

## Research Report on Loot Boxes

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## **1. SUBJECT AND CONTEXT**

In mid-November 2017, a worldwide conflict broke out in the video game sector concerning payments that players had to make within a video game to progress within the respective game.<sup>1</sup> The specific reason was the planned launch of Star Wars Battlefront II, the latest video game by game developer Electronic Arts about the Disney saga. This game incorporated loot boxes, which could be purchased for payment. A large part of the international gaming community was indignant and forcefully mobilised against these loot boxes. Ultimately, the game developer decided to remove the paid loot boxes from the video game shortly before the official launch of the video game. The government was summoned to intervene in this conflict. The regulating loot boxes is also an issue among game developers.<sup>2</sup> A self-regulating body like PEGI does not speak out against regulation but refers to the member states' responsibility concerning gambling.<sup>3</sup>

This discussion also reached Belgium. Local media were interested in the problem from the viewpoint of whether loot boxes are indeed a form of gambling. The Belgian reactions in local media were echoed in European and international media. Various countries are examining the possibility of restricting loot boxes or at least to subjecting them to certain rules.<sup>4</sup> Several clear problematic cases were highlighted by the media.<sup>5</sup> The Gaming Commission had already intervened in Belgium in the past when a video game manufacturer had embedded a casino into a video game (Game of War).

This memorandum by the Secretariat of the Gaming Commission examines whether loot boxes can be subject to the Belgian Gaming and Betting Act and hence should be viewed as gambling. Recommendations will also be formulated from the conclusions stemming from this analysis.

Although it is possible to differentiate within the video game market between free-to-play games, triple A games and Indie games, this investigation is restricted to AAA games.<sup>6</sup> Specifically, the following AAA games were selected for a direct analysis: Overwatch, Star Wars Battlefront II, FIFA 18 and Counter-Strike: Global Offensive. Each chapter focuses on all four of these games.

## **2. THE EXAMINED GAMES**

### **a. OVERWATCH**

The game Overwatch is a shooting game that can be played by multiple players at the same time.<sup>7</sup> Blizzard Entertainment was the game developer and launched it on 24 May 2016. The game can be played on various platforms.<sup>8</sup> In this report, Playstation 4 (hereinafter referred

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to as PS4) was used to play Overwatch for the analysis. The player pays for a subscription that must be periodically renewed.<sup>9</sup> At the moment of purchase, the game cost EUR 71.39.

#### **b. STAR WARS BATTLEFRONT II**

Star Wars Battlefront II is another shooting game which can be played both alone and in a group (third-person shooter) and is based on the Star Wars films, giving it vast recognition. The Star Wars franchise has been the property of Disney since 2012.<sup>10</sup> Disney granted game developer Electronic Arts (EA) a licence to make Star Wars video games. EA worked together with Criterion Games and Motive Studios for the development. The worldwide launch took place in November 2017. Star Wars Battlefront II is available on various platforms.<sup>11</sup> In this report, a PC was used for the analysis of Star Wars Battlefront II. This version can be downloaded online via Origin for EUR 59.99. You first have to create an EA account for this.

#### **c. FIFA 18**

The video game FIFA 18 is a football game in which the player takes part in a simulated match either alone or together with others. At the moment of purchase, the game cost EUR 64.98. The first FIFA football game was launched in 1992. FIFA was developed by EA and is listed as an Official FIFA-licensed product. EA is authorised by FIFA to use famous football players, matches and countries until 2022. FIFA 18 is the latest edition and was launched on 29 September 2017. PS4 was used to analyse the game. The player must create a Playstation network account to play together with other players.

#### **d. COUNTER-STRIKE: GLOBAL OFFENSIVE**

The game Counter-Strike: Global Offensive (C-S: GO) is a first-person shooter that was launched on 21 August 2012 by Valve. C-S: GO has versions for Windows, Mac OS X, Linux, PlayStation 3 and Xbox 360. In contrast to the 2012 version of C-S, C-S: GO was not distributed by Vivendi but by Valve Software itself. Valve currently launches its own games through Steam because it developed this platform. This explains the close interconnectedness between C-S: GO and Steam. After creating a Steam account, the player can download the game for EUR 13.99.

### **3. THE SELF-REGULATING CLASSIFICATION SYSTEM OF VIDEO GAMES**

#### **3.1. General**

Protection of vulnerable players plays a key role in the Belgian Gaming and Betting Act.<sup>12</sup> This is manifested in various protection techniques, such as a maximum average hourly loss, exclusion of certain categories of people, various prevention measures and, importantly, age limits for access to and participation in gambling. There are 3 crucial age limits, in particular minors (total ban, with strict exceptions)<sup>13</sup>, +18 years of age (possibility to participate in lotteries and bets) and +21 years of age (possibility to participate in casino games).

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It must be noted that the gaming industry has itself specified requirements through the self-regulating body PEGI.<sup>14</sup> PEGI employs 5 age categories (3 [all], 7, 12, 16 and 18 years of age) and 8 criteria (violence, foul language, fear, drugs, sex, discrimination, betting and playing together with others online).<sup>15</sup> In addition to the age requirement, there is therefore a content-related game requirement with respect to “gambling”.<sup>16</sup> A video game that teaches you how to bet using Roulette or Poker, for example, is considered a game that encourages or teaches gambling by the PEGI. According to PEGI standards, gambling can only be “simulated”. They do not systematically check whether the games allow betting, winning or losing actual money.<sup>17</sup> PEGI also does not take into account other types of gambling which are banned even in the real world and which are not allowed in casinos and slot machine arcades.<sup>18</sup>

PEGI’s classifications do not take into account the Belgian Gaming and Betting Act. Video games that encourage or teach gambling and can be found in casinos and slot machine arcades are supposedly suitable for minors (12+, 16+). A game that contains simulations of betting receives a PEGI 12 rating. The descriptor gambling does not appear very often. In 2017, PEGI allocated the descriptor to 13 licences for 9 different games - a total of 1,978 granted licences.<sup>19</sup> Over the years, the percentage is supposed to fluctuate around 1% of all games.

Given the importance of protecting minors and vulnerable players, the lack of effective protective measures with regard to gambling is a great concern.

### 3.2. Application to the examined games

#### a. OVERWATCH

The PEGI age category is set to 12 years and up for Overwatch due to unrealistic violence perpetrated against human characters. The only symbol that is displayed is the symbol referring to scenes of violence.

#### b. STAR WARS BATTLEFRONT II

The PEGI age category is set to 16 years and up for this game due to lifelike violence. The only symbol that is displayed is the symbol referring to scenes of violence.

#### c. FIFA 18

According to PEGI, this game is suitable for all ages, but this classification is not extended to the operation of the game.<sup>20</sup> PEGI 3 is listed on the hard cover of the FIFA 18 DVD. However, the purchased FIFA game had a separate DVD sleeve that listed a different age requirement (7 years and up). Online connection and registration on the PS4 requires the player to be at least 16 years old, but it is doubtful whether any age limitation is effectively complied with or monitored.

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The options for restricting gaming behaviour are embedded in the PS4 manual, but these are not really aimed at restrictions regarding gambling, gambling elements or even payments.

#### d. COUNTER-STRIKE: GLOBAL OFFENSIVE

The PEGI age category is set to 18 years and up for this game due to lifelike violence. The only symbol that is displayed is the symbol referring to scenes of violence. According to US standards, this game is suitable for players aged 16 years and up.

It is noteworthy that the payment terms within the game mention that payments are accepted from players starting at age 13.

#### 4. LOOT BOXES

Loot boxes is the umbrella term for one or more game elements that are integrated into a video game whereby the player acquires game items either for payment or for free in an apparently random manner. These items can be very diverse, varying from characters or objects to emotions or special characteristics.<sup>21</sup> This umbrella term is based on the (treasure) boxes that contain these items. This report examines whether the use of loot boxes in video games constitutes a gambling operation in the sense of the Belgian Gaming and Betting Act. The purchase of objects, characters, skills or items without a random number generator is not important to this investigation. It is assumed that the consumer is able to have sufficient insight at that moment into the price that he wants to pay for his purchase.

The fact that they have to make an additional payment to win something random is not only important to consumers (including minors and vulnerable people), the online component is also relevant here. Professor of Social Psychology, Dr. Vera HOORENS, highlighted the additional dangers of online connectedness in response to an embedded casino in the video game Game of War.<sup>22</sup> The online component not only creates social pressure; players often erroneously believe that certain achievements are based on skill and not on randomness and luck.

It seems that game developers are assigning (paid) loot boxes a key role in the course of the game, thereby turning them into an essential element of the game in order to increase the chances of winning or achieving progress more quickly in the game. Sometimes the player can play loot boxes for free without paying, but here too the player is confronted with animations that are very similar to animations used in slot machine operation. Game operators are trying to make more money using these additional wagers. In some cases, these micro-transactions generate even more revenue than the sale of the game itself.<sup>23</sup>

Players are lured into betting money through loot boxes with a range of techniques:

- (Social) behaviour monitoring

Activision recently received a patent in the United States.<sup>24</sup> The goal of this patent is to stimulate sales of micro-transactions. The first step is to examine which in-game object individual players are most interested in. The second step is to have them play against the player who is at a higher level and already has this object. The intention is to motivate the less experienced player to purchase that object too.<sup>25</sup>

Another technique, which Activision is already applying to its games, is turning loot boxes into a social activity.<sup>26</sup> In FIFA 18, the loot boxes are also linked to social online activity.

An (emotional) profit expectation is also created within the player.<sup>27</sup> This uncertainty about the content of the loot box, combined with the accumulation of the player's hoped-for profit by opening a loot box, encourages the player to purchase a new loot box.

- The illusion of the game of skill<sup>28</sup>

The video game - and the associated actions - is presented as a game of skill, but the computer corrects the players' actions to give the player the feeling that he is good at what he's doing.<sup>29</sup> Should the computer always very correctly and one-dimensionally execute what the player is doing with his controller, then most video games might not be profitable in their operation. Furthermore, the gaming world has seen a development towards dynamic games, whereby the same game always unfolds differently in relation to the time and character used to play.

By presenting a video game as a pure game of skill, the loot boxes can be brought to consumers even more easily.

- The fusion of fiction and reality<sup>30</sup>

What happens in the real world is connected to the game in players' minds.<sup>31</sup> Both during the game and with respect to content and publicity of loot boxes, facts and experiences from the real world are used to entice players. This may initially seem innocent (recognition of certain celebrities, favourite club or country), but it quickly becomes less innocent (e.g. the systematic use of the character Ronaldo for advertising the [most expensive] loot boxes) to entirely not innocent (whitewashing the behaviour of the super-rich in the football world or the possibility of match-fixing).

- The use of celebrities or cult items

In Star Wars and Overwatch certain characters and items are highly coveted. In C-S: GO skins are very valuable. In the online game mode, a favourite player cannot be purchased outright but has to be won through loot boxes. The player is guided to the loot boxes in the hope of acquiring his favourite player or item. In Overwatch, legendary items are much rarer than other items. These items, which can only be acquired during a specific event (so during a certain time frame), are thus more exclusive and can be considered an online status symbol.

- The introduction of a personal currency system (paid or unpaid)<sup>32</sup>

The use of points (coins) and especially their size are psychologically very sophisticated and aimed at creating a personal reality which is then disconnected from the real world. FIFA 18 teaches players to think in FUT currency and FIFA coins.<sup>33</sup> When certain goals are achieved in the game, a player will sometimes receive FUT coins, but also loot boxes, for example.<sup>34</sup> In Overwatch and Star Wars Battlefront II, the value of real money is also fully disconnected from the value of the in-game currency, causing players to lose contact with the real value.<sup>35</sup> Keeping the value of the in-game currency high compared to the real value of real money creates a psychological advantage for players.<sup>36</sup>

- The approachable payment methods

It seems that unlimited amounts of money can easily be deposited into a player's account. The easy anonymous payment method is done using codes. Players immediately learn about this payment method through free activities. Except for with Star Wars Battlefront II, payments can be made for each of the examined games.<sup>37</sup>

- A vast and unfathomable data policy

Game operators and online platforms can collect a vast amount of data in very diverse ways. These are data not only about the player himself but also about players in his residential area, about friends, offline gaming behaviour, chat behaviour, all sort of information about equipment, etc. The data management and policy is sometimes not very respectful with regard to the consumer/player.<sup>38</sup> Reasoning does not take place according to European standards. At no time does age truly constitute a real limiting factor.<sup>39</sup> Both at the beginning as well as in the event of changes, the fact that the consumer is focused on playing the game is fully exploited.<sup>40</sup> With regard to children, a lot of responsibility is placed on the parents, who are given tips.<sup>41</sup> By accepting the user agreement, a player also forfeits better protection of his privacy by accepting privacy laws from another country that do not offer as much protection.

- Differentiation in loot boxes without this necessarily having added value

In the examined games, various types of loot boxes were available and some loot boxes were offered for only a limited time (e.g. during the year-end period).<sup>42</sup>This created shortages, which in turn resulted in value being attributed to these loot boxes. Players will therefore be more psychologically inclined to procure such boxes during these times.

Discounts are also given if multiple loot boxes are purchased at the same time. The higher the amount paid, the more loot boxes you can get. The price per loot box decreases in this case.

- The hiding of a random number generator or at least the lack of transparency thereof<sup>43</sup>

A great deal of inscrutability exists with respect to the used random number generator (RNG) of loot boxes. It is not possible to see who or what exactly is inside the loot box. In FIFA 18 and C-S: GO a child can bet infinitely on loot boxes to win something. What's more, no odds of winning are communicated.

Both in the purchase of loot boxes and in the entire operation of the game, all of this can lead to pure manipulation of individuals or groups of players. The line between encouragement and manipulation is sometimes difficult to differentiate in an online environment where one party (game manufacturer/game platform) records almost everything and the consumer who plays the game rather passively from this perspective.

## 5. LOOT BOXES IN LIGHT OF THE BELGIAN GAMING AND BETTING ACT

### 5.1. General

In order for a game to be considered a game of chance (gambling), the constitutive elements set forth in Art. 2(1) of the Gaming and Betting Act of 7 May 1999 which regulates gambling, betting, gambling establishments and protection of players (hereinafter referred to as the Gaming and Betting Act) must be complied with. In accordance with this article, *a game of chance is any **game** whereby a **bet** of any kind that is placed leads to the **loss** of this bet by at least one of the players, or a **win** of any kind for at least one of the players or organisers of the game, and whereby **chance** may even be a secondary element in the course of the game, indication of the winner or determination of the size of the winnings.*

Once it has been determined that these constitutive elements are cumulatively present, the game in question is a game of chance. Based on Art. 4 of the Gaming and Betting Act, it is in principle forbidden to operate a game of chance without first obtaining a permit from the Gaming Commission.



The fact that the loot box is not a necessary condition for being able to participate in the game does not rule out the possibility that this is a game of chance. This too was illustrated in the past by the analysis of the casino game in Game of War, as well as by the analysis based on social psychology. Art. 3.3. of the Gaming and Betting Act (including card and party games and small wagers limited in time and place) cannot be applied to these video games.

#### 5.1.1. Game element

In the four examined games, the game element is present both at the video game level as well as at the loot box level. A game activity entails either a competition between multiple players or the achievement of a specific result by a single player. Playing against machines is also eligible here.<sup>44</sup> In this case, the player is playing against the game manufacturer. The result determines the win or loss.<sup>45</sup> To purchase a loot box, active participation by the player is often expected. In C-S: GO, the player first has to go to the marketplace to purchase such a box. Then he has to purchase a key, which must be combined with the box before it can be opened. In other cases, players have to press a start or stop button to spin a wheel.

Loot boxes are therefore already games in the sense of the Gaming and Betting Act.

#### 5.1.2. Wagers

A wager (bet) of any type is sufficient to qualify as betting for these games. Use of money is not necessary. Just because *virtual* currency is used in a game does not mean that there is no wager. It must be possible to attribute a value to this wager, however.<sup>46</sup> Value can be defined as the degree of usability. Specifically, items that the player finds useful or nice and for which he pays money.

In this investigation, we assume that neither the purchase of the game nor the subscriptions that are connected to games for playing online can be considered as a wager.<sup>47</sup> However, payments that are made above and beyond the so-called “basic costs” are examined. Not all possible payments in the game (in app purchases) are examined, but only those that are connected to loot boxes and the playing of the game. The investigation is supported by a judgment of the supreme court of administrative justice, the Council of State.<sup>48</sup>

Regarding the evaluation of the betting requirements of the game of chance, a differentiation must be made between the direct use of euros to make purchases in the game, a created currency value in the regular course of the game (game-play currency) and the paid currency (in-game currency). Game-play currency consists of virtual currencies (points, coins, crystal, etc.) that a player gets when playing the game but that he cannot necessarily purchase. It is a type of virtual reward system for the player. Usually he will be able to bet these currencies in the game at some point.<sup>49</sup> In Overwatch, for example, the player can purchase items with such coins (“credits”) in the “Hero Gallery”. Social psychology shows us that these rewards are very sophisticated. Sometimes the rewards are trivial for an outsider and sometimes they do not affect the game (e.g., the colour of a T-shirt), but they

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can be quite important to the course of the game. In any case, we do not consider the game-play currency as a wager in the sense of the Gaming and Betting Act if this cannot be purchased.

The situation is quite different when it comes to the currencies that can be purchased directly with money (in-game currency). In-game currency is an additional “layer” on top of the game whereby purchases are made in the game with money.<sup>50</sup> These currencies are not necessarily a mandatory part of the content of the game itself but allow the player to collect all sorts of advantages by means of the payment.

So when the player purchases in-game currency to buy a loot box, this constitutes a wager in the sense of the Belgian Gaming and Betting Act because an asset value is brought into the game that serves as a participation fee/compensation fee for the loot box. This is not the case if the loot box is purchased with game-play currency.<sup>51</sup> A fortiori, a direct purchase of a loot box in the game without the necessity of in-game currency being used, such as in Overwatch and CS GO, is thus considered to be a wager in the sense of the Gaming and Betting Act.

The investigation showed that it was possible to purchase in-game currency with real money in FIFA 18. In Star Wars Battlefront II, this option was removed from the game and only occurs in the beta phase.

In certain cases (C-S: GO), there is even a disguised wager given that the player cannot do anything with a purchased loot box without also buying a key for it. Here the wager therefore concerns the price of the loot box plus the price of the key. Because the player is not informed of this in advance, this is misleading.

So if you buy a loot box in a game, this constitutes a wager in the sense of the Gaming and Betting Act.

### 5.1.3. Chance of wins and losses

If a wager is made, this wager can be lost or won. Specifically, we examine whether there is a possibility of the player winning or losing when he buys loot boxes. In other words, does the player receive value for his money or is the item obtained from the loot box of lower value (loss) or higher value (win) than the money that the player paid for this box?

The Gaming and Betting Act requires “a win of any type” for at least one of the players, betters or organiser. This is subject to broad interpretation.<sup>52</sup> The type and scope of the win is therefore not relevant for the requirement of the transaction. For example, it is not important if a “skin” in Overwatch, FIFA 18 or C-S: GO is merely of aesthetic value. What is important is that players attach value to it and that this value is also emphasised by the game developers themselves.<sup>53</sup> Sometimes colour or numeric codes are used to assign value to items.

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The items are also often assigned value by creating scarcity. By offering certain items in loot boxes during a certain time frame, players will be inclined to buy more boxes during that specific period (event) because this is the only chance to obtain this 'valuable' item.

Winning is not even a decisive criterion in the Belgian Gaming and Betting Act. The mere loss of a wager can suffice and can also be of any type. If a player pays a certain amount for the purchase of a loot box, then the player's loss will consist of the value of the wager minus the value of the obtained item. Therefore, even though developers and distributors maintain that the obtained items in loot boxes have no value, the amount of the wager will constitute an integral loss for the player and an integral win for the distributors and game developers.

What's more, the Gaming and Betting Act mentions *a win of any type*. So not only is the obtained item itself taken into account, but also any advantages that a player can attain compared to another player who did not purchase any loot boxes. Some levels, for example, can only be reached with items in loot boxes, thus giving these players a special advantage in the game.<sup>54</sup>

The type and scope of the win is also irrelevant for the requirement of the transaction.<sup>55</sup> Something that is described as a "bonus", "gift" or "reward" by the parties can also be qualified as a "win".<sup>56</sup> The win therefore does not necessarily need to be of the monetary kind. The impossibility for a player to convert the game currency back into money does not rule out application of the Gaming and Betting Act.<sup>57</sup>

The analysed loot boxes in the games show that wins and losses are experienced.

#### 5.1.4. Chance

When the Belgian Gaming and Betting Act was introduced, a radical change took place in terms of defining games of chance in Belgium. To avoid the earlier discussion with games of skill, the standpoint that chance is the main aspect that must be present (50%+1) was abandoned, and instead a broad interpretation of the chance requirements was adopted in the Belgian Gaming and Betting Act. It is therefore sufficient for chance to be a *secondary element* in the course of the game, the indication of the winner or the determination of the size of the winnings. Chance must therefore be understood as the occurrence of an indeterministic event, situation or outcome, so when the chance of a specific event, situation or outcome is not equal to one.<sup>58</sup> Specifically, chance may be present when opening loot boxes.

Because there is a lack of information provision regarding the random number generator, it is entirely unclear which specific RNG is used and whether it is entirely objective.<sup>59</sup> In any case, it is clear that certain player data can be recorded and monitored and can therefore be taken into consideration in determining the outcome of the loot box.

However, it is obvious that such a behaviour-related "chance factor" only exists for the game manufacturer and not for the player, who does not know what has been recorded about him

and who is unable to perform such recording himself (even if this is merely because he is busy playing).

Based on the in-depth data recording and analysis, which frequently goes beyond the individual (the region is also recorded and analysed), it is possible to obtain a purely behaviour-related RNG. This means that the content of the loot box can be manipulated depending on behaviour, results, wallet, cursor use, payments, nationality, Playstation use, hours, quantities, etc. In this case, we are dealing with a subjective RNG.

It is clear that knowledge of this data gives distributors and developers power over users so that they can spend more money.<sup>60</sup> In any case, the chance is staged for the user, who believes that he has an equal chance of obtaining each item in the loot box. Whichever random number generator is used, there is an element of chance present for the player because he cannot guess the content of the loot box and cannot find a methodology in the items he receives (except for by means of the general descriptions that are provided).

Chance is thus present in loot boxes through the use of a (subjective) random number generator.

## 5.2. Concrete application to the examined games

### a. OVERWATCH

The loot boxes in Overwatch contain random collectable items such as skins, unique voices, sprays and others. Loot boxes can be obtained in various ways.<sup>61</sup>

The question of whether this then constitutes a wager must be answered in the affirmative when there is a possibility of purchasing such loot boxes with real money (in-game currency). The price overview provided in Overwatch shows that such purchases are possible and that this therefore constitutes a **wager**.

The **chance of a loss or win** of this wager concerns the wager that has been made and the content of these loot boxes. This box always has four items or characteristics that can be specifically assigned to a certain hero. Each obtained loot box will always contain four items; in other words, the box will never be empty. The player cannot see in advance which items are in the loot box. He can only see them when he opens the box.

Although the content of the loot boxes is always aesthetic in nature in Overwatch, a value is associated with the content and the player has an advantage by purchasing these loot boxes.<sup>62</sup> By classifying the items in the loot boxes into four groups according to frequency, a value is inherently assigned to these items. The value of these items is also driven up by the organisation of special events, whereby items can only be obtained during a specific short period of time.

Because Blizzard does not permit players to purchase credits directly and only makes these credits available through loot boxes, players are encouraged to purchase loot boxes with money in order to obtain coveted game items (faster).<sup>63</sup> Should a player want to collect all items, he would have to open 1,300 loot boxes - or with less luck, even 1,600.<sup>64</sup> Even though the loot boxes can be obtained for free, it has been calculated that a player would have to play for 1,250 hours in order to collect the same items.<sup>65</sup> What's more, there are special events with separate loot boxes with collectable items that can only be won during the event. These events are linked to events in the real world (e.g. Chinese New Year or Halloween). Paid loot boxes give the player a better chance of winning a special item linked to the special event (e.g. a Halloween costume).

The chance of losing your wager (the cost of the loot box) is, of course, ever-present now that testimonies and research have shown that players have a substantial chance of obtaining an object or item that they already own or that has a 'low' collection value (common).<sup>66</sup>

The last constitutive element that needs to be examined is whether **chance** even exists. It is not possible to ascertain based on research how the content of the loot boxes is determined. What is certain is that players believe that the content is determined based on chance. The developer did not respond to the request for more information about this.

#### **b. STAR WARS BATTLEFRONT II**

In this game, players can purchase loot boxes (crates) with real money in the beta and early access phase of the game. This system was removed from the game due to the flood of criticism from the player community.<sup>67</sup> Since the official release of this game, it has thus been impossible to purchase loot boxes with real money. Loot boxes can now only be purchased with credits earned in-game. The initial game design was for players to purchase loot boxes with "crystals".<sup>68</sup> You could still purchase crates using "credits", which you can earn by playing the game, but purchasing these crates with "crystals" (which had to be bought with real money) used to allow you to obtain the crates faster.<sup>69</sup>

The loot boxes contained a mixture of "star cards", "emotes", "victory poses", "weapons" and "crafting parts". Star cards are items used to equip the various classes, vehicles and characters in the game. They vary from passive bonuses to entirely new skills for the four standard classes. These star cards therefore offer a clear advantage over players who do not have star cards, thereby constituting a **win** for the players who purchase these loot boxes.

The player cannot know in advance which exact items the crate will contain. He also cannot purchase the item directly. He is therefore paying for a chance. The player also has no insight into how the chance of receiving the specific items is generated. The loot boxes are opened in a manner reminiscent of a slot system, with the player's desire to open the crates being additionally stirred. The goal of this system was thus clearly to allow players to spend as

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much money as possible on the chance of receiving a certain item. A chance factor therefore exists. Which chance factor is present is not known, and the questions put to EA were not met with a response.

Here the loot boxes do not therefore fulfil the definition of a game of chance because there is no wager present that can be valued in terms of money.

#### c. FIFA 18

In FIFA 18 there are various types of loot boxes (packets) available, and these are further sub-divided. Actually, special loot boxes can be discovered indefinitely. There are at least ten different loot boxes available, which can be purchased without restrictions.

The loot boxes can be purchased with FUT coins and in some cases are free. The system of paid loot boxes is systematically promoted. A player cannot simply purchase FUT coins, but he can purchase FIFA coins (packets of up to EUR 100.00) to use to buy loot boxes. Packets costs between 100 and 700 FIFA points, with 100 points amounting to about EUR 0.99. Therefore, a value can be attributed to the points.<sup>70</sup>

Even though the loot boxes or packets cannot be directly purchased with real money, this can be considered as a wager.

**A win and loss** is experienced with the paid loot boxes. The loot boxes always contain one or various players and items that can be used throughout the game to win something. The more expensive the loot box, the bigger and more exceptional the win is portrayed as being. Wins and losses are clearly shown in the system of duplicate prizes. Winning duplicate items in a loot box is a regular occurrence; items that cannot be quickly sold because they are not worth anything and that cannot be saved either, forcing the player to immediately transact them, as it were. This is noteworthy because as soon as the loot box is opened, the computer system lets the player know that this is a duplicate prize, which means that this duplicate prize could have been avoided. In the case of a paid loot box, the player has thus received a useless item, which constitutes a lost wager.

The goal of the online game with paid loot boxes is to compile the strongest possible football team in order to win matches and gain status among the other players. If you obtain strong players by purchasing loot boxes, then this constitutes a **win** in the game. Rankings are also provided for teams that indicate which position a player has won or lost. These rankings appear to be greatly locally/regionally oriented.

The random number generator (RNG) used is far from transparent. Whichever random number generator is used, there is an element of chance present for the player because he cannot guess the content of the loot box and cannot find a methodology in the items he receives (except for by means of the general descriptions that are provided).

The paid loot box in FIFA 18 hence constitutes a game of chance in the sense of the Gaming and Betting Act.

#### d. COUNTER-STRIKE: GLOBAL OFFENSIVE

Weapons and skins (layout of weapons) are central to the game C-S: GO. These weapons and skins can be obtained by playing the game, but it is much easier to purchase them through micro-transactions. Because the price of these weapons is artificially set by the system, it is appealing to purchase expensive weapons through loot boxes. The price of the loot boxes varies but is on average EUR 0.03. In C-S: GO, in-game currency is not used but the loot boxes can be purchased directly with real money.

What is noteworthy here is that once a loot box has been purchased, it cannot be opened without an additional key being purchased, which in turn can only be used once. A key costs on average EUR 2.10 EUR, which means that the wager is equal to EUR 0.03 EUR + EUR 2.10.

The items that a box might contain are listed next to the box. Colour coding (comparable to that used in Overwatch) is used for displaying the in-game value. Some items therefore have a certain exclusivity and thus a monetary value. The value of the items in the loot boxes can always be checked via the marketplace where each item is separately sold. The purchase of a loot box can therefore be especially lucrative in that case. Additionally, weapons can be exchanged or be resold for real money through a third-party website. These websites are always linked to Steam (the Internet platform on which C-S: GO is played).

Here there is thus a clear chance of a win or loss depending on the received items in the loot box.

Once a loot box has been purchased with a key, it is automatically opened and the player sees an animation that is similar to a casino game. The distribution key of these boxes is unknown to the player, nor is it clear whether subjective RNGs - and hence personal data - are taken into account. What is certain is that the player believes it is chance that determines which item is obtained through the loot box.

The paid loot box in C-S: GO therefore constitutes a game of chance in the sense of the Gaming and Betting Act.

## 6. CONCLUSION

The investigation clearly shows that the purchase of loot boxes by players in the examined video games is highly problematic, both in terms of the purchase as well as in terms of the techniques used to allow players to bet using loot boxes. The self-regulating classification system of video games does not offer the protection envisioned by the Gaming and Betting Act. In fact, there is no single systematic protection of consumers, minors or gambling addicts from gambling. More and more people, including young people, are confronted with gambling without realising it. Because they experience wins and losses in connection with monetary wagers, they are, as it were, raised to consider gambling to be normal and are less

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capable of resisting the dangers of gambling. The disguised character of games of chance is extra problematic in the case of children. If there is no adequate intervention, then games of chance in video games will increasingly cause harm to players, families and society.

The **paid loot boxes in the examined games Overwatch, FIFA 18 and Counter-Strike: Global Offensive fit the description of a game of chance because all of the constitutive elements of gambling are present** (game, wager, chance, win/loss). The loot box system in Star Wars Battlefront 2 prior to the official release of the game also fits this definition, but this is no longer the case today.

Games of chance are banned in Belgium other than the exceptions provided for by the Gaming and Betting Act. The large-scale, permanent operation of these video games by private companies whose sole objective is to make a profit - i.e. that have no social or charitable goal - ensures that this operation cannot fall under any of the exceptions provided for by the Gaming and Betting Act.

The examined games with paid loot boxes such as those that are currently being offered and operated in Belgium violate the Gaming and Betting Act and can be criminally prosecuted. From the legal-technical perspective, the loot boxes themselves do not fall under the definition of gambling, but they can teach young and vulnerable players gambling. Free loot boxes are also problematic if players are directed to paid loot boxes through free loot boxes. Use of personal data is not considered a wager in this investigation. However, it must be noted that the developed data management can be very problematic with a real risk of large-scale manipulation of players.

Just as measures were undertaken with regard to Game of War in the past, the paid loot boxes must be removed from the video games in order to comply with the Belgian Gaming and Betting Act. If the video games are not revised in compliance with the Gaming and Betting Act, the active operators risk a prison sentence of up to five years and fines of up to EUR 800,000 for a first violation. These penalties can double if the violation was perpetrated against a person younger than 18.

It is clear that the game manufacturers and platforms use many techniques for luring and encouraging players to play online and purchase loot boxes in an unrestricted manner. These techniques vary from social behaviour monitoring, to a lack of data protection policy with possibly large-scale manipulation of the player through behaviour-related random number generators (RNG). It is important to keep sight of the fact that this possible behaviour manipulation, which could remove the characteristic of chance, does not exist on the part of the player/consumer. Such manipulation of the game and the player is also far removed from a correct course of play.

The gaming industry's self-regulation does not (adequately) protect the player. The option to use money in video games is fine-tuned down to the last detail; not so the integration of the developed PEGI system. The age and playing requirement is not extended to the payment



system by the game manufacturers and platforms. Once a player has created an account, he can make (anonymous) payments in a variety of ways without his age being checked. A 13 year old can make payments in a game whose age requirement is 16.

The lack of regulation and control of these video games is particularly problematic with regard to minors and gambling addicts, who can take part in games of chance without any protection. PEGI does not check for loot boxes and does not organise any effective monitoring of its age limits.

In conclusion, we noticed that not only the game manufacturer and game platform but also the companies that grant licences such as the international football federation FIFA and Disney must urgently be confronted with the part they play in the operation of illegal gambling and the need to protect minors and vulnerable players.

The monitoring of the video game sector and the lack of effective regulations for games of chance is in stark contrast to the regulated gambling sector for adults.

## 7. RECOMMENDATIONS

Because paid loot boxes in the examined video games are illegal, criminal prosecution should be undertaken if these loot boxes continue to be offered. In the first instance, this prosecution should be against the operators of these games of chance, in a later phase also against those involved in operating the illegal game.

Given the fact that only four games were examined, the problem might be bigger and the following recommendations are not without merit:

With regard to the regulator:

- Update the Gaming Commission so that parents and children can be better informed about and protected against gambling addiction and so that more research can take place on the presence of gambling elements in (free) video games. It must be possible to inspect video games for the presence of problematic gambling elements in the event of a complaint against them or as a matter of course. This will serve both to put into perspective the gambling element (video games where elements of chance are not problematic) and protect players (making clear to players and parents which video games are not suitable for minors).
- Specific permits must be developed for games of chance in video games.
- Principal ban on minors purchasing games with paid loot boxes.
- Age verification in supermarkets when purchasing codes or gift cards for video games. Minors may not make payments associated with video games that are not suitable for minors.

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With regard to the granters of licenses such as the international football association FIFA and Disney:

- Take into consideration quality standards if the licence is granted to a game developer (no illegal gambling, no promotion of match fixing, etc.).

With regard to game platforms that facilitate payments that can be used in video games:

- The age requirements of the platform and the used video game must be the same. If a game is not approved for minors, they must also not be able to make any payments.

With regard to distributors and game developers (EA, etc.):

- Clear indication of the chances of winning for the various item values.
- Permit complete control of the random number generators used for the loot boxes by the Gaming Commission's Technical Assessments team.
- Provision of the data of players and payments.
- Introduction of a financial ceiling for the monetary amount that can be spent on loot boxes.
- The presence of paid loot boxes may not impede or disadvantage a normal game without paid loot boxes.
- A game symbol 'gambling' is needed (e.g.: "contains gambling").

## ENDNOTES

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<sup>1</sup> In this report, the term “video games” comprises all games and apps, regardless of the platform on which they are available and regardless of whether these are paid or free.

<sup>2</sup> <http://www.gdconf.com/>

<sup>3</sup> <https://wccfttech.com/pegi-loot-boxes-cant-define-gambling/>

<sup>4</sup> The Netherlands, UK, France, Finland, Poland, Germany, China, USA and Australia, for example.

<sup>5</sup> A 19 year old spends \$13,500.25 on in-game purchases in 3 years (USA), a 14 year old spends his mother’s monthly salary on FIFA 18 (Ireland), a student spends more than £2,000 on skin betting (UK).

<sup>6</sup> <https://intotvg.weebly.com/indie-games-en-aaa-games.html>, AAA games are defined as the games with the biggest budgets for development and promotion. The high budgets increase the pressure on the company and on sales. Indie games are games that were created by smaller companies, without the financial backing of a distributor. This makes them independent, which led to the abbreviation Indie. They do not have the same production resources as larger studios at their disposal, which motivates them to differentiate themselves through other game techniques. The AAA games and Indie games are often purchased online (e.g.: Steam) or in a real-world store.

<sup>7</sup> A multiplayer first-person shooter (FPS) is a type of action game that is played from the player’s perspective. In first-person shooters, the player holds a weapon or other object in his hands with which he can fight enemy characters.

<sup>8</sup> Windows, Xbox One and PlayStation 4

<sup>9</sup> The player creates a PlayStation network account to be able to play together with other players on the Internet. PlayStation Plus membership is offered for EUR 59.99 per year, or EUR 7.99 per month, for example. You can also register for a free trial subscription that lasts two weeks.

<sup>10</sup> <https://www.usatoday.com/story/money/business/2012/10/30/disney-star-wars-lucasfilm/1669739/>

<sup>11</sup> PlayStation 4, Xbox One and Microsoft Windows

<sup>12</sup> The Gaming and Betting Act of 7 May 1999 on games of chance, betting, the gambling establishments and the protection of the players.

<sup>13</sup> Article 3.3 of the Gaming and Betting Act makes an exception, for example, for the practising of sports, games that do not provide any advantages to the player or gambler other than the right to continue playing at most another five times for free, certain card and party games, as well as small games in amusement parks, fairs or at local level for a charity and demarcated in time.

<sup>14</sup> PEGI (Pan European Game Information) introduced the system in April 2003 via the Interactive Software Federation of Europe (ISFE). The PEGI system replaced a number of national age classification systems with one European system that is used in most European countries. The European classification system has an American counterpart (ESRB), but the ratings of PEGI and ESRB do not (always) correspond.

<sup>15</sup> The distributor or developer assesses a game by means of a set and paid procedure using a questionnaire that must be completed. Then PEGI verifies and confirms or changes the given classification. The Netherlands Institute for the Classification of Audiovisual Media (NICAM) and the British Video Standards Council (VSC) handle the operational work for the PEGI system. NICAM checks the submissions for PEGI 3 and PEGI 7 classifications, and VSC handles PEGI 12, 16 and 18.

<sup>16</sup> The questionnaire – which expresses all relevant criteria as a yes/no question with help texts – asks about gambling in the following manner (question 27): “Does the game contain moving images that encourage and/or teach the use of games of chance that are played/carried out as a traditional means of gambling?” The associated help text states the following: “This refers to types of betting or



starts, the box bursts open and discs are emitted towards the heavens. While these discs are lobbed into the air and fall back to the ground, you can see how rare they are based on their colour (Common: Grey, Rare: Blue, Epic: Purple, Legendary: Yellow). It isn't until all the discs have fallen back to the ground that you can see which items you've got. The player cannot therefore immediately see what he's won. The tension is built up in multiple steps. This colourful animated system often gives the player disappointing items, although sometimes he gets exactly the item he wanted.

<sup>28</sup>An additional problem with embedding a game of chance into a game that pretends to be a game of skill is that players often don't run into the game of chance until after they've already been playing the game of skill. After they have acquired the game and done their best to master it, they discover that they have to participate in a game of chance in order to compete with other players or progress in the game. This plays to people's tendency not to easily abandon something in which they have invested their emotions, the so-called 'sunk cost effect' (Arkes & Blumer, 1985; Delfabbro & King, 2015). The psychological pressure to participate in a game of chance is therefore great, and in any case greater than if the game of chance were a stand-alone game. The 'illusion of control' and the easy confounding of electronic games of chance with games of skill makes it possible, and even likely, that people will participate in electronic games of chance without realising it. The fact that young people do indeed confuse electronic games of chance with games of skill is evidenced by the following observation (Gupta & Derevensky, 1996; research conducted among 9 to 14 year olds who were given the opportunity to play blackjack). Players of games of skill find that they score increasingly better with more practice. They expect this to be the same with gambling games. However, young people who frequently play games of skill and consider themselves to be well trained in games of skill also think that they have a greater chance of winning when playing gambling games (which they do not consider as 'luck' but as the fruits of their skill achieved through practice). Primary school children and children in the first years of secondary school who play a lot of electronic games of skill therefore also tend to try out games of chance more often and think that these games require just as much skill as the games of skill. Source: Prof. Dr. Vera HOORENS, unpublished research report.

<sup>29</sup> FIFA 18 gives players the feeling that they always win, even if they lose a match. A player always receives points, or useless items at first glance. Of course, the useless nature of these items disappears if it becomes a status symbol for young people.

<sup>30</sup> The video game Star Wars is based on the Disney films of the same name. FIFA 18 is successful thanks to its similarities with reality. Players who play for a club or country, physical characteristics, walking styles, transfer market, greed... Overwatch organises special events during Chinese New Year or Halloween when items can be won (through paid loot boxes) that cannot be won at other times of the year.

<sup>31</sup> <http://www.futhead.com/news/fifa-18/344/what-romelu-lukakus-manchester-united-move-means-to-fifa-18/>.

<sup>32</sup> The providers do their best to make the player 'forget' that he is paying real money. One example of this is when a player has to select the 'Get' button in order to pay automatically. The providers also make sure that the chips needed for the casino that is embedded in the game can only be purchased with gold, with that gold in turn having to be purchased with money. Once a gold supply has been purchased, it is easy to forget that the gold was purchased with real money and therefore represents a value and is not merely a virtual element of the game. The providers also use persuasion techniques that create the impression that the wager is limited. Temporary special offers regularly appear for the items that players can purchase to progress in the game, or to buy chips with which they can gamble in the casino in the hope of winning additional items. These offers give players the impression that they are missing an opportunity if they do not act quickly. Because this concerns an apparent reduction of the usual price, they can even be given the impression of making a 'profit' with a purchase. They get this impression when they assume that they will 'have to' make the purchase anyway sooner or later, but think that they will be able to get it cheaper now. The unit price of the

items and chips is also very low, and they must be purchased in large quantities. This is not coincidental, because the game could also be played perfectly well if the number of items required to progress in the game were lower and proportionally fewer items needed to be purchased. By working with very high volumes of items, always for an extremely low unit price, the total amounts to be paid seem low thanks to the psychological contrast effect (see also Chapman & Johnson, 2002). (...) The fictional coin and point units that can be won in a game are therefore often just as real as real money for players. Even if this is not the case, a player can have a real psychological experience of win or loss, regardless of what can be won or lost. This can be money, but also prestige, admiration or fun sound and lighting effects. That is why in psychology literature, the term 'game of chance' is not reserved for games where money can be won but the phrase 'monetary and non-monetary forms of gambling' is employed (King, Delfabbro, & Griffiths, 2010). Source: Prof. Dr. Vera HOORENS, unpublished research report.

<sup>33</sup>A player cannot simply purchase FUT coins, but he can purchase FIFA coins (packets of up to EUR 100.00) to buy loot boxes. In the game, messages are sent to the players that lead them to advantages (paid or unpaid) but are always linked to FUT currencies. This is immoral because, under the umbrella of FIFA, players are encouraged to purchase a match at the end of the season for a relatively cheap price (tie or win). Players are also paid for a lost match in FUT coins.

<sup>34</sup> Won loot box items may not be of much value to the player himself (because he has no affiliation with the country or favourite football club), but they do have value for other players via the transfer market. These then yield additional FUT coins.

<sup>35</sup> At a given moment, FUT coins are also won through a loot box. However, should the 1,000 obtained FUT points be immediately sold (an offered option), then the player will only receive 656 FUT coins on his game account.

<sup>36</sup> Because the quantities of coins to be purchased are so much higher than the EUR amounts that represent them, the amounts to be paid appear low due to the psychological contrast effect. Source: Prof. Dr. Vera HOORENS, unpublished research report.

<sup>37</sup> The following quantities of FIFA coins can be purchased: 100 FIFA points (EUR 0.99); 250 FIFA points (EUR 2.49); 500 FIFA points (EUR 4.99 EUR); 750 FIFA points (EUR 7.49); .... The most expensive package is EUR 99.99 EUR for 12,000 FIFA points.

<sup>38</sup> PS4 indicates that it uses its data to tailor marketing and advertising to the individual player and to obtain more insight into a player's behaviour and preferences. An enormous amount of data transfer takes place through mandatory consent (otherwise you cannot play the game you purchased).

<sup>39</sup> The main limitations are not sharing the credit card number or other financial information with third parties such as Facebook, and the personal information of children under 18 "is not consciously published to independent third parties, not even with consent".

<sup>40</sup> The consumer is informed of major changes but consent is not requested in this case.

<sup>41</sup> Not offering a way in which they can enter personal information, blocking access, talking with strangers by chat.

<sup>42</sup>In FIFA 18, there are various types of loot boxes available and these are further sub-divided, which means that a player can continue offering special loot boxes indefinitely. There are at least ten different loot boxes available, which can be purchased without restrictions. The contents of the loot boxes are subdivided according to importance. The items in a loot box are generally qualified according to a certain degree of importance, which is either expressed in a number or becomes evident in the course of the game. So-called skins also appear in loot boxes (player equipment, a home or away jersey of an (important) team). A football stadium can also be added to the package. Some items and rewards are explicitly negotiable, but most are indicated as being non-negotiable. On TV stations on PS4, people talk about available player packages and players who are supposed to be 'good'. The actual items in a loot box are not clear when a player receives or purchases a loot box. However, both FUT points (no direct financial value) and FIFA coins (directly linked to money that is in the player's account) are systematically linked to the profit elements in all sorts of loot boxes.

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<sup>43</sup> It is difficult for people to estimate the degree to which a result depends on chance (Langer, 1975; Stefan & David, 2013). They often display the ‘illusion of control’ phenomenon, which means that they overestimate their influence on outcomes. This ‘illusion of control’ is so strong that people often believe they can exert control over things that, objectively seen, are fully or largely outside the scope of their influence. For example, people think that they increase their chances of winning a lottery if they themselves choose the numbers they bet. The ‘illusion of control’ occurs with all sorts of games of chance, electronic or otherwise, and it can contribute to players continuing to play (Frank & Smith, 1989) – both when they win (because then ‘they are doing it right’) as well as when they lose (because ‘things will go better with practice and placing more bets’). However, when games of chance are offered in electronic format, the ‘illusion of control’ is even greater than for non-electronic games of chance because there is an additional reason why people cannot differentiate properly between games of chance and games of skill. This is due to the structural similarities between many electronic games of skill and electronically offered games of chance. Scientific literature mentions the following frequently occurring similarities (Griffiths, 1991; Wood, Gupta, Derevensky, & Griffiths, 2004): the more a player pays, the longer he can play or the more chances at winning he has:

- o frequently it’s not about winning a lot but about being able to play as long as possible
- o it is possible to win extra turns or extra points
- o the feedback regarding wins and losses usually comes very quickly after certain actions
- o the audio and lighting signals that indicate wins or losses are very similar
- o actions are ‘intermittently reinforced’: sometimes they are rewarded and sometimes they are not
- o similar physical actions must be undertaken in order to be able to play
- o both trigger a fun thrill and escape from daily life

(...) If it is not clear at first glance from the game rules that a certain game is a game of chance, or if even a few elements of the game suggest that skill co-determines the outcome, people will not (fully) recognise the game as being a game of chance (...) These similarities create the impression that games of chance ‘are simply another type of computer game’. The agreements between electronic games of skill and games of chance have led some researchers to state that it would be better to describe all electronic games of skill as ‘a non-financial form of gambling’, whereby the goal is to collect points instead of money (Griffiths, 1991; Wood et al., 2004). Source: Prof. Dr. Vera HOORENS, unpublished research report.

<sup>44</sup> “Kansspel” in *Recht en Onderneming* (“Game of Chance” in Law and Business) , K. Andries, N. Carette and N. Hoekx, *Die Keure*, 2006, 79, no. 15-158.

<sup>45</sup> In FIFA 18, a notable characteristic in the loot box system is the phenomenon of duplicate prizes. Winning duplicate items in a loot box is a regular occurrence. Items that cannot be quickly sold because they are not worth anything and that cannot be saved either, forcing the player to immediately transact them, as it were. The player can therefore also experience his win as a loss. And if this concerns a paid loot box, then the player has an item that is immediately worth either nothing or little.

<sup>46</sup> “Kansspel” in *Recht en Onderneming* (“Game of Chance” in Law and Business) , K. Andries, N. Carette and N. Hoekx, *Die Keure*, 2006, 249.

<sup>47</sup> However, there are indirect links. For example, loot boxes may become less expensive if one has a specific subscription.

<sup>48</sup> Judgement no. 232,752 by the Council of State, dated 29 October 2015 (unpublished): Not every amount can be considered as a wager, only the amounts that constitute real compensation for participating in the game and where it is possible for the wager (either in its original amount or augmented) to be returned to the player in the form of profit. (...) If the coins are procured for free, this does not constitute a wager, but coins received after paying for a “VIP” or “Super VIP” subscription do constitute an actual wager in the sense of Article 2, 1° of the Gaming and Betting Act. After all, these subscribers are paying for additional chances of playing, among other things, which increases their chances of winning additional coins. The situation in which - to a limited degree and

possibly through repeated creation of new free profiles - players can play the game without paying, and the situation in which paying players receive access to a social platform and additional use options does not alter the fact that players also pay for additional chances of playing on the paid website.

<sup>49</sup> Here's a specific example from Divinity (Larian): the character with which you play can receive 'gold' for getting a cat down from a tree. This gold can be used to purchase a sword, for example.

<sup>50</sup>FIFA18 operates on FIFA coins. In Overwatch, loot boxes can be directly purchased with real money. And in Star Wars Battlefront 2, crystals could be purchased with real money prior to the official launch release. You could then use these crystals to purchase loot boxes. This possibility to purchase loot boxes does not necessarily represent the only way to acquire loot boxes.

<sup>51</sup> As indicated above, this investigation does not focus on what happens in secondary markets, where certain virtual items may also be assigned an economic value.

<sup>52</sup> According to the Gaming and Betting Act, the profit can be "of any type", both monetary and material, large or small. The profit therefore does not necessarily need to be of the monetary kind; it is sufficient for the profit to have a financial value. In view of Article 3, 2° of the Gaming and Betting Act, the right to continue playing for free can also constitute profit. Given that the paying player is given the opportunity on spelpunt.nl to win "playing coins" that give him more play time and hence the right to continue playing for free, this constitutes profit. How many times a player can continue to play for free (with the same or a different game) is not limited on spelpunt.nl, so that the reason for the exception stipulated in Article 3, 2° of the Gaming and Betting Act is not applicable. Judgement no. 232,752 by the Council of State, dated 29 October 2015 (unpublished).

<sup>53</sup> The evolution value of the skins in C-S: GO is even depicted graphically and compared to stock market prices.

<sup>54</sup> The above-mentioned judgement by the Council of State is also important here. It is considered that *in order to win "game coins" that grant the right to additional play time and hence the right to (...) continue playing constitutes profit.*

<sup>55</sup> Kansspel in *Recht en Onderneming* (Game of Chance in Law and Business) , K. ANDRIES, N. CARETTE and N. HOEKX, Die Keure, 2006, no. 422.

<sup>56</sup> Kansspel in *Recht en Onderneming* (Game of Chance in Law and Business) , K. ANDRIES, N. CARETTE and N. HOEKX, Die Keure, 2006, no. 422.

<sup>57</sup> The profit therefore does not necessarily need to be of the monetary kind; it is sufficient for the profit to have a financial value. Judgement no. 232,752 by the Council of State, dated 29 October 2015 (unpublished).

<sup>58</sup> Kansspel in *Recht en Onderneming* (Game of Chance in Law and Business) , K. ANDRIES, N. CARETTE and N. HOEKX, Die Keure, 2006, 5, 475.

<sup>59</sup>See also the rather passive character of loot boxes, so that theoretically a lottery plan can even be a factor of chance.

<sup>60</sup> Knowledge is power, GDC 2018 (<http://www.gdconf.com/>): "Much time is spent on designing how game agents make decisions. However, regardless of architecture, most decisions require information from the world. In fact, the quality of the decisions (and subsequent behaviours) is often directly related to the quality of the data available to the AI. It's important to provide this data in a form that is efficient and easily interpreted. The session illustrates and explains a variety of techniques for representing and delivering information. This session will cover systems appropriate to action games such as target information and environmental knowledge. Additionally, this talk will address broader techniques that can be applicable to RPGs and simulation games."

<sup>61</sup>Every time the player reaches a new level; during special events players can receive loot boxes as a gift; seasonal boxes when logging in for the first time during a seasonal event; when the player wins a number of games per week in arcade mode (1 loot box per 3 won games with a maximum of 3 loot boxes per week acquired in this manner); paid via micro-transactions: EUR 1.99 for the purchase of 2 loot boxes, EUR 4.99 for 5 loot boxes, EUR 9.99 EUR for 11 loot boxes, EUR 19.99 EUR for 24 loot boxes and EUR 39.99 for 50 loot boxes.



<sup>62</sup>The items players can obtain can be subdivided into four groups or levels depending on their frequency of occurrence (in order of decreasing frequency): “Common”, “Rare”, “Epic” and “Legendary”. A “Legendary” item, which occurs very rarely, will have a much higher value for the player than a frequently occurring “Common” item. The player also wins game credits via loot boxes with which items can specifically be purchased. These items cannot be purchased through direct payments with euros.

<sup>63</sup> <https://www.theverge.com/2017/5/28/15702686/overwatch-blizzard-loot-box-business-model-masterpiece>

<sup>64</sup> <https://www.pcgamesn.com/overwatch/overwatch-loot-legendary-skin-chance/page/0/1>

<sup>65</sup> <https://www.forbes.com/sites/insertcoin/2016/06/10/the-math-behind-why-overwatches-loot-boxes-are-exhausting-to-unlock/#1da347a02adf>

<sup>66</sup> [https://www.reddit.com/r/Overwatch/comments/6dhvnx/acknowledging\\_your\\_loot\\_box\\_feedback/?st=j36h8woc&sh=85804e8b](https://www.reddit.com/r/Overwatch/comments/6dhvnx/acknowledging_your_loot_box_feedback/?st=j36h8woc&sh=85804e8b)

<sup>67</sup> Until 17 November 2017, these crystals could be purchased with real money, which constituted a wager in the sense of the Gaming and Betting Act. At the moment there is no wager, but the General Manager of Dice, Oscar Gabrielson, did state in an official communication that this option will be available again at a later date.

<sup>68</sup> These “crystals” could, in turn, be purchased with real money. This resulted in the link between spending real money and purchasing crates being relegated to the back of the player’s mind. Furthermore – given that the “exchange rate” between real money and “crystals” was not 1 to 1 – it was made more difficult for the player to know how much money he was spending on crates.

<sup>69</sup> The prices for the crates were as follows: Trooper crate: 4000 credits/200 crystals; Starfighter crate: 2400 credits/120 crystals; Hero crate: 2200 credits/110 crystals.

<sup>70</sup> The value of the packages is also promoted and determined in an artificial manner, among other things by offering ‘premium packages’ and ‘rare packages’.