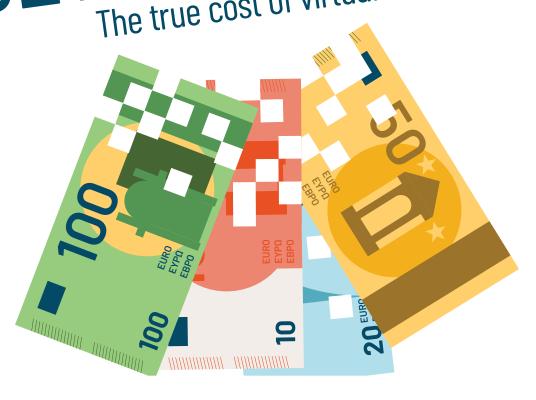


GETTING PLAYED The true cost of virtual currency



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GETTING PLAYED

The true cost of virtual currency

June 2024, Oslo

Design: VON Kommunikasion



INTRODUCTION



The illusion

Imagine you are at Super Mart, a grocery store with a wide variety of groceries, looking for ingredients to make dinner tonight.

However, before making any purchases at Super Mart, you must exchange money for proprietary cards loaded with "SuperPoints" at a vending machine outside the store. These cards come in different batches and can be recharged using credit cards, debit cards, cash, or value vouchers.

All groceries are priced solely in SuperPoints, with no other price information available, and there is no pricing per liter or kilogram. A disclaimer in small print states that purchasing SuperPoints is the only transaction you can make and that using SuperPoints merely exchanges them without standalone purchases. As a result, you forfeit any consumer rights when exchanging SuperPoints for groceries.

If you decide to buy fresh fish at the in-store counter, you'll find that prices require a different currency. SuperPoints must be exchanged for "Freshies": in-store points used exclusively for purchasing fresh products like fruit, fish and meat. The exchange rate is exclusive to SuperPoints and includes a time-sensitive quantity discount.

After selecting your groceries, the cashier will add up the amount, for example totaling 125,000,000 SuperPoints and 12 Freshies. You'll then swipe your proprietary card and walk home.

It is unlikely that anyone would accept this reality in a grocery store. The lack of transparent pricing, the obscure value of the store's currencies, and the absence of consumer rights would be significant dealbreakers.

Yet this fictional scenario is currently the reality in many video games, and the issues above pervade the world's largest entertainment market. This report describes the pervasiveness of premium virtual currencies in the video game industry and explores how to address problematic practices.



Summary

Virtual currencies are widely used in digital services and are particularly prominent in the video game industry. These currencies are usually purchased inside a game or platform and can only be spent in the context of that service.

This report focuses on in-game virtual currencies purchased for real money, sometimes called "premium" virtual currencies. By using numerous real-life examples from popular games, we demonstrate why these premium virtual currencies are predatory and harmful to consumers.

With the introduction of premium virtual currencies, video game companies have essentially been able to design in-game monetary systems where they set all the terms, where they can change the values at any time, and the consumer has no property rights. This is deeply problematic, because it deprives consumers of rights that would be in place if they were spending real-world money.

Using premium currencies as an intermediary step between the consumer and the in-game purchase is a practice that only benefits the video game company, while introducing various problems for the consumer. It can become difficult to keep track of how much money one is spending, it is often impossible to receive a refund, and video games are often designed to push consumers to spend as much as possible.

While it is not inherently problematic that consumers spend money in video games, this report aims to address the particularly problematic aspects of premium virtual currencies and argues that this practice should cease to exist.

The crux of this report is that virtual in-game currencies purchased with real money are actively detrimental and harmful to consumers while providing no benefits to them. This applies to the video game industry and other digital services, such as

social media platforms and streaming services. While this report focuses on the video game industry, the practices and recommendations described here also apply to digital marketplaces in general.

This report is a contribution to ongoing discussions about these problematic issues and how to address them. The report aims to contribute to the Digital Fairness Fitness Check of EU Consumer Law, as announced by the European Commission, that is meant to update consumer law to the digital age. The report is being published in conjunction with the paper "..." by the European Consumer Organisation (BEUC), of which the Norwegian Consumer Council is a member. The BEUC paper provides further background to complement this report's legal and policy analysis.

While this report does not have all the answers to the problem of premium virtual currencies, it argues that the overall effects of the practices are overwhelmingly detrimental to consumers and only benefit video game companies' bottom-line. While the enforcement of existing legislation may be used to address some of these issues, there is an urgent need for complementary measures to protect consumers in the digital sphere.

Banning the use of premium virtual currencies purchased for real money could be one such solution and can be proposed as a part of the Digital Fairness Fitness Check from the European Commission.

In the meantime, current EU consumer law remains fully applicable to the in-game and in-app environment. Therefore, to protect consumers effectively—given the significant potential harm to consumers and the recent exponential growth of in-game and in-app purchases—enforcing these practices should be a priority for consumer protection authorities.

BACKGROUND



A new business model

In the past, the video game industry primarily made money from selling games on physical media or by distributing games through online platforms. Consumers would purchase the game and subsequently be able to access all its content through their device of choice. However, the proliferation of smartphones and mobile gaming contributed to a major shift in the industry, toward always-connected games built on in-game purchases.

The rise of the internet laid the groundwork for an industry based around in-game purchases. Bethesda was the first major publisher to use in-game purchases: In 2006, they sold horse armor for \$2.50 in **The Elder Scrolls IV: Oblivion**. It was characterized as an experiment, and consumers did not respond positively.²

In 2008, the iOS store was launched on Apple iPhones, and games there used in-game purchases as their main source of funding. In the first three years after the launch, iOS apps made over \$3.6 billion in revenue, with over 15 billion downloads, and 80% of that revenue came from mobile games.³ These games included the use of premium virtual currencies.

Games such as **Smurfs' Village** caused outraged parents to report that their children had racked up huge bills by buying the premium virtual currency *Smurfberries* without understanding that they were spending real-world money.⁴

In-game purchases (i.e., sales of additional in-game digital content) have since become a major source of revenue for the industry, generating more than 15 billion dollars in 2020.⁵ Popular video games such as **Fortnite** earn about a million dollars a day via in-game purchases.⁶



What are virtual currencies?

Virtual currency is a form of digital currency⁷ used within a particular digital service, such as a video game or app. Virtual currencies are issued and usually controlled by the game's publisher. They are used by the members of a specific virtual community, platform, or marketplace—typically a video game, app, or other digital service. In most cases, virtual currencies can only be spent within the confines of the digital service for which they were issued. In some virtual environments, virtual currency can be traded between consumers, while in other cases, it can only be spent on content within the service.

This report uses the terms "in-game currency" and "virtual currency" synon-ymously. The authors are aware that "virtual currency" encompasses various currencies, but this report does not aim to cover other types of digital currencies, such as cryptocurrencies and other digital representations of value. Digital assets such as non-fungible tokens (NFTs) are also outside of the scope of this report.

In 2014, the European Banking Authority defined virtual currency as "a digital representation of value that is neither issued by a central bank or a public authority nor necessarily attached to a fiat currency but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically."

The Electronic Money Directive⁹ regulates the operation and supervision of electronic money institutions to contribute to the emergence of a genuine single market for electronic money services in the EU.

Inspiration from the Electronic Money Directive could be used as a template if the European Commission and Parliament decide to regulate in-game virtual currency to a greater extent. The legal principles in the directive may also be used when assessing precontractual information in transactions made with in-game currency today.¹⁰

In video games, the game's publisher is the issuer of the virtual in-game currency. The main characteristics of virtual currencies used in video games are that the currency's value is limited to within the game itself, the bulk of the currency needs to be bought with conventional money, and the currency's value changes with the amount purchased.

Some video game publishers provide players with a small amount of premium virtual currency for free, but any substantial amount usually needs to be pur-



chased with conventional money. Simultaneously, many games have virtual currencies that are not purchased for real money but earned through playing the game. These non-premium currencies are usually different and separate from the premium currency.

This strategy is often referred to as providing "taste samples," because players are given free gifts of currency (or in-game items), presumably so that they will "develop a taste" for the currency (or product). This, in turn, encourages them to spend real money on obtaining more of the game's currencies or items.

Virtual currencies can take various aesthetic forms, such as coins, gems, points, and fruit. In most cases — with a few notable exceptions 11 — they cannot be exchanged for real money once purchased and cannot be refunded.



The solution is to remove the intermediate step, premium virtual currencies, from the transaction. If players want to buy in-game items, they should be able to do so using regular money.

The video game industry asserts that the use of in-game currencies is a long-standing practice that is well understood by consumers; they also state that various safeguards have been implemented for in-game purchases of digital content (e.g., in-game currencies). However, such statements do not account for the manipulative and predatory nature of the practices.

As early as 2014, debates centered on how the proliferation of in-game currencies confused players. In the report "Predatory Monetization? A Categorization of Unfair, Misleading, and Aggressive Monetization Techniques in Digital Games from a Player Perspective," scholars analyzed the viewpoints of video game enthusiasts, pinpointing over 30 techniques deemed deceptive, aggressive, or unfair by the players. Notably, the use of in-game currencies as a substitute for money in the in-game transaction was highlighted as particularly troublesome.



Terminology

Game economies mirror traditional economic systems by employing classic economic principles, such as supply and demand, (artificial) scarcity, virtual currency systems, price fluctuations, and marketing personalization.¹⁵ ¹⁶

Virtual currencies in the form of in-game currencies are part of an in-game economy. In-game currencies have various forms and can be earned by playing the game and purchased with real-world money.

Currencies earned by playing the game do not entail most of the problematic issues outlined in this report and are often a benign aspect of immersion in a video game world.

The problematic aspects of virtual in-game currencies arise from the use of money to purchase virtual in-game currency.

In this report, we adhere to the following definitions:

Virtual currency: All digital currency used within the video game or other digital service, either

acquired through real-world purchases or earned by completing in-game

activities.

Premium currency: Virtual currency purchased for real money, often through an in-game store.

It can take many forms, such as points, gems, or coins. The players may

receive a small amount for free or by playing the game.

Earned currency: In-game currency that is earned through playing the game.

Secondary currency: Lower-level currency types, typically not available for purchase using

> real-world money or other currencies. These are often labelled as resources in the game, such as stones, dragon parts, or magical dust. The hierarchy may

continue with tertiary currency, quaternary currency, and so on.



	ACQUIRED	EXAMPLE	PURPOSE
Virtual currency	By playing or by spending real money	All the below	Monetization and/or entertainment
Premium currency	By spending real money	FUT Points (EA FC 24)	Monetization
Earned currency	By playing	Coins (EA FC 24)	Entertainment
Secondary currency	By playing or by spending virtual currency	Resources, etc.	Monetization and/or entertainment

Note that the boundary between premium and earned virtual currencies can be blurry. In many games, players are given small amounts of premium currencies for free as part of playing the game. However, as shown in the next chapter, this usually happens only at the beginning of the game to get players accustomed to making in-game purchases or in such small amounts that the player must purchase additional premium currencies to be able to spend them on in-game items. Furthermore, some games let players exchange premium currency for earned currencies, for example to skip or speed up parts of the gameplay.

This report does not use the term "microtransactions." This term is outdated and is not applicable when a single transaction may cost well beyond €100. Instead, we employ the term "in-game purchase," regardless of whether the transaction is major or minor.



Other relevant terms used in this report:

In-game item: A virtual object within the game that serves a specific function. Exam-

ples include swords, guns, clothing, characters, magical spells, or season

passes.

Free-to-play/freemium: A game that is available to download or play for free. It usually has in-

game purchases and/or advertising as its primary source of revenue.

Pay-to-win: Game mechanics where real-world money can be used to gain advantag-

es, making it easier to achieve victory. Such mechanics are found both in single-player games and in games where players compete against each

other.

Grinding: Repetitive and often tedious in-game activities required to progress in

the game. In many cases, players may spend premium currency to skip

the grinding phase of the game.

Paywall: A point in the game where publishers attempt to encourage players to

spend real-world money. This is often accomplished by significantly slowing down progression (for example, excessive grinding) or by steeply

increasing the difficulty of the game.

Loot box: An in-game object purchased with premium virtual currency, whose

contents are unknown until the box is opened. Can sometimes also be

obtained through completing in-game activities or objectives.

Battle pass: A time-limited mechanism where players earn in-game rewards through

completing challenges. Usually purchased for real money or premium currencies but may have a free version with slower progression and/or fewer rewards. Essentially, players who purchase a battle pass must also invest a significant amount of time to unlock the content for which they

paid.

Whales: This is a type of player who spends far money in-game more than the typ-

ical player, often contributing a substantial portion of a game's revenue. Typically whales often contribute over 50 percent of in-app purchase revenue, while representing a couple of percent of the player base.¹⁷



Predatory monetization aimed at children

An in-game economy centered around purchasing premium currency for real money—where selling premium currency is the main revenue generator for the video game company—generally pushes the gameplay loop in the direction of constant monetization tactics. The strong financial incentives to maximize consumer spending leads to what can be regarded as predatory monetization.¹⁸

This phenomenon is most evident in free-to-play games, where the core game is free, and the publisher relies on other revenue streams than game sales. However, the business model of maximizing revenue from consumers through the entire lifecycle of the game has become increasingly common in all genres of video games, across all platforms.

Although many consumers choose not to spend real-world money in such games, it is well documented how big spenders—so-called "whales"—may be pushed into spending large amounts of money, regardless of their financial situation.¹⁹

As such, the use of premium in-game currencies can be used to exploit consumers in vulnerable situations, such as those with latent gambling addictions, those with low impulse control, or young children.

Games that are free-to-play appeal to children since the game itself entails no purchase price for the parent. This low threshold for entry makes the child susceptible to the exploitative practices designed into many games.

Research shows that as many as 73% of children aged 6 to 10 play video games. Moreover, a total of 84% of children aged 11 to 14 and 74% of young people aged 15 to 24 play video games.²⁰



Cognitive biases and deceptive design

The use of premium virtual currencies as a stand-in for real currency often confuses consumers about the actual price of in-game purchases, making it difficult to keep track of spending and manipulating them into spending more money than they planned. It can therefore be regarded as a form of "deceptive design." Deceptive design—or "dark patterns" —is a term for design features created to manipulate, mislead, or confuse consumers into making choices that are in the company's rather than the consumer's interest.

Deceptive design works by exploiting cognitive biases that influence consumer choices.²² Such biases include the sunk-cost fallacy (the tendency to keep going once one has invested time and money into something) and the scarcity bias (the tendency to assign more value to products that appear to be limited).

Deceptive design is primarily employed to maximize consumer spending and is a widespread practice in video games that feature in-game purchases as the primary source of revenue.²³ As demonstrated in the next chapter, this involves manipulating consumers into purchasing premium virtual currencies, but also includes obscuring monetary costs and pushing consumers into continuously spending money. When the financial incentive of the publisher is at odds with the consumer's interest, deceptive design can be a relatively inexpensive and simple way to influence consumers to spend more money than they intended.²⁴

The use of premium virtual currencies mainly serves to psychologically remove the act of buying in-game purchases as far away from actually spending money as possible. By disconnecting the act of spending money from the purchase of in-game items, the threshold for spending money is lowered and the spending itself becomes gamified.



The immersion of an in-game economy

The inclusion of an in-game economy can be used to make games more immersive. The dynamics of earning in-game currency and deciding how to spend it brings the game world to life; for example, completing specific tasks earns the player coins that they can spend on an in-game reward. However, such in-game economies can exist without including the option to purchase premium currency for real money.

Games do not need the possibility to spend real-world money to be immersive. On the contrary, most of the highest-scoring games of all time do not include the possibility of in-game purchases nor currencies that can be purchased for real money.²⁶

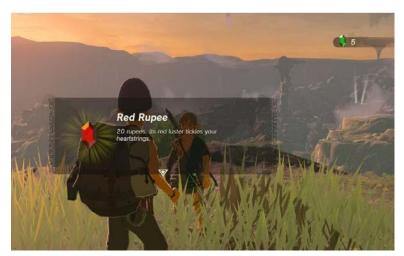


Figure 1: Player earning a primary currency after completing a side quest. The Legend of Zelda: Tears of the Kingdom

Many video games include comprehensive in-game economies without premium currencies. Øverst i skjemaet For example, the game **The Legend of Zelda: Tears of the Kingdom** features a decentralized and dynamic economic system where players can buy, sell, and trade to obtain the necessary items and equipment for their adventure. Similarly, the publishers of the highly acclaimed 2023 game **Baldur's Gate 3** explicitly distanced themselves from including "additional costs or microtransactions" in the game, even using this as a selling point.²⁷

It should be noted, however, that these games are usually purchased at the point of sale for a set amount of money. Many of the worst offenders when it comes to in-game currencies and in-game purchases are free-to-play games that can be downloaded and played for free and are monetized through selling premium virtual currencies. At the same time, the problematic use of premium currencies is not limited to free-to-play games. As we demonstrate in the next chapter, many full-price games also include premium virtual currencies that are purchased in addition to the price of the game itself.

Another game with a comprehensive in-game economy is the fantasy roleplaying game **Dragons Dogma 2**. This game has the possibility for in-game purchases, but it differs from other games in certain respects.



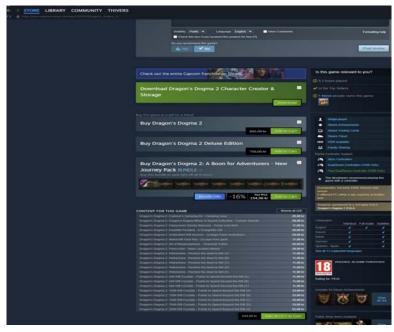


Figure 2: Dragons Dogma 2— in-game purchases via Steam client

The in-game purchases in **Dragons** Dogma 2 are not connected to the game world, and there is no connection between the game itself and the store. When the player runs out of in-game resources, the in-game store is not presented automatically. In this way, the store is optional and not exploitive.

In addition, the game is not designed in a way that makes the need to purchase in-game items relevant, since nearly all the items can be found in the game without too much trouble.²⁸

This type of possibility for in-game purchases is benign and not exploitive. Other publishers should use this type of design as inspiration. A more exploitive design would have been to push the store as soon as the player ran out of in-game items.

3

PROBLEMATIC EXAMPLES OF PREMIUM VIRTUAL CURRENCIES



Below, we outline several problematic practices that are common in games selling premium currencies. Although not all these issues are unique or intrinsically tied to premium currency, they all contribute to what essentially constitutes consumer exploitation.

	MINECRAFT	RAID: Shadow Legends	ROBLOX	EA SPORTS FC 24	DIABLO IV	PUBG Mobile	ASSASSIN'S CREED ODYSSEY	CLASH OF CLANS	FORTNITE
Price range	\$30-40	Free-to-play	Free-to-play	699-799 NOK	€70-100	Free-to-play	679 NOK	Free-to-play	Free-to-play
Name of premium currency	Minecoins	Silver, gems, energy	Robux	FC Points	Platinum	UC	Helix Credits		V-Bucks
Hidden cost	•			•	•	•	•	•	
More than one premium currency	×	•	•	X	×	×	×		
Inflated value	×	•	•	?	X		X		
Inconsistent exchange rates	×			•	×	×	×		
Bundled sales		•	•	•	•	•	•		
No refunds	•					•			
Paywalls	×	•			×	×	•	•	
Pay-to-win				•	×	×	×	•	
Lost if game is shut down						•			
Loot boxes	X	•		•	×	X			

The games that are used as examples were selected because of their large revenue, large player base, or the demographics of their players, such as games for children. This is not a complete analysis, but is meant to serve as examples of widespread, problematic practices throughout the industry. The games were analyzed between September 2023 and April 2024, on a variety of platforms including PCs, consoles, and smartphones.



Hidden monetary cost

When a consumer enters an in-game shop to browse in-game purchases, prices are usually displayed only in in-game currencies, rather than showing the actual monetary cost. Actual pricing information is often not available for any in-game purchases, except when purchasing premium virtual currencies.

Game: Tom Clancy's Rainbow Six Siege

Publisher: Ubisoft

Publication: December 2015

Premium virtual currency: R6 Credits

For example, a player who wants to purchase a Premium Pass in the game **Tom Clancy's Rainbow Six Siege** is informed that this will cost 1,200 of the premium currency *R6 Credits*. This is around €10 in real money, but this information is not displayed at the point of purchase. The player first has to enter the in-game currency shop, determine how many *R6 Credits* they need to purchase to get the Premium Pass, and then calculate the price in real money.

This creates a layer of abstraction that creates distance between the actual spending of real money from the action of obtaining the in-game item. As a result, it becomes unnecessarily difficult for the player to know the exact

DEADLY OMEN Finds IN

THE PASS SHOP

CONFIRM PURCHASE

CONFIRM PURCHASE

CONFIRM PURCHASE

CONFIRM PURCHASE

CONCECUMENTS

ARE OFFENDED INVENDED.

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Figure 3: Tom Clancy's Rainbow Six Siege (05.04.2024)

monetary cost of what they are purchasing. After all, a price of 1,200 *R6 Credits* is less tangible than €10.

Minecraft's in-game shop also only displays the price of ingame purchases in the game's premium currency Minecoins. As above, this makes it difficult to keep track of the costs and, thus, to keep track of spending. This is particularly problematic, as Minecraft is an extremely popular game among children.

By moving the player's purchase away from actual monetary value, premium virtual currencies reduce the so-called "pain of paying" for consumers, lowering the threshold for spending money. Simply put, the pain of paying refers to the phenomenon where people feel negatively about spending money. These negative emotions are reduced when consumers pay with credit cards instead of spending cash, and it stands to reason that premium virtual currencies have a similar effect. In other words, video game publishers can increase consumers' willingness to spend money in games by abstracting the actual monetary value. ³⁰

Game: Minecraft

Publisher: Mojang Studios

Premium virtual currency: Minecoins



The reduced "pain of paying" is documented by recent experiments³¹ that revealed that the use of types of virtual currencies increased consumer ingame spending. Other studies have shown that using currencies (e.g., chips in gambling) instead of real-world currency is associated with overspending but also gambling problems. 32 33 In the video game sector, testing revealed that 92.3% of players who experienced a simulation of video games and who made

> in-game purchases via virtual currencies and real currencies stated that it was more painful to pay in a real currency com-

> pared to a virtual currency.34

The Dutch Authority for Consumers and Markets states in their report on digital fairness that "businesses, by using these currencies, deliberately or in effect, disconnect consumers from the awareness that they are spending actual money."35

The abstraction of an in-game currency also makes it more difficult to detect whether in-game prices have been raised. A change from 300,000 to 350,000 coins may seem less significant than a price change from €30 to €35.

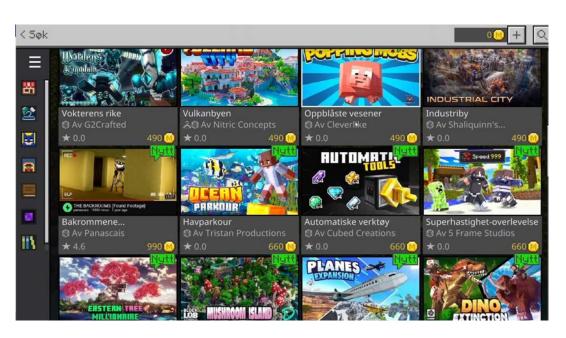


Figure 4: Minecraft (07.07.2023)



IS IT LEGAL?

Under the Consumer Rights Directive (CRD) and the Unfair Commercial Practices Directive (UCPD), consumers should be informed about key precontractual and material information before being bound by a contract. Typical precontractual information includes the actual price of the product or the service to be purchased.

In its updated interpretative guidelines for the UCPD, the European Commission³⁶ states clearly that the product's primary characteristics must be clearly described and, therefore, that the prices of virtual items must be clearly and prominently displayed—including in real currency.

If the price cannot be reasonably calculated in advance, the publisher should indicate how the price will be calculated. The prices of virtual items must be clearly and prominently displayed in real currency when the commercial transaction occurs.

Therefore, before any invitation to purchase, publishers should provide the main characteristics of the products or services and inter alia must provide the prices of virtual items, clearly and prominently, in real and local currency. It is also confirmed in the updated UCPD guidelines that the directive also applies for purchases made with premium virtual currencies.

When the publisher hides the monetary cost, the practice breaches the pre-contractual information requirements under the CRD³⁷ and a misleading omission³⁸ under the UCPD – and thus illegal.

This was confirmed by the Consumer Protection Cooperation (CPC) Network (also called CPC Net)³⁹ in its coordinated enforcement action⁴⁰ against the social media platform TikTok, following the complaints of BEUC and its members.⁴¹ In the commitments accepted by the European Commission and the CPC authorities, before sending any virtual items to users under the platform, TikTok states that they will prominently display an estimate of the unit price per coin in local currency. Many games are not doing this.



Bundled sales

Game: Apex Legends **Publisher:** Electronic Arts

Premium virtual currency: Apex Coins

If a player wishes to purchase an in-game item for real money, they usually must first "convert" their real money into the game's own premium currency. In most cases, the player cannot choose the exact amount of premium currency they want to purchase, as the currency is only sold in bundles. These bundles are typically priced so that a larger bundle has a better conversion rate. In other words, the individual unit of premium virtual currency becomes cheaper when purchased in bulk.

The bundled sale of premium currency makes it more difficult for players to keep track of spending for two main reasons. Firstly, it becomes difficult to understand the actual exchange rate of the virtual currency compared to real money.



Figure 5: Apex Legends (05.04.2024)

In the in-game currency shop of the game **Apex Legends**, larger bundles of the premium currency *Apex Coins* come with a discount by offering "free" additional *Apex Coins* if the player immediately spends at least $\[\in \] 20$. For the first two tiers of bundles, which do not include bulk discounts, $\[\in \] 1$ is converted to $100 \]$ *Apex Coins*. In the third tier, $\[\in \] 1$ is worth $107.5 \]$ *Apex Coins*; in the fourth tier, it is 108.75; in the fifth, it is 111.66; and in the sixth and largest bundle (priced at $\[\in \] 100$), $1\[\in \]$ is worth $115 \]$ *Coins*. This means that the actual cost of an in-game purchase (such as a new outfit for the player's avatar) will differ depending on which *Apex Coins* bundle the player bought. This makes it practically impossible for the player to know the true monetary cost of an in-game purchase.



Game: EA Sports FC 24 **Publisher:** EA Sports

Premium virtual currency: FC Points

The issue of incomprehensible conversion rates becomes even more problematic when in-game purchases can also be made with other forms of (non-premium) in-game currency. The popular sports game **EA Sports FC 24** offers various in-game purchases in the form of loot boxes, which are priced differently depending on whether the player pays with the premium currency *FC Points* (bought for real money) or the primary currency *Coins* (earned in-game).

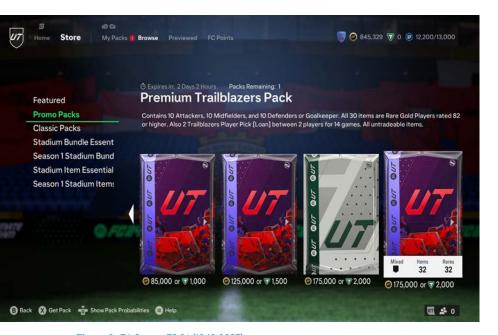


Figure 6: EA Sports FC 24 (18.10.2023)

As shown in the screenshot above, one of the loot boxes is sold for 125,000 *Coins* or 1,500 *Points*. A different loot box costs 175,000 *Coins* or 2,000 *Points*. In the first case, 1 *Point* converts to 83.3 *Coins*. In the second case, 1 *Point* converts to 87.5 *Coins*. Thus, players who want to purchase *Points* for real money cannot understand the in-game value of *Points* compared to *Coins*— even though the two currencies are interlinked—as items purchased with *Points* can be sold in-game in exchange for *Coins*.

Bundled sales of premium currency also mean that, in many cases, the player will be left with surplus

currency after purchasing an in-game item. For example, if the player can only purchase at least 1,000 *Gems*, and the in-game item they want to buy is sold for 900 *Gems*, they will be left with 100 *Gems* that cannot be spent on anything.

In the popular online shooter game Fortnite, players can purchase a battle pass—a ticket bought with premium currency that gives access to a limited-time event where players can unlock exclusive rewards. These

Game: Fortnite **Publisher:** Epic Games

Premium virtual currency: V-Bucks

rewards can typically only be unlocked by playing the game and completing challenges, which includes a lot of repetitive grinding unless the player purchased the battle pass.





of the premium currency *V-Bucks*. However, the smallest bundle of *V-Bucks* available for purchase contains 1,000 units. There are no in-game items that cost 50 *V-Bucks*, so unless the player purchases additional bundles, they will not be able to spend the entirety of the purchased premium currency.

The Fortnite battle pass costs 950

Figure 7: Fortnite (05.04.2024)

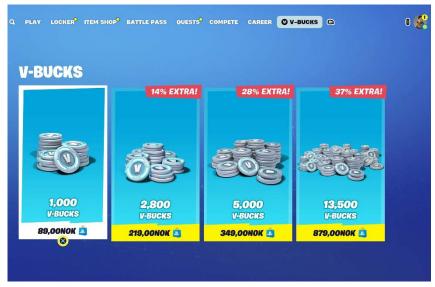


Figure 8: Fortnite (05.04.2024)

Game: Disney Dreamlight Valley

Publisher: Gameloft

Premium virtual currency: Moonstone

In the game **Disney Dreamlight Valley**, players who want to purchase in-game items must first purchase the in-game premium currency *Moonstones*. Most in-game item bundles are sold for 4,000 *Moonstones*. However, *Moonstones* are only sold in bundles of 1,200, 2,500, 5,500, or 14,500. This means that a player who wishes to acquire an item bundle must first purchase multiple *Moonstone* bundles. Regardless of the





Figure 9: Disney Dreamlight Valley (05.04.2024)



Figure 10: Disney Dreamlight Valley (05.04.2024)

types of *Moonstone* bundles they purchase, the player will be left with unused currency.

In some cases, new players are provided with a small amount of premium currency as an introductory "gift." This amount is often too small to purchase any in-game items, which means that the player will have unspent currency sitting in their account unless they purchase enough additional currency to spend it. This incentivizes further spending so that the residual amount is not wasted.



Game: Diablo IV

Publisher: Blizzard Entertainment **Premium virtual currency:** Platinum

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(2) Learn about Season Progression

The game **Diablo IV** came under criticism when introducing a battle pass. 42

In the **Diablo IV** battle pass, rewards included the premium currency *Platinum*, which was given out in small amounts as the player progressed. If players paid for the battle pass and

spent significant time unlocking every reward tier, they would earn 666 *Platinum*. However, the cheapest item available in the in-game store at the time cost 800 *Platinum*. In other words, players who unlocked premium currency through the battle pass (for which they already paid) would still need to purchase additional currency to be able to spend what they earned.

Figure 11: Diablo IV

IS IT LEGAL?

Under the CRD and UCPD, consumers should be informed about key precontractual and material information before being bound by a contract.

The use of bundled sales of premium currency with a rising discount rate makes it impossible for the consumer to calculate the real value of the premium currency available. This is exacerbated if the consumer can earn premium currency by playing the game as well.

To only provide price information in fluidly priced virtual currency before the conclusion of the contract constitutes a breach of the precontractual information requirements under the CRD, as well as a misleading omission under the UCPD.⁴³ Even if the information should be present in the terms and conditions, the practice would not be in compliance with the principles of clarity and available language demanded in consumer contracts.



Several layers of premium currency

Some games operate with many different virtual currencies and premium virtual currencies that may have various uses, values, and ways to obtain them. This makes it very complicated for players to keep track of their spending and what any given piece of currency is worth.

The freemium mobile game **Raid:** Shadow Legends operates with several types of virtual currencies. *Gems* are the game's premium currency and is used to buy in-game items. *Silver* is used to upgrade the player avatar and to open loot boxes. *Energy* is needed to play the game.

Players can purchase both *Gems* and *Silver* for real-world money, but *Silver* can also be purchased by spending *Gems*. *Energy* can only be purchased by spending *Gems*.

All these currencies can also be obtained by playing the game, but only in small and insignificant amounts. Occasionally, the player also receives small amounts of the currencies for free.

Game: Raid: Shadow Legends **Publisher:** Plarium Games

Premium virtual currency: Silver, gems, energy

Gems, Silver, and Energy are bundled together and operate on different exchange rates. If a player wants to purchase Silver, they can spend real money or Gems. The largest and most expensive packs of currency are the most economical; the player can either choose to purchase 4,500,000 Silver for €129 or 4,200,000 Silver for 1,400 gems.

It costs €129 to buy 4,200 *Gems*, meaning that purchasing *Silver* via *Gems* is cheaper by almost a factor of three. The calculation shows clearly that the layers of currencies make it difficult for the player to assess the actual in-game value of the purchases.



Figure 12: Raid Shadow Legends

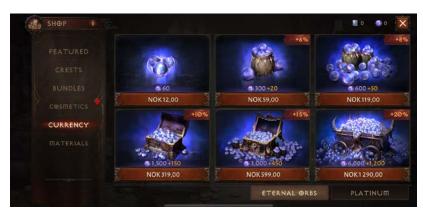


Game: Diablo Immortal

Publisher: Blizzard Entertainment **Premium virtual currency:** Eternal Orbs,

Platinum

The freemium game **Diablo Immortal** operates with two layers of premium currencies, *Eternal Orbs* and *Platinum*. In the game's in-game store, players can purchase bundles of *Eternal Orbs* for real money.



The player can then spend those *Eternal Orbs* to purchase *Platinum* in the same store.

Figure 13: Diablo Immortal (22.11.2023)



These *Platinum* can then be spent to purchase *Materials*, which are used to gain in-game advantages.

Figure 14: Diablo Immortal (22.11.2023)



Figure 15: Diablo Immortal (22.11.2023)

This double-layer of abstraction makes it even more difficult to understand the in-game value of what the player actually wanted to purchase. Players are required to perform several steps of conversion, which is made even more complicated as the premium currency is only sold in bundles.



IS IT LEGAL?

Under the CRD and the UCPD, consumers should be informed about key precontractual and material information before being bound by a contract. This includes the price of the goods purchased.

The use of several layers of virtual currency, all differing in price, makes it impossible for the consumer to calculate the real value of the premium currency available. This is exacerbated if the consumer can acquire one or more of the virtual currencies by playing the game as well.

To only provide price information in fluidly priced virtual currency before the conclusion of the contract constitutes a breach of the precontractual information requirements under the CRD and a misleading omission under the UCPD. 44

Payment systems with multiple currencies are most likely illegal under European consumer law, as the abstractions make calculating for the consumer impossible.



Game: Hay Day **Publisher:** Supercell

Premium virtual currency: Diamonds

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Figure 16: Hay Day. The player must wait 20 minutes to receive 1 egg or can spend 2 premium Diamonds to get an egg instantly.



Figure 17: Candy Crush Saga (22.11.2023)

Paywalls and grinding

Many games are developed to provide new players with quick and steady progression, which gives a sense of fast and fulfilling achievement. After a certain point, however, the player may hit a progress wall, where they must spend

hours completing mindless and often tedious tasks, known as grinding, to keep progressing.

In games that include in-game purchases, players are often given the option to spend premium currency to speed up or skip the grinding phase and return to progression. In practice, this means that players are encouraged to pay to skip something akin to a paywall. As men-

tioned above, many games also provide players with a small amount of free premium currency at the beginning of the game, which may sometimes ensure smoother progression at the start of the game. This increases frustration—and possibly the willingness to pay—once the player hits the de facto paywall.

Game: Candy Crush Saga

Publisher: King

Premium virtual currency: Gold bars



In many mobile freemium games, such paywalls entail that the player must wait for many hours after taking action to unlock further progression. This means that players have the option to wait while the gameplay grinds to a halt or skip the wait by spending premium currency.

For example, the game Hay Day has a gameplay loop where players must wait for a set amount of time before being allowed to progress. Alternately, the player can spend units of the premium currency Diamonds to skip the wait and get on with the game.

Similarly, players can run out of "lives" in the popular mobile game Candy Crush Saga. When this happens, there is a waiting period to recharge, which can be circumvented by purchasing the premium currency Gold Bars. Additionally, players can spend Gold Bars to boost performance in the game.

The option to bypass parts of the gameplay loop (such as grinding) by using real-world money creates specific financial incentives for publishers. When one of the objectives is to make players spend real money in the game, publishers are incentivized to make certain portions of the game less enjoyable, motivating players to pay to skip those sections.

If the game includes quick and steady progression for new players before reaching the paywall, it is exploiting the cognitive bias known as the sunk-cost fallacy (which, as stated earlier, is the tendency to keep going once one has invested time or money into something). In a video game environment, this could mean that a player who has already spent money and/or many hours in the game will be more likely to keep playing (and paying) once they hit the paywall. This creates a strong incentive to purchase premium virtual currencies to progress rather than grinding or simply abandoning the game. Publishers can exploit the sunk-cost fallacy to make players purchase more premium currency.

Game: Assassin's Creed Valhalla

Publisher: Ubisoft

Premium virtual currency: Helix Credits

While the "pay to skip" mechanism has primarily been a phenomenon in free-to-play mobile games, where the player may have to wait many hours to progress, it has also emerged in full-priced single-player games. For example, the game Assassin's Creed Valhalla includes "permanent boosts" that can be purchased for the game's premium currency Helix Credits. These boosts increase the speed of progression, allowing players to become more powerful in the game at a quicker pace.



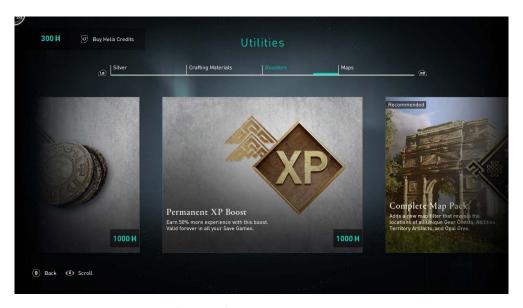


Figure 18: Assassin's Creed Valhalla (07.07.2023)

IS IT LEGAL?

Children are granted strong legal protection under the UCPD, ⁴⁵ the framework of which protects them from direct exhortation. Marketing in games that are commonly played by children needs to be adjusted accordingly.

Video games are supposed to be entertaining and engaging. The game typically has loops of gameplay that is recognizable between games in the same genre. Such gameplay usually revolves around completing objectives or competing against other players.

Not all games are enjoyable all the time, and sometimes the player must do tasks of a repetitive nature. When games demand that the player complete repetitive tasks, this might be a result of poor gameplay design or a way of boosting the hours needed to complete the game. However, with monetization in mind, the publishers might design boring or repetitive sections into the game and then offer the player the possibility to buy their way out of that part of the game.

This type of bait-and-switch strategy on behalf of the publishers might in some cases be a form of misleading or aggressive marketing. The player has invested time—and often money—into the game and is partly met with a deliberately repetitive product. The repetitiveness is only there to incentivize the player into spending more money to progress in the game.

When this type of game design is used in games made for children, or games usually played by children, paywalls and grinding as a way of incentivizing spending will easily become direct exhortation toward the child who is playing. This is further exacerbated when the transition between game and store is seamless.



Seamless game-to-store transition

Game: Township **Publisher:** Playrix

Premium virtual currency: Cash



Figure 19: Township (pop-up)

In order to push the player to spend money, many games are designed to present the in-game store at any opportunity. If the in-game store is unintrusive or does not show up during gameplay, players are not as pressured to spend money.

In the popular mobile game **Township**, the player is seamlessly taken from the game to the store when the premium currency runs out.

The game is a farming simulator and city-builder, where the gameplay loop that revolves around waiting for crops, animals, and other projects to complete growing, breeding, building, etc. The timers are both short and long, and the game employs a comprehensive pay-to-skip mechanism paid for by premium virtual currency.

If players want to skip the wait for in-game tasks to complete, they must use the premium currency *Cash*. If the player runs out of *Cash*, the player is shown a window asking if they "would like to add more *Cash*."

The store is then presented, and the consumer is shown different bundles of premium virtual currency.



Figure 20: Township (store)

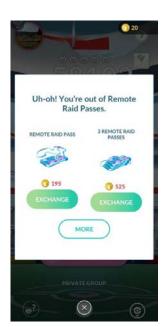


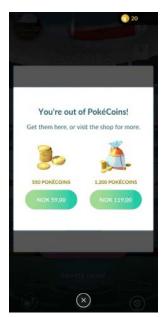
Game: Pokémon Go **Publisher:** Niantic

Premium virtual currency: PokéCoins

In the location-based mobile game **Pokémon Go**, several in-game items are available for purchase using the premium currency *PokéCoins*. These items are required to take certain actions in the game, such as entering "raid events" from a distance. Such items and *Coins* are also given out to players as part of the game, but at a very slow rate.

Players who attempt to take actions without having the necessary items are taken directly to a screen where *Poké-Coins* can be spent to purchase (or "exchange") more items. If the player has no *Coins*, they are redirected to the in-game shop to purchase more.





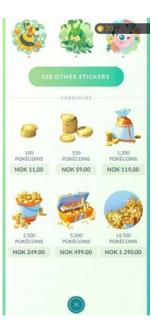


Figure 21: Pokémon Go (09.04.2024)

IS IT LEGAL?

Children are granted strong legal protection under the UCPD,⁴⁶ the framework of which protects them from direct exhortation. Marketing in games that are commonly played by children needs to be adjusted accordingly.

When the publisher designs an automatic transfer from the in-game environment to the store, the marketing might be a direct exhortation to children, which is banned in the UCPD. The seamless transition between playing and paying might quickly become an unfair commercial practice, especially in games designed for or generally played by children.

The same results were found in a report made by the Swedish Consumer Council.⁴⁷



Pay-to-win

In multiplayer games where players compete against each other, players can sometimes purchase premium currencies and spend them on in-game purchases to gain in-game advantages against their opponents. This is commonly called "pay-to-win" and is a controversial practice because it allows players with the resources and willingness to spend money to quickly gain the upper hand against other players, who may then feel compelled to spend money to keep up.

Game: Clash of Clans **Publisher:** Supercell

Premium virtual currency: Gems

The mobile game **Clash of Clans** allows players to spend the premium currency *Gems* to speed up gameplay. As the player competes against others, the race to compete provides a strong incentive to purchase more currency. Competitors wanting to keep up will also be incentivized to spend money, and so on. This creates a cycle of spending where the only winner is the publisher.



Figure 22: Clash of Clans (06.07.2023)

In the football game **FC Sports 24**, players earn a small number of *Coins* as they play the game. These *Coins* can be used to purchase in-game items, such as players, kits, or loot boxes. As demonstrated in the Norwegian Consumer Council report "Insert Coin," the process of grinding for *Coins* to obtain the best players without purchasing premium currency would take thousands of hours.⁴⁸

As described above, the endless grinding to earn *Coins* can be skipped by purchasing the premium currency *FC Points*, which can be used to buy loot boxes. Players who purchase *FC Points* to open loot boxes may obtain better in-game items faster (although this may also be a slow process due to exceedingly low probabilities⁴⁹), which gives them a competitive advantage.



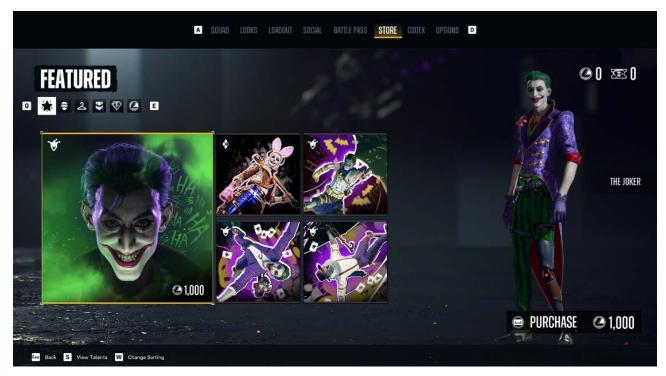


Figure 23: Suicide Squad: Kill the Justice League (marketing The Joker)

When players can purchase premium currencies to gain in-game advantages, this creates a race to the bottom (from the player perspective) or to the top (from a business perspective).

Game: Suicide Squad: Kill the Justice League

Publisher: Rocksteady Studios

Premium virtual currency: LuthorCoin

In the 2024 action-adventure shooter game **Suicide Squad: Kill the Justice League**, you can unlock the cartoon supervillain the Joker as a playable character. The game was criticized for its lack of content and story, as well as its requirement to grind to unlock the Joker. The player needed to do some repetitive missions to unlock this character. There was, however, an easier way.

Instead of playing the game to earn the Joker, you could pay your way to this playable character. The price for the Joker is 1,000 premium virtual currencies (Luthor Credits), or \$9.99 USD.

To pay for the Joker, the player skips a part of the game they already purchased. This is a combination of pay-to-win and a concept that might be called pay-not-to-play.



IS IT LEGAL?

A "pay to win" mechanism may be unfair from the point of view of the players but is unlikely to be illegal by itself. The Digital Content Directive constitutes baselines for conformity for any digital content, including video games.

This Directive should establish common rules on certain requirements concerning contracts between publishers and consumers for the supply of digital content or a digital service.

Consumers have a clear expectation when purchasing a game that it is balanced and that the competitors are on an even footing. When this is not the case—in effect, when your competitors have unfair advantages due to having paid to win—the game might not be in compliance.

The consequences of a game lacking compliance entail that the publisher either remedies the problem via updates or refunds the consumer.



Inflated values

The abstract nature of premium virtual currencies means that their stated ingame values and exchange rates are often entirely arbitrary. This sometimes leads to in-game economies where the values of different currencies are wildly inflated. It then becomes almost impossible for players to understand what something costs in premium and other virtual currencies, obscuring the real money cost.

Game: Roblox

Publisher: Roblox Corporation **Premium virtual currency:** Robux

In addition to obscuring costs, such inflation may also psychologically entice players to purchase premium virtual currency by framing the purchase as providing greater value. For example, the popular game **Roblox** (which boasts over 150 million active monthly users, many of whom are children), wildly inflates its in-game economy.

Roblox is a game that also serves as a sort of gaming platform where players can create and play a large variety of mini-games, which may have their own in-game currencies. At the time of testing, one of the most popular mini-games in Roblox called Pet Simulator used the primary currency Diamonds to purchase in-game items. Diamonds can be accumulated by playing the game, or they can be purchased with the game's premium currency Robux.



Figure 24: Shop in the mini-game "Pet Simulator" in Roblox (14.03.2023)



The following calculation shows that it is difficult, if not impossible, to understand the real value in this game.

To open an in-game bank account, the player must earn 7.5 million *Diamonds*. During one hour of play, we amassed 40,000 *Diamonds*, indicating that it would have required approximately 187.5 hours of gameplay to gather enough *Diamonds* to purchase the bank account.

Players who do not want to spend nearly 200 hours grinding have the option to purchase bundles of *Diamonds* in the in-game store. These bundles come in different sizes. The "Best Value" option is a bundle of 50,000,000,000 (50 billion) *Diamonds*.

This bundle costs 4,500 *Robux*, which equals around €94. The exchange rate becomes absurd if a player is purchasing one of these "Best Value" bundles of *Diamonds* by spending *Robux*. At the time of testing, the exchange rate between Euros and *Diamonds* via *Robux* was incomprehensibly low. Written in decimal numbers, each *Diamond* costs €0.00000000188.⁵¹

As mentioned above, the use of layered economies with several types of ingame currency makes it difficult to understand the actual monetary cost of ingame purchases. With the wild inflation* of ingame currency, where units of currency are sold and spent in a magnitude of tens of billions, it becomes almost impossible to understand what anything actually costs. This is even more problematic in a game such as **Roblox**, which is mainly targeted at and played by children.

Game: Grand Theft Auto Online **Publisher:** Rockstar Games

Premium virtual currency: Shark Cash

Cards, \$

The online multiplayer game **Grand Theft Auto Online** stands out as a game that to some degree emulates a "real-world" setting. As a part of this setting, the in-game currency, which can be earned through grinding or bought as part of the premium currency *Shark Cash Cards*, is simply called \$. This makes things particularly confusing for players who want to purchase the ingame currency. The player exchanges real money for *Shark Cash Cards*, which include different amounts of in-game \$.

This is a less inflated example where the in-game currency *GTA* \$ still operates on a wildly inflated conversion rate compared to real-world dollars. As shown in the screenshot above, players can purchase *Shark Cash Cards* containing GTA \$ 250,000 for €3.99, up to *GTA* \$10,000,000 for €74.99.

If a GTA Online player wants to purchase the XA-21 hyper car from the in-game car dealer, the price varies depending on what bundles of premium virtual currency are purchased.

^{*} It is not actual inflation. It seem like the publisher just added loads of zeroes to cause confusion.



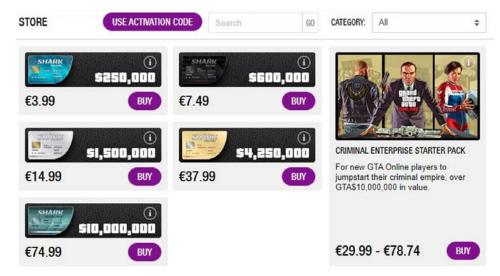




Figure 25: GTA Online—the price for the XA-21 hyper car at the in-game car dealer

The XA-21 hyper car is priced at *GTA* \$2,375,000, which ranges from €38 to €18 depending on which bundle is purchased.

The use of inflated premium virtual currencies exacerbates the difficulties of assigning real monetary value to the transaction, making it almost impossible for consumers to keep track of the real cost of purchases.⁵²

We all have biases when it comes to decision making and tend to use cognitive shortcuts where possible. Inflated values may exacerbate cognitive short-sightedness in consumers, resulting in a focus during decision making that is solely on information that is immediately available.

The consequence is that the consumer does not slow down to try to convert virtual currency into real money.⁵⁴ Without being shown the real monetary cost of the in-game purchase, it becomes difficult to ascertain what the purchase is actually worth.

IS IT LEGAL?

The use of inflated values of premium virtual currencies makes it impossible for the consumer to calculate the real value of the premium currency available. This is exacerbated if the consumer can acquire one or more of the premium virtual currencies by playing the game as well.

To only provide price information in fluidly priced virtual currency before the conclusion of the contract constitutes a breach of the precontractual information requirements under the CRD and a misleading omission under the UCPD.

When the price is used to confuse the consumer, the practice quickly becomes illegal under European consumer law. The illegality is even more specific in games targeted at and played primarily by children. The fact that the value of premium virtual currencies can be changed at the publisher's discretion only makes this problem even more acute.



Currencies tied to loot boxes

Premium virtual currencies are often used to purchase loot boxes. Loot boxes are "mystery packages" that contain randomized, in-game items. While they can sometimes be earned through regular gameplay, most loot boxes are offered for sale in exchange for premium currency.

While loot boxes and premium currencies are not exclusively interlinked, the abstraction of premium virtual currencies serves to obscure the cost of the loot boxes. As noted above, this makes it more difficult for players to know how much money they spend.

Game: Call of Duty Mobile **Publisher:** Activision

Premium virtual currency: COD Points

the player has enough Credits, they can spend them on ingame items or more loot boxes. PROBABILITY OF REWARDS CREDITS provides an in-depth analysis of these issues.55 50 Odds 5.00 75 Odds 4,001 CREDITS CREDITS

Figure 26: Call of Duty Mobile (22.11.2023)

100 Odds 3.505

CREDITS

CRATE DETAILS

Loot boxes as a concept has been heavily criticized for exploiting consumer vulnerