room/20230113IPR66646/protecting-gamers-and-encouraging-growth-in-the-video-games-sector>> accessed 27 February 2023.

<sup>24</sup> A.J. van Rooij and others (n 2) 56.

difficult to balance children's rights to play and self-expression with violations of their right to freedom from economic exploitation and protection of their privacy.<sup>25</sup>

### I.III PROBLEM STATEMENT

Based on the numerous discussions taking place at both the national, regional and international level, it becomes clear that the effects of (online) games on children's rights is a 'hot topic' on everyone's agenda. It is, however, less clear what steps must be taken in the regulatory context. This would require further research. The goal of this research is to provide insights into the regulation of (online) games design to protect children's rights, as formulated in the Convention on the Rights of the Child. As it stands, it is generally acknowledged that gaming has an impact on children's rights: this can be both beneficial and detrimental. The extent of the impact remains uncertain, however, as do the different ways in which existing legislation may play a role. Research has shown that, in The Netherlands, experts from various fields agree on the fact that new policies are needed to ascertain the adequate protection of young gamers.<sup>26</sup> Taking a closer look at the existing legal frameworks currently in place could provide more insight into whether these rules can be applied to protect and promote children's rights within the (online) gaming context as well.

This thesis shall attempt to answer the question:

How can legislation regulate the design choices in (online) (video)games in order to promote children's rights, particularly their right to protection from economic exploitation, their right to privacy and their right to rest and leisure?

In order to answer the main research question, several sub-questions have been formulated. These are comprehensively discussed below.

#### 1. What are design choices in online games?

This research shall first look into what design choices in online games. Having an understanding of the development of design choices and how the motivations of game developers have changed over the years will help in determining how these choices might impact children's rights. This is discussed in the next chapter.

#### 2. How might the design choices in online games affect children's rights, specifically their right to protection against economic exploitation, their right to privacy and their right to rest and leisure?

This chapter looks at the relation between game design and children's rights, with a focus on the right to protection against economic exploitation, their right to privacy and their right to rest and leisure. Though game design can impact a variety of children's rights, these three are most directly affected by the choices of game developers. As discussed, (online) games can have an impact upon many different rights of the child.<sup>27</sup> The

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<sup>25</sup> See, among others: 'The Online Gaming Industry and Child Rights: Opportunities and Challenges for Children and the Industry' (Child Rights and Business Unit 2019) (n 2); Resolution 2022/2014(INI) (n 2); UN Committee on the Rights of the Child, General Comment No. 25 on children's rights in relation to the digital environment (March 2021) CRC/C/GC/25.

<sup>26</sup> Tuijnman, Andree and Rooij (n 4).

<sup>27</sup> Though, as mentioned, several rights can be impacted by the game and its design, because of limitations in space and time this research focuses only on these three rights. The right to health, for example, is another, often discussed right whereupon games can have a significant – and not always positive – impact. As will be alluded to throughout the thesis, games can be designed in such a way that they retain the player's attention for hours on end. This, naturally, impacts a person's health and could even result in a gaming disorder. This discussion should certainly be had elsewhere, but it is outside the scope of this research specifically.

game's design specifically, however, usually has an underlying motive of the game company.<sup>28</sup> This motive might be ascertaining the enjoyment of the gamer, when playing the game. It might also be an economic incentive by the game company to make a substantial profit, which could mean taking unjust advantage of the child. The objective of a game company is (hopefully) not to cause gamers to become addicted to their games. Rather, this might be best viewed as a corollary effect of the game company's objective to make a profit, which involves encouraging players to spend much of their time gaming – through the game's specific design.

3. What legislation is currently in place at the European Union level to protect children's rights when they play (online) games.

Chapter four then looks at existing legislation that aims to protect children when they engage in gameplay. Though there are currently no specific rules that regulate games and game design within the EU, discussions at the EU level do show that it is currently a topic of interest and one that requires further research.<sup>29</sup> This research analyses five different EU Regulations and Directives, all of which have been mentioned explicitly in the Parliament's call for action. The focus, when analysing these instruments, will be on how they specifically protect the children's rights that have been set out and defined within the previous chapter. This means also that the scope for the analysis is limited to those provisions that directly affect the child's right to protection from economic exploitation, to play and to privacy in the context of game design. Though all provisions within the instruments might be applicable to children (they are, after all EU citizens) for reasons of time and space the analysis is limited to provisions that mention – or for which it has been made clear that they cover – the child and the protection and promotion of their rights.

4. To what extent does the EU's regulatory framework regulate game design – specifically, microtransactions, loot boxes and in-game data collection – so as to protect and promote children's rights?

The final chapter aims to describe and analyse any perceived gaps that were noticed in the analysis of the legal framework, as set out in the previous questions. This evaluation is then used to set certain recommendations, which are discussed in the conclusion. The evaluation may (hopefully) also serve as a starting point for further research and policy debates. The evaluation focuses on whether the measures that have been discussed in the previous chapter actually protect the rights set out in chapter III. In this evaluation, the child's rights perspective takes central place, meaning that a balance should be sought between ensuring the child's enjoyment in playing games with the need to protect them from unjustified interferences with their rights.

### I.III METHODOLOGY

This research employs a legal-dogmatic approach. The research makes use of literature from other researches and contains a normative element, wherein the legal state of affairs is evaluated.

The first chapter consists of a descriptive analysis of the relevant academic writings on the topic of game design. It draws extensively on the non-legal social sciences and humanities in the multidisciplinary field that focuses on gaming studies. Insights from the economic field as well as (some) from the IT sector have

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<sup>28</sup> Scott A Goodstein, 'When the Cat's Away: Techlash, Loot Boxes, and Regulating "Dark Patterns" in the Video Game Industry's Monetization Strategies Comments' (2021) 92 University of Colorado Law Review 285; Zendle, Meyer and Over (n 18); Thierry Rayna and Ludmila Striukova, "'Few to Many": Change of Business Model Paradigm in the Video Game Industry' (30 June 2014) <<https://papers.ssrn.com/abstract=2534019>> accessed 12 April 2023.

<sup>29</sup> 'Protecting Gamers and Encouraging Growth in the Video Games Sector | News | European Parliament' (n 23).



been taken into account as well. Factually, these fields inform the technical and behavioural aspects of games, game design and behavioural (economic) incentives. Understanding how game design might impact the behaviour of young gamers requires a (rudimentary) understanding of children's development, particularly with regard to questions of appeal, undue influence and manipulation.

The first question requires an extensive literature review to understand what game design choices are and their relation to economic exploitation practices. For this, several scholarly databases have been consulted. This includes databases such as Heinonline, JSTOR and Kluwer for the legal aspects, as well as Elsevier and SSRN and Sagepub for articles within the social scientific fields. Google Scholar and the University's databases were used as well. Search terms included variations on: "game design" AND "economic" OR "marketing practices" OR "commercialisation"; "game design" AND "exploitation"; etc. Having found several sources, the snowballing method was then used to find further relevant literature on the topic. The databases of the national and international institutions mentioned above were also searched, to see whether they had already published something on game design. This resulted in a number of research papers and policy documents, which were then included in the literature review.

The second and third chapter consist of descriptive-interpretative analyses of the legal rules. Chapter two examines in detail the children's rights and principles at stake. Again, use was made of various scholarly databases to obtain information on the CRC and the specific rights that inform this research. Making use of the different handbooks<sup>30</sup> that exist – and using the snowballing method to obtain more sources – an initial understanding of the CRC was developed. The analysis starts with an in-depth investigation of the CRC, as well as the interpretation and recommendations by relevant bodies and organisations such as the UN Committee on the Rights of the Child. The third chapter sets out the current legislative framework for game design, particularly where children are concerned. The framework includes an analysis of both consumer protection law and data protection law. This overview is necessary for the evaluation of the law that takes place in chapter four. It must be stated that the analysis is limited in its scope to those articles deemed particularly relevant for children specifically and the protection of the child's rights discussed in chapter two. Though there are various other provisions within the legislation discussed that could prove relevant or useful, constraints on (words/) space and time have meant that the thesis only discusses those provisions that mention the protection and/or promotion of children and their rights.

The legal-dogmatic method is employed in especially the second and third chapter. This methodological approach is used to systematically discuss and analyse the legal rules, principles and concepts – and their underlying relations – within the context of games. This should then provide a basis to resolve any inconsistencies or lacunas in the existing laws,<sup>31</sup> and to improve coherence and consistency.<sup>32</sup> The legal-dogmatic approach analyses the legislation from an internal perspective, which means that the law's own

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<sup>30</sup> These included in particular, but are not limited to: Ton Liefwaard and Julia Sloth-Nielsen, *The United Nations Convention on the Rights of the Child: Taking Stock after 25 Years and Looking Ahead* (BRILL 2016) <<http://ebookcentral.proquest.com/lib/uunl/detail.action?docID=4731135>> accessed 10 July 2023; Ursula Kilkelly, Laura Lundy and Bronagh Byrne (eds), *Incorporating the UN Convention on the Rights of the Child into National Law* (Intersentia 2021) <<https://www.cambridge.org/core/books/incorporating-the-un-convention-on-the-rights-of-the-child-into-national-law/81D3FD28AF0255A8C4C503C98526DDEB>> accessed 10 July 2023; John Tobin (ed), *The UN Convention on the Rights of the Child: A Commentary* (First edition, Oxford University Press 2019); Meda-Mihaela Couzens, 'The application of the United Nations Convention on the Rights of the Child by national courts'.

<sup>31</sup> Jan M Smits, 'What Is Legal Doctrine? On the Aims and Methods of Legal-Dogmatic Research' (1 September 2015) 5 <<https://papers.ssrn.com/abstract=2644088>> accessed 14 March 2023.

<sup>32</sup> Jan Vranken, 'Exciting Times for Legal Scholarship' (2012) 2 *Law and Method* 42, 43.

sources are used for analysis and developing further recommendations.<sup>33</sup> This research does not solely employ an internal perspective, as the eventual evaluation is informed by the findings set out in chapter one – which was of an interdisciplinary nature and combined insights from the economic, IT and sociological fields. The overall aim of this research is to describe and understand how a certain phenomenon affects children’s rights and how the existing legal framework deals with this. Following that, a more normative discussion allows for a reflection upon the relevance of these rules and whether they are sufficient to ascertain the protection of said rights.<sup>34</sup>

Especially for the second and third question, legal sources are particularly relevant. Given the fact that the scope of this research is limited, the sources of law to be studied are derived from the international (UN) and regional (European Union) level. All sources will thus have to be taken into account to create a comprehensive and unified understanding of the rules at play. Policy documents, General Comments and other related documents are considered as well. In terms of substance, the thesis focuses on children’s rights law and national/regional rules on consumer protection and data protection.

The fourth chapter discusses a question that is of a more normative nature. It is a critical reflection on the findings in the previous chapters to determine whether the existing rules are sufficient to ascertain the rights of the child. For this, a normative framework is necessary.<sup>35</sup> While the second and third research question are more descriptive – they look at the positive and negative qualities of the law, in the context of game design – the fourth question focuses on what (if necessary) needs to be done to improve the law. A normative framework would here serve as a yardstick, providing a set of standards or values that can be used as arguments to support why and how the law might be improved.<sup>36</sup> Following Taekema, a normative framework may be based either on the basic principles and values of the law itself (internal framework), or the theories that provide such standards (external framework). This framework focuses on the rights as analysed in chapter two. Van der Burg’s framework for evaluative and normative legal research explains all methodological decisions in the research must be justified.<sup>37</sup> In order to evaluate a specific topic – in this case, game design – the most important values that are used in this evaluation must be distinguished and explained. Chapter two provides the basis thereto, setting out the specific rights children have under the CRC. The goal of chapter four is then to examine whether game design is covered by existing rules and protections at the EU level and to identify any gaps or overlaps that would hinder the effective realisation of children’s rights and principles.

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<sup>33</sup> *ibid.*

<sup>34</sup> Smits (n 31) 8–12.

<sup>35</sup> Sanne Taekema, ‘Theoretical and Normative Frameworks for Legal Research: Putting Theory into Practice’ [2018] *Law and Method* 7 <<https://www.bjutijdschriften.nl/tijdschrift/lawandmethod/2018/02/lawandmethod-D-17-00010>> accessed 2 May 2023.

<sup>36</sup> *ibid.*

<sup>37</sup> Wibren van der Burg, ‘The Merits of Law: An Argumentative Framework for Evaluative Judgements and Normative Recommendations in Legal Research’ (22 February 2018) <<https://papers.ssrn.com/abstract=3020624>> accessed 3 May 2023.

## CHAPTER II – DESIGN CHOICES IN GAMES

This chapter aims to set out what game design is and its relevance in relation to the rights of the child. The development of game design over time is first set out, discussing the most common design choices in the gaming environment and the reasoning behind these choices. The evolution that has taken place in the game industry, with an increasing reliance upon controversial monetisation strategies, has seemingly led to new challenges and policy concerns regarding questions of privacy and economic exploitation. For the past decades, the focus has been primarily on the health-related aspects of gaming.<sup>38</sup> The specific design of games has not been given much attention yet, but research thus far suggests that manipulative and unfair practices could constitute a new threat to children’s rights.<sup>39</sup> These practices have slowly shifted the focus from a transparent transaction where each party knew what he or she was getting into and could enjoy the benefits, to much more obscure methods that could potentially harm the gamer. Having an understanding of how this evolution took place and what its main drivers were is useful in determining how game design can impact children’s rights – whether positively or negatively. This chapter also provides the basis for the legislative analysis, as it helps make clear what and why certain regulations or legislation are applicable to game design.

### II.I THE DEVELOPMENT OF GAME DESIGN

Until the early 90s, games were primarily designed upon the basis of a pay-to-play model.<sup>40</sup> This was a single transaction, where the gamer would pay a small amount of money to play the game. This were usually so-called arcade games, which could be played at restaurants or entertainment arcades.<sup>41</sup> The most well-known example of a pay-to-play game is the game Pacman. These games needed to be entertaining and not easily won, so as to encourage continued use.<sup>42</sup> Especially since the amount of money spent on a single game was usually only a few cents.

With home-owned computers becoming more common, the industry took advantage of the better graphics and online connectivity and refined the pay-for-play business model. The box (or retail) revenue model was introduced, sometimes also referred to as the pay-per-play model.<sup>43</sup> Here, the gamer would buy the game as a whole in one ‘macro-transaction’. The player would be the owner of the game – which was usually sold as a physical copy – and could play the game for as long as they liked. If the gamer was satisfied with the game and enjoyed playing it, he or she might buy another game from that same developer. Up until the early 2000s, this was the most common form of game distribution.<sup>44</sup> These games had no hidden costs; once the game was bought, there were no further transactions involved.

With the introduction of the game World of Warcraft (WoW), the box revenue model changed to one of periodical subscriptions.<sup>45</sup> Players paid a periodical subscription fee in order to participate in the game. Profits

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<sup>38</sup> For example, the WHO voted in 2019 to include “gaming disorder” in its International Classification of Diseases. See: ‘ICD-11 for Mortality and Morbidity Statistics’ s 6C51 <<https://icd.who.int/browse11/l-m/en/#/http://id.who.int/icd/entity/1448597234>> accessed 7 May 2023.

<sup>39</sup> See, A.J. van Rooij and others (n 2); Tuijnman, Andree and Rooij (n 4); Annette Cerulli-Harms (n 2); Hof and others (n 2). For this research, those rights are specifically the right to privacy (Article 16 CRC), the right to play (Article 31 CRC) and the right to protection from economic exploitation (Article 32 CRC).

<sup>40</sup> Tomić (n 13) 17.

<sup>41</sup> Tim Fields and Brandon Cotton, ‘Chapter Three - History of Game Monetization’ in Tim Fields and Brandon Cotton (eds), *Social Game Design* (Morgan Kaufmann 2012) 21–22 <<https://www.sciencedirect.com/science/article/pii/B9780240817668000038>> accessed 16 April 2023.

<sup>42</sup> Fields and Cotton (n 41).

<sup>43</sup> A.J. van Rooij and others (n 2); Tomić (n 13).

<sup>44</sup> See, among others, Zendle, Meyer and Ballou (n 11); Tomić (n 13); A.J. van Rooij and others (n 2).

<sup>45</sup> Fields and Cotton (n 41) 22.

were continuously gathered which provided the developers with a more stable and reliable income stream.<sup>46</sup> Compared with the box revenue model, there was thus no ‘peak’ moment upon the game’s release and game developers had to ensure that their users remained content with the game over a longer period of time. An important element of these newer games, particularly WoW, was the newly incorporated social element. WoW was one of the first massively multiplayer online game (MMOG),<sup>47</sup> which is a video game in which thousands of players can interact with each other in real-time, in fantasy-based settings.<sup>48</sup> This interaction did not only increase the socialisation of games and the formation of so-called gamer communities, but has also been said to affect other aspects of gameplay enjoyed by players, such as their competitiveness and the immersion through character customisation.<sup>49</sup>

Technological advancements also changed the design of games. The gaming equipment necessary for playing the game became much more easily available and the number of educated ICT-experts grew exponentially.<sup>50</sup> This meant that there were more game developers and a larger audience of (potential) gamers. Combined with the rise of smartphones and mobile games, the gaming industry had to find new ways to engage players into buying their products.<sup>51</sup> Mobile gamers are less likely to pay a full game price for the smaller games found on smartphones, so the concept of free-to-play games was introduced.<sup>52</sup> These games are initially free, but rely upon other monetisation strategies to obtain revenue. This might mean that the buyer is provided only with the basic essentials of the game and required to make additional purchases to keep the game interesting. The monetisation strategy might also involve various advertisements being shown throughout the game or the selling of the gamer’s personal data to third parties to obtain revenue.<sup>53</sup>

The effects of a game’s design on its players have only become a topic of interest for policy makers and academics in more recent times.<sup>54</sup> Gaming companies have, as discussed, been aware of the (behavioural) impact of their games’ design for much longer and have been using this to determine their monetisation strategies.<sup>55</sup> For example, under the original WoW player-vs-player (PVP) Honor system, progress was calculated based upon weekly PVP contributions.<sup>56</sup> Playing for a consistent number of hours every week would not improve the player’s position within the game. Rather, more and more time had to be put into the game. This meant that in order to obtain the highest Ranking, the player was essentially expected to ‘live’ in the game for several months.<sup>57</sup> This system can be seen as particularly illustrative for the interplay between design choices in games and the behavioural impact upon the player. The game’s design encourages players to keep playing the game. By keeping the players engaged, the gaming company enjoys a structural inflow of money.

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<sup>46</sup> Matthew E Perks, ‘How Does Games Critique Impact Game Design Decisions? A Case Study of Monetization and Loot Boxes’ (2020) 15 *Games and Culture* 1004, 1007.

<sup>47</sup> Fields and Cotton (n 41).

<sup>48</sup> Janey Barnett and Mark Coulson, ‘Virtually Real: A Psychological Perspective on Massively Multiplayer Online Games’ (2010) 14 *Review of General Psychology* 167, 168.

<sup>49</sup> *ibid* 175.

<sup>50</sup> Tomić (n 13) 17.

<sup>51</sup> *ibid* 17–18.

<sup>52</sup> Tomić (n 13).

<sup>53</sup> Jennifer Valentino-DeVries and others, ‘How Game Apps That Captivate Kids Have Been Collecting Their Data’ *The New York Times* (12 September 2018) <<https://www.nytimes.com/interactive/2018/09/12/technology/kids-apps-data-privacy-google-twitter.html>, <https://www.nytimes.com/interactive/2018/09/12/technology/kids-apps-data-privacy-google-twitter.html>> accessed 8 May 2023; ‘Data Protection Trends in Children’s Online Gaming’ <<https://iapp.org/news/a/data-protection-trends-in-childrens-online-gaming/>> accessed 8 May 2023.

<sup>54</sup> Antonius J Van Rooij and others, ‘Video Game Addiction and Social Responsibility’ (2010) 18 *Addiction Research & Theory* 489.

<sup>55</sup> A.J. van Rooij and others (n 2) 8.

<sup>56</sup> ‘PvP Honor System Overview - WoW Classic Season of Mastery’ (*Wowhead*) <<https://www.wowhead.com/classic/guide/pvp-honor-system-overview-wow-classic>> accessed 26 June 2023.

<sup>57</sup> krivolapovna, ‘WoW Classic PvP System Overview’ (*Overgear Guides*, 3 December 2019) <<https://overgear.com/guides/wow-classic/pvp-system-in-world-of-warcraft-classic/>> accessed 26 June 2023.

In an ideal world, this income can then be used to enhance the game, creating an enjoyable experience for the player – who is then also willing to invest time, money and energy – while maximising profit for the gaming company.<sup>58</sup>

The different interests are, however, not always evenly balanced. The evolution of game design led to the introduction of new monetisation strategies in the gaming industry. To recap: next to the original pay-to-play, box revenue models and subscription-based games, online/mobile and free-to-play games have become more common in the gaming world. Free-to-play games make increasingly more use of hidden costs to extract money from the gamer, which are often interwoven in the design of the game.<sup>59</sup> The extraction of money can involve exploitative practices, which deceive or manipulate the gamer into making a monetary transaction. If the gamer is a minor, this can be particularly problematic and possibly even infringe their rights.

The use of these microtransactions – which are the main source of revenue for the game developer in these types of games – has increased immensely over the past twenty years.<sup>60</sup> Microtransactions are nowadays used in almost all games, even those that require a one-time purchase.<sup>61</sup> They rely heavily upon the influencing the gamer's behaviour.<sup>62</sup> Because of their apparent omnipresence in many of the games played by children, microtransactions as a game design illustrate the tension between protecting children from harm while simultaneously enabling them to actively participate in fun leisure activities and be part of the gamer community. The next paragraph sets out the different types of microtransactions particularly common in online games.

## II.II DIFFERENT TYPES OF MICROTRANSACTIONS

It has been discussed that the chosen monetisation strategy will affect the game's design. Microtransactions are a common monetisation strategy, especially in contemporary (online) games. Microtransactions were first introduced to games in the early 2010s.<sup>63</sup> Microtransaction refers to the real-world money paid when purchasing additional material, bonuses or services within an online game.<sup>64</sup> The transaction usually involves a only a small amount of money, so as to reach a wide audience.<sup>65</sup> A microtransaction may describe different monetisation strategies, the most common ones being pay-to-win/pay-to-skip mechanisms, cosmetic add-ons and loot boxes.<sup>66</sup> Another, related strategy, is the so-called data-driven/data-for-access model. This is a microtransaction of its own, but also often used to enhance the effects of the aforementioned strategies.<sup>67</sup> The boundaries between these strategies are thus not always clear, nor are they mutually exclusive in their implementation in the design of a particular game.

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<sup>58</sup> A.J. van Rooij and others (n 2) 8.

<sup>59</sup> Kishan Mistry, 'P(L)Aying to Win: Loot Boxes, Microtransaction Monetization, and a Proposal for Self-Regulation in the Video Game Industry Student Notes' (2018) 71 Rutgers University Law Review [i]; Zagal, Björk and Lewis (n 2); Matthew McCaffrey, 'The Macro Problem of Microtransactions: The Self-Regulatory Challenges of Video Game Loot Boxes' (2019) 62 Business Horizons 483.

<sup>60</sup> Zandle, Meyer and Ballou (n 11).

<sup>61</sup> A good example would be FIFA, which is a one-time purchase (pay-per-play) to obtain the game, but then requires additional transactions to keep gameplay enticing. See, for example, Jeroen S Lemmens, 'Play or Pay to Win: Loot Boxes and Gaming Disorder in FIFA Ultimate Team' (2022) 8 Telematics and Informatics Reports 100023.

<sup>62</sup> Zagal, Björk and Lewis (n 2); Tomić (n 13); *ibid.*

<sup>63</sup> A.J. van Rooij and others (n 2) 16.

<sup>64</sup> Zandle, Meyer and Ballou (n 11) 2.

<sup>65</sup> Tomić (n 13) 18.

<sup>66</sup> Zandle, Meyer and Ballou (n 11).

<sup>67</sup> Ronan Fahy, Joris Van Hoboken and Nico Van Eijk, 'Data Privacy, Transparency and the Data-Driven Transformation of Games to Services', *2018 IEEE Games, Entertainment, Media Conference (GEM)* (2018); Zaniah Jordan, 'The Effect of the European Union (EU) General Data Protection Regulation (GDPR) on the Gaming Industry Notes' (2020) 10 UNLV Gaming Law Journal 259; A.J. van Rooij and others (n 2).

### II.II.i Pay-to-Win & Pay-to-Skip

The pay-to-win microtransactions refer to a monetisation strategy where players can buy additional virtual ‘items or ‘bonuses that help them do better in the game.<sup>68</sup> These items will provide the player with a functional advantage over players that have not bought any such products. Depending on the type of game, such items could be better armoury, temporary increases in character statistics or even allow the player to skip certain requirements in the game.<sup>69</sup> This might involve the completion of a specific task or finishing a level. In this context, the ‘selling of time’<sup>70</sup> has become increasingly popular as well. Gamers who play without paying additional money will have to wait a specified amount of time before they can take a next turn, while gamers who do pay will be able to skip the waiting time and play consecutive turns.<sup>71</sup> The pay-to-win design can be employed within both single-player games and multi-player games. The design is highly criticised among the gaming community, as it is said to disrupt the balance of the game and give paying players an unfair advantage over those that do not pay.<sup>72</sup> The game no longer involves a competition wherein the player’s skills are tested but instead focuses only on who can pay the most money, thereby favouring the more affluent players.<sup>73</sup> Pay-to-win transactions are particularly controversial in that they oftentimes contain deliberately designed inconveniences that impair or intentionally frustrate the gamer in his or her play.<sup>74</sup> This entices users to spend money in order to be able to continue playing. The pay-to-win microtransaction is closely related to the pay-to-skip microtransaction.<sup>75</sup> Pay-to-skip urges gamers to pay a certain amount of money to skip certain obstacles in the game or time that was meant to be ‘waited’ (for example, because the character in the game had to ‘recuperate’ or ‘sleep’). Pay-to-skip exploits the same vulnerabilities in people as pay-to-win does, inserting additional waiting times and the like within the game to increase the frustrations experienced by the gamer.<sup>76</sup>

### II.II.ii Cosmetic Transactions

Cosmetic microtransactions are transactions in which the player pays for a wide range of customisation content that enhances the aesthetic appeal of the game.<sup>77</sup> In the online gaming context, cosmetic transactions are sometimes also referred to as ‘skins’, which is derived from the application of visual surface detail to otherwise featureless 3D character models.<sup>78</sup> Cosmetic add-ons usually do not affect the gameplay itself, nor do they offer any particular advantage to the gamer. They are most often found in the customisation of the ‘avatar’ of a player, which is their controlled character in a specific game. These avatars are meant to physically represent the player – or their desired or idealised representation – and are often fully customisable. This customisation is found to strengthen the connection between the gamer and their avatar and to increase their identification with the character.<sup>79</sup> As such, the gamer might also feel more invested in the game itself.

<sup>68</sup> Juho Hamari and Lauri Keronen, ‘Why Do People Buy Virtual Goods: A Meta-Analysis’ (2017) 71 *Computers in Human Behavior* 59.

<sup>69</sup> Juho Hamari, Nicolai Hanner and Jonna Koivisto, ‘“Why Pay Premium in Freemium Services?” A Study on Perceived Value, Continued Use and Purchase Intentions in Free-to-Play Games’ (2020) 51 *International Journal of Information Management* 102040, 2, 10.

<sup>70</sup> Tomić (n 13) 19.

<sup>71</sup> Tom Bramwell Contributor and Tom Bramwell, ‘Console Developers Need to Look at Dungeon Keeper and Learn’ (*Eurogamer*, 8 February 2014) <<https://www.eurogamer.net/console-developers-need-to-look-at-dungeon-keeper-and-learn>> accessed 11 April 2023.

<sup>72</sup> See, among others, Tomić (n 13); Hamari and Keronen (n 68); Hamari, Hanner and Koivisto (n 69); Myriam Davidovici, ‘Innovation in Business Models in the Video Game Industry: Free-to-Play or the Gaming Experience as a Service’ (2013) 2 *The Computer Games Journal* 22.

<sup>73</sup> Olli I Heimo and others, ‘Virtual to Virtuous Money: A Virtue Ethics Perspective on Video Game Business Logic’ (2018) 153 *Journal of Business Ethics* 95, 100.

<sup>74</sup> Hamari, Hanner and Koivisto (n 69) 11.

<sup>75</sup> Hamari, Hanner and Koivisto (n 69); Tomić (n 13).

<sup>76</sup> A.J. van Rooij and others (n 2).

<sup>77</sup> Christian Böffel and others, ‘Character Customization With Cosmetic Microtransactions in Games: Subjective Experience and Objective Performance’ (2022) 12 *Frontiers in Psychology* 770139, 2.

<sup>78</sup> Alia Reza and others, ‘Skins for Sale: Linking Player Identity, Representation, and Purchasing Practices’ in Natalie Greene Taylor and others (eds), *Information in Contemporary Society* (Springer International Publishing 2019) 125.

<sup>79</sup> Böffel and others (n 77).

Research has linked identification to the motivation of gamers to continue playing the game,<sup>80</sup> which suggests that it might also affect the player enjoyment of the game and their performance.<sup>81</sup>

### *II.II.iii Loot Boxes*

Loot boxes are a special type of microtransactions. They can include both aesthetic functions, as well as gameplay advantages. Loot boxes have been defined as “items in video games that may be bought for real-world money, but which provide players with a randomized reward of uncertain value.”<sup>82</sup> The gamer does not know what type of item he or she will receive and whether this item is actually ‘worth’ the money spent on it. For example, FIFA – one of the most popular games – uses so-called card packs with football players that gamers can buy without knowing what which football player they will receive. Though loot boxes may also appear during the game and be obtained through gameplay (and not money), this usually does not indicate a specific design feature that focuses on monetisation. For the purpose of this work, loot boxes are thus described as involving a transaction with real-world money. Loot boxes have increased in prevalence in games over the past decade, though many game developers claim that they are still incorporated in only a small number of games.<sup>83</sup> This might be correct, but the games that have incorporated them are among the most popular games played.<sup>84</sup> This means that the majority of gamers is exposed to this type of design. Loot boxes have received considerable attention over the past few years by both policy makers and researchers, as well as gamers themselves. They are an exceptionally lucrative strategy for the gaming industry, generating billions of dollars of revenue.<sup>85</sup> Loot boxes do, however, also pose major dilemmas. A particular concern is the similarity this design feature has with gambling, as well as the potential manipulation of gamers in terms of making informed decisions as a consumer.<sup>86</sup> Taking note of these debates, the issue of loot boxes is a conundrum many jurisdictions are struggling with.

### *II.II.iv Data-for-Access*

A very different type of microtransaction is the data-driven/data-for-access model. In this model, game developers sell the personal data of their gamers to third parties in order to generate revenue.<sup>87</sup> The gamer can enjoy the game for free, but their personal data is commodified and used as a payment. This is not a novel concept, many online platforms – particularly social media platforms – use the personal information of their users to generate money.<sup>88</sup> The information is monetised and sold to third parties, who often use it for personalised advertising. Though much research has been done on this already, the use of personal data to create revenue in games has remained somewhat underdeveloped.<sup>89</sup> Within games, various types of personal data can exist. First, some data is actively provided for by the gamer. This is the data that is usually required to sign up (for example an email-address or bank account for any pay-per-play game). Second, some data is

<sup>80</sup> Max Birk and others, ‘Fostering Intrinsic Motivation through Avatar Identification in Digital Games’ (2016) 2983; Böffel and others (n 77) 5.

<sup>81</sup> Birk and others (n 80) 2987.

<sup>82</sup> David Zendle and others, ‘The Prevalence of Loot Boxes in Mobile and Desktop Games’ (2020) 115 *Addiction* 1768.

<sup>83</sup> *ibid.*

<sup>84</sup> Zendle, Meyer and Ballou (n 11) 9.

<sup>85</sup> *ibid.* 3.

<sup>86</sup> See, among others, Tuijnman, Andree and Rooij (n 4) 22; A.J. van Rooij and others (n 2) 11; Xiao (n 17); Shiddhartha Uddin, ‘Loot The Children: The Need To Regulate Predatory Loot Box Mechanics In Video Games That Target Young Audiences’ (2021) 59 *Family Court Review* 870; Daniel L King and Paul H Delfabbro, ‘Predatory Monetization Schemes in Video Games (e.g. “Loot Boxes”) and Internet Gaming Disorder’ (2018) 113 *Addiction* 1967; Annette Cerulli-Harms (n 2).

<sup>87</sup> Karin Leichtenstern and others, ‘An Empirical Evaluation of the Compliance of Game-Network Providers with Data-Protection Law’ in Ian Wakeman and others (eds), *Trust Management V* (Springer 2011); Fahy, Van Hoboken and Van Eijk (n 67).

<sup>88</sup> See, among others, Joseph Phelps, Glen Nowak and Elizabeth Ferrell, ‘Privacy Concerns and Consumer Willingness to Provide Personal Information’ (2000) 19 *Journal of Public Policy & Marketing* 27; Stacy-Ann Elvy, ‘Paying for Privacy and the Personal Data Economy’ (2017) 117 *Columbia Law Review* 1369; Deborah Lupton and Ben Williamson, ‘The Datafied Child: The Dataveillance of Children and Implications for Their Rights’ (2017) 19 *New Media & Society* 780.

<sup>89</sup> Jordan (n 67).

passively given. This usually concerns metadata and behavioural data.<sup>90</sup> Metadata is data that explains or describes other data, which helps in sorting and identifying attributes of the information it describes.<sup>91</sup> Behavioural data is data that derives from the engagement(s) with a business or organisation.<sup>92</sup> The main aim of the collection of these types of data is to predict future player activities.<sup>93</sup> The gamer is oftentimes not aware that such data is spread. Finally, some data is inferred. This is data that is generated through the profiling of the gamer: it reveals certain identity traits and (gaming) behaviours.<sup>94</sup> It may even include information on the gamer's health, political preferences or their sexual orientation. Inferred data is usually derived from the first two types of data. This means that the individual gamer's behaviour or their characteristics are analysed to determine whether patterns – in their behaviour or characteristics – can be identified.<sup>95</sup> The patterns that have been found within the personal data are then used to analyse or predict how this individual conducts him or herself, within the gaming environment specifically. Finally, this information is then used by the gaming company to 'target' the individual through tailored messages, information or offers.<sup>96</sup> These targeted messages have thus been designed, upon the basis of the information collected about the individual, so that the individual is more receptive towards it.<sup>97</sup>

Many jurisdictions have put into place certain safeguards against user profiling through the collection and processing of data (the most well-known example being the European General Data Protection Regulation (GDPR)). The fact that (online) (video)games might, however, fall within the scope of this instrument as well is not always clear. The fact that video game companies may actually monetise the data that is collected within the game itself – through the specific design features – may not be so obvious.<sup>98</sup> As can be seen in the discussion on the development of game design above, games have transformed from mere software into actual services.<sup>99</sup> The use of personal data in games combines (relatively) well-known practices of user profiling for advertising purposes with the microtransactions described above. Games – and gaming consoles – collect information on what games players choose to play, and about how long and when they play them.<sup>100</sup> Even information from within the gameplay itself is collected: how the user moves in the game, what skins the user prefers, what weapons the user uses, how they are used and what conversations the user has with others in the game.<sup>101</sup> This information can then be used to entice the gamer into making a transaction within the game that is specifically adjusted towards their (gaming) needs and desires. In other words, pay-to-win mechanisms, cosmetic add-ons and loot boxes can be personalised to best fit with the wants and needs of a particular gamer. The gamer is then more likely to be willing to purchase such microtransactions. It must be mentioned that the

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<sup>90</sup> Rafet Sifa, Anders Drachen and Christian Bauchhage, 'Profiling in Games: Understanding Behavior from Telemetry' in Kiran Lakkaraju, Gita Sukthankar, and Rolf T. Wigand, *Social Interactions in Virtual Worlds: An Interdisciplinary Perspective* (Cambridge University Press 2018) 27.

<sup>91</sup> 'What Is Metadata and How Does It Work?' (*WhatIs.com*) <<https://www.techtarget.com/whatis/definition/metadata>> accessed 26 June 2023.

<sup>92</sup> 'What Is Behavioral Targeting? A Definition from WhatIs.Com' (*WhatIs.com*) <<https://www.techtarget.com/whatis/definition/behavioral-targeting>> accessed 26 June 2023.

<sup>93</sup> Sifa, Drachen and Bauchhage (n 90) 27.

<sup>94</sup> A.J. van Rooij and others (n 2) 14.

<sup>95</sup> Committee of Ministers, 'The Protection of Individuals with Regard to Automatic Processing of Personal Data in Context of Profiling' (Council of Europe 2011) Recommendation CM/Rec(2010)13 25.

<sup>96</sup> *ibid.*

<sup>97</sup> *ibid.* 9.

<sup>98</sup> Mie Oehlenschlager, 'Report on GameTech: Online Games Are Gambling With Children's Data' (Danish Society of Engineers' Working on Ethics and Technology & DataEthics.eu 2021) <<https://dataethics.eu/online-games-are-gambling-with-childrens-data/>> accessed 8 May 2023.

<sup>99</sup> Fahy, Van Hoboken and Van Eijk (n 67) 137.

<sup>100</sup> Mie Oehlenschlager (n 98) 13. In fact, Sony made use of a particular technology that enabled the PlayStation to automatically detect the user's identity by how they hold their game controller. See, Andy Robinson, 'New PlayStation Tech Can Detect Users by How They Hold Their Controller' (*VGC*, 24 August 2020) <<https://www.videogameschronicle.com/news/new-playstation-tech-can-detect-users-by-how-they-hold-their-controller/>> accessed 8 May 2023.

<sup>101</sup> Mie Oehlenschlager (n 98) 9.



use of algorithms in game design need not be inherently ‘bad’ or problematic. In fact, the processing of personal data and profiling of gamers can be used to improve the players’ gaming experiences.<sup>102</sup> It may result in a more personalised and enjoyable experience that is adjusted to the player’s desires. For example, algorithms and personal data be used to optimize the time needed to complete a specific task or to support aiming in controller-based games to compensate for the lack of accuracy in controller input.<sup>103</sup> The game Devil May Cry is known for its ability to pace difficulty in gaming, adjusting it to the player’s skills and gameplay.<sup>104</sup> This could enhance the enjoyment the player experiences when playing the game, as well as helping them develop their skills and become a better player. The collection and processing of data in games can, however, also be (mis)used to direct – possibly even manipulate – the player into making a particular (monetary) decision that he or she might not have made without the influence of personalised game design.

### II.III GAME DESIGN AND DARK PATTERNS

Having established the most common forms of microtransactions used in game design, it can be inferred from the above discussion that there is some form of interplay between the monetisation scheme(s) used and the gamer’s gaming experience. The game design is used to steer the gamer’s behaviour, both positively and negatively. This is also referred to as ‘persuasive design’ or ‘behavioural design’, a concept related to behavioural economics and ‘nudge’ literature.<sup>105</sup> Within this research paper, behavioural design is used as a neutral term that merely denotes the fact that the game is designed with the intention of influencing (whether positively or negatively) the gamer’s behaviour. The specific game design can have a positive impact upon the gamer, as well as a negative one.

Though the term behavioural design itself ought to be neutral, the discussion above on the development of game design and the revenue models employed does show that the interests of the gamer need not always be of primary importance to game companies.<sup>106</sup> These changes in game design seemingly serve primarily the game company, potentially even being harmful to gamers. Behavioural designs are used to induce the gamer into spending more resources (whether money or time) on the game. Zagal and others describe this as ‘dark patterns’ in the design of the game, highlighting that game companies usually have numerous objectives when bringing a game into the market.<sup>107</sup> The juggling of these different interests can lead to the misalignment of the interests of the game company and the gamer. Dark game design patterns, according to these authors, are patterns that are “used intentionally by a game creator to cause negative experiences for players that are against their best interests and happen without their consent.”<sup>108</sup>

These dark patterns, as a form of behavioural design, play specifically upon children’s still-developing cognitive abilities. There is currently no research into the specific effects of game design on children’s cognitive abilities. However, there is a (vast) body of research on advergaming or in-game advertisements, which may analogously applied to game design specifically. For, in-game advertisements are a monetisation strategy often employed by game companies as well are oftentimes embedded within the game’s design as well. Within the literature, they are similarly often grouped together with microtransactions and loot boxes.<sup>109</sup>

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<sup>102</sup> Matti Mäntymäki, Sami Hyrynsalmi and Antti Koskenvoima, ‘How Do Small and Medium-Sized Game Companies Use Analytics? An Attention-Based View of Game Analytics’ (2020) 22 Information Systems Frontiers 1164.

<sup>103</sup> Daniel Clarke, ‘The Design and Personalization of AI Assistance Algorithms’ (MSc Thesis, Queen’s University Kingston 2019).

<sup>104</sup> Renan Fontes, ‘Dante Must Die! How Devil May Cry Perfected Difficulty’ (*Goomba Stomp Magazine*, 23 August 2021) <<https://goombastomp.com/dante-must-die-how-devil-may-cry-perfected-difficulty/>> accessed 20 July 2023.

<sup>105</sup> 5Rights Foundation, ‘Pathways: How Digital Design Puts Children at Risk’ (5Rights Foundation 2021) 26.

<sup>106</sup> Hof and others (n 2); Zagal, Björk and Lewis (n 2).

<sup>107</sup> Zagal, Björk and Lewis (n 2).

<sup>108</sup> *ibid.*

<sup>109</sup> Zendle, Meyer and Ballou (n 11); Tuijnman, Andree and Rooij (n 4).

According to this research, children generally have more difficulty recognizing the commercial nature of advertisements where they are integrated as entertainment (for example, in a game).<sup>110</sup> This is particularly problematic because it impedes young people's ability to critically consider any (economic) messages directed towards them, a process that requires that children are able to direct their attention away from the engaging activity.<sup>111</sup> This is closely linked to children's development of their executive functions, which only reaches adult levels in late adolescence.<sup>112</sup> This means that many young gamers are more easily susceptible to hidden economic messages in games that incentivise young people to make a monetary transaction. These transactions are often low-friction, which means that they require minimal effort.<sup>113</sup> It can thus be inferred that this, together with their still developing ability to distinguish between the commercial incentives hidden in the game's design and the non-commercial content of the game, only makes it easier for children to unwittingly spend (significant) amounts of money on the game.

To illustrate, the original box revenue model focused on keeping the gamer satisfied with the game. So long as the gamer enjoyed playing, he or she might buy another game from that same developer. There were no hidden costs, nor was it necessary to entice the gamer into spending an inordinate amount of time on the game. This is different for the newer revenue schemes, particularly those that involve microtransactions. For example, pay-to-win transactions – as is its derivative 'pay-to-skip' – are an example of monetary dark patterns.<sup>114</sup> Players are intentionally confronted with long waits, so as to induce them to make a monetary payment in order to 'skip ahead'. Gaming accounts can be coupled with the gamer's bank account, meaning that transactions made in the game are automatically withdrawn – as 'real-world' money.<sup>115</sup> Gameplay is thus not interrupted and players are oftentimes not aware of the amounts they spend. More recently, microtransactions are oftentimes being combined with data collection practices, enabling game developers to offer for more personalised and targeted transactions.<sup>116</sup> For example, the Android game *Replica Island* employed a player tracking system to identify instances where players were facing difficulties and then recorded the level of frustration felt by the player, as evident from the gameplay.<sup>117</sup> This data can be used for two purposes. One is to make the game more enjoyable: the game's design must then be seen as containing an (accidental) design mistake that is causing inconveniences to the player and should therefore be remedied.<sup>118</sup> If the data is instead used to further the frustrations of the gamer to manipulate them into making a purchase, there is a dark game design pattern.

Children are still developing their critical thinking skills and they do not have the same skills as adults to control their impulses.<sup>119</sup> They may lack the resources (and knowledge) required to correctly spot and assess (potentially) misleading and manipulative practices. Monetary dark patterns can put them in particularly vulnerable positions. Even so, consumers do not always act rational when deciding to purchase a particular

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<sup>110</sup> Esther Rozendaal and Moniek Buijzen, 'Children's Vulnerability to Advertising: An Overview of Four Decades of Research (1980s–2020s)' (2023) 42 *International Journal of Advertising* 78, 81.

<sup>111</sup> *ibid* 82.

<sup>112</sup> Esther Rozendaal and others, 'Reconsidering Advertising Literacy as a Defense Against Advertising Effects' (2011) 14 *Media Psychology* 333.

<sup>113</sup> 5Rights Foundation (n 105) 39.

<sup>114</sup> Zagal, Björk and Lewis (n 2); A.J. van Rooij and others (n 2) 35.

<sup>115</sup> "'The Kids Emptied Our Bank Account Playing Fifa'" *BBC News* (8 July 2019) <<https://www.bbc.com/news/technology-48908766>> accessed 10 July 2023.

<sup>116</sup> Mäntymäki, Hyrynsalmi and Koskenvoima (n 102).

<sup>117</sup> *ibid* 1165; <https://www.gamedeveloper.com/author/chris-pruett>, 'Hot Failure: Tuning Gameplay With Simple Player Metrics' (*Game Developer*, 16 December 2010) <<https://www.gamedeveloper.com/design/hot-failure-tuning-gameplay-with-simple-player-metrics>> accessed 8 May 2023.

<sup>118</sup> Zagal and others call these types of design mistakes "anti-patterns".

<sup>119</sup> Mie Oehlenschläger (n 98) 15.

product and information asymmetries exist.<sup>120</sup> Adults and children alike need correct, complete and transparent information to make an informed and well-reasoned decision.<sup>121</sup> Contemporary microtransactions in games often do not provide the necessary information. Taking the example of loot boxes, it seems highly unlikely that children and adolescents – or adults with not an abundance of knowledge on statistics, for that matter – are able to adequately determine what their chances are for obtaining a Lionel Messi-card during a game of FIFA. The deceptive nature of the game's design manipulates the player into making a transaction that is not beneficial and could potentially cause them harm.

#### I. IV GAME DESIGN, DARK PATTERNS AND CHILDREN'S RIGHTS

The gaming industry has seen several shifts in monetisation strategies over the past decades. Particularly the introduction of microtransactions has resulted in a different approach towards games: creating a product to be enjoyed by the player upon purchasing it is no longer the sole objective of game developers. Sometimes, these monetisation strategies can veer towards deceptive and manipulative practices, so-called dark patterns in the design of the game. The game's design intends to direct gamer's behaviour in a certain way. Usually, this focuses on inducing gamers to engage in gameplay and invest time, money and personal information. If the design is 'too effective', gamers may experience harms. Still, though dark patterns have become more common over the past years, the steering of a gamer's behaviour can also have positive effects. Other than providing gamers with a pleasant leisure activity, the player may also be cajoled into positive behaviours. All in all, the design of a game matters and it can directly affect a person's behaviour. With online games being played by a large number of children – who are not always capable of understanding the monetisation strategies contained within the design of the game and their effects – their interests might be affected by the design as well. Where dark patterns are contained within the game's design, this has the potential to undermine children's wellbeing and violate their rights. The next Chapter discusses the three most relevant rights (right to privacy, right to play and right to protection from economic exploitation) in the context of game design and how they might be affected.

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<sup>120</sup> A.J. van Rooij and others (n 2) 21.

<sup>121</sup> *ibid* 22.

## CHAPTER III – THE UN CONVENTION ON THE RIGHTS OF THE CHILD & GAME DESIGN

This chapter considers how design choices in online games may affect children's rights. The focus will be on the right to protection against economic exploitation, the right to privacy and the right to rest and leisure. Though other children's rights are, naturally, affected by game design as well, several authors have mentioned these three rights as warranting further discussion.<sup>122</sup> While games can affect a variety of rights, it is not always the game's design specifically that is relevant for these rights. For example, concerns regarding gaming addiction strongly relate to the child's right to health,<sup>123</sup> while the rights to information and free expression might be thought of where it relates to a child's participation in the gaming community.<sup>124</sup> This is different for the three rights that are the focus point of this discussion. As seen in the previous chapter, complex monetisation schemes lie behind the fun games children can play online. These models focus on creating revenue for game companies by nudging children to buy or try to win in-app items to advance in the games they play or by using children's personal data to profile them. Game design thus has the potential to impact the right to protection against economic exploitation, the right to privacy and the right to rest and leisure directly in one way or another.

Children hold a unique position as (economic) actors in the digital environment: younger generations<sup>125</sup> are often said to be digital pioneers.<sup>126</sup> While it is important that children are protected from being unjustly manipulated or to have their personal data abused for the economic benefit of commercial actors, online games can promote children's rights as well. They are, above all, an important social activity for children in the digital landscape and a way for them to simply have fun.

### III.I CHILD'S RIGHTS APPROACH

The United Nations' Convention on the Rights of the Child (CRC) is a unique instrument. While most of its provisions focus on protecting children and their rights – based upon their perceived vulnerability – the UNCRC also emphasises the capacities of children as right holders.<sup>127</sup> The CRC is thus a multidimensional instrument: it has a protection, provision and participation dimension.<sup>128</sup> Children, because of their presumed vulnerability, require additional protection in specific situations to ascertain their rights.

Despite the CRC's rights-based approach, protecting children from harm is still one of the most important objectives of the CRC and its related Optional Protocols. While the CRC views children as individuals who are the subjects of their own rights, they are also still developing and may have special needs because of their

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<sup>122</sup> Hof and others (n 21) 833; Hof and others (n 2); Anum Faraz and others, 'Child Safety and Protection in the Online Gaming Ecosystem' (2022) 10 IEEE Access 115895; Holli Sargeant, 'A Rights-Based Approach to Online Economic Exploitation of Children' (25 March 2022); Ingrida Milkaitė and Eva Lievens, 'The Internet of Toys: Playing Games with Children's Data?' in Giovanna Mascheroni and Donell Holloway (eds), *The Internet of Toys: Practices, Affordances and the Political Economy of Children's Smart Play* (Springer International Publishing 2019) <[https://doi.org/10.1007/978-3-030-10898-4\\_14](https://doi.org/10.1007/978-3-030-10898-4_14)> accessed 8 May 2023.

<sup>123</sup> Veronica Rosendo-Rios, Sangeeta Trott and Paurav Shukla, 'Systematic Literature Review Online Gaming Addiction among Children and Young Adults: A Framework and Research Agenda' (2022) 129 Addictive Behaviors 107238; Zekihan Hazar, 'An Analysis of the Relationship between Digital Game Playing Motivation and Digital Game Addiction among Children' (2019) 5 Asian Journal of Education and Training 31.

<sup>124</sup> Valerie Verdoodt, 'The Role of Children's Rights in Regulating Digital Advertising' (2019) 27 The International Journal of Children's Rights 455.

<sup>125</sup> Specifically, generation Alpha, born entirely in the 21<sup>st</sup> Century.

<sup>126</sup> Lupton and Williamson (n 88).

<sup>127</sup> Hubertus Hesse and Euronet, European Children's Network (eds), *What about Us? Children's Rights in the European Union; next Steps* (Euronet c/o International Save the Children Alliance 2005) 105.

<sup>128</sup> Verdoodt (n 124) 58–59.

lack of experience and maturity.<sup>129</sup> Children are not, however, the property of their parents nor are they helpless objects of charity.<sup>130</sup> The provision dimension of the CRC asserts that children have a right to be provided with the resources they require to develop.<sup>131</sup> Finally, the CRC also has a participation dimension, which purports that children should be enabled to play an active role in society.<sup>132</sup> The general principles contained in the CRC – and within other international human rights instruments – should guide interpretation of children’s rights in practice.<sup>133</sup> This involves a holistic interpretation, balancing the different dimensions of protection, empowerment and provision.<sup>134</sup>

This research takes a children’s rights approach. This means that children’s rights, principles and standards are used as a framework to critically examine the existing legislation that regulates online games. In other words, the rights of the child to protection, participation and opportunities are considered in light of the challenges posed by game design.

### III.II RIGHT TO PROTECTION AGAINST ECONOMIC EXPLOITATION

Children are protected from economic exploitation under Article 32 CRC. The Article protects primarily against forms of child labour. Nevertheless, it has been argued that this notion must be interpreted in a much broader sense, especially in the digital context.<sup>135</sup> The Council of Ministers, building upon the CRC, has stated that “States should take measures to ensure that children are protected from commercial exploitation in the digital environment.”<sup>136</sup> That risks faced by young people can be “reinforced or exacerbated by the digital environment”<sup>137</sup> was also recognised by the Committee in General Comment No.20. Similarly, the Committee stated in General Comment No.25 that by “creating and sharing content, children may be economic actors in the digital environment, which may result in their exploitation.”<sup>138</sup> The explanatory note to this General Comment explains that “States must ensure that laws and regulations are in place to protect children effectively from harmful goods or services that they may encounter online”.<sup>139</sup> Children can be particularly lucrative targets for commercial actors for two main reasons: children may influence their families spending and they are future consumers.<sup>140</sup> Personal data and online content are nowadays seen as commodities monetised by commercial actors and with children being particularly vulnerable economic actors.<sup>141</sup> It would thus not seem

<sup>129</sup> S van der Hof, ‘I Agree... Or Do I?: A Rights-Based Analysis of the Law on Children’s Consent in the Digital World’ (2017) 34 *Wisconsin International Law Journal* 409, 122.

<sup>130</sup> ‘Child Rights and Why They Matter | UNICEF’ <<https://www.unicef.org/child-rights-convention/child-rights-why-they-matter>> accessed 24 May 2023.

<sup>131</sup> Verdoodt (n 124) 64.

<sup>132</sup> *ibid* 77; Eva Lievens, *Protecting Children in the Digital Era: The Use of Alternative Regulatory Instruments* (Brill Nijhoff 2010) <<http://brill.com/view/title/18584>> accessed 13 June 2022.

<sup>133</sup> Hof and others (n 21).

<sup>134</sup> UN Committee on the Rights of the Child, ‘General Comment No. 5 (2003), General Measures of Implementation of the Convention on the Rights of the Child’ para 62 <<https://digitallibrary.un.org/record/513415>> accessed 24 May 2023.

<sup>135</sup> Verdoodt (n 124); Sargeant (n 122); Hof and others (n 21).

<sup>136</sup> Committee of Ministers, ‘Guidelines to Respect, Protect and Fulfil the Rights of the Child in the Digital Environment’ (Council of Europe) Recommendation CM/Rec(2018)7 para 57 <<https://edoc.coe.int/en/children-and-the-internet/7921-guidelines-to-respect-protect-and-fulfil-the-rights-of-the-child-in-the-digital-environment-recommendation-cmrec20187-of-the-committee-of-ministers.html>> accessed 6 February 2023.

<sup>137</sup> Committee on the Rights of the Child, ‘General Comment No. 20 (2016) on the Implementation of the Rights of the Child during Adolescence’ (UNICEF 2016) CRC/C/GC/20 para 12 <<https://digitallibrary.un.org/record/855544>> accessed 22 May 2023.

<sup>138</sup> Committee on the Rights of the Child, ‘General Comment No. 25 (2021) on Children’s Rights in Relation to the Digital Environment’ (n 3) para 112.

<sup>139</sup> 5Rights Steering Group, ‘Explanatory Notes on the General Comment No. 25 (2021) on Children’s Rights in Relation to the Digital Environment’ (5Rights Foundation 2021) 114.

<sup>140</sup> OECD, ‘Protecting Children Online: An Overview of Recent Developments in Legal Frameworks and Policies’ (OECD 2020) 29 <[https://www.oecd-ilibrary.org/science-and-technology/protecting-children-online\\_9e0e49a9-en](https://www.oecd-ilibrary.org/science-and-technology/protecting-children-online_9e0e49a9-en)> accessed 23 May 2023.

<sup>141</sup> Sargeant (n 122) 9.

unreasonable to presume that economic exploitation must be interpreted in a broad manner,<sup>142</sup> so as to include economic activities in the digital context.

The notion of ‘economic exploitation’ itself consist of two elements: ‘economic’ and ‘exploitation’. While the CRC itself does not provide a definition, the Committee has interpreted the provision as that ‘economic’ implies a “certain gain or profit through the production, distribution and consumption of goods and services”.<sup>143</sup> This is described as a material interest, which “has an impact on the economy of a certain unit, be it the State, the community or the family.”<sup>144</sup> Within the context of games, the economic element might thus be the microtransactions or loot boxes entrenched within the game, for which gamers are expected to pay. This results in a profit for the game company and impacts the targeted child. Similarly, the game company also profits from the monetisation of the child’s personal data by selling it to third parties or using it to make their own advertising and in-game offers more specific – and thus more effective.

Exploitation means taking “unjust advantage of another for one’s own advantage or benefit. It covers situations of manipulation, misuse, abuse, victimization, oppression or ill treatment”. As shown in the previous chapter, game design has evolved and new revenue models have been developed. These revenue models increasingly rely upon design choices that focus on influencing the gamer’s behaviour to induce them to generate more profit for the game company. While it is acceptable for game companies to pursue economic goals within their games, the child’s protection against economic exploitation means that their vulnerabilities cannot be exploited for profit. This is important, because economic exploitation does not contribute to the child’s well-being and their healthy development and might even be harmful.<sup>145</sup> The right protects children from being (unjustly) taken advantage of by large corporations with significant means, against whom the individual child will have little recourse.

In short, the monetisation strategies embedded within the game design create revenue for the game company (the economic/material interest) by manipulating children into making in-game microtransactions or purchasing loot boxes (the exploitation). Their personal data is oftentimes used to specifically target children with temptations that coincide with their gaming behaviour. What exactly manipulation – in the context of economic exploitation – would mean is not clear, for there is no definition of this concept in the CRC or other relevant documents.<sup>146</sup> If we follow Sunstein’s interpretation, manipulation would be “an effort to influence people’s choices [...] to the extent that it does not sufficiently engage or appeal to their capacity for reflection and deliberation.”<sup>147</sup> Trying to influence another person’s behaviour or persuading them to do something is not always manipulative.<sup>148</sup> Many games are designed to keep gamers’ attention merely because it is a fun game to play or challenges a person’s gaming skills. However, the commercial elements in the game are generally

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<sup>142</sup> See also, Lee Swepston, *A Commentary on the United Nations Convention on the Rights of the Child, Article 32: Protection from Economic Exploitation* (BRILL 2012).

<sup>143</sup> Committee on the Rights of the Child, ‘General Discussion on the Economic Exploitation of Children’ (Committee on the Rights of the Child 1993) CRC/C/20 51 <<https://digitallibrary.un.org/record/194072>> accessed 15 May 2023.

<sup>144</sup> *ibid.*

<sup>145</sup> Hof and others (n 21); Philip Alston, ‘Art.32 The Right to Protection from Economic Exploitation’ in John Tobin, *The United Nations Convention on the Rights of the Child: A Commentary* (Oxford University Press 2019).

<sup>146</sup> With ‘relevant documents’, reference is made to other legislation and related commentaries that are relevant in the digital economy. For example, at the European level, there is no reference to manipulation in the UCPD or the eCommerce Directive. No definition is given in the (forthcoming) AI Act either, though manipulation is mentioned. Implicitly, this mention suggests manipulation is not transparent and exploitative, with the intention to distort behaviour that could cause harm (here, the Act mentions children specifically). Commentaries on Article 32 CRC specifically do not provide a definition either.

<sup>147</sup> Cass R Sunstein, *The Ethics of Influence: Government in the Age of Behavioral Science* (Cambridge University Press 2016) 83 <<https://www.cambridge.org/core/books/ethics-of-influence/E29EDE19EBCB53F6D8691730668115F7>> accessed 15 May 2023.

<sup>148</sup> *ibid* 80.

not made explicit and often intentionally concealed from gamers.<sup>149</sup> Especially for children, who are still learning to make rational decisions and are generally seen as more gullible, this non-transparency plays specifically upon their vulnerabilities.

As discussed in the previous chapter, in the context of game design such practices are often called ‘dark patterns’. These dark patterns in games intentionally mislead or trick people into doing something, without providing sufficient information on the commercial transactions involved. Sometimes they are even designed so as to intentionally create negative experiences,<sup>150</sup> to induce gamers to complete a transaction, which then results in profits for the game company. Research into these dark patterns in the context of shopping website shows that these dark patterns essentially focus on exploiting the customer’s cognitive biases and trust to induce customer behaviour that is advantageous for the seller.<sup>151</sup> There is, as of yet, little research into the dark patterns found in online games and their effects on customers.<sup>152</sup> This research presumes, however, that game design that specifically employs such dark patterns to exploit the vulnerabilities of children to manipulate them into making monetary transactions can then be considered to fall within the scope of Article 32.

### III.III RIGHT TO REST AND LEISURE

Article 31 CRC provides children with the right “to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.” According to the Committee, play is of fundamental importance in a child’s life. It is essential to the health and well-being of children and promotes the development of creativity, imagination, self-confidence, self-efficacy, as well as physical, social, cognitive and emotional strength and skills.<sup>153</sup> That play can involve ‘digital’ or ‘online play’ as well, has been recognised by the Committee during its 2014 General Day of Discussion ‘Digital Media and Children’s Rights’. It was stated that “States should recognise the importance of access to, and use of, digital media and ICT [information and communication technologies] and their potential to promote all children’s rights including the rights to [...] rest, leisure, play, recreational activities, cultural life and the arts.”<sup>154</sup> Given that gaming is a popular pastime and a way for children (and adults) to have fun and relax, the Committee considers it a form of play. This can be seen in its General Comment No.17, when the Committee states that children are “engaged in play, recreational, cultural and artistic activities, both as consumers and creators, via various digital platforms and media, including [...] gaming.”<sup>155</sup> That children are skilled in both online and offline activities is also acknowledged by the Committee and States are encouraged to ascertain that children

<sup>149</sup> See, for further clarification, ‘Deceptive Patterns - Home’ <<https://www.deceptive.design/>> accessed 22 May 2023.

<sup>150</sup> Zagal, Björk and Lewis (n 2).

<sup>151</sup> Arunesh Mathur and others, ‘Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites’ (2019) 3 Proceedings of the ACM on Human-Computer Interaction 81:1.

<sup>152</sup> Jacob Aagaard and others, ‘A Game of Dark Patterns: Designing Healthy, Highly-Engaging Mobile Games’, *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems* (Association for Computing Machinery 2022) <<https://dl.acm.org/doi/10.1145/3491101.3519837>> accessed 10 July 2023; Linda Di Geronimo and others, ‘UI Dark Patterns and Where to Find Them: A Study on Mobile Applications and User Perception’, *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (Association for Computing Machinery 2020) <<https://dl.acm.org/doi/10.1145/3313831.3376600>> accessed 10 July 2023.

<sup>153</sup> UN Committee on the Rights of the Child, ‘General Comment No. 17 (2013) on the Right of the Child to Rest, Leisure, Play, Recreational Activities, Cultural Life and the Arts (Art. 31)’ (UNICEF 2013) CRC/C/GC/17 para 9 <<https://digitallibrary.un.org/record/778539>> accessed 22 May 2023.

<sup>154</sup> Committee on the Rights of the Child, ‘Digital Media and Children’s Rights’ (United Nations 2014) 2014 day of general discussion para 85 <<https://www.ohchr.org/en/events/days-general-discussion-dgd/2014/2014-day-general-discussion-digital-media-and-childrens>> accessed 22 May 2023.

<sup>155</sup> UN Committee on the Rights of the Child (n 153) para 45.

can optimally enjoy the (education, social and cultural) benefits that online platforms offer.<sup>156</sup> Online games and ‘virtual play’ have become an entrenched element within children’s lives.<sup>157</sup>

Article 31 paragraph 1 stipulates that play should be “appropriate to the age of the child”. This is considered to be a fundamental aspect of the right: play should be adapted to the child’s age and their level of development.<sup>158</sup> This also requires that adults refrain from imposing forms of play or recreational activities upon children that are unsuited. It could then also be presumed that this can be applied to game companies as well. Though there is no specific literature on this, it seems likely that game companies should similarly refrain from incorporating monetisation strategies within their game design that encourage children to partake in economic transactions or other activities (such as gambling-like activities) that are unsuited for their age and development.<sup>159</sup> Age appropriate game design would then mean that features that contribute to a positive gaming experience of children are encouraged and features that lead to a negative impact are to be avoided in the design of the game.<sup>160</sup>

Within Article 31 CRC, a distinction can be made between “play” and “recreational activities”. Both are based on play or recreational activities should not be compulsory and follow from the free choice(s) of the child. “Play” refers to unstructured informal activities of children that are not controlled by adults, though they may be supervised and facilitated by them, and which do not necessarily conform to any rules.<sup>161</sup> The concept of “recreational activities”, on the other hand, refers to a more organized and formal form of activities that in some instances can be framed by precise rules.<sup>162</sup> According to the Committee, central elements within the concept of play are “fun, uncertainty, challenge, flexibility and non-productivity”.<sup>163</sup> Recreational activities covers a broad range of activities, which are chosen by the child “because of the immediate satisfaction provided or because he or she perceives some personal or social value will be gained by accomplishing them.”<sup>164</sup> Online gaming can be considered as both a form of play and as a recreational activity. Games are, in essence, meant to be fun. Depending on the type of game, they may offer a lot of flexibility in how the game is played. A good illustration would be games that are known to foster the gamers’ ability for creative expression, such as Minecraft or The Sims.<sup>165</sup> These games generally come with little instruction and can be played in whichever way the gamer pleases. Similarly, a novel concept of so-called ‘cosy games’ are known to be designed specifically to be relaxing and comforting.<sup>166</sup> These types of games can easily be seen as falling

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<sup>156</sup> *ibid.*

<sup>157</sup> Sonia Livingstone and Kruakae Pothong, ‘Playful by Design: Free Play in a Digital World’ (Digital Futures Commission 2021) 489.

<sup>158</sup> UN Committee on the Rights of the Child (n 153) para 14(f).

<sup>159</sup> See also the obligations (game) companies have in ensuring that they understand and anticipate the impact their ‘products’ will have on children, as derived from the UN’s guidance in: Office of the High Commissioner for Human Rights, ‘Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework’, United Nations, New York and Geneva, 2011, open PDF from <[www.ohchr.org/Documents/Publications/ GuidingPrinciplesBusinessHR\\_EN.pdf](http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf)> last accessed 6 August 2023.

<sup>160</sup> Hof and others (n 2) 6.

<sup>161</sup> Paulo David, ‘Scope of Article 31’, *A Commentary on the United Nations Convention on the Rights of the Child, Article 31: the Right to Leisure, Play and Culture* (BRILL 2006) 24 <<http://ebookcentral.proquest.com/lib/uunl/detail.action?docID=468018>> accessed 15 May 2023.

<sup>162</sup> *ibid.*

<sup>163</sup> UN Committee on the Rights of the Child (n 153) para 14(c).

<sup>164</sup> *ibid* 14(d).

<sup>165</sup> Jorge A Blanco-Herrera, Douglas A Gentile and Jeffrey N Rokkum, ‘Video Games Can Increase Creativity, but with Caveats’ (2019) 31 *Creativity Research Journal* 119.

<sup>166</sup> Marissa M Baker, ‘The Visual and Narrative Rhetoric of Mental Health in *Gris*’ (2022) 14 *Journal of Gaming & Virtual Worlds* 249; Seren Morris, ‘What Are Cosy Games and Which Are the Best Ones?’ (*Evening Standard*, 20 April 2023) <<https://www.standard.co.uk/tech/gaming/cosy-games-best-genre-animal-crossing-stardew-valley-b1056844.html>> accessed 30 May 2023; Colin Campbell Contributor, ‘What Are Cozy Games, and What Makes Them Cozy?’ (*GamesIndustry.biz*, 28 November 2022) <<https://www.gamesindustry.biz/what-makes-a-cozy-game-cozy>> accessed 30 May 2023; Hope Bellingham published, ‘Cozy



within the concept of play. Games that, on the other hand, require a little more instruction or have a more specific set of rules for playing can be seen as recreational activities. Games such as FIFA, League of Legends or World of Warcraft generally require that the gamers abide by the rules of the game in order to effectively participate.<sup>167</sup> These games usually also provide the ‘satisfaction’, in the form of the achieving of a higher ranking or a ‘level-up’ upon having completed all tasks.<sup>168</sup>

Article 31 covers both protection and participation rights of the child.<sup>169</sup> These should equally be respected in the context of play and recreational activities. So, play should remain based on spontaneity, freedom and informality and recreational activities need to be chosen on the basis of freedom of choice. Research has shown that online games are an important type of play for children.<sup>170</sup> One research project shows that many children appreciate the flexible, open-ended form of play that online games can offer.<sup>171</sup> Children feel that this supports them in their agency and allows for autonomous play:<sup>172</sup> the child is in charge and he or she has full reign on how they want to play the game. The social element is furthermore deemed an important aspect of online games, for it is possible to connect with people from all over the world and develop new friendships over the shared interest that is the game.<sup>173</sup> A child’s online presence can strengthen individual autonomy and self-determination.<sup>174</sup> Being able to participate in the online environment enables children to participate in peer culture.<sup>175</sup> For games, numerous gaming communities have developed wherein players can make forge new friendships with people sharing common interests. These online communities are a “forum for self-presentation and identity play”,<sup>176</sup> wherein gamers can share experiences and foster personal development.

At the same time, both play and recreational activities need to be undertaken under “competent supervision” (see, Article 3(3) CRC), and in conformity “with the standards established by competent authorities, particularly, in the areas of safety, health [ . . . ]” (Article 3(3) CRC).<sup>177</sup> Children are entitled to grow up in an environment that offers space for them to develop autonomously their own play skills, thus giving due regard to their evolving autonomy under Articles 5 and 12 CRC, while under adult guidance and supervision if necessary. It is not specified when this guidance and supervision is necessary, though it can be presumed that

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Gaming: Why a Wholesome Trend Became a Recognized Genre’ (*gamesradar*, 26 July 2022) <<https://www.gamesradar.com/cozy-gaming-why-a-wholesome-trend-became-a-recognized-genre/>> accessed 30 May 2023.

<sup>167</sup> Tuijnman, Andree and Rooij (n 4); A.J. van Rooij and others (n 2).

<sup>168</sup> Irem Gökçe Yildirim, ‘Time Pressure as Video Game Design Element and Basic Need Satisfaction’, *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (Association for Computing Machinery 2016) <<https://dl.acm.org/doi/10.1145/2851581.2892298>> accessed 7 August 2023; Wei Peng and others, ‘Need Satisfaction Supportive Game Features as Motivational Determinants: An Experimental Study of a Self-Determination Theory Guided Exergame’ (2012) 15 *Media Psychology* 175.

<sup>169</sup> David (n 161) 16.

<sup>170</sup> Sonia Livingstone and Kruakae Pothong (n 157); Brooks and Clark (n 18); Aubrey Anable, *Playing with Feelings: Video Games and Affect* (University of Minnesota Press 2018) <<https://www.jstor.org/stable/10.5749/j.ctt20mvgwg>> accessed 7 August 2023; Deborah Chambers, “‘Wii Play as a Family’: The Rise in Family-Centred Video Gaming’ (2012) 31 *Leisure Studies* 69.

<sup>171</sup> Sonia Livingstone and Kruakae Pothong (n 157) 494.

<sup>172</sup> *ibid.*

<sup>173</sup> *ibid* 492. It must be acknowledged that the online gamer community has its downsides as well, being at times described as ‘toxic’ – in other words, discrimination, harassment, or abuse are allowed to occur and sometimes even encouraged. These discussions are outside the scope of this research. Though the game’s design may certainly dis- or encourage such behaviours, there is no evidence that the design is specifically made to do so. This is different in the context of monetisation schemes and questions of privacy.

<sup>174</sup> Verdoodt (n 124) 101.

<sup>175</sup> Sonia Livingstone, ‘Mediating the Public/Private Boundary at Home: Children’s Use of the Internet for Privacy and Participation’ (2005) 6 *Journal of Media Practice* 41, 10.

<sup>176</sup> Valerie Steeves and Priscilla Regan, ‘Young People Online and the Social Value of Privacy’ (2014) 12 *Journal of Information Communication and Ethics in Society* 298, 303.

<sup>177</sup> David (n 161) 25.

this refers to ensuring that the activity is consistent with the child's development and not harmful thereto.<sup>178</sup> Within the context of games, the Committee has related this specifically to concerns regarding the increasing commercialisation of play, whereby children are at a risk to be economically exploited.<sup>179</sup> The Committee focused specifically on the use of advertising in games and hidden marketing techniques. Parents experience increasing pressure to purchase certain toys and games which may be harmful to their children's development.<sup>180</sup> This does not stop at advertising, however, for the game's design can have a commercial nature as well. Given that children often do not recognise the commercial nature of a specific game design, it is difficult for them to make balanced commercial decisions.<sup>181</sup>

Game design that incorporates microtransactions and loot boxes or which is driven by the collection of the child's personal data, can undermine the rights protected in Article 31 CRC. Games that 'keep players locked in' or where it is impossible to continue playing without making, for example, a monetary transaction undermine the voluntariness and freedom that are inherent elements of play. This also affects the child's autonomy and could frustrate the enjoyment and (immediate) satisfaction they get out of playing the game. If a game encourages its users to keep playing by making it difficult to exit the game, it could even be seen as affecting the child's right to rest. Several online games provide barriers in the form of notifications that, for example, ask the gamer whether they are 'sure that they want to leave the game'. Some even use (threatening) language. For example, a game might warn its players that they 'lose their progress if they leave now'. Also, farm simulation games are known to provide the player with notifications that claim that 'their crops/animals are dying'. This induces the gamers to keep playing, thus resulting in higher profits for the game companies. Given that these notification might interfere with other events in the gamer's life – such as sleep, school or other offline world activities – it might even be to their own detriment.

### III.IV RIGHT TO PRIVACY

Privacy rights can be found in several international legal instruments. Article 16 CRC protects children from arbitrary or unlawful interferences with their privacy, family, home or correspondence, and from unlawful attacks on their honour and reputation, which are considered inherent in any truly democratic society. This protection includes protection from interferences by States *and* private organisations. The Article also specifies that legislation should be in place to protect children from any such interferences (Article 16(2) CRC). States thus have a positive obligation to ascertain – to the best of their capabilities – the protection of a child's privacy. In its General Comment No.25, the Committee has indicated that a child's right to privacy also includes a right to data protection.<sup>182</sup> Here, it must be acknowledged that the (child's) right to privacy and data protection is incredibly broad and that it would be impossible to discuss all different aspects and elements thereof. There is no exhaustive definition of the concept, neither within the legislation discussed nor in any of the academic literature consulted.<sup>183</sup> For the purpose of this thesis, the right to privacy is defined according to the definition

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<sup>178</sup> John Tobin and Gerrison Lansdown, 'Art.31 The Right to Rest, Leisure, Play, Recreation, and Participation in Cultural Life and the Arts' in John Tobin, *The UN Convention on the Rights of the Child: A Commentary* (Oxford University Press 2019) <<https://opil-ouplaw-com.proxy.library.uu.nl/display/10.1093/law/9780198262657.001.0001/law-9780198262657-chapter-32>> accessed 15 May 2023.

<sup>179</sup> Committee on the Rights of the Child, '2014 Day of General Discussion' (n 154) para 70; UN Committee on the Rights of the Child (n 153) paras 47, 57(f).

<sup>180</sup> UN Committee on the Rights of the Child (n 153) para 47.

<sup>181</sup> Francisco Lupiáñez-Villanueva, 'Study on the Impact of Marketing through Social Media, Online Games and Mobile Applications on Children's Behaviour' (European Commission 2016) EACH/FWC/2013 85 08 <[https://commission.europa.eu/publications/study-impact-marketing-through-social-media-online-games-and-mobile-applications-childrens-behaviour\\_en](https://commission.europa.eu/publications/study-impact-marketing-through-social-media-online-games-and-mobile-applications-childrens-behaviour_en)> accessed 23 May 2023.

<sup>182</sup> Committee on the Rights of the Child, 'General Comment No. 25 (2021) on Children's Rights in Relation to the Digital Environment' (n 3).

<sup>183</sup> A sentiment that is seemingly corroborated within the literature. See, for example, Eugenia Politou, Efthimios Alepis and Constantinos Patsakis, 'Forgetting Personal Data and Revoking Consent under the GDPR: Challenges and Proposed Solutions' (2018)

provided by Cambridge Dictionary: privacy is “someone’s right to keep their personal matters and relationships a secret”.<sup>184</sup> The notion is discussed in somewhat more detail below, placed within the context of the CRC and how this instrument is presumed to understand its meaning.

Article 16 CRC is almost a direct reformulation of Article 17 of the International Covenant on Civil and Political Rights (ICCPR), which itself is based on article 12 of the Universal Declaration on Human Rights (UDHR).<sup>185</sup> With the inclusion in the CRC, the right to privacy now has an extra dimension that incorporates the interests of children. The right to privacy is not an absolute right and interferences can be justified if they are non-arbitrary and lawful. The CRC itself does not provide a definition of these terms. The prevailing view in the literature seems to suggest that arbitrary interferences hold an element of injustice, unpredictability and unreasonableness.<sup>186</sup> A lawful interference then requires that the law (upon which the interference is based) is valid and accessible to the public and that this law is in accordance with the principles under the CRC and international human rights law.<sup>187</sup> This ‘lawfulness’, however, is broadly construed, accommodating a parent’s rights to restrict their child’s privacy if deemed necessary. Any restriction by parents must, naturally, be in the best interests of the child (Article 3 CRC) and happen in accordance with the child’s evolving development as protected in Article 5 CRC.

Article 16(1) CRC states that “[n]o child shall be subjected to arbitrary or unlawful interference with his or her privacy, family, home or correspondence, nor to unlawful attacks on his or her honour and reputation.” As seen in this formulation, the article protects six different interests against unjustified interferences. Given the scope of this research, the focus lies specifically on the protection of a child’s privacy. International jurisprudence has derived five separate dimensions from the right to privacy, all of which relate to a person’s autonomy and their normative agency. For this research, a child’s information privacy is most relevant. Information privacy includes both information created by a child (such as text messages) and information about a child. Having a log on these types of information can be necessary in the context of relationships with specialists (such as information gathered by hospitals or schools).<sup>188</sup> Given what has been discussed above on the exact meaning the right to privacy, a child’s right to information privacy thus means the child’s rights to keep any information that relates to him or herself secret. Within the context of game design specifically, the child has the option to keep any information on his or her in-game actions, discussions or mode of gameplay a secret if he or she wishes. A child’s right to privacy would then be interfered with if this information becomes known without the child having decided thereto. The child may subsequently experience negative effects, such as stagnations or frustrations within the game that result from collecting information on the child’s gameplay and using this to induce the child to partake in a microtransaction (for example, pay-to-skip<sup>189</sup>). The definition of privacy that is provided here is, naturally, not without its own limitations. However, it serves the purpose of laying down a normative framework through which current EU legislation can be analysed.

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4 Journal of Cybersecurity <<https://academic.oup.com/cybersecurity/article/doi/10.1093/cybsec/tyy001/4954056>> accessed 16 August 2023; Stephen T Margulis, ‘Three Theories of Privacy: An Overview’ in Sabine Trepte and Leonard Reinecke (eds), *Privacy Online: Perspectives on Privacy and Self-Disclosure in the Social Web* (Springer 2011) <[https://doi.org/10.1007/978-3-642-21521-6\\_2](https://doi.org/10.1007/978-3-642-21521-6_2)> accessed 19 June 2022.

<sup>184</sup> Cambridge Dictionary, ‘Privacy’ (16 August 2023) <<https://dictionary.cambridge.org/dictionary/english/privacy>> accessed 16 August 2023.

<sup>185</sup> John Tobin and Sarah M Field, ‘Art.16 The Right to Protection of Privacy, Family, Home, Correspondence, Honour, and Reputation’ in John Tobin, *The UN Convention on the Rights of the Child: A Commentary* (Oxford University Press) 552 <<https://opil-ouplaw-com.proxy.library.uu.nl/display/10.1093/law/9780198262657.001.0001/law-9780198262657-chapter-17>> accessed 18 May 2023.

<sup>186</sup> *ibid* 556.

<sup>187</sup> *ibid* 555.

<sup>188</sup> *ibid* 560.

<sup>189</sup> See above, under Section II.II.i.

Within the digital realm, the right to privacy has various dimensions. As with the right to play, the right to privacy is a multi-layered concept that relates to both the protective as participatory nature of the CRC. The OECD emphasises that children, as a particularly vulnerable group of online actors, require extra protection.<sup>190</sup> According to the OECD, children “may not anticipate the long-term problems that may be created by the irretrievable, searchable, easy to manipulate and persistent nature of personal information online.”<sup>191</sup> Children are furthermore more likely to worry about protecting their privacy from invasions by parents or teachers (their social network), rather than from States or private commercial actors.<sup>192</sup>

Threats to a child’s right to privacy often result in a tension between protection and participation rights. An often overlooked but most obvious example thereof would be the right to privacy children (ought to) have in their own homes. A child’s right to privacy also means that they have privacy from their parents.<sup>193</sup> In other words, children are allowed to keep their personal matters or relationships a secret from their parents. Children – even very young ones – should be able to have certain places, whether online or offline, that are not accessible to their parents.<sup>194</sup> Within the context of games, children should be able to engage in gameplay without the game’s design leading to unjust interferences by their parents. This approach towards the right to privacy can difficult to reconcile with more protective approaches towards children’s rights and the duty as ‘guardian’ that parents or those bearing parental responsibility over a child generally have. It thus always requires a careful consideration of whether the invasion of a child’s privacy by their parents was truly necessary (or, lawful) and in accordance with their best interests and their own capacities.

Another concern particular to the digital context that illustrates the tension between participation and protection rights, is the profiling and behavioural targeting of children based upon the personal data that is collected on them.<sup>195</sup> Data collection and profiling can affect children in their autonomy and their development. Based on the personal data that is obtained, the algorithms that underlie the platform will shape the child’s preferences accordingly.<sup>196</sup> This inhibits children from freely exploring the internet and developing their individual opinions and perspectives, all while they are usually not even aware of the fact that this is happening. The Committee has acknowledged that such behavioural targeting may lead to unlawful and arbitrary interferences with the child’s right to privacy.<sup>197</sup> Supervision and the tracking of information, to be collected and processed, can be said to undermine the child’s capacity to learn new things, gain new insights and explore without influence or oversight. The fact that the profile is used to influence the child’s behaviour and/or decisions furthermore undermines their autonomy. Protection is thus needed to ascertain that a child’s personal data remains safe, while simultaneously allowing the child to explore the digital realm without hindrances. The issue of profiling can even happen at group level. In fact, the Committee has also argued that the child’s right to privacy can “be abused as a group,” where a profile regarding their behaviour is created that is “based

<sup>190</sup> OECD, ‘Recommendation of the Council on Children in the Digital Environment’ (OECD 2012) OECD/LEGAL/0389 <<https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0389>> accessed 22 May 2023.

<sup>191</sup> OECD, ‘The Protection of Children Online: Risks Faced by Children Online and Policies to Protect Them’ (OECD 2011) OECD Digital Economy Papers 179 37 <[https://www.oecd-ilibrary.org/science-and-technology/the-protection-of-children-online\\_5kgcjf71pl28-en](https://www.oecd-ilibrary.org/science-and-technology/the-protection-of-children-online_5kgcjf71pl28-en)> accessed 23 May 2023.

<sup>192</sup> Eva Lievens and others, ‘Children’s Rights and Digital Technologies’ in Ursula Kilkelly and Ton Liefwaard (eds), *International Human Rights of Children* (Springer 2019) <[https://doi.org/10.1007/978-981-10-4184-6\\_16](https://doi.org/10.1007/978-981-10-4184-6_16)> accessed 10 May 2022.

<sup>193</sup> Alice E Marwick, Diego Murgia-Diaz and John G Palfrey, ‘Youth, Privacy and Reputation (Literature Review)’ (Harvard Law School, 12 April 2010) <<https://papers.ssrn.com/abstract=1588163>> accessed 24 May 2022.

<sup>194</sup> Benjamin Shmueli and Ayelet Blecher-Prigat, ‘Privacy for Children’ (24 January 2011) <<https://papers.ssrn.com/abstract=1746540>> accessed 18 July 2023.

<sup>195</sup> OECD, ‘The Protection of Children Online’ (n 191) 34.

<sup>196</sup> Dan Ariely and Gregory S Berns, ‘Neuromarketing: The Hope and Hype of Neuroimaging in Business’ (2010) 11 *Nature Reviews Neuroscience* 284.

<sup>197</sup> Committee on the Rights of the Child, ‘General Comment No. 25 (2021) on Children’s Rights in Relation to the Digital Environment’ (n 3) para 67.

merely on their age.”<sup>198</sup> The individual child – and what is best for them – is then disregarded. This is particularly interesting, as it is known that Artificial Intelligence (AI) is used to profile not just individual gamers, but also within groups.<sup>199</sup>

A lack of transparency is oftentimes seen as a threat to privacy as well.<sup>200</sup> Games using monetisation strategies without making clear that a monetary transaction is involved purposefully obfuscate gamers to induce them to spend more money. This is, for example, illustrated in the use of ‘coins’, ‘tokens’ or other virtual currencies that represent money. Children are found to struggle with separating in-game money with real-world money<sup>201</sup> and are therefore more at risk when being presented with microtransactions and loot boxes interwoven in the game’s design, as compared to adults. Children’s autonomy might be said to be compromised when they are manipulated into making such transactions because the game prevents them from making an informed commercial decision. There is insufficient information on the transaction itself and the manipulative design prevents – or, at the very least, makes it very difficult – to make a different choice.

### III.IV CHAPTER CONCLUSION

This chapter first introduced the child’s rights-approach. The digitalisation – and related commercialisation – of contemporary society has an impact on all children’s rights. Upon its conception, the CRC was designed to apply in the ‘offline world’. With children being important actors in the contemporary online world, the principles enshrined within the CRC require a new interpretation. This is corroborated by the UN Committee in its General Comment No.25, as well as in several other international, regional and national policy documents. Children must be protected from interferences with their rights in both the online and offline environment, though this protection cannot result in a curbing of their participation in today’s digital world. The interpretation of their (digital) rights should thus serve as a comprehensive analytical framework in light of which legislation on online games must be interpreted.

This chapter has argued that the design of online games has the potential to impact a number of children’s rights. The chapter first argued to that the child’s right to protection from economic exploitation (Article 32 CRC) extends beyond traditional child labour and includes protection against commercial exploitation in the digital environment. It was noted that the monetisation strategies embedded within the game design create revenue for the game company by manipulating children into making in-game microtransactions or purchasing loot boxes, wherein the dark patterns embedded in the game design play an important role. Next, the chapter considered the child’s right to rest and leisure, illustrating how digital games are recognized as forms of play and recreational activities under Article 31 of the CRC. The importance of age-appropriate game design, the distinction between play and recreational activities, and the necessity of competent supervision were explored. The positive and negative effects of game design on children's enjoyment, autonomy, and participation in online communities were addressed and it was suggested that game design choices that exploit children's vulnerabilities could potentially infringe upon the right to rest and leisure. The final section focused on the

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<sup>198</sup> Christian Whalen, ‘Article 16: The Right to Protection of Privacy’ in Ziba Vaghri and others (eds), *Monitoring State Compliance with the UN Convention on the Rights of the Child: An Analysis of Attributes* (Springer International Publishing 2022) 99 <[https://doi.org/10.1007/978-3-030-84647-3\\_11](https://doi.org/10.1007/978-3-030-84647-3_11)> accessed 18 May 2023.

<sup>199</sup> Autoriteit Consument & Markt, ‘Leidraad bescherming online consument | ACM.nl’ (15 March 2023) <<https://www.acm.nl/nl/publicaties/voorlichting-aan-bedrijven/acm-leidraad/leidraad-bescherming-online-consument>> accessed 8 May 2023.

<sup>200</sup> Ingrida Milkaite and others, ‘The General Data Protection Regulation and Children’s Rights: Questions and Answers for Legislators, DPAs, Industry, Education, Stakeholders and Civil Society. Roundtable Report.’ <<http://hdl.handle.net/1854/LU-8528975>> accessed 18 May 2023.

<sup>201</sup> Daniel L King and Paul H Delfabbro, ‘The Convergence of Gambling and Monetised Gaming Activities’ (2020) 31 *Current Opinion in Behavioral Sciences* 32; Annette Cerulli-Harms (n 2).

right to privacy and its relevance in the digital landscape. The multifaceted nature of privacy rights, particularly information privacy, was emphasized, with a focus on the potential threats of profiling and behavioural targeting of children. The tension between privacy protection and participation rights was highlighted, as is the manipulation of children's autonomy through game design practices like microtransactions and obfuscation of commercial decisions.

The chapter argued that children must be protected from these interferences. However, it must be emphasised that this protection should not undermine children's autonomy in making commercial decisions or their enjoyment in freely and leisurely playing online games. Nor can it result in restraints upon their ability to learn and experiment without supervision. This requires that a balance must be sought between protecting children from (commercial) harms that may befall, while safeguarding and encouraging their right to play and explore. The CRC obliges its State Parties to take due regard for the rights of the child contained within this instrument.<sup>202</sup> The instrument does not, however, provide its Parties with much guidance on how to adequately balance the child's participation rights, while ensuring their protection from possible harms. Though the UN Committee urges State Parties to enact the necessary measures, including legislation, regulation and policies, to prevent violations of children's rights,<sup>203</sup> the focus seems to be primarily on the protection dimension. This means that it is left to the State Parties to determine how they will ensure that children are able to experience the positive aspects of the digital environment (or, in this research, online games), while shielding them from possible harms. In the next chapter, the existing legal framework (potentially) applicable to game design choices in relation to children is discussed. Attention will be paid to both how these legal instruments protect and promote children's rights in the context of game design.

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<sup>202</sup> The UN Committee on the Rights of the Child looks at how well governments are setting and meeting the standards for the realization and protection of children's rights as outlined in the Convention or Optional Protocol. See, for more information: 'Implementing and Monitoring the Convention on the Rights of the Child | UNICEF' <<https://www.unicef.org/child-rights-convention/implementing-monitoring>> accessed 8 August 2023; 'Committee on the Rights of the Child' (OHCHR) <<https://www.ohchr.org/en/treaty-bodies/crc>> accessed 8 August 2023.

<sup>203</sup> Committee on the Rights of the Child, 'General Comment No. 25 (2021) on Children's Rights in Relation to the Digital Environment' (n 3).

## CHAPTER IV – EXISTING LEGAL FRAMEWORK

In January 2023, the European Parliament (EP) called for gamers to be better protected from addiction and other manipulative practices. A harmonised regulatory approach was deemed necessary, with clearer information on the content, in-game purchase policies and target age group of games.<sup>204</sup> The European Parliament recognised the potential of the gaming industry, but rapporteur Adriana Maldonado López states that there is a need “to harmonise EU rules, ensuring strengthened consumer protection and with a specific focus on minors.”<sup>205</sup> As such, protecting children against the potentially harmful effects of online games is demonstrably gaining attention in not just many national jurisdictions, but also at the European level. There are numerous instruments that (could potentially) support the aim of the EP to bolster consumer protection in online games and ensure a safe environment for gamers. The multitude of instruments means that there is a fragmented framework of both legislation and self-regulation. Hence, a more detailed analysis of these instruments is necessary in order to understand whether the current framework is sufficient in protecting and promoting children’s rights in the context of game design.

At the EU-level, there are five important legal instruments that need to be considered: the Unfair Commercial Practices Directive, the Digital Content Directive, the General Data Protection Regulation, the ePrivacy Directive and the Digital Services Act. These instruments have been selected because they are most likely to be applicable to (legal) questions related to the design of games.<sup>206</sup> Given the novelty of the topic, there are not many sources that discuss game design within the context of these instruments. Sometimes the legislation itself acknowledges that (online) games may fall within its scope or it has been discussed in official EU documents. However, given the scope of these instruments and their contents, it seems most likely that a the specific features of the game’s design – e.g. the dark patterns embedded within the design<sup>207</sup> – could (potentially) be regulated under either of these instruments.

The legislation can be divided into instruments dealing with consumer protection and instruments focused on privacy protection. The boundaries between these frameworks are not strict and the instruments overlap in several aspects. Still, having this distinction in place can be helpful in getting a better overview of the different measures in place. This chapter provides an overview of the relevant provisions of each of these instruments. This includes provisions related to their scope of application and the specific protections for children.

### III.I PRIVACY & DATA PROTECTION

As discussed, the design of online games oftentimes relies upon the collection and processing of personal data for the personalisation (and individual targeting) of offers for microtransactions and loot boxes. Children – as adults – have become ‘datafied’.<sup>208</sup> From the moment they are born, their personal data is

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<sup>204</sup> James Batchelor Editor-in-Chief, ‘European Parliament Votes to Take Action against Loot Boxes, Gaming Addiction, Gold Farming and More’ (*GamesIndustry.biz*, 18 January 2023) <<https://www.gamesindustry.biz/european-parliament-votes-to-take-action-against-loot-boxes-gaming-addiction-gold-farming-and-more>> accessed 17 April 2023; ‘Protecting Gamers and Encouraging Growth in the Video Games Sector | News | European Parliament’ (n 23).

<sup>205</sup> Adriana MALDONADO LÓPEZ, ‘REPORT on Consumer Protection in Online Video Games: A European Single Market Approach | A9-0300/2022 | European Parliament’ <[https://www.europarl.europa.eu/doceo/document/A-9-2022-0300\\_EN.html](https://www.europarl.europa.eu/doceo/document/A-9-2022-0300_EN.html)> accessed 27 May 2023.

<sup>206</sup> As acknowledged by the European Parliament during its January discussions, see: ‘Protecting Gamers and Encouraging Growth in the Video Games Sector | News | European Parliament’ (n 23).

<sup>207</sup> These dark patterns – encompassing therein microtransactions, loot boxes and data-driven games – are exemplary for blurring the lines between several different types of legislation. Wherein games as such (for example, those games that are still sold in a pay-to-play format) may be primarily regulated under consumer regulations, the technology underlying dark patterns, microtransactions, etc. mean that legislation on data collection and processing, the transfer and transmittance of data and the use of AI in consumer goods similarly plays a role as well.

<sup>208</sup> Lupton and Williamson (n 88).

collected, stored and (potentially) processed. The EU Charter of Fundamental Rights (CFR) specifically sets out a right to protection of personal data for all EU citizens, including children.<sup>209</sup> With its Digital Agenda 2020-2030, the EU aims to address any technology-related issues, focusing on the creation of secure digital spaces and services.<sup>210</sup> Protecting and empowering children in the online space is one of the ‘digital principles’ that are meant to guide the EU in questions related to digitisation.<sup>211</sup> First, the General Data Protection Regulation (GDPR) will be discussed. This Regulation was adopted in 2016 – replacing the old 1995 Data Protection Directive – and is said to be the strongest privacy and security law in the world.<sup>212</sup> It is also one of the first instruments with a provision that specifically protects minors. Second, the ePrivacy Directive, which contains provisions on people’s communication data.<sup>213</sup> The Directive can be seen as a *lex specialis* to the GDPR and is currently undergoing legislative reform. Finally, the EU’s newest major piece of legislation in the digital context is the Digital Services Act (DSA).<sup>214</sup> The Act aims to give people more control over what they see online: it gives insight into content recommendations and the use of profiling. The DSA explicitly bans targeted advertising for minors. For the purposes of this thesis, the focus lies on the use of a child’s personal data to personalise their gaming experience. This can serve both a positive, as well as a negative objective.

### III.1.i The General Data Protection Regulation (GDPR)

The GDPR aims to protect “natural persons with regard to the processing of personal data and [...] the free movement of personal data.”<sup>215</sup> The GDPR covers, essentially, all of a person’s fundamental rights and freedoms, wherein the right to data protection has a central position.<sup>216</sup> For the purposes of this thesis, the analysis is focused on the parameters imposed by the GDPR for processing the personal data of a child. Other than its predecessor, the 1995 Data Protection Directive, the GDPR distinguishes explicitly between children’s and adults’ consent in relation to the processing of personal data. This means that there is an additional layer meant to protect children and regulate the processing of their personal data on account of them being more vulnerable data subjects.<sup>217</sup> A detailed analysis of the concept of consent and its different elements is outside the scope of this research. The following evaluation of the GDPR – an instrument that, due to its context-based approach, is applicable to all children’s rights – focuses explicitly on the concept of ‘consent’ as it has been altered and adapted to children. The analysis aims to open the discussion on whether the provisions on consent within the GDPR are sufficient to protect and promote children’s rights. Various areas of law have struggled with determining the legal capacity of a child to consent to, for example, medical treatments or the entering into contracts.<sup>218</sup> The online world is unique, however, due to the opaqueness of its underlying processes and

<sup>209</sup> Article 8 of the Charter of Fundamental Rights of the European Union [2012] OJ C 326/391.

<sup>210</sup> ‘Digital Agenda for Europe | Fact Sheets on the European Union | European Parliament’ (30 June 2022) <<https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe>> accessed 17 June 2023.

<sup>211</sup> European Commission, Digital Compass: the European way for the Digital Decade 2021 [COM/2021/118 final].

<sup>212</sup> ‘The General Data Protection Regulation’ (1 September 2022) <<https://www.consilium.europa.eu/en/policies/data-protection/data-protection-regulation/>> accessed 17 June 2023.

<sup>213</sup> 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) 2002 (OJ L).

<sup>214</sup> 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, DSA) 2022 (OJ L).

<sup>215</sup> 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, GDPR) 2016 (OJ L).

<sup>216</sup> Recital 2 GDPR.

<sup>217</sup> Article 29 Data Protection Working Party, ‘Guidelines on Consent under Regulation 2016/679’ (2017) 17/EN WP259 rev.01 23 <<https://ec.europa.eu/newsroom/article29/items/623051>> accessed 21 January 2022.

<sup>218</sup> Cansu Caglar, ‘Children’s Right To Privacy And Data Protection: Does the Article on Conditions Applicable to Child’s Consent Under the GDPR Tackle the Challenges of the Digital Era or Create Further Confusion?’ (2021) 12 European Journal of Law and Technology 16 <<https://www.ejlt.org/index.php/ejlt/article/view/828>> accessed 6 March 2023.



the fact that it is often much more difficult to determine whether the ‘person behind the screen’ is a child or not. Next to this, the matter of consent within the context of privacy and data protection also illustrates the dissonance between a child’s right to privacy from its parents and a child’s right to privacy more generally.<sup>219</sup>

The GDPR has a broad territorial scope,<sup>220</sup> with even foreign businesses processing EU resident’s personal data having to comply with the rules of the GDPR. The GDPR starts from the presumption that each person should have control over their own personal data.<sup>221</sup> Accordingly, the GDPR applies to “the processing of personal data wholly or partly by automated means and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system.”<sup>222</sup> The GDPR’s scope of application thus involves two elements: (1) personal data,<sup>223</sup> and (2) processing. The GDPR classifies ‘personal data’ as “any information relating to an identified or identifiable” natural person, who is or can be identified directly or indirectly,<sup>224</sup> and is referred to as the data subject. The interpretation of personal data is thus relatively broad and may refer to a person’s name, date of birth, IP address or any other factor that is specific to that person. This may also include specifics into the economic, cultural or social identity of a person.<sup>225</sup> The interpretation of processing is even broader, referring to “any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means.”<sup>226</sup> As such, it includes essentially any action that is undertaken with regard to personal data. This ranges from collection to disclosure and destruction of personal data.

The chief responsibility for compliance with the GDPR lies with the ‘controller’, where the controller is defined as any “person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data.”<sup>227</sup> This means that more than one legally separate entity may function as a controller, where data is processed for a shared purpose.<sup>228</sup> The ‘processor’ is “a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller”, meaning that this person bears only a limited range of data protection obligations.<sup>229</sup> Under the GDPR, both the controller and the processor may be liable for non-compliance with their specific obligations.<sup>230</sup> Finally, the GDPR often refers to the ‘data subject’, which is the individual to whom the personal data relates.<sup>231</sup>

Article 5 GDPR sets out the six general principles of data protection, that have to be respected whenever personal data is processed. These principles form the basis for the more detailed provisions that follow in the subsequent articles of the GDPR. They are the fundamental principles that underlie all later European data protection legislation and the interpretation of such later provisions.<sup>232</sup> The controller must be

<sup>219</sup> Where it is again acknowledged that the right to privacy is incredibly

<sup>220</sup> Article 3 GDPR.

<sup>221</sup> Recital 7 GDPR.

<sup>222</sup> Article 2(1) GDPR.

<sup>223</sup> As well as the collection and storage thereof.

<sup>224</sup> Article 4(1) GDPR.

<sup>225</sup> Article 4(1) GDPR.

<sup>226</sup> Article 4(2) GDPR.

<sup>227</sup> Article 4(7) GDPR.

<sup>228</sup> Valerie Verdoodt, ‘Children’s Rights and Advertising Literacy in the Digital Era : Towards an Empowering Regulatory Framework for Commercial Communication’ (dissertation, Ghent University 2018) 176 <<http://hdl.handle.net/1854/LU-8585920>> accessed 15 May 2023.

<sup>229</sup> Article 4(8) GDPR. See also, Article 29 Data Protection Working Party, ‘Opinion 1/2010 on the Concepts of “Controller” and “Processor”’ (EDPB 2020) 00264/10/EN WP 169.

<sup>230</sup> Article 82(2) GDPR.

<sup>231</sup> Recital 23, 24 and 26 GDPR.

<sup>232</sup> European Union Agency for Fundamental Rights (FRA), ‘Handbook on European Data Protection Law’ 116 <<http://fra.europa.eu/en/publication/2018/handbook-european-data-protection-law-2018-edition>> accessed 17 August 2023.

able to account for his or her compliance with these principles.<sup>233</sup> Because of their importance in data protection law, the six principles will each be shortly discussed below. This analysis will not do justice to the breath and importance of these principles, but serves as a basic understanding of their contents.

The first of these principles is captured in Article 5(1)(a) and states that personal data needs to be processed in a fair, lawful and transparent manner.<sup>234</sup> Article 6 GDPR subsequently sets out the legitimate grounds for lawful processing, of which consent is one (to be discussed below). The element of fairness refers to the fact that the data subject must be informed of the processing activity and risk(s) that may come with the processing, to ensure that there will not be any unforeseeable negative effects. Central place takes the relationship between the controller and the data subject.<sup>235</sup> Essentially, the notion of fairness seems to focus on preventing adverse effects in concrete situations, particularly where the (conflicting) interests between the controller and data subject need to be balanced.<sup>236</sup> This means, among others, that controllers are required to be process data in a transparent manner – here it is clear how the notion of fairness interacts with the other two elements found in Article 5(1)(a) GDPR – and that controllers must comply with the wishes of the data subject, especially where consent is the legal basis for the data processing.<sup>237</sup> Where children are concerned, the Working Party 29 has made it clear that the principle of fairness must be interpreted strictly. Children are still maturing and controllers should take this into due regard.<sup>238</sup> The transparency element finally requires that controllers take the necessary measures to keep data subjects informed about how their data is used.<sup>239</sup> Transparency may therefore refer to information that is provided to the data subject before the processing commences,<sup>240</sup> as well as the information that can be requested by the data subject at a later point in time.<sup>241</sup> Transparency requires that the specific purpose of the data collection is known by the data subject and that clear and plain language is used.<sup>242</sup> Where children are concerned, this thus means that the information must be presented in a way that is understandable to them.<sup>243</sup> Data subjects should be “made aware of risks, rules, safeguards and rights in relation to the processing of personal data and how to exercise their rights in relation to such processing.”<sup>244</sup>

Next, the principle of purpose limitation determines that any processing of personal data must be done for a specific and well-defined purpose and that there can be no further processing of the data in a way that incompatible with this original purpose.<sup>245</sup> There are some exception thereto, but a discussion of those is outside the scope of this paper. The purpose limitation principle has a strong connection with the notions of transparency, predictability and user control: if the purpose of processing is sufficiently specific and clear, individuals know what to expect and transparency and legal certainty are enhanced.<sup>246</sup> Furthermore, knowing the specific purpose of the data processing enables data subjects to effectively exercise their data protection

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<sup>233</sup> Article 5(2) GDPR.

<sup>234</sup> Article 5(1)(a) GDPR.

<sup>235</sup> European Union Agency for Fundamental Rights (FRA) (n 232) 118.

<sup>236</sup> Gianclaudio Malgieri, ‘The Concept of Fairness in the GDPR: A Linguistic and Contextual Interpretation’, *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency* (Association for Computing Machinery 2020) 156 <<https://dl.acm.org/doi/10.1145/3351095.3372868>> accessed 17 August 2023.

<sup>237</sup> European Union Agency for Fundamental Rights (FRA) (n 232) 118.

<sup>238</sup> Article 29 Data Protection Working Party, ‘Opinion 2/2009 on the Protection of Children’s Personal Data (General Guidelines and the Special Case of Schools)’ (2009) 398/09/EN WP 160 7.

<sup>239</sup> Article 12 GDPR.

<sup>240</sup> Articles 13-14 GDPR.

<sup>241</sup> Article 15 GDPR.

<sup>242</sup> Recital 39 GDPR.

<sup>243</sup> Article 12(2) GDPR.

<sup>244</sup> Recital 39 GDPR.

<sup>245</sup> Article 5(1)(b) GDPR.

<sup>246</sup> European Union Agency for Fundamental Rights (FRA) (n 232) 122.

rights.<sup>247</sup> The Working Party 29 has acknowledged that the data of children might sometimes be shared among a number of different parties and be kept for longer periods of time – for example, school records or medical files.<sup>248</sup> It has recommended that the best interests of the child and the purpose limitation should be guiding in those situations.<sup>249</sup>

The data minimisation principle determines that the personal data is adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed.<sup>250</sup> This means that data processing: should only occur where the ultimate objective cannot be achieved via other means; and may not interfere with relevant interests, rights and freedoms. For example, for app developers this means that they “must carefully consider which data are strictly necessary to perform the desired functionality.”<sup>251</sup>

The data accuracy principle requires that personal data is accurate and, where necessary, kept up to date. Any inaccuracies within the data must be promptly rectified or erased.<sup>252</sup> This principle has a special dimension where it concerns children, as they are constantly developing. This means that controllers must take extra care to ensure that their data is kept up-to-date.<sup>253</sup> This principle is, for children especially, then closely related to the storage limitation principle.<sup>254</sup> The storage limitation principle determines that personal data must be “kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed.”<sup>255</sup> The GDPR states that this means that time limits for erasure or periodic review should be established.<sup>256</sup>

Finally, the integrity and confidentiality principle – or the data security principle – requires that appropriate technical or organisational measures are implemented when processing personal data to protect the data against accidental, unauthorised or unlawful access, use, modification, disclosure, loss, destruction or damage.<sup>257</sup> The details data security are set out within Section 2 of the GDPR. Depending on the specific circumstances of the case, appropriate technical and organisational measures could include, for example, pseudonymising and encrypting personal data,<sup>258</sup> and/or regularly testing and evaluating the effectiveness of the measures implemented.<sup>259</sup> The Working Party 29 has stated that data controllers and processors should be aware that children's data require a high level of protection.<sup>260</sup>

As part of the principle of lawful processing, personal data can only be processed based upon one of the grounds present in Article 6 GDPR. Of particular relevance for this work would be subsection 1(a) of the

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<sup>247</sup> Article 29 Data Protection Working Party, ‘Opinion 03/2013 on Purpose Limitation’ (EDPB 2013) 00569/13/EN WP 203 <[https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/index\\_en.htm](https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/index_en.htm)> accessed 17 August 2023.

<sup>248</sup> Article 29 Data Protection Working Party, ‘Guidelines on Consent under Regulation 2016/679’ (n 217).

<sup>249</sup> Article 29 Data Protection Working Party, ‘Opinion 2/2009 on the Protection of Children’s Personal Data (General Guidelines and the Special Case of Schools)’ (n 238); Article 29 Data Protection Working Party, ‘Guidelines on Consent under Regulation 2016/679’ (n 217).

<sup>250</sup> Article 5(1)(c) GDPR.

<sup>251</sup> Article 29 Data Protection Working Party, ‘Opinion 02/2013 on Apps on Smart Devices’ (Directorate C (Civil Justice, Rights and Citizenship) of the European Commission 2013) Opinion 00461/13/EN WP 202 2 <<https://ec.europa.eu/newsroom/article29/items/624198/en>> accessed 30 May 2023.

<sup>252</sup> Article 5(1)(d) GDPR.

<sup>253</sup> Article 29 Data Protection Working Party, ‘Opinion 2/2009 on the Protection of Children’s Personal Data (General Guidelines and the Special Case of Schools)’ (n 238) 7.

<sup>254</sup> *ibid* 8.

<sup>255</sup> Article 5(1)(e) GDPR.

<sup>256</sup> Recital 39 GDPR.

<sup>257</sup> Article 5(1)(f), Recital 39 GDPR.

<sup>258</sup> Article 32(1)(a) GDPR.

<sup>259</sup> Article 32(1)(d) GDPR.

<sup>260</sup> Article 29 Data Protection Working Party, ‘Opinion 2/2009 on the Protection of Children’s Personal Data (General Guidelines and the Special Case of Schools)’ (n 238) 9.

Article, as this subsection focuses on the matter of consent – which relates to Article 8 GDPR on parental consent.<sup>261</sup> Specifically, it determines that processing might be lawful where the data subject has given consent thereto.<sup>262</sup> Consent means “any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action”, agrees to the processing of their personal data.<sup>263</sup> The concept of consent stems from the notion of informational autonomy (or, self-determination). Informational autonomy refers to the individuals’ right to determine which information about themselves will be disclosed, to whom and for which purpose.<sup>264</sup> The GDPR’s emphasis on being in control of one’s own data can thus be seen as stemming from this principle of informational autonomy. Where the processing is based on consent, Article 7 then sets out the conditions for consent. These include, among others, that the data controller can provide evidence of having obtained such consent;<sup>265</sup> that it has been presented to the data subject in an easily accessible form with clear language;<sup>266</sup> and that the data subject can withdraw their consent.<sup>267</sup>

The GDPR pays specific attention to children. According to Recital 38, “[c]hildren merit specific protection with regard to their personal data, as they may be less aware of the risks, consequences and safeguards concerned and their rights in relation to the processing of personal data.”<sup>268</sup> This is especially true where the data is used for marketing purposes, to profile the child or where data collection is derived from services that are specifically aimed at children. The GDPR does not provide a definition of ‘child’, though the Working Party 29<sup>269</sup> - and advisory body on data protection established under the 1995 Data Protection Directive – has stated that it follows the CRC. As such, anyone below the age of 18 is deemed a child.<sup>270</sup> The Working Party 29 has recognised that children are still in the process of developing physically and mentally and that the child’s data protection rights should be adjusted accordingly. This can be interpreted in line with the CRC’s provision on the evolving capacities of the child. Similarly, the Working Party 29 has emphasised that, where children and their personal data are concerned, due regard must be had for both the CRC’s general principles, as the specific data protection principles set out in the GDPR. The processing of children’s personal data requires extra care and should be guided by the best interests of the child principle, which is the “core legal principle”.<sup>271</sup> The principles of purpose limitation and data minimisation must be given additional consideration where it involves the data of children.<sup>272</sup>

That children warrant specific protections is seen in the fact that a specific provision in the GDPR is solely dedicated to them. Article 8 of the GDPR sets out the conditions applicable to child's consent in relation to information society services. In the context of consensual data collection and processing, Article 8 GDPR states that “in relation to the offer of information society services directly to a child, the processing of the

<sup>261</sup> Article 8 GDPR is only applicable where the processing is based on consent, see: European Data Protection Board (EDPB), ‘Guidelines 05/2020 on consent under Regulation 2016/679’ (May 2020).

<sup>262</sup> Article 6(1)(a) GDPR.

<sup>263</sup> Article 4(11) GDPR, see also Recital 32.

<sup>264</sup> C. de Terwangne, *The Right to be Forgotten and the Informational Autonomy in the Digital Environment* (European Union 2013), Joint Research Centre – Institute for the Protection and Security of the Citizen, Report EUR 26434 EN.

<sup>265</sup> Article 7(1) GDPR.

<sup>266</sup> Article 7(2) GDPR.

<sup>267</sup> Article 7(3) GDPR.

<sup>268</sup> Recital 38 GDPR.

<sup>269</sup> The Article 29 Working Party was an advisory body made up of a representative from the data protection authority of each EU Member State, the European Data Protection Supervisor and the European Commission. It has undoubted authority in the context of data protection. The WP 29 was replaced by the European Data Protection Board (EDPB), following the entry into force of the GDPR.

<sup>270</sup> Article 29 Data Protection Working Party, ‘Opinion 2/2009 on the Protection of Children’s Personal Data (General Guidelines and the Special Case of Schools)’ (n 238) 3.

<sup>271</sup> *ibid* 4.

<sup>272</sup> Article 29 Data Protection Working Party, ‘Opinion 02/2013 on Apps on Smart Devices’ (n 251) 26.

personal data of a child shall be lawful where the child is at least 16 years old.” Member States may lower this to a minimum of 13 years of age. For any children below the age threshold, consent from the holder of parental responsibility<sup>273</sup> is required. Currently, there is a myriad of age thresholds adhered to, whereas some countries adhere to the 16-years standard set by the GDPR, others decide to opt for the minimum of 13 years old.<sup>274</sup> Information society service is defined as “any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services.”<sup>275</sup> Free (or, allegedly ‘free’) services – such as social media and search engines – fall under this definition as well. Free-to-play advergames, which are funded through advertisements incorporated in the game, might then also be considered as part of these information society services and thus within the scope of the GDPR. The requirement of informed consent in the context of parental consent refers to information that is provided “in a concise, transparent, intelligible and easily accessible form, using clear and plain language, in particular for any information addressed specifically to a child.”<sup>276</sup>

As mentioned above, the main problem (and primary focus of this thesis) within the context of games and game design is the use of in-game collected personal data to create ‘gamer profiles’. These personal profiles on both individual gamers as groups of gamers are used to personalise the games played. By doing this, game companies can more accurately determine the ‘needs’ of each player in their gaming experience. Article 22 GDPR bans automated decision-making with legal or similarly significant effects,<sup>277</sup> where the automated decision-making might be based upon a profile established upon the basis of a data subject’s personal data. This Article does not state anything about children or whether or not they should be awarded any additional protections. Article 22 GDPR defines profiling as “any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person.”<sup>278</sup> This includes, for example, using personal data to analyse a person’s economic situation or to predict their behaviour. As such, profiling is seen as potentially creating risks to the rights and freedoms of people.<sup>279</sup>

For children specifically, Recital 38 requires that the processing of children’s personal data for profiling purposes warrants additional protection. Recital 71 states that solely automated decision-making, including profiling, with legal or similarly significant effects should not apply to children.<sup>280</sup> The Working Party 29 does not, however, consider this an absolute prohibition on this type of processing involving children.<sup>281</sup> Though the Working Party 29 does not recommend controllers to rely upon the exceptions provided for automatic

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<sup>273</sup> There is, as of yet, no clarity on whether the GDPR requires consent from both parents/all holders of parental responsibility, see: Mark J Taylor and others, ‘When Can the Child Speak for Herself? The Limits of Parental Consent in Data Protection Law for Health Research’ (2018) 26 *Medical Law Review* 369. Research into the practices of companies with regard to asking for consent has shown that children are generally required to only provide verification details of one parent, see: S van der Hof and S Ouburg, ‘D2.3 Methods for Obtaining Parental Consent and Maintaining Children Rights’ (Leiden University 2021) LC-01622116 / 101018061 <<https://hdl.handle.net/1887/3494449>> accessed 8 August 2023.

<sup>274</sup> For example, Denmark and Belgium have lowered the threshold to 13 years, whereas Austria sets a 14-year old minimum. France and Greece set the bar at 15, while The Netherlands and Germany have a standard of 16 years. For a full overview, see: ‘Consent to Use Data on Children’ (*European Union Agency for Fundamental Rights*, 24 April 2018) <<http://fra.europa.eu/en/publication/2017/mapping-minimum-age-requirements-concerning-rights-child-eu/consent-use-data-children>> accessed 17 June 2023.

<sup>275</sup> Article 1(1)(b) Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

<sup>276</sup> Article 12(1) GDPR.

<sup>277</sup> Article 22 GDPR.

<sup>278</sup> Article 4(4) GDPR.

<sup>279</sup> Recital 75 GDPR.

<sup>280</sup> Recital 71 GDPR.

<sup>281</sup> Article 29 Data Protection Working Party, ‘Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (Wp251rev.01)’ (Directorate C (Civil Justice, Rights and Citizenship) of the European Commission 2017) Guidelines 17/EN WP 251 26 <<https://ec.europa.eu/newsroom/article29/items/612053>> accessed 30 May 2023.

processing in Article 22(2), the article does not explicitly prevent controllers from making solely automated decisions about children. The Working Party 29 does, however, state that because “children represent a more vulnerable group of society, organisations should, in general, refrain from profiling them for marketing purposes.” It is not specified, by either the Commission or Working Party 29, what exactly the “additional protection” cited in Recital 38 should include.<sup>282</sup> It may be meant as a reference to the Data Protection Impact Assessment (DPIA),<sup>283</sup> which is required where children’s personal data is processed, but that is not clear. Specifically within the context of online gaming, the Working Party 29 found that “profiling can be used to target players that the algorithm considers are more likely to spend money on the game”, and that the “age and maturity of the child may affect their ability to understand the motivation behind this type of marketing or the consequences.”<sup>284</sup> Still, there is no specific prohibition upon the profiling nor advice on how game companies are meant to handle personal data collected from children during (online) (video)games so that they are awarded the additional protection they have a right to under the GDPR. The Guidelines of the Working Party 29 are furthermore not binding – though they do hold authority – and it remains to be seen how the provision is to be interpreted by the CJEU in the context of (online) (video)games and their design features.

### *III.I.ii ePrivacy Directive / (Proposed) ePrivacy Regulation*

The ePrivacy Directive ensures the protection of fundamental rights and freedoms of European citizens.<sup>285</sup> It focuses on the respect for private life, confidentiality of communications and the protection of personal data in the electronic communications sector.<sup>286</sup> Specifically, it is the crystallisation of Article 7 EU CFR into EU secondary law. As part of its Digital Single Market Strategy (DSM Strategy), the EU carried out a review of the ePrivacy Directive to ensure coherency between the different instruments that focus on protecting European citizens’s rights in the digital context. The objective is to provide a high level of privacy protection for users of electronic communications services and a level playing field for all market players.<sup>287</sup> According to the EU Commission, an adequate EU framework on data protection and privacy requires consistency between the ePrivacy Directive and the GDPR. The proposed and modified ePrivacy Regulation is an elaboration (or, *lex specialis*) upon the GDPR, as it focuses specifically on the protection of personal data in the context of electronic communication (messages). The proposed ePrivacy Regulation was intended to go into effect in 2018, but is as the time of writing (2023) still under discussion within the EU’s institutions.

In its original form, the ePrivacy Directive applies to the processing of personal data in connection with the provision of publicly available electronic communications services in public communications networks.<sup>288</sup> The scope of the proposed ePrivacy Regulation has significantly expanded.<sup>289</sup> For its general material scope four conditions have to be met: there must be an electronic communications service (ECS),<sup>290</sup> which is offered over

<sup>282</sup> Eva Lievens and Valerie Verdoodt, ‘Looking for Needles in a Haystack: Key Issues Affecting Children’s Rights in the General Data Protection Regulation’ (2018) 34 Computer Law & Security Review 269; Eva Lievens, ‘The Importance of Privacy by Design and Data Protection Impact Assessments in Strengthening Protection of Children’s Personal Data under the GDPR’.

<sup>283</sup> Article 35 GDPR.

<sup>284</sup> Article 29 Data Protection Working Party, ‘Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (Wp251rev.01)’ (n 281) 26.

<sup>285</sup> 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, ePrivacy Directive) 2002 (OJ L).

<sup>286</sup> Article 1(1) ePrivacy Directive.

<sup>287</sup> Proposal for a Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications, ePrivacy Regulation) 2017 [COM/2017/010 final] para 1.1.

<sup>288</sup> Article 3(1) ePrivacy Directive.

<sup>289</sup> See, Article 2(1) (proposed) ePrivacy Regulation.

<sup>290</sup> Article 2(d) ePrivacy Directive specifies that ‘communication’ means “any information exchanged or conveyed between a finite number of parties by means of a publicly available electronic communications service” and excludes broadcasting services which may - in theory - reach an unlimited audience.

an electronic communications network<sup>291</sup> that is publicly available, and the service and network are offered in the EU.<sup>292</sup> This means that end-users in the EU are protected regardless of whether the service provider is established in the Union and irrespective of whether a payment is required from the end-user.<sup>293</sup> Under the (old) Directive, an ‘user’ is “any natural person using a publicly available electronic communications service, for private or business purposes, without necessarily having subscribed to this service.”<sup>294</sup>

The ePrivacy Directive has some general provisions on the use of location data or the storage of information on the devices of end-users. The ePrivacy Directive aims to ensure the confidentiality of communications and prohibits any interferences with communication data.<sup>295</sup> An interference is only allowed where consent thereto has been provided by the user or where it has been legally authorised.<sup>296</sup> Article 5(3), sometimes referred to as ‘the cookie-rule’, requires that consent is provided before the placement of (or subsequent access to) cookies on an individual’s computer.<sup>297</sup> ‘The cookie-rule’ is somewhat of a misnomer, however, as the article applies to any storage of (or subsequent access to) information on the terminal equipment of end-users.<sup>298</sup> It thus covers much more than merely the collection of ‘cookies’ on online websites. Article 5(3) thus applies to any application that is run on a mobile device, as well as any other application which gains access to data contained on an end-user’s device.<sup>299</sup> Online games are likely included therein as well, given that many games are nowadays downloadable as applications on mobile phones. During the literature review for this research, no discussion thereof was found in relevant sources in (academic) literature or policy documents, however.

The modified ePrivacy Regulation proposed by the Commission elaborates upon the GDPR, focusing specifically on (the use of) cookies and other tracking technologies. It is said to be even more stringent than the GDPR regarding the protection of internet user privacy, which will have an effect on direct marketing practices.<sup>300</sup> It also has a much broader scope, being applicable to “to the processing of electronic communications data [...] and to information related to the terminal equipment of end-users.”<sup>301</sup> It applies to all electronic communications provided to end-users in the EU, regardless of whether the service provider him or herself is located within EU territories.<sup>302</sup> The Proposal furthermore brings the requirements for consent in

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<sup>291</sup> ‘Electronic communications network’ is defined in article 2(4) of Directive (EU) 2018/1972 (Electronic Communications Code) as: “transmission systems, whether or not based on a permanent infrastructure or centralised administration capacity, and, where applicable, switching or routing equipment and other resources, including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means.”

<sup>292</sup> Article 3(1)(a) (proposed) ePrivacy Regulation. See also: European Data Protection Board, ‘Opinion 5/2019 on the Interplay between the EPrivacy Directive and the GDPR, in Particular Regarding the Competence, Tasks and Powers of Data Protection Authorities | European Data Protection Board’ (2019) <[https://edpb.europa.eu/our-work-tools/our-documents/opinion-board-art-64/opinion-52019-interplay-between-eprivacy\\_en](https://edpb.europa.eu/our-work-tools/our-documents/opinion-board-art-64/opinion-52019-interplay-between-eprivacy_en)> accessed 27 July 2023.

<sup>293</sup> David Martin, ‘Position Paper: Proposal for a Regulation on Privacy and Electronic Communications (e-Privacy)’ (The European Consumer Organisation (BEUC) 2017) Position Paper BEUC-X-2017-059.

<sup>294</sup> Article 2(1) ePrivacy Directive.

<sup>295</sup> Article 5.

<sup>296</sup> Article 5(1). A legal authorisation may, for example, include the prevention, investigation, detection and prosecution of criminal offences or of unauthorised use of the electronic communication system. See specifically, Article 15 of the ePrivacy Directive.

<sup>297</sup> Brendan van Alsenoy, ‘Rights and Obligations of Actors in Social Networking Sites’ (Agentschap voor Innovatie door Wetenschap en Technologie & SBO Security and Privacy for Online Social Networks 2014) 33 <[https://kuleuven.limo.libis.be/discovery/fulldisplay/lirias1656314/32KUL\\_KUL:Lirias](https://kuleuven.limo.libis.be/discovery/fulldisplay/lirias1656314/32KUL_KUL:Lirias)> accessed 12 June 2023; 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) art 5(3).

<sup>298</sup> Brendan van Alsenoy (n 296) 34.

<sup>299</sup> Article 29 Data Protection Working Party, ‘Opinion 02/2013 on Apps on Smart Devices’ (n 251) 7.

<sup>300</sup> ‘EU’s EPrivacy Regulation: 2022 Updates’ (<https://secureprivacy.ai/>) <<https://secureprivacy.ai/blog/eu-eprivacy-regulation-2022-updates>> accessed 12 June 2023.

<sup>301</sup> Proposal for a Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications) (n 286) art 2(1).

<sup>302</sup> Article 3(1).

line with those found in the GDPR.<sup>303</sup> This means that consent has to be “freely given, specific, informed and unambiguous”, expressly stated or made clear by an affirmative action, and can be withdrawn at any moment.<sup>304</sup> Direct marketing communications may furthermore only be provided to end-users who have given their explicit consent thereto. An exception is made for emails that have already been collected for the sale of similar goods or services, in accordance with the GDPR.<sup>305</sup>

The ePrivacy Directive, as the proposal now stands, does not have any provisions that address children specifically. This has been criticised by both academics and regulatory bodies in the Opinions and comments upon the Proposal.<sup>306</sup> The argument is made that children are the most active users of the Internet and are the first generation of ‘digital natives’. As already discussed, children generally have more difficulty in understanding the tracking of their personal data and the extent to which this data might be used for profiling. This would, it is argued, warrant specific protections of their privacy. In its Opinion, the Committee of the Internal Market and Consumer Protection (IMCP)<sup>307</sup> made several recommendations that would recognise the rights of children – specifically their right to privacy.<sup>308</sup> The IMCP recognised “the need to provide additional protection to children, given that they may be less aware of the risks and consequences associated with the processing of their personal data. This Regulation [the proposed ePrivacy Regulation] should also grant special attention to the protection of children's privacy.”<sup>309</sup> Because children are more vulnerable, they warrant specific protection with regard to their privacy, meaning that “[s]pecific safeguards are necessary in relation to the use of children's data, notably for the purposes of marketing and the creation of personality or user profiles.”<sup>310</sup>

Based upon these considerations, the IMCP actually proposed two amendments. First, an amendment to article 6, which would include an explicit prohibition on the use of electronic communications data that is generated in the context of an electronic communications service designed particularly for children or directly targeted at children for profiling or behaviourally targeted advertising purposes. Next, article 8 would be amended to include a new paragraph that would prohibit access to children’s terminal equipment to prevent profiling or the tracking of behaviour with commercial intent. None of the recommendations can be found in the contemporary draft ePrivacy Regulation, however, meaning that there is no specific provision that focuses on the rights of the child. Given that the actual ePrivacy Regulation is still pending, it remains to be seen whether (and if so, how) the position of children will be considered.

### *III.I.iii the Digital Services Act*

The goal of the Digital Services Act (DSA) is to make the digital realm safer, while also strengthening the protection of fundamental rights online. It aims to “contribute to the proper functioning of the internal

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<sup>303</sup> Article 9(1).

<sup>304</sup> See, Articles 4(11) and 7 GDPR.

<sup>305</sup> Article 16(2) Proposal.

<sup>306</sup> See, among others, the Opinions of the European Data Protection Supervisor and the Committee of the Internal Market and Consumer Protection. All Opinions are available at: <<https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=CELEX:52017PC0010>> accessed 18 June 2023.

<sup>307</sup> The IMCO Committee is responsible for the legislative oversight and scrutiny of EU rules on the single market, including the digital single market, customs and consumer protection. For more information, see: <<https://www.europarl.europa.eu/committees/en/imco/about>> accessed 28 July 2023.

<sup>308</sup> The Committee of the Internal Market and Consumer Protection, ‘Opinion on the Proposal for a Regulation of the European Parliament and of the Council Concerning the Respect for Private Life and the Protection of Personal Data in Electronic Communications and Repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications)’ (*EESC*, 23 October 2017)

<[https://dmsearch.eesc.europa.eu/search/public?k=\(documenttype:AC\)\(documentnumber:0655\)\(documentyear:2017\)\(documentlanguage:EN\)](https://dmsearch.eesc.europa.eu/search/public?k=(documenttype:AC)(documentnumber:0655)(documentyear:2017)(documentlanguage:EN))> accessed 12 June 2023.

<sup>309</sup> Amendment 8, Recital 16a

<sup>310</sup> Amendment 14, Recital 23a



market for intermediary services by setting out harmonised rules for a safe, predictable and trusted online environment that facilitates innovation and in which fundamental rights enshrined in the Charter are effectively protected.”<sup>311</sup> The DSA applies to intermediary services offered to recipients that are established or located within the EU.<sup>312</sup> An ‘intermediary service’ is defined in Article 3(g) of the DSA as a “mere conduit” service (i), “caching” service (ii) or “hosting” service (iii). Content creators do not fall within the scope of the DSA,<sup>313</sup> which may include creators of videogames. However, it has been acknowledged by the Interactive Software Federation of Europe (ISFE, Europe’s video game industry) that game companies may sometimes operate their own online platforms where users can purchase, download, play and stream games, and where they can chat to and share with other users their own self-generated content.<sup>314</sup> Especially the larger game companies – which are known to make the most use of the game design features discussed in Chapter II<sup>315</sup> – could thus potentially be classified as online service providers within the scope of the DSA.<sup>316</sup> As with the (proposed) ePrivacy Regulation and GDPR, the broad territorial scope means that the DSA is applicable even to service providers outside EU territories. The recipient of the intermediary service<sup>317</sup> and where he or she is based is determinative in the application of the DSA. The concept of ‘offering services’ is furthermore interpreted in a broad manner: it includes providers of intermediary services that enable use of their service by EU users and have a “substantial connection” to the EU – for example due to targeting (some of) their activities in a MS.<sup>318</sup>

The DSA distinguishes four ‘categories’ of platforms: intermediary services, hosting services, online platforms and very large online platforms/search engines. Depending upon which category a particular platform belongs to, there will be different obligations. Very large online platforms (VOLPs) “have a number of average monthly active recipients of the service in the Union equal to or higher than 45 million”.<sup>319</sup> Within the context of children and their rights, these platforms are required to “consider for example how easy it is for minors to understand the design and functioning of the service, as well as how minors can be exposed through their service to content that may impair minors’ health, physical, mental and moral development. Such risks may arise, for example, in relation to the design of online interfaces<sup>320</sup> which intentionally or unintentionally exploit the weaknesses and inexperience of minors or which may cause addictive behaviour.”<sup>321</sup> Because of their size, these platforms are deemed to have a special role: because of their widespread reach the societal stakes are higher. This meant that the EU legislator believed it to be appropriate for these platforms to put into place additional measures to mitigate risks.<sup>322</sup>

VOLPs are furthermore required to conduct a yearly risk assessment. This risk assessment shall be “specific to their services and proportionate to the systemic risks, taking into consideration their severity and

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<sup>311</sup> 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, DSA) Article 1(1).

<sup>312</sup> Article 2(1) DSA.

<sup>313</sup> Recital 18 DSA.

<sup>314</sup> ISFE Position Paper on the Digital Services Act (May 2021), available at: <<https://videogameseurope.eu/wp-content/uploads/2021/05/ISFE-DSA-Position-Paper-May-2021.pdf>> Accessed 20 June 2023.

<sup>315</sup> Zendle, Meyer and Ballou (n 11); Tomić (n 13).

<sup>316</sup> See also, ‘Protecting Gamers and Encouraging Growth in the Video Games Sector | News | European Parliament’ (n 19) where the EU Parliament explicitly mentions the DSA as potentially having an impact upon the (video) gaming sector.

<sup>317</sup> This is defined as any person “who uses an intermediary service, in particular for the purposes of seeking information or making it accessible”, see Article 3(b) DSA.

<sup>318</sup> ‘The Digital Services Act What Is It and What Impact Will It Have?’ (Clifford Chance) <<https://www.cliffordchance.com/content/cliffordchance/insights/resources/blogs/talking-tech/en/articles/2022/06/the-digital-services-act-what-is-it-and-what-impact-will-it-have.html>> accessed 12 July 2023.

<sup>319</sup> Article 33(1) DSA.

<sup>320</sup> An online interface is any software or application (including mobile applications, such as games downloaded on smartphones and the like). See, Article 3(m) DSA.

<sup>321</sup> Recital 81 DSA.

<sup>322</sup> Article 48 DSA.

probability<sup>323</sup> and must include considerations of any foreseeable negative effects in relation to minors.<sup>324</sup> The risks may result from the VOLPs' design or functioning of its service and its related systems (including algorithms), or from the use made of its services. In order to adequately mitigate these risks, VOLPs are required to put into place proportionate and effective measures. For children, this may include age verification and parental control tools.<sup>325</sup> The DSA does not provide information or guidance on what other measures might be taken by VOLPs. The risk assessments and measures subsequently implemented are to be reviewed by independent auditors.<sup>326</sup> However, there is no method for age verification in DSA. Providers of online platforms are not obliged to process additional personal data in order to assess whether the recipient of the service is a minor.<sup>327</sup> In line with the principle of data minimisation,<sup>328</sup> providers should not maintain, acquire or process more personal data than it already has on a particular individual in order to assess if the recipient of the service is a minor. The obligation to refrain from showing advertisements based on profiling where it concerns minors should thus not incentivize providers of online platforms to collect the age of the recipient of the service prior to their use.<sup>329</sup>

The DSA is meant to complement the GDPR. As discussed above, the GDPR has already provided EU citizens with the possibility to contest the use of their personal data for targeted digital marketing. The DSA goes even further and introduces two new restrictions. First, it bans targeted advertising to minors based on profiling. Second, it bans targeted advertising based on profiling using special categories of personal data, such as sexual orientation or religious beliefs. For this research, the first restriction is most relevant.

Article 28 sets out the specific protection of minors. Providers of platforms that cater to minors are required to put in place appropriate and proportionate measures to ensure a high level of privacy, safety, and security.<sup>330</sup> The Commission can issue further guidelines that expand upon this obligation.<sup>331</sup> Article 28(2) contains the prohibition on targeted advertising, which follows the same definition and wording as Article 4(4) of the GDPR.<sup>332</sup> Profiling is thus defined as “any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person.” Interesting to note is that, in the original 2020 Proposal by the Commission, no specific article on the protection of minors was included. This amendment was only made after several Opinions suggested that children required more stringent protective measures.<sup>333</sup> Quite a number of these Opinions also referred specifically to the CRC,<sup>334</sup> though these references were not included by the Commission in the final version.

Relevant for this research are furthermore the DSA's stringent approach towards the use of dark patterns<sup>335</sup> and its requirements imposed upon recommender systems. The DSA prohibits providers of online platforms “from deceiving or nudging recipients of the service and from distorting or impairing the autonomy,

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<sup>323</sup> Article 1 DSA.

<sup>324</sup> Article 33(1)(d) DSA.

<sup>325</sup> Article 35(j) DSA.

<sup>326</sup> Article 37(1)(b) DSA.

<sup>327</sup> Article 28(3) DSA.

<sup>328</sup> Article 5(1)(c) GDPR.

<sup>329</sup> Recital 71 DSA.

<sup>330</sup> Article 28(1) DSA.

<sup>331</sup> Article 28(4) DSA.

<sup>332</sup> See above, under Section III.II.i

<sup>333</sup> ‘Procedure 2020/0361/COD - COM (2020) 825: Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and Amending Directive 2000/31/EC’ <<https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=celex%3A32022R2065>> accessed 12 July 2023.

<sup>334</sup> These Opinions can be found at <https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=celex%3A32022R2065> (see, *ibid*).

<sup>335</sup> The DSA defines dark patterns as “practices that materially distort or impair, either on purpose or in effect, the ability of recipients of the service to make autonomous and informed choices or decisions.”

decision-making, or choice of the recipients of the service via the structure, design or functionalities of an online interface or a part thereof.”<sup>336</sup> This means, among others, that online platform providers are prohibited from making “exploitative design choices to direct the recipient to actions that benefit the provider of online platforms, but which may not be in the recipients’ interests” and from “deceiving the recipients of the service by nudging them into decisions on transactions.”<sup>337</sup> Specifically, Article 25 provides that “[p]roviders of online platforms shall not design, organise or operate their online interfaces in a way that deceives or manipulates the recipients of their service or in a way that otherwise materially distorts or impairs the ability of the recipients of their service to make free and informed decisions.”<sup>338</sup> This prohibition applies only to those practices not covered by the GDPR or UCPD.

In the context of game design, it includes the use of pop-ups that repeatedly ask the user of the service to make a particular choice.<sup>339</sup> It seems likely that this could include in-game notifications that encourage the player to purchase a certain item that would optimise their gameplay, as these types of notifications are known to repeatedly pop up during the game. As to recommender systems, the DSA requires that online platforms recommending content must provide users with easily accessible information regarding how the recommender system operates (including its criteria, parameters, any objectives and how the user's behaviour affects output) and the options available to modify or influence these parameters.<sup>340</sup> While the DSA does not impose a mandatory 'disable recommendations' option, it does require that online platforms make it easy for users to modify the parameters of recommender systems.

### III.II CONSUMER PROTECTION

The consumer protection framework is subsequently analysed. This involves all instruments applicable to (online) video games, regardless of the specific game design found therein. First, the relevant provisions in the Unfair Commercial Practices Directive<sup>341</sup> are considered. Second, the Digital Content and Digital Services Directive<sup>342</sup> is analysed. The Directive itself acknowledges that it may apply to (online) video games,<sup>343</sup> though there are (as of yet) no discussions of this dimension of the Directive in the literature.

#### III.II.i *The Unfair Commercial Practices Directive (UCPD)*

The Unfair Commercial Practices Directive (UCPD)<sup>344</sup> is the primary instrument in the EU’s consumer protection law regulating marketing. It has a relatively broad scope, as it is not restricted to specific products or market behaviours.<sup>345</sup> This enables the UCPD to stay ‘up-to-date’ with modern developments. It is furthermore principle-based, which means that it captures a broad range of situations.<sup>346</sup> The UCPD provides

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<sup>336</sup> Recital 67 DSA.

<sup>337</sup> Recital 67 DSA.

<sup>338</sup> Article 25(1) DSA.

<sup>339</sup> Article 25(2) & 3(b) DSA.

<sup>340</sup> Recital 70 DSA.

<sup>341</sup> 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’, UCPD) 2005 (OJ L) 22.

<sup>342</sup> Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services 2019 (Digital Content Directive, DCD) (OJ L).

<sup>343</sup> See, Recital 19 of the DCD.

<sup>344</sup> 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’, UCPD) 2005 (OJ L) 22.

<sup>345</sup> Bram Duivenvoorde, ‘The Liability of Online Marketplaces under the Unfair Commercial Practices Directive, the E-Commerce Directive and the Digital Services Act’ 47.

<sup>346</sup> Verdoodt (n 228) 122.

full harmonisation, meaning that EU Member States have no discretion in adopting rules on the matters regulated under the common standards. The UCPD is applicable to all commercial practices, which are defined as “any act, omission, course of conduct or representation [...] by a trader, directly connected with the promotion, sale or supply of a product to consumers.”<sup>347</sup> A consumer is “any natural person who is acting for purposes which are outside his trade, business, craft or profession.”<sup>348</sup> Traders are those persons “acting for purposes relating to his trade, business, craft or profession” in one of the commercial practices covered by the UCPD.<sup>349</sup> The UCPD aims to protect consumers from unfair commercial practices. As such, it focuses only on the economic interests of consumers and does not apply to any health-related aspects of products (this could, for example, involve the possibility of developing a gaming addiction).

The core provision of the UCPD is found in Article 5, which contains a general prohibition on unfair commercial practices. The Directive further contains more specific prohibitions on misleading<sup>350</sup> and aggressive commercial practices.<sup>351</sup> Annex I to the UCPD contains the so-called ‘black list’, which are commercial practices that are deemed inherently unfair. The UCPD is an important mechanism in the EU consumer protection with regard to children, as it explicitly recognises children as particularly vulnerable to unfair commercial practices.<sup>352</sup> The Commission has also acknowledged that aggressive practices may occur in the field of online games, specifically where children are concerned.<sup>353</sup> The Commission did not elaborate upon this statement, but emphasised that the framework must be strengthened to protect vulnerable consumers.<sup>354</sup>

The prohibition in Article 5 UCPD contains a two-step test to determine whether a commercial practice is unfair. First, the practice must be contrary to the requirements of professional diligence.<sup>355</sup> Second, it must materially distort or is likely to materially distort the economic behaviour of the average consumer with regard to a product or a service.<sup>356</sup> With respect to games, the practice may also be incorporated in the design of the game.<sup>357</sup> In its Notice, the Commission has made it clear that traders should take appropriate measures to ensure that the design of their interface does not distort the transactional decisions of consumers.<sup>358</sup> The benchmark for the test is the ‘average consumer’. The UCPD takes special regard for vulnerable consumers,<sup>359</sup> which includes children. For those consumers, the assessment must be made from the “perspective of a member of *that* group”.<sup>360</sup> As such, it can be assumed that the UCPD acknowledges that even within the category of vulnerable consumers, there may exist differences. The behaviour of a young adolescent can be ‘distorted’ through different practices, as compared to a child. This must be taken into account when determining whether a practice is unfair.

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<sup>347</sup> Article 2(d) UCPD.

<sup>348</sup> Article 2(a) UCPD.

<sup>349</sup> Article 2(b) UCPD. Following the Guidelines published by the Commission, this includes game companies.

<sup>350</sup> Article 6 UCPD.

<sup>351</sup> Article 9 UCPD.

<sup>352</sup> Recital 18 UCPD.

<sup>353</sup> European Commission, Communication from the Commission - On the application of the Unfair Commercial Practices Directive Achieving a high level of consumer protection Building trust in the Internal Market 2013 4.

<sup>354</sup> *ibid.*

<sup>355</sup> Article 5(2)(a) UCPD.

<sup>356</sup> Article 5(2)(b) UCPD.

<sup>357</sup> 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 101.

<sup>358</sup> *ibid.*

<sup>359</sup> Article 5(3) UCPD. See also, Recital 19.

<sup>360</sup> *ibid.*

Next to the more general clause found in Article 5, Articles 6 and 7 offer (somewhat) more specific guidance on unfair practices. According to these articles, commercial practices are generally regarded as unfair if they are misleading or aggressive. Misleading practices usually contain some form of deception.<sup>361</sup> Articles 6 and 7 UCPD then distinguish between two types of misleading practices: misleading actions and misleading omissions. Again, the starting point from which the assessment must take place is the average consumer, which may also be the average child.<sup>362</sup> A misleading commercial practice involves the average consumer making a transactional decision he or she would otherwise not have made, because he or she has been deceived.<sup>363</sup> A misleading omission “omits material information that the average consumer needs to take an informed transactional decision and thereby results in a transactional decision that the consumer would not have taken otherwise.”<sup>364</sup> The fact that traders must not omit information that the customer needs to make a reasoned decision reflects the idea that consumers should be helped when making a transactional decision.<sup>365</sup> In other words, it cannot be expected of consumers that they exercise total self-reliance in discovering what might be important information regarding their purchase. In both situations (under Article 6 and 7), the specific circumstances must be taken into account, though the UCPD mentions certain elements that may suggest that a particular action or omission is deceptive. It is up to Member States to interpret these clauses.<sup>366</sup> The CJEU has provided some guidance in the Trento Sviluppo case, wherein it clarified that Articles 6 and 7 should be applied in accordance with Article 5.<sup>367</sup>

In the context of games and the design of games, an action may be misleading where the consumer is deceived regarding the (calculation of the) price<sup>368</sup> or that an (additional) part or service is required.<sup>369</sup> The gamer may expect that a ‘free game’ would indeed not require any additional purchases to be made or that the game is designed in such a way that ‘levelling up’ requires an additional investment (whether in terms of money, time or other extensions to the game). It is thus not clear to the gamer that he or she might incur actual or additional costs when playing the game. Similarly, it might be questioned whether a general disclosure of in-game purchases is sufficient to warrant an ‘informed decision’. Or that it is not always made clear to gamers that the game will require updates (for which one has to pay) in order to remain playable. The Hungarian enforcement authority has indeed found that misleading practices of the trader and influencers, not marking certain advertisements and promotions in games accordingly and misleading consumers into viewing one such in-game advertisement constituted a misleading practice.<sup>370</sup> The Commission has similarly acknowledged that, unless the commercial element is made sufficiently clear and distinguishable from gameplay, in-game advertisements and promotions can constitute misleading practices as within the scope of Article 6 and 7 UCPD.<sup>371</sup> In order for an in-game purchase to comply with the information requirements set out in Article 7,

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<sup>361</sup> Verdoodt (n 124) 126.

<sup>362</sup> Bram B Duivenvoorde, ‘The Unfair Commercial Practices Directive’ in Bram B Duivenvoorde (ed), *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (Springer International Publishing 2015) <[https://doi.org/10.1007/978-3-319-13924-1\\_2](https://doi.org/10.1007/978-3-319-13924-1_2)> accessed 12 July 2023.

<sup>363</sup> Article 6(1) UCPD; see also: 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 353); Duivenvoorde (n 358).

<sup>364</sup> Article 7(1) UCPD.

<sup>365</sup> Chris Willett, ‘Fairness and Consumer Decision Making under the Unfair Commercial Practices Directive’ (2010) 33 *Journal of Consumer Policy* 247.

<sup>366</sup> Duivenvoorde (n 358).

<sup>367</sup> CJEU 19 December 2013, Case C-281/12 (*Trento Sviluppo*).

<sup>368</sup> Article 6(d) UCPD.

<sup>369</sup> Article 6(e) UCPD.

<sup>370</sup> Hungarian Competition Authority, 26 May 2021, VJ/3/2020, Global AWA Pty Ltd et al.

<sup>371</sup> 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 353) 103.

“the main characteristics of the product must be clearly described and the prices of virtual items must be clearly and prominently displayed (also) in real currency.”<sup>372</sup>

Another type of unfair commercial practices are aggressive commercial practices, laid down in Articles 8 and 9. A practice is aggressive, if the consumer makes a transactional decision he or she would not have taken otherwise, because their freedom of choice or conduct is impaired by “harassment, coercion, including the use of physical force, or undue influence.”<sup>373</sup> Within the context of game design, it is unlikely that harassment or coercion are applicable. In order to determine whether undue influence has been exerted, the specific circumstances of the case must be taken into account.<sup>374</sup> For children, this could mean that the assessment should take into account children’s special position as more vulnerable consumers and the fact that they are generally less capable of understanding marketing techniques than adults. Interesting within the context of games might be the element of persistence.<sup>375</sup> A game can be designed in such a way that it requires additional steps to exit the game – for example, the player may be asked several times whether they are ‘sure they want to leave the game’ – or the many notifications that games will usually give if not played for a certain amount of time, remind the player to continue playing the game. This is closely related to the use of threatening language, as laid down in Article 9(b). Many games will provide gamers with periodical notifications that warn them of ‘losing their progress’ or ‘missing out on [...]’ if they do not undertake a certain action. This action oftentimes involves making a monetary transaction. Players may be persuaded to do so by the implicit threat contained within the notification. Finally, Article 9(c) provides that a practice may also be aggressive if there is the “exploitation by the trader of any specific misfortune or circumstance of such gravity as to impair the consumer’s judgement, of which the trader is aware.” It could be argued that intentional losses meant to frustrate the player and induce them to buy some sort of advantage in the game are indeed an exploitation of intentionally created misfortunes that have been embedded in the game’s design. However, there is no guidance as to how ‘grave’ the misfortune or circumstance must be. Whether the emotional frustration experienced by gamers falls within this category is thus uncertain. The literature on this topic – what little there is – does not offer a clear answer either.<sup>376</sup>

Of relevance for this research are furthermore some of the practices listed in Annex I that are inherently unfair. One misleading practice that might be applicable to games and game design would be the falsely stating that a product will only be available for a very limited time or on particular terms, “in order to elicit an immediate decision and deprive consumers of sufficient opportunity or time to make an informed choice.”<sup>377</sup> Many online games employ such schemes, wherein gamers will get notifications that they obtain get add-ons or other extras, but that this offer is available only for a specific number of hours and/or days. Similarly, “describing a product as ‘gratis’, ‘free’, ‘without charge’ or similar if the consumer has to pay anything other than the unavoidable cost of responding to the commercial practice and collecting or paying for delivery of the item”<sup>378</sup> may also constitute a misleading practice. Free-to-play games will often require monetary investments in order to keep the game interesting, whether that be in the form of extras to enhance game play or add-ons that are necessary to keep the game playable. Finally, a misleading practice may also be the claiming that

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<sup>372</sup> *ibid* 104.

<sup>373</sup> Article 8 UCPD.

<sup>374</sup> Article 9 UCPD.

<sup>375</sup> Article 9(a) UCPD.

<sup>376</sup> King and others (n 21); Elena Petrovskaya and David Zendle, ‘Predatory Monetisation? A Categorisation of Unfair, Misleading and Aggressive Monetisation Techniques in Digital Games from the Player Perspective’ (2022) 181 *Journal of Business Ethics* 1065.

<sup>377</sup> 7 Annex 1.

<sup>378</sup> 20 annex I. See also, MD 2012:14, Norwegian Market Court, 6 December 2012, *Stardoll*.

products are able to facilitate winning in games of chance.<sup>379</sup> This provision is illustrative of the conundrum currently faced by many European legislators; namely the question whether loot boxes in games constitute gambling. It is certain that such loot boxes are advertised as increasing a player's chances of winning or progressing in the game. However, there is still much uncertainty as to whether loot boxes actually hold gambling elements.

Annex I also lists several inherently unfair aggressive practices. Of relevance is the inclusion in an advertisement a direct exhortation to children to buy advertised products or persuade their parents or other adults to buy advertised products for them.<sup>380</sup> This is not so much a ban on advertising to children as a whole, but rather on the intention to exhort (urge) them to do buy something. The direct exhortation is key here: expressions like 'buy now!' or 'up-grade now!' have been deemed to be in breach of the UCPD in national enforcement cases.<sup>381</sup> A TV advertisement for the release of the movies stating: "Your favourite book is now out on DVD – tell your dad to buy it for you!" is seen as an unfair practice.<sup>382</sup> The Dutch Authority on Consumer and Markets has made it clear that, following the UCPD, targeted exhortations may not appear in games that are aimed at or may appeal to children.<sup>383</sup> This is reiterated in the Commission's Guidance, which clarifies the rules as regards payment for apparently random items that are present in video games. It was said that No.28 of Annex I applies to all games that are likely to appeal to children, not just those specifically targeting children. In fact, a "game or application, and the exhortation contained within it, may be considered as directed at children within the meaning of point No 28 of Annex I if the trader could reasonably be expected to foresee that it is likely to appeal to children."<sup>384</sup>

In the context of game design, the Commission stated that using algorithms to personalise the game, including the timing of in-game offerings of loot boxes and the microtransactions offered, with the purpose of keeping gamers entrenched within the game constitutes an aggressive practice under Articles 8 and 9 UCPD.<sup>385</sup> This may be the case if the practices involve the use of behavioural biases or manipulative elements relating to, for example, "the timing of offers within the gameplay (e.g. offering micro-transactions during critical moments in the game), pervasive nagging or the use of visual and acoustic effects to put undue pressure on the player."<sup>386</sup> Furthermore, commercial practices could be personalised, meaning that specific information about the gamers' vulnerabilities is taken into account in the marketing strategies employed. The Commission warned that the "combination of such practices in a game (e.g. appeal to children or other vulnerable groups, use of micro-transactions, embedded and non-transparent advertising) exacerbate the consumer impact. In addition to the concerns related to children and young people, the increased susceptibility to commercial communications and manipulative practices could also affect adult gamers, especially during lengthy and immersive gameplay."<sup>387</sup>

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<sup>379</sup> 16 Annex I.

<sup>380</sup> 28 Annex I.

<sup>381</sup> Marijn Sax and Jef Ausloos, 'Getting under Your Skin(s): A Legal-Ethical Exploration of Fortnite's Transformation into a Content Delivery Platform and Its Manipulative Potential' [2021] *Interactive Entertainment Law Review* 1, 19.

<sup>382</sup> European Commission Communication from the Commission - On the application of the Unfair Commercial Practices Directive Achieving a high level of consumer protection Building trust in the Internal Market (n 349).

<sup>383</sup> Markt (n 199).

<sup>384</sup> 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 353) 71.

<sup>385</sup> *ibid* 104.

<sup>386</sup> 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 353).

<sup>387</sup> *ibid*.

Dark patterns<sup>388</sup> in B2C relations furthermore fall within the category of manipulative practices, as The UCPD applies to any ‘unfair commercial practice’ that meets the requirements of its material scope, regardless of their classification.<sup>389</sup> This means it is highly likely that dark patterns found in the design of (online) games do as well. The Commission has already explained that under No 20 of Annex I and Article 7(4)(c) UCPD and Article 6(1)(e) CRD, only games where in-app purchases are optional can be presented as ‘free’ without misleading consumers. This also means that a game that becomes unplayable without making in-app purchases is not ‘free’ falls within the scope of the UCPD.<sup>390</sup> The commercial element must be made sufficiently clear and must be distinguishable from the gameplay itself in order to not be classed as a misleading practice.

### *III.II.ii The Digital Services and Digital Content Directive*

The Digital Content Directive (DCD)<sup>391</sup> is another instrument meant to further harmonise European consumer law, specifically focused on consumers in the digital age. The Directive lays down common rules on certain requirements concerning contracts between traders and consumers for the supply of digital content or a digital service.<sup>392</sup> A trader is any person that “is acting [...] for the purposes relating to that person’s trade, business, craft, or profession, in relation to the contracts covered by this Directive.”<sup>393</sup> A consumer refers to any person that is “acting for purposes outside [that person’s] trade, business, craft or profession.”<sup>394</sup> The DCD is meant to cover problems across different categories of digital content and services and should be able to cater to new developments. Hence, the scope of the Directive is wide: it applies to any contract “where the trader supplies or undertakes to supply digital content or a digital service to the consumer and the consumer pays or undertakes to pay a price.”<sup>395</sup> The Directive also applies where the ‘price’ is the provision of personal data.<sup>396</sup> Recital 19 explicitly mentions the coverage of digital games and games offered in the cloud computing environment. The Directive thus covers nearly all aspects of (online) video games.

Digital content refers to data which are produced and supplied in digital form.<sup>397</sup> This means that the Directive applies to video games that can be obtained for a fee as such – no matter if distributed via hardcopy or downloaded (on PC or mobile phone) – as well as downloadable content, such as additional skins or otherwise extended game content. Digital service refers to (a) a service that allows the consumer to create, process, store or access data in digital form; or (b) a service that allows the sharing of or any other interaction with data in digital form uploaded or created by the consumer or other users of that service.<sup>398</sup> This includes subscriptions to games and in-game purchases. Free-to-play games – which are known for having microtransactions and other monetisation schemes incorporated in their design – may fall within the scope of the Directive as well. In order for these types of games to do so, they will have to fulfil the three conditions set out in Article 3(1), second paragraph. First, the consumer will have to ‘pay’ for using the game by providing personal data.<sup>399</sup> In

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<sup>388</sup> According to the Commission, dark patterns are “a type of malicious nudging, generally incorporated into digital design interfaces. Dark patterns could be data-driven and personalised, or implemented on a more general basis, tapping into heuristics and behavioural biases.” See, *ibid*.

<sup>389</sup> *ibid* 101.

<sup>390</sup> European Commission, ‘In-App Purchases: Joint Action by the European Commission and Member States Is Leading to Better Protection for Consumers in Online Games’ (*European Commission - Press Corner*, 18 July 2014) <[https://ec.europa.eu/commission/presscorner/detail/en/IP\\_14\\_847](https://ec.europa.eu/commission/presscorner/detail/en/IP_14_847)> accessed 29 May 2023.

<sup>391</sup> Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services 2019 (Digital Content Directive, DCD) (OJ L).

<sup>392</sup> Recital 11 DCD.

<sup>393</sup> Article 2(5) DCD.

<sup>394</sup> Article 2(6) DCD.

<sup>395</sup> Article 3(1) DCD.

<sup>396</sup> Article 3(2) DCD.

<sup>397</sup> Article 2(1) DCD.

<sup>398</sup> Article 2(2) DCD.

<sup>399</sup> ‘Personal data’ as defined in Article 4(1) GDPR, see above. See, Article 2(8) DCD.



the context of games, the processing of personal data may occur upon registering with a personal email address or social media account in order to play the game or to receive in-game bonuses. Second, the consumer's personal data are *not* exclusively processed for the purpose of supplying or improving the game itself. This means that the evaluation of statistical data – for example, how many people have played the game over a specific period of time – is not considered 'data payment' within the scope of the Directive. Third, processing of the personal data is not done in order to comply with any legal requirements that the trader may have under (inter)national law. To summarise, if a video game had some sort of (hidden) monetisation scheme that uses personal data as a transaction method, it will most likely fall within the scope of the Digital Content Directive.<sup>400</sup>

Furthermore, under the Digital Content Directive, traders (e.g. game companies) have both subjective and objective conformity obligations. This means that: the game (and its contents) will need to be as described in the contract; the game is supplied with all accessories and other attributes as required by the contract; and the game must be updated according to the contract.<sup>401</sup> A video game needs to meet the targeted players' reasonable expectations regarding its purpose of use, quantity and quality, and it must possess the functionality, interoperability and other features required by the contract.<sup>402</sup> For the assessment of these reasonable expectations, every public statement made by person(s) involved in the development and/or bringing onto the market of the game, or any advertisements promoting the game, must be taken into account. Increasingly common in both the film and gaming industry is to put out 'teasers' in advance of a new game or film. These teasers are a short video segment – or, less commonly, images or pictures – related to an video game. Teasers are usually released in advance of the product, so as to 'tease' the audience and build anticipation.<sup>403</sup> Under the Content Directive, any (indirect) promises as to the contents or its functionalities must thus be in accordance with what the player will ultimately receive. Traders, or game developers, will be liable for any failure to supply or lack of conformity with the requirements set out in Articles 7 to 9 of the Directive.<sup>404</sup> If liability is established, the player can ask for a replacement, improvement or rectification, provided this does not involve disproportionate effort of the video game company. The player may also request to proportionately reduce the price (of paid games, content or services)<sup>405</sup> or, after the video game company was given the opportunity for rectification, terminate the or withdraw from the contract.<sup>406</sup> Being located abroad does not allow a video game company to escape the provisions of the Directive. Contracts concluded between a player (in his/her capacity as a consumer) and a video game company are governed by the laws of the country where that player has his/her habitual residence.<sup>407</sup>

### III.III CHAPTER CONCLUSION

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<sup>400</sup> Karin Sein and Gerald Spindler, 'The New Directive on Contracts for the Supply of Digital Content and Digital Services - Scope of Application and Trader's Obligation to Supply - Part 1' (2019) 15 *European Review of Contract Law* 257; Sebastian Schwidessen Contributor, 'Ten Risks Associated with the New EU Digital Content Directive' (*GamesIndustry.biz*, 5 November 2020) <<https://www.gamesindustry.biz/ten-risks-associated-with-the-new-eu-digital-content-directive>> accessed 30 July 2023; Sloboda D Midorovic and Milos B Sekulic, 'A New Function of Personal Data in the Light of the Contract for the Supply of Digital Content and Digital Services' (2019) 53 *Zbornik Radova I*.

<sup>401</sup> Article 7(1)-(4) DCD.

<sup>402</sup> Article 8(1)(a)-(b) DCD.

<sup>403</sup> <https://www.gamedeveloper.com/author/nemanja-bondzulich>, '3 Tips on Making Video Game Teaser' (*Game Developer*, 3 March 2014) <<https://www.gamedeveloper.com/business/3-tips-on-making-video-game-teaser>> accessed 15 June 2023; Robert G Barnwell, *Guerrilla Film Marketing: The Ultimate Guide to the Branding, Marketing and Promotion of Independent Films & Filmmakers* (Taylor & Francis 2018).

<sup>404</sup> Article 11 DCD.

<sup>405</sup> Articles 13-14 DCD.

<sup>406</sup> Article 14 DCD.

<sup>407</sup> Article 21 DCD.

Chapter IV aimed to set out the different instruments that (could potentially) regulate game design within the European Union. In order to have a well-balanced framework for (online) (video)games and game design that promotes and protects children's rights, particularly those discussed in Chapter III, the existing legislation had to be mapped and analysed.

The analysis has shown that while the General Data Protection Regulation (GDPR) recognises children as vulnerable data subjects requiring additional protection, it is unclear on how to achieve this. Similarly, the rules on consent in relation to children are ambiguous and vague and there is no explicit ban on the profiling of children. The ePrivacy Directive (or its amendment, the proposed ePrivacy Regulation) has no provisions that focus specifically on children. The novel Digital Services Act (DSA) seems promising, for it bans targeted advertising to minors through profiling, introduces more stringent requirements for online platforms catering to minors and tackles manipulative practices like dark patterns. However, its relation to the other instruments is not always clear and it remains to be seen how the specific provisions will work out in practice. Next, the chapter looked at the EU's framework on consumer protection. It first focused on the Unfair Commercial Practices Directive (UCPD), which explicitly mentions children as vulnerable consumers. The Commission's Guidance document provides interesting and highly relevant advice in the context of games and game design, seemingly laying down a (potentially) robust framework for the protection of children as consumers. Finally, the Digital Content and Digital Services Directive (DCD) imposes stringent obligations on companies, including game companies, but has no provisions that focus specifically on children.

With this analysis, the chapter has attempted to lay down a basis for a legal evaluation of the framework. In the next chapter, the relevant legal elements discussed in this chapter will be normatively evaluated in light of the child's right to protection from economic exploitation, the right to play and the right to privacy. Taking a children's rights approach, possibly gaps or inconsistencies within the legislation will be identified and discussed.

## CHAPTER V – EVALUATION OF THE CURRENT REGULATORY FRAMEWORK

Having presented and explained the concept of ‘game design’ in the first chapter, as well as the (potential) issues and harms related to children, the second chapter provided a detailed analysis of the relevant children’s rights and their role in regulating game design. The third chapter then provided a descriptive-analytical overview of the existing regulatory framework consumer and privacy protection at the EU level. From these previous chapters, an important research question follows: how do games and game design – specifically, microtransactions, loot boxes and data collection – fit within the identified regulatory framework, while keeping in mind children’s rights and principles? In short, this chapter aims to discover any gaps or overlaps and highlight what legal elements are needed to attain a regulatory framework for game design. Having established this, the findings will then form the basis for the recommendations that are set out in the Conclusion.

### V.I PLAYFUL GAME DESIGN

Under Article 32 CRC, children have a right to play. Games are a popular pastime and an important means for children – and adults alike – to relax and have an enjoyable time. A game’s design can contribute to a positive gaming experience. The open-endedness of the game might, for example, provide children with agency and allow them to explore and be creative in a fun, flexible and non-productive way. As has been discussed, however, a game’s design can also undermine the child’s right to play. Some games may be designed to disincentive players from quitting the game. This would undermine the voluntariness that is a part of the right to play: to what extent can there be voluntary play if the design has sticky features that make it difficult to get away from the game. Games might also contain design features that constantly disturb players with notifications or push them to keep playing to retain their progress and/or leading position. This would not only be problematic in that it obliges children to keep playing, it also has the potential to negatively affect a child’s rest. It is recognized that getting enough rest from activities and adequate sleep are an important aspect of the right to play and leisure.

Game design that is focused on encouraging children to make in-game purchases or other transactions that are related to the gameplay might also result in the commercialisation of the right to play. Being closely connected to a child’s right to protection from economic exploitation, these types of design features could induce the belief that (what is supposed to be) a fun and relaxing activity requires monetary contributions in order to be fully enjoyed. This is contrary to the essence of the right to play and leisure, which presupposes that unstructured and free play is of fundamental importance in a child’s life and their development. Taking it one step further, where the purchases focus on items that are meant to help the player gain an advantage over other players, the design also takes advantage of players’ competitiveness and encourages the idea that a ‘win’ can be bought, rather than earned. Microtransactions incorporated into games can also hardly be said to be age-appropriate. Research has shown that children often struggle with distinguishing between commercial messages (e.g. encouragement to make a transaction in favour of their gameplay) and the non-commercial content of the game itself.<sup>408</sup> Including them in leisure activities such as games and making it extremely difficult for players – any players, no matter their age – to spot them seems to run contrary to a positive gaming experience.

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<sup>408</sup> Rozendaal and others (n 112).

Many of these design features that lead to negative gaming experiences are often inextricably linked to the revenue models of the gaming industry – as discussed in Chapter II. Such design (choices) therefore interfere not only with children’s right to free play but also with their right to protection against economic exploitation and their right to privacy. European legislation focused on protecting the rights of consumer and data subjects play an important role therein (see, Chapter IV) and could simultaneously provide support in safeguarding a child’s right to leisure and play, within the context of game design. The discussion below is therefore relevant to this right as well. Relevant to note is that the legislation discussed is universally applicable, meaning that the different Directives and Regulation will apply where the consumer or recipient of a service or product is located within the European Union. Given that many of the larger game companies have their (main) headquarters outside the EU – with sometimes an EU branch, such as EA<sup>409</sup> – this universal application means that the protection offered in terms of territorial scope is quite extensive.

## V.II NON-EXPLOITATIVE GAME DESIGN

In essence, the right to protection from economic exploitation entails that while game companies can pursue economic goals – and have their games' design support these monetisation schemes – it should not result in the exploitation of children’s vulnerabilities to make a profit. It has been discussed how, with the development of new monetisation strategies in the game industry, design choices seem to be increasingly focused on making a profit – possibly at the expense of the gamers’ interests and wellbeing. In order to do so, game companies may rely upon unfair methods to make a profit. These methods might include the deception and manipulation of children in ways that they are not aware of.<sup>410</sup>

Many of the design features that could interfere with a child’s right to play and leisure, also have the potential to negatively affect the child’s right to protection from economic exploitation. These features do not only aim to increase gamers’ engagement, but also encourage the gamer to spend money on the game. Some examples of techniques used to stimulate purchases and trigger impulse purchases include the use of offers that are valid for a limited time, price personalization, and algorithms that determine the best sales strategy.<sup>411</sup> If the gamer refuses to make in-game purchases or other payments, then the game might require that they wait for a significant amount of time. This stagnates their gameplay and induces the gamer to engage in microtransactions such as pay-to-skip. Similarly, pay-to-win does not only dissuades enjoyable gameplay by creating so-called monetised rivalries, it also encourages the gamer to spend money they would not otherwise have spent in order to achieve in-game status. Furthermore, these microtransactions do not only hinder a child in asserting their autonomy by negating their voluntary engagement with the game. These design features could also be seen as undermining a child’s autonomy by essentially forcing them – through manipulative design – to make a transaction they might otherwise not have made. Essentially, the player is manipulated into undertaking a specific action. This is why economic exploitation in gaming is said to more specifically include ‘dark patterns’ in the design of the game,<sup>412</sup> for these interfaces intentionally mislead or trick people into doing something. This action might involve spending (more) money on a game-related item, but could also involve the unintended or unwanted sharing of personal information, as this data might be used to more precisely encourage gamers to make certain purchases. In order to protect children from economic exploitation, both consumer protection and data protection laws could thus be helpful.

<sup>409</sup> ‘Electronic Arts Locations - Official EA Site’ <<https://www.ea.com/careers/locations>> accessed 10 August 2023.

<sup>410</sup> ‘Procedure 2020/0361/COD - COM (2020) 825: Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and Amending Directive 2000/31/EC’ (n 332).

<sup>411</sup> Hof and others (n 2).

<sup>412</sup> *ibid.*

### V.II.i Microtransactions as Economic Exploitation

In the previous chapter, it has been discussed how (online) games might fall within the scope of European consumer protection rules and how these provisions aim to protect children as vulnerable consumers. The Unfair Commercial Practices Directive (UCPD) seems particularly promising in the context of misleading or manipulative game design. Several of the microtransactions discussed could potentially be classed as an unfair commercial practice – whether misleading or aggressive – under the UCPD. Gameplay and commercial messages that are indistinguishable from one another and intended to encourage gamers to engage in microtransactions (such as pay-to-skip or pay-to-win) may, for example, be regarded as misleading commercial practices. Similarly, describing a product as free if the consumer actually does have to pay for its use or features may also constitute a misleading practice.<sup>413</sup> Games that suggest that a particular item within the game is scarce or available only for a limited time can be an aggressive practice under the UCPD. For children specifically, games should not directly encourage children to purchase items in a game. This includes pressuring a child to buy the game directly or asking them to persuade an adult to buy items for them.

The protection of children as a particularly vulnerable consumer (group) under the UCPD is extensive and the Commission has, in its Guidance, also clarified the applicability and interpretation of some of its provisions in the context of games. The Commission has worded this as including all games that are likely to “target or appeal to children.”<sup>414</sup> This is a particularly wide scope, which is a positive development. Game companies that might originally have advertised or promoted their games among older audiences, are less likely to avoid responsibility if their games hold equal appeal to children. Another development that has the potential to positively impact the child’s right to protection from economic exploitation is the fact that the UCPD takes special regard for vulnerable consumers,<sup>415</sup> and that any assessments as to the unfair commercial practice(s) must be made from the “perspective of a member of *that* group”.<sup>416</sup> As mentioned already, this means that there is room for an assessment that takes into account the fact that children’s ability to spot unfair commercial practices and their susceptibility thereto will vary throughout their lifetime. As children develop, they are generally considered to become more adept at understanding these unfair practices,<sup>417</sup> while simultaneously being influenced by different practices as compared to younger children.<sup>418</sup> The national courts of the Member States are charged with making the actual assessment as to what would constitute the actual perspective of the child, but the possibility for more tailored and individual assessments seems promising in protecting children from economic exploitation through game design. In that context, it might even be considered that loot boxes – for which it is still uncertain whether or not they fall under gambling law or not – might come to fall under the scope of the UCPD as well. It has been established in both literature and (Dutch) case law that loot boxes contain elements that could constitute gambling practices.<sup>419</sup> If these gambling elements play are seen as playing into the gamer’s vulnerabilities – specifically where it concerns children – this may constitute an unfair commercial practice.

The Commissions Guidance on the inclusion of microtransactions within the scope of the UCPD is furthermore a welcome development that could prove to be an important means for protecting children from manipulative

<sup>413</sup> 20 annex I. See also, MD 2012:14, Norwegian Market Court, 6 December 2012, *Stardoll*.

<sup>414</sup> 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 (n 353) 71.

<sup>415</sup> Article 5(3) UCPD. See also, Recital 19.

<sup>416</sup> *Ibid*.

<sup>417</sup> Rozendaal and Buijzen (n 110).

<sup>418</sup> Francisco Lupiáñez-Villanueva (n 181).

<sup>419</sup> *ECLI:NL:RVS:2022:690*, *Raad van State*, 202005769/1/A3 [2022] ABRvS ECLI:NL:RVS:2022:690. See also, among others: Zendle, Meyer and Over (n 15); Stephanie Derrington, Shaun Star and Sarah Kelly, ‘The Case for Uniform Loot Box Regulation: A New Classification Typology and Reform Agenda’ (2021) 46 *Journal of Gambling Issues* 302; King and Delfabbro (n 189).

game design. For example, the Dutch National Authority for Consumers and Markets (ACM) has already updated its National Guidelines for protecting the online consumer to include the Commission's guidance and has indicated be "very strict when assessing practices involving minors," for these minors "are often more sensitive to persuasion techniques."<sup>420</sup> According to the ACM, game providers cannot directly encourage minors to make in-game purchases.<sup>421</sup> This is indicative of the fact that certain provisions of the UCPD could come to form an important layer of protection for children against certain types of manipulative and unfair commercial practices that are incorporated (or hidden) in the game's design. Due to its broad scope of application, the UCPD seems to take due regard for the individual child's right to protection from economic exploitation.

Furthermore, under the Digital Content Directive, any (indirect) promises as to the contents or functionalities of a particular product or service must be in accordance with what the player will ultimately receive. Traders (in this research, game companies) will be liable for any failure to supply or lack of conformity with the requirements set out in Articles 7 to 9 of the DCD.<sup>422</sup> The DCD is the first set of EU rules to protect consumers faced with faulty digital content or services. It emphasises requirements of conformity and determines that, if a product or service is not confirm that what was promised and the problem cannot be fixed then the price will be reduced or the contract is ended and the consumer refunded. The DCD explicitly mentions – as one of the few regulations discussed – (online) games. It has a few interesting provisions that might prove useful in the context of protection from economic exploitation.

Notably, the DCD's understanding of conformity can be seen as rather stringent. This means that, in essence, a game that does not function as the consumer might expect could be seen as not meeting the requirement of conformity. For example, a game's design might include microtransactions that rely upon complicated monetisation schemes which could hardly be said to be understandable for a child. If the game is advertised as being aimed at – or, at the very least, appealing to – children it could then possibly be argued that the content is not fit for the purpose for which digital content of the same type would normally be used, let alone possess the qualities that the consumer may reasonably expect.<sup>423</sup> Furthermore, the DCD explicitly states that where the contract provides for a continuous supply of digital content or digital service over a period of time, the digital content or digital service shall be in conformity throughout the duration of that period.<sup>424</sup> This means that any public statements made – and where no correction has been published at a later point in time – game companies are bound to their public statements, advertisements and reasonable expectable product standards throughout the lifespan of the service game.<sup>425</sup> If a game had originally been advertised as only containing cosmetic microtransactions, but at a later point in time the game is modified to also include microtransactions that actually affect gameplay (e.g. loot boxes or pay-to-win microtransactions), the game is no longer conform the earlier statement. Given that the games' design become increasingly more sophisticated – and thus potentially contains more dark patterns – this could provide gamers with an avenue to pursue reparations for microtransactions in games.

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<sup>420</sup> Markt (n 199).

<sup>421</sup> *ibid.*

<sup>422</sup> Article 11.

<sup>423</sup> Article 8(1)(a)-(b) DCD.

<sup>424</sup> Article 8 (4) DCD. Also, Recital 57 DCD.

<sup>425</sup> Sebastian Schwiddessen, 'Ten Risks Associated with the New EU Digital Content Directive' (*GamesIndustry.biz*, 5 November 2020) <<https://www.gamesindustry.biz/ten-risks-associated-with-the-new-eu-digital-content-directive>> accessed 30 July 2023.

### *V.II.ii Data Collection & Profiling as Economic Exploitation*

In relation to the UCPD's broad scope of application, the Commission has also stated that using algorithms to personalise the game, including the timing of in-game offerings of loot boxes and the microtransactions offered, with the purpose of keeping gamers entrenched within the game constitutes an aggressive practice under Articles 8 and 9 UCPD.<sup>426</sup> This may be the case if the practices involve the use of behavioural biases or manipulative elements. The use of algorithms (or, any type of AI) in games can thus be used to enhance the (unfair) commercial practices, as it becomes easier for game companies to track gamers' behaviour and use it to identify profitably interesting gamers and for targeted marketing.<sup>427</sup> Algorithms that focus on improving the quality of the game can be seen as supportive of the child's right to play. However, the use of algorithms in games becomes problematic where it is solely used for increasing profitability, not for improving the actual quality of the game. When the sole goal of the algorithm (used to profile the gamer) is profitability, the rights to protection against economic exploitation, especially for children, can easily be impacted.<sup>428</sup> The fact that this use of algorithms and profiling has been acknowledged by the Commission as (potentially) constituting an aggressive practice is commendable and could be seen as an important safeguard in protecting children where their economic interests are threatened.

In the context of profiling to support (unfair) commercial practices, the coming together of data protection law and consumer protection law is clearly visible. While this means that there is a wide scope of regulation that (could) protect children in the context of game design, the multitude of rules and obligations does not mean that, automatically, the level of protection and empowerment of children is high. Indeed, it can be argued that the conflation between the many instruments could create difficulties for children to make carefully considered and critical commercial decisions or decisions concerning their privacy.<sup>429</sup> The different EU instruments oftentimes refer one another and, where necessary, delineate their scope of applicability with regard to other instruments. For children specifically, however, this does not always result in more clarity.

This problem can be seen in the newly enacted Digital Services Act (DSA) and its close relations with the GDPR and UCPD. There is a possibility that the deference of either one of these instruments to the other could result in possible lacunae or ambiguities in the protection offered.<sup>430</sup> For example, the prohibition on the use of dark patterns or manipulative design by online platform providers found in Article 25(1) DSA seems promising in protecting (online) gamers from monetisation strategies that make use of such dark patterns in the design of their game. This prohibition covers only, however, those practices that are not already covered under the GDPR or UCPD. This raises a number of issues. First, what practices would fall under the GDPR, UCPD or DSA exactly? Legally, there is a mixed situation, as dark patterns are not just addressed by the DSA. The UCPD covers dark patterns in its general prohibition of unfair commercial practices (Article 5), the prohibition of misleading (Articles 6-7 UCPD) or aggressive practices (Articles 8-9 UCPD), as well as a breach of certain regulatory examples of the "black list" of the UCPD (Annex I, especially points 5, 6, 7, 18, 19, 31, 20 and 26). Similarly, dark patterns may also constitute a breach of GDPR, in particular of the principles of Article 5 GDPR, of the requirements for consent to be given freely, specific and informed (Article 4(11), Article 7 GDPR), and of the principle of privacy by design (Article 25 GDPR). The UCP Directive and the

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<sup>426</sup> 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 353) 104.

<sup>427</sup> A.J. van Rooij and others (n 2).

<sup>428</sup> *ibid.*

<sup>429</sup> M Cantero Gamito, 'Do Too Many Cooks Spoil the Broth? How EU Law Underenforcement Allows TikTok's Violations of Minors' Rights' [2023] *Journal of Consumer Policy* <<https://doi.org/10.1007/s10603-023-09545-8>> accessed 22 July 2023.

<sup>430</sup> *ibid.*

GDPR take precedence over the DSA.<sup>431</sup> However, from a first glance it seems as if the protection offered by the DSA in the context of dark patterns is more extensive than what is found in these two instruments, particularly where it concerns children. This would then mean that children are left with subpar protection where dark patterns are embedded within game design, despite the DSA's promising outlook.

Another issue in relation to dark patterns within the DSA, is the possible uncertainty that might arise as to the precise scope of the prohibition. The rules on dark patterns in the are limited to intermediation services. It has been discussed that there are several game companies that provide gamers with the possibility to purchase, download, play and stream games (online) and would thus be classified as an intermediary service provider. However, there are also game companies that only provide the gaming content and are thus excluded from the DSA and the provisions on dark patterns and the protection of children from targeted advertising. This requires further clarification.

### V.III PRIVACY-FRIENDLY GAME DESIGN

The move toward data-driven revenue models that track gamers' behaviour and use it to identify profitably interesting gamers and for targeted marketing raises questions related to data protection and privacy. EU data protection law – including the GDPR, ePrivacy Directive and DSA – is known for providing a high level of protection for data subjects. This protection is generally deemed to be even more elaborate where it concerns children, with more stringent obligations being imposed upon companies where they handle children's data. As discussed, the use of personal data can be considered a violation of both the child's right to privacy and its protection from economic exploitation. Again, it must also be emphasised that the right to privacy and the right to data protection are difficult concepts to denote and there is no exhaustive definition. In order to determine whether game design is 'privacy-friendly', this research presumes that the design allows children to keep information on their gameplay – for example, with which parts of the game they may struggle or how they prefer to outfit their avatars or characters – a secret from others. The design does not collect or expose this information and does not use the information to potentially cause any negative consequences for the child, such as the extraction of money via in-game purchases.

Though the GDPR and ePrivacy Directive do not explicitly mention the issue of games in their provisions, it can be presumed that games do fall within the scope of these instruments. Especially for the GDPR, the WP 29 has already acknowledged that profiling practices can occur within games<sup>432</sup> and there seems to be agreement within the literature that online games would fall under the GDPR as well.<sup>433</sup> Presuming that online games fall within the scope of the GDPR, it can be questioned to what extent it will be effective in regulating the problems identified with regard to a child's right to privacy.

The GDPR allows for the processing of personal information where there is a legitimate reason to do so. A legitimate reason may be having the consent of the data subject or the legitimate interest of the controller. Consent is one of the lawful grounds for the processing of personal data under the GDPR. It has been discussed that the GDPR's emphasis on being in control of one's own data can thus be seen as stemming from this principle of informational autonomy.<sup>434</sup> That does not mean, however, that consent is without its issues, particularly where children are concerned. It has already been discussed that, under Article 8 of the GDPR,

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<sup>431</sup> Article 25(2) DSA.

<sup>432</sup> Article 29 Data Protection Working Party, 'Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (Wp251rev.01)' (n 281).

<sup>433</sup> Jordan (n 67).

<sup>434</sup> See, above under Section III.I.i on the GDPR.



the consent required must be verifiable parental consent for the processing of personal data of children under 16 (or lower). The consent requirement is problematic for a number of reasons.

First, a problem can be found in the actual determining of what a ‘child’ would be under the GDPR. The Working Party 29 has indicated that it follows the CRC, which would mean that any person below the age of 18 is a child. For the processing of personal information, additional protections should thus be awarded to any person below the age of 18. However, Article 8 of the GDPR sets the age for which parental consent is required in the context of information society services at 16, with a minimum age of 13. As mentioned before, the data subject’s explicit consent is one of the (three) grounds upon which profiling – or, automated decision-making in general – is allowed under the GDPR.<sup>435</sup> This means that there is a uncertainty as to whether the parental consent by proxy rule found in Article 8 GDPR would then also be applicable for the profiling in video games, and if the same age-standards would apply as well. In other words, if a 13-year old Belgian child can consent to the processing of his or her personal data for information society services under Article 8 GDPR, would this same 13-year old child then also be able to provide consent for the automated decision-making (including profiling) under Article 22 GDPR? If so, this would suggest that, where children merit specific protection under the GDPR,<sup>436</sup> this refers to any person below the age of 13 or 16, depending upon the individual Member State. The literature does not provide a coherent answer to these distinctions, nor does the EU itself. In fact, the Working Party 29 has provided several statements wherein they discuss the profiling of children as well, including within the context of online games. The Working Party 29 does not, in any of its statements, specify whether they refer to all those under the age of 18 or only the age thresholds that have been adopted in national legislation. In the context of games, the Working Party 29 speaks only of ‘the child’.<sup>437</sup> These different standards create problems for data controllers, who are required to check per EU Member State what the minimum age for data processing activities is. As seen in recent research, this means that there is either a great diversity in the different age requirements adhered to by companies, or companies choose to play it safe and simply denote their services as available only to those over 16 years of age.<sup>438</sup> This is problematic on its own, for it excludes a great number of young people from these services (including) games and might even encourage children to lie about their age in order to be able to play their preferred game.<sup>439</sup> The uncertainty as to what is a ‘child’ under the GDPR could furthermore potentially undermine the protections awarded to children in the context of profiling for 13-year olds and up where it is accepted that the concept of a child corresponds to the national threshold.

Second, the consent requirement (as already briefly discussed Chapter II) creates a tension between the child’s participation and protection rights. A child’s right to privacy also means privacy from one’s parents; a space to retreat where one’s parents do not have access to. However, access to their online hangouts may require their parent’s consent, thus undermining the notion of privacy. Research has shown that young people often view parental consent as parental surveillance<sup>440</sup> and that the paternalistic approach taken by the GDPR may only further encourage the monitoring of children online.<sup>441</sup> The GDPR does not provide any non-commercialised (privacy or data) protection in the interpersonal relationships between children and their

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<sup>435</sup> Article 22(2)(c) GDPR.

<sup>436</sup> See, among others, Recital 38 GDPR.

<sup>437</sup> Article 29 Data Protection Working Party, ‘Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (Wp251rev.01)’ (n 281).

<sup>438</sup> Ingrida Milkaite and Eva Lievens, ‘Status Quo Regarding the Child’s Article 8 GDPR Age of Consent for Data Processing across the EU’ [2019] BIK PORTAL <<http://hdl.handle.net/1854/LU-8640119>> accessed 3 January 2022.

<sup>439</sup> Hof and Ouburg (n 273) 18.

<sup>440</sup> S van der Hof, *Children and Data Protection from the Perspective of Children’s Rights - Some Difficult Dilemmas under the General Data Protection Regulation*. (Wolters Kluwer 2018) 13 <<https://hdl.handle.net/1887/83557>> accessed 30 December 2022.

<sup>441</sup> Shmueli and Blecher-Prigat (n 194).

parents. This means that there is a risk of parental consent being then conflated with parental control.<sup>442</sup> To clarify, parental consent is legal act of consenting to data processing for a specific purpose which makes the data processing lawful.<sup>443</sup> Parental controls are tools, measures or other strategies meant to guarantee the (online) safety of a child beyond data processing.<sup>444</sup> By giving parents control over their children's data, they are simultaneously given access to their children's online lives. The extent to which parental control tools actually provide insights into the child's online behaviour varies, but where this is more intensive it might result in the online world no longer being a place where children can retreat without the supervision of their parents. Parental controls in games furthermore usually do not provide the possibility to change the setting depending upon the child's specific age – which would take into account the developing capacities of the child. Paradoxically, we see that in an effort to protect children's personal data and their data protection rights, an important (participation) element of their right to privacy under the CRC might be put in jeopardy. This issue is exacerbated by the lack of clarity on who exactly is a 'child' under the CRC. Starting from the CRC's presumption that children develop and that their rights should be interpreted accordingly, the fact that Member States are allowed to arbitrarily<sup>445</sup> set age limits that allow parents to potentially interfere with their child's privacy seems contrary to the spirit of the CRC.

Third, related to the issue of consent is the fact that, where the consent is provided by the minor him or herself through bypassing the age verification and parental consent requirements, consent might actually not be deemed the lawful ground upon which the processing takes place. In other words, the GDPR determines that consent as a justification for the processing of personal data needs to be, among others, lawful and specific.<sup>446</sup> Age verification mechanisms are easily bypassed<sup>447</sup> – or, not even present in several games<sup>448</sup> – and hardly ever do parental consent methods specify the details that underlie the processing.<sup>449</sup> This means that, where age verification is circumvented, the consent might not be lawful. Furthermore, an investigation of verification mechanisms and privacy policies of different digital services has found that, where parental consent was asked, the parents or guardians were generally only asked to agree with the privacy policy.<sup>450</sup> Under the GDPR's principle of purpose limitation, data may only be processed for specific purposes, meaning that simply agreeing to a privacy statement would not be sufficient. Age verification mechanisms in relation to the GDPR's principles for data processing processes may pose somewhat of a Catch-22 anyway. The data minimisation principle requires that a data controller limits the collection of personal information to what is directly relevant and necessary to accomplish a specified purpose.<sup>451</sup> Age verification mechanisms, on the other hand, oftentimes require quite a significant amount of data in order to function properly.<sup>452</sup> The EDPB has

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<sup>442</sup> Hof and Ouburg (n 273).

<sup>443</sup> *ibid* 7.

<sup>444</sup> *ibid* 66.

<sup>445</sup> The decision to allow Member States to decide upon the age for themselves (within the set parameters) seems to be based on the diverging ages for legal capacity of children in member states' private law, see: Lievens and Verdoodt (n 282). There is, however, no empirical evidence suggesting that children from the age of 13 (or 14, 15, 16) have better understanding of data processing and consent than those younger.

<sup>446</sup> Article 5(1)(a) GDPR.

<sup>447</sup> Liliana Pasquale and others, 'Digital Age of Consent and Age Verification: Can They Protect Children?' (2022) 39 IEEE Software 50; Victoria Nash and others, 'Effective Age Verification Techniques: Lessons to Be Learnt from the Online Gambling Industry' [2012] SSRN Electronic Journal <<http://www.ssrn.com/abstract=2658038>> accessed 9 August 2023; Svetlana Smirnova, Sonia Livingstone and Mariya Stoilova, 'Understanding of User Needs and Problems: A Rapid Evidence Review of Age Assurance and Parental Controls' (London School of Economics and Political Science 2021) LC-01622116/101018061; 5Rights Foundation, 'But How Do They Know It Is a Child? Age Assurance in the Digital World' (5Rights Foundation 2021).

<sup>448</sup> Hof and Ouburg (n 273).

<sup>449</sup> *ibid*.

<sup>450</sup> *ibid*; Smirnova, Livingstone and Stoilova (n 442).

<sup>451</sup> Article 5(1)(b) GDPR, see above under Section III.I.i.

<sup>452</sup> Hof and Ouburg (n 273); EPRS, European Parliamentary Research Service, 'Online Age Verification Methods for Children' (European Parliament 2023).

specifically stated that age verification mechanisms should not lead to excessive data processing and has provided a number of ways in which age verification may take place in a manner that is in accordance with the principle of data minimisation.<sup>453</sup> Though a more extensive discussion on the practicalities of age verification mechanisms and parental control tools is outside the scope of this research, it is important to realise that where game design features process data to develop a profile, the current verification methods and control tools might not be sufficient to fulfil the obligations set out in the GDPR.

Next to the GDPR, game companies that employ tracking technologies and process children's communications data also have to take into account the rules of the ePrivacy Directive. This Directive is currently under review and meant to be a *lex specialis* to the GDPR, focusing on the use of tracking technologies and the protection of internet privacy. The ePrivacy Directive does not recognise children as a particularly vulnerable group. This is different from the GDPR, which does explicitly recognise children as a vulnerable group that deserve specific protection when it comes to the processing of their personal data, especially in the context of profiling and direct marketing. As said above, given that the ePrivacy Directive ought to be a *lex specialis* from the GDPR, it would be logical to include such provisions. This would not only provide children with specific protections – which, given that they are avid users of the online world, would be greatly beneficial – it would also negate any uncertainties that might (come to) exist following the GDPR's interpretations.

Another instrument in the EU's data protection toolbox is the DSA. As discussed, the DSA does explicitly acknowledge children's vulnerable position as data subjects. The DSA obliges online platform providers to put in place (additional) safeguards to protect minors and prohibits the use of personal information to create profiles of children. Interestingly, the DSA does not focus particularly on the matter of privacy protection, except where it concerns minors. Platform providers who provide services to minors are urged to design their “online interfaces or parts thereof with the highest level of privacy, safety and security for minors by default.”<sup>454</sup> Though the acknowledgement of children's rights and the particular position occupied by children is praiseworthy, the DSA suffers from similar deficiencies as outlined under the GDPR.

The instrument does not provide guidance on who should be seen as ‘minors’ under the instrument. The DSA references the CRC in a number of its Recitals, which could mean that it also follows the CRC's approach in that everybody below the age of 18 is a minor (or child). However, the DSA is also said to be complimentary to the GDPR and regularly refers to this instrument in its provisions on children.<sup>455</sup> As has already been analysed in greater detail above, this uncertainty in what exactly constitutes a child could potentially lead to particular (age) groups of children falling outside the protections offered by these instruments. Next to that, in order for the DSA's protections to function optimally, it is necessary that it can be ascertained whether the recipient of a service is a minor<sup>456</sup> or not. The DSA does not provide a solution on how service providers are expected to do this, though the Act does make clear that platforms are not required to process additional data in order to determine this.<sup>457</sup> As has been discussed above, age verification mechanisms and self-declarations are easily circumvented and may negatively impact a child's right to privacy.<sup>458</sup> The DSA thus struggles with

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<sup>453</sup> European Data Protection Board, ‘Guidelines 05/2020 on Consent under Regulation 2016/679’ (EDPB 2020) Version 1.1 28.

<sup>454</sup> 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) Recital 71 and Article 28(1).

<sup>455</sup> See, among others, Recital 71 and Article 28(2) DSA.

<sup>456</sup> Notwithstanding the question of what exactly a minor is, as discussed in the sentence before this.

<sup>457</sup> Article 28(3) DSA.

<sup>458</sup> Hof and Ouburg (n 273).

the same problem as the GDPR, namely that its protections – specifically its prohibition on the profiling of children for advertisement’s purposes – might be rendered mute if it is not clear to the service provider whether the recipient is a child or not.

Related to this, in both the GDPR and DSA service providers and controllers are required to have due regard for the child and his or her position as a more vulnerable data subject. Recital 38 GDPR finds that the processing of children’s personal data for profiling purposes warrants additional protection. Recital 71 states that solely automated decision-making, including profiling, with legal or similarly significant effects should not apply to children.<sup>459</sup> This prohibition is, however, not absolute and there is no guidance on how data controllers are supposed to ascertain that minors indeed receive the additional protection they are entitled to. Similarly, the DSA obliges VOLPs to mitigate the risks that their platforms or search engines may pose to children by “taking targeted measures to protect the rights of the child, including age verification and parental control tools.”<sup>460</sup> The wording of this provision suggests that there are other ‘targeted measures’ that may be implemented by VOLPs, but it is not made clear what exactly these are. Given that these specific measures – and their implementation by game companies – have already proven to be inadequate in ensuring the protection and promotion of children’s rights,<sup>461</sup> further guidance on what can be done seems desirable.

#### V.IV CHAPTER CONCLUSION

From the assessment conducted in chapter three, it can be concluded that at the EU level there are a number of legislative initiatives that impose a myriad of obligations on game companies in how they design their games. This includes legislation on how design features may encourage the spending of money, as well as the use of profiling to personalise the different monetisation strategies as discussed. This patchwork of legal rules is indicative of the many different interests that are involved, making the issue highly complex. However, the multitude of rules does not mean that the child’s rights in the gaming context are automatically preserved. In fact, the above discussion has shown that game design may affect a number of children’s rights, including the rights to privacy, play and protection from economic exploitation. In this regard, the current regulatory framework provides specific protections for children across different regulatory instruments. However, the effectiveness of contemporary monetisation schemes incorporated within the game design of popular games calls the existing protections and their enforcement into question. From the above analysis it can be concluded that there are a number of gaps in the current regulatory framework for games - and the game’s design - played by children.

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<sup>459</sup> Recital 71 GDPR.

<sup>460</sup> Article 35(1)(j) DSA.

<sup>461</sup> Hof and Ouburg (n 273).

## VI. CONCLUSION

This research focused on the question how the design choices in (online) (video)games could best be regulated, in order to promote children's rights. Specific attention was paid to the child's right to protection from economic exploitation, their right to privacy and their right to rest and leisure. Children's rights and principles – interpreted in the context of game design –, as laid down in the Convention on the Rights of the Child, formed the analytical framework in light of which legislation on consumer protection and data protection was to be evaluated. Following the children's rights approach, this analytical framework required that a balance was struck between empowering children to (safely) participate in what is an enjoyable and (potentially) educational activity and protecting them from the dangers invoked by misleading, non-transparent and/or manipulative game design. Member States to the CRC are responsible for setting up a regulatory framework that ascertains an adequate balance between the different dimensions of children's rights. This conclusion first provides a short summation of the thesis and what has been discussed in the previous chapters. Following that, the thesis concludes with three recommendations based on the gaps and problems identified in the previous chapter.

## VI. SUMMARY OF THE RESEARCH

Following the introductory chapter, Chapter II discussed what game design is and how it has developed. Four different types of microtransactions that are nowadays employed by game companies in order to generate profits were analysed. This included the microtransactions pay-to-win and pay-to-skip – whereby the gamer is encouraged to spend in-game money in order to get ahead in the game – and cosmetic transactions – where the gamer can buy in-game customisations that enhance the aesthetic appeal of the game and its characters. Loot boxes, as a special type of microtransactions, were discussed as well. These loot boxes are random rewards gamers can buy, without knowing the true in-game value of the object that is purchased. Loot boxes especially are a big concern among policymakers due to their potential for inducing gambling-like behaviours. Finally, a data-for-access model allows gamers to enjoy a game for free, but uses their personal data and data gathered during gameplay as a way of 'paying'. Data-for-access can enhance the other microtransactions, by targeting gamers more directly with specific in-game offers and deals that are more likely to appeal to the individual gamer.

With the evolvement of technology and the possibilities offered by algorithms and AI, the gaming industry has thus found new ways to extract revenue from its gamers and novel monetisation strategies have emerged. This is not necessarily a bad thing. The specific features of some designs can, however, be misleading or manipulative and cause a negative experience for the gamer. This, it was established, happens when games contain dark patterns. The game's design intends to direct gamer's behaviour in a certain way, which may not always be clear to the gamers themselves. The microtransactions discussed in this research are generally seen as clear examples of dark design patterns: the game's design induces the gamer to invest time, money and personal information in the game by creating a negative gameplay experience – due to long waits, obstructions within the game or an inability to continue without divulging information. While this affects gamers of all ages, it is a particular issue where it concerns children. Children are still developing the skills needed to identify and (critically) process these commercial – and possibly deceptive – nudges and make well-thought through decisions regarding transactions they undertake and protecting their privacy. Though there is, as of yet, not much literature on the exact impact game design has on children, the matter is currently being discussed in various settings. The European Parliament has, among others, indicated that further research is necessary and urged the European Commission to take action.

Chapter III examined the role of children's rights, as defined in the CRC taking a children's rights approach. Three rights were analysed in detail and interpreted in light of game design and the specific monetisation strategies discussed in the previous chapter. The CRC defines a child as any person below the age of eighteen and focuses on the child's (personal) development, while recognises that each child develops at their own pace and in their own way. The CRC has three different dimensions: a participation, protection and provision dimension. Each of these dimensions must be interpreted (applied) in light of a child's evolving capacities. In contemporary times, all of the children's rights contained within the CRC must furthermore be considered within a digital context as well. Within the context of game design, it was concluded, several children's rights are applicable. For brevity's sake, three specific rights were chosen that were particularly affected by the novel monetisation strategies. The child's right to protection from economic exploitation, the right to play and the right to privacy.

While (online) games offer children a wonderful opportunity to relax and enjoy themselves in both unstructured and structured ways, the new monetisation strategies found in the game's design increasingly focus on the commercialisation of play. Dark patterns are furthermore often interwoven within this design and induce the gamer to participate in making such microtransactions, possibly to the gamer's detriment. This undermines not just the child's right to a fun activity, but also impedes their autonomy and development. The focus game companies seemingly put on creating revenue at the expense of children and their rights furthermore affects their right to economic exploitation. Game design that contains dark patterns – as 'hidden nudges' – negatively affect the child's ability to make autonomous commercial decisions and takes advantage of their naivety and credulity. Finally, game companies increasingly collect and process children's personal data to create gamer profiles. These profiles enable companies to more effectively target gamers with microtransactions and other offers. This infringes upon children's privacy. As such, it was concluded that these rights should function as an analytical framework from which the applicable EU legislation would be interpreted and evaluated.

Chapter IV then contained a comprehensive analysis of five EU Regulations and Directives. These pieces of legislation were mapped, to determine whether they (could potentially) promote the children's rights discussed in Chapter III and strike a balance between protection and participation. The European data protection framework was considered. The General Data Protection Regulation (GDPR) explicitly recognises children as particularly vulnerable data subjects that require specific protection where their data is processed. Such processing requires a legitimate ground. This would, generally, be parental consent for those under the age of 16. Consent is similarly one of the justifications for the creation of profiles on data subjects, though suitable measures to safeguard the fundamental rights and freedoms have to be put in place where profiles are created upon the basis of a child's personal data. Nonetheless, the GDPR does not explicitly prohibit the profiling of children. The ePrivacy Directive (and, the newly proposed Regulation) were subsequently analysed. This measure contains provisions on the processing of communication data and is supposed to expand upon the GDPR. It does not, however, contain any provisions that focus specifically on children and the protection of their rights. The Digital Services Act (DSA) concluded the discussion on the data protection measures. This novel instrument bans targeted advertising to minors based on profiling and imposes additional requirements on large online platforms where they offer their services to minors. The DSA further contains provisions on the use of dark patterns, prohibiting their use where they deceive or 'nudge' service recipients, or deliberately impair their autonomy or decision-making skills.

The European consumer protection framework was subsequently analysed, wherein the Unfair Commercial Practices Directive (UCPD) plays an important role. Following a review of its applicability in contemporary times, the Commission has provided a Guidance wherein (online) games are brought within the scope of the UCPD and acknowledged that this may have a particular impact upon children. This means that children – as vulnerable consumers – can rely upon the UCPD’s protection where unfair (commercial) practices occur within the context of games. Finally, this research looked at the Digital Content and Digital Services Directive (DCD). The DCD applies to any contract where the vendor supplies or undertakes to supply digital content or a digital service, in exchange for a price. The price may be an actual monetary transaction, but also includes the provision of personal information as a means of currency. (Online) (video)games fall within the DCD’s scope and game companies must therefore abide by the (stringent) conformity obligations imposed by the DCD.

Based on the assessment of the European regulatory framework, it was concluded that there is a multitude of rules – and various obligations imposed upon game companies – in relation to both the protection of the consumer where he or she engages in commercial decision-making, as well as the protection of a person’s personal data and his or her privacy. It was also concluded that this myriad of obligations did not mean that children were automatically protected and empowered by the regulatory framework in place. Chapter V went into further detail and analysed the current regulatory framework in light of the children’s rights and principles set out in Chapter III. It was found that the European Regulations and Directives discussed provide specific protections for children across different regulatory instruments. This includes, among others, information requirements and stringent obligations imposed upon game companies where their products are sold to – or, at the very least, presumably attractive to – children. These obligations are primarily found within the EU’s consumer protection framework, with the Commission having made clear that using algorithms for game personalisation are aggressive practices and thereby explicitly forbidden under the UCPD. Special regard is to be had for children and consumers cannot evade their responsibilities by simply claiming that their game does not target children. Anything that could logically be deemed as an attractive game for children, may fall within the scope of the UCPD and thus requires game companies to adhere to its requirements.

However, a number of gaps and uncertainties were identified in the overall framework as well. These related primarily to the fragmentation of the regulatory framework and the lack of clarity as to how the different instruments relate to one another, as well as how certain terms are to be interpreted and defined. The balance between protecting children and allowing them to participate in a fun activity was also deemed to be inadequate, taking a too paternalistic approach that undermined children’s rights. It was found that the consumer protection framework could potentially prove to be an important tool for children in protecting themselves from infringements of their rights by unfair game design. The UCPD, for example, does not only offer protections from economic exploitations, but also can be utilised to halt the commercialisation of play and even connects the consumer protection framework to the data protection framework by acknowledging how profiling can be used – as a dark pattern – in manipulative game design. The data protection framework held, however, a few more problems and did not always provide for a sufficient balance between the CRC’s protection and participation dimensions. Based on these identified issues, several recommendations can be made.

## VI.II RECOMMENDATIONS

### *VI.II.i Balancing Protection and Participation*

It has been discussed that contemporary times require a new perspective on children’s rights, namely one where children’s rights function in the digital sphere. The current under-eighteen generation has grown up with

modern technologies and are well-versed in the online world. This does not mean that they are fully capable of understanding the intricate workings that lie behind the monetisation strategies employed by game companies in their games' design. From the perspective of children's rights, a balance must be struck between empowering children to participate in the enjoyable activity that is (online) gaming, while also protecting them from harmful game design that infringes upon their rights.

Following the evaluation, it can be concluded that the instruments in place at the EU level acknowledge that children, due to their still-developing capacities, ought to be awarded additional protections. Little regard is had, however, for empowering children to deal with the challenges they might face. The UCPD, ePrivacy Directive and GDPR focus on information and transparency requirements, whereby much responsibility is allocated to children and their parents. Naturally, parents have a responsibility towards their children.<sup>462</sup> However, extensive research has been conducted on how well adults are able to understand the intricacies of modern technologies, in a variety of contexts.<sup>463</sup> Given that microtransactions embedded within the design oftentimes contain dark patterns, this 'shift' in responsibility from the game companies to the gamers seems unfair and not in accordance with the principles upon which these instruments lie. These dark patterns are expertly hidden and the gamer generally does not know how – or, even that – these patterns influence their behaviour by inducing them to spend more in-game money. The DSA and DCD, with their explicit prohibitions on the profiling of children and the use of dark patterns and the conformity obligations imposed upon game companies are seemingly a positive development, but their deference to the GDPR and other EU instruments means that it is unclear how far these protections reach. Clarifications are necessary here (as discussed below in more depth) and game companies ought to be given more responsibility. This may, for example, occur in the form of detailed, preliminary impact assessments that evaluate the impact their monetisation strategies will have on the rights of the child.<sup>464</sup> In fact, several of the instruments discussed already contain provisions that oblige its addressees to conduct impacts assessments and take into account the effects of their work on children.<sup>465</sup> Placing more emphasis on these types of impact assessments could be a first step in the consideration of more child-friendly designs.

Another (related) issue identified in the context of protection and empowerment lies in the emphasis that is placed on the parent as the provider of proxy consent for (young) children. Under the GDPR, consent is one of the primary legitimisations that controllers can rely upon when processing personal data. For those below the ages of 13-16 (depending on the specific Member State), parents are required to provide consent in lieu of the child. This could potentially result in an infringement – or, at the very least, undermining – the child's right to privacy, which includes privacy from his or her own parents. Though it is true that parents are expected to look out for their children and protect them from harmful content online, the GDPR's emphasis on parental consent runs the risk of encouraging parental surveillance of children online. The issue then becomes one wherein parental consent is potentially conflated with parental control. In the case of parental consent, consent requirements set out in legislative instruments (for example, Article 8 GDPR) are leading. Parental control

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<sup>462</sup> As seen in Article 18 of the CRC.

<sup>463</sup> See, among others: MR Leiser, 'Dark Patterns: The Case for Regulatory Pluralism between the European Unions Consumer and Data Protection Regimes', *Research Handbook on EU Data Protection Law* (Edward Elgar Publishing 2022) <<https://www.elgaronline.com/display/edcoll/9781800371675/9781800371675.00019.xml>> accessed 10 May 2023; Antonia Vlahou and others, 'Data Sharing Under the General Data Protection Regulation' (2021) 77 *Hypertension* 1029; Gemma Pons-Salvador, Xud Zubieta-Méndez and Dolores Frias-Navarro, 'Parents' Digital Competence in Guiding and Supervising Young Children's Use of the Internet' (2022) 37 *European Journal of Communication* 443.

<sup>464</sup> Provisions on impact assessments are contained within Section 3 of the GDPR.

<sup>465</sup> For example, Article 34 DSA requires VOLPs to conduct a child's interest impact assessment as part of the general risk assessment and Article 35 similarly obliges processors to conduct a Data Protection Impact Assessment where the data they process belongs to a child.



mechanisms, on the other hand, should be guided by the evolving capacities of the child and their best interests in order to justify whether parental interference and control is necessary.

A greater regard for the child's right to privacy in a personal setting and their evolving capacities is recommended, wherein data protection rules should be adapted to the level of maturity of the child. Game companies ought to be obliged to take this into account when conducting impact assessments. Game companies involve both parents and children when designing and developing their games – specifically the age and consent verification methods. Other protection mechanisms than self-declared age verification and parental controls – which do not always have the desired effect<sup>466</sup> – ought to be explored and considered as well. Child-friendly privacy policies and alternative services could be considered as one of those avenues (which corresponds with the recommendation for more information and support). Further research into technologies that offer possible solutions should be stimulated – for example, privacy-friendly verification mechanisms – wherein the different dimensions of children's rights ought to be a central consideration.

#### *VI.II.ii A Coherent Regulatory Framework*

It has been discussed that the EU has a sizable toolbox for addressing consumer injustices and infringements of privacy, with an extensive territorial reach. The fragmentation and confusion that currently surrounds the legal framework inhibits effective use of these tools. Based on the evaluation, it is deemed not so much necessary to create any new legal instruments that address the issue of dark patterns in game design. Rather, more coherence is needed between the existing regulations. A first step ought to be the clarification of certain terms and the relations between the different pieces of legislation.

Specifically, it must be made clear what exactly constitutes a 'child' under the different instruments. Here, it is recommended that the CRC's definition of a child as any person under eighteen be adhered to, in all instruments. This would ascertain the highest level of protection and negate any confusion that exists for both game companies, as parents and children. With regard to the GDPR specifically, it must be made clear whether the extra caution required from controllers when processing the personal data of children for profiling follows the same differentiation between ages made in Article 8 of the GDPR. A clarification of the concept of a 'child' under the GDPR could have a positive effect on the protections offered by the DSA and ePrivacy Directive as well, given that these instruments are meant to complement the GDPR.

Similarly, the wording of some provisions should be clarified and game companies should be provided with more details on what exactly their obligations are. In the legislation discussed there are a number of provisions claim that children should be awarded "additional protection"<sup>467</sup> or to take "targeted measures"<sup>468</sup> to ensure the protection of children's rights, without providing further information or guidance on how this can be achieved. Age-verification or parental control tools were generally the only suggestions as to the specific actions game companies can undertake. As has already been discussed, however, research shows that these methods are not always (if ever) sufficient to ensure the protection required by the CRC nor do they support the participation dimension of children's rights.

A next step would be clarifications as to the exact relations between the many different instruments, for example in the context of direct marketing and the prohibition on profiling and the use of dark patterns.

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<sup>466</sup> See the discussion in the previous Chapter.

<sup>467</sup> Recital 38 GDPR.

<sup>468</sup> Article 35(1)(j) DSA.

This would also mean that any new ‘trends’ (or, new monetisation strategies) in the gaming sector are to be evaluated in light of all applicable instruments. It is recommended that it is made clear what practices fall under which instrument and where one instrument is supposed to defer to another. In short, a more holistic approach in the context of (online) games and game design is needed.

Though an in-depth discussion was outside the scope of this research, mention should also be made of the role that national supervisor authorities play. This research has shortly discussed the (commendable) role of the Dutch ACM in protecting gamers, specifically children, from harmful game design. It is known, however, that the interplay between data protection authorities and consumer protection authorities is not always as desired.<sup>469</sup> When recommending a more holistic approach in terms of regulations, regard should also be had for possible improvements in the coordination and collaboration between the different authorities, both at the national and the EU level.

### *VI.II.iii Research, Information & Best Practices*

Finally, the overall system could benefit from better information and education on the impact game design (online) (video)games may have on children’s rights. This means that all relevant parties – children, parents and game companies – ought to be informed of their obligations, their rights and the protections they may rely upon. The fact that, as has been mentioned throughout this thesis, there is a lack of research into game design and its relation to children’s rights is indicative of the fact that many people are probably not aware of the potential harms that could arise from deceptive, non-transparent and manipulative game design. In other words, game companies make increasingly use of microtransactions, such as pay-to-win or loot boxes, to encourage gamers to spend more money on the game. The fact that these microtransactions embedded within the game design often contain dark patterns, which can influence the behaviour of the gamer, is still relatively unknown. Further research is recommended; sociological research into the effects upon the child and their wellbeing, legal research into other potentially relevant regulations,<sup>470</sup> and a more comprehensive consideration of the role IT and (new) technologies can play.

Children and their parents ought to be educated on the concept of game design and especially on the possible avenues that are available to them where their rights are interfered with. It must be made clear to them how they can protect themselves from (possibly) dark patterns embedded within game design – which relates to more child-friendly privacy policies – and where they can turn to if they experience harm. The Guidance published by the Dutch ACM is a good starting point, where it is recommended that other authorities follow this example. PEGI might play a role herein as well and research should look into how PEGI might further support parents and children. Ideally, a Guidance Document that is specifically aimed at children and explains the concept of game design and the possible dangers therein ought to be created. Similarly, game companies and the general gaming industry could benefit from having a clear overview of their obligations under the different EU regulatory instruments<sup>471</sup> and the impact their games’ design will have on children.

Ideally, the industry should take due regard for children’s rights and their best interests when designing their products and services. It has been said that gaming companies are aware of the (behavioural) impact of their

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<sup>469</sup> Dan Jerker B Svantesson, ‘Enter the Quagmire – the Complicated Relationship between Data Protection Law and Consumer Protection Law’ (2018) 34 *Computer Law & Security Review* 25; Wolfgang Kerber and Louisa Specht, ‘Synergies between Data Protection Law and Competition Law’ (1 September 2021) <<https://papers.ssrn.com/abstract=3977039>> accessed 29 July 2023; Natali Helberger, Frederik Zuiderveen Borgesius and Agustin Reyna, ‘The Perfect Match? A Closer Look at the Relationship between EU Consumer Law and Data Protection Law’ (6 October 2017) <<https://papers.ssrn.com/abstract=3048844>> accessed 29 July 2023.

<sup>470</sup> Possibly even into soft law measures, particularly the role PEGI might play herein.

<sup>471</sup> Which would be further served by a more coherent legal framework, as discussed above.

games' design and have been using this to determine their monetisation strategies. If gaming companies would put the best interests of the child central when designing their products and services, this would reinforce the promotion and protection of children's rights. It is a big if, however. Still, this research has shown that existing EU legislation can play an important role in promoting and protecting the child's right to economic exploitation, to play and to privacy and (hopefully) opened the debate for further discussions with all relevant stakeholders. EU legislation, informed by the different dimensions of children's rights, might then be the game changer that convinces game companies to focusing their attention on more child-friendly designs.<sup>472</sup>

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<sup>472</sup> This is, naturally, dependent also on the effective enforcement of such legislation. A discussion on enforcement is, however, outside the scope of this research.

## APPENDIX I – BIBLIOGRAPHY

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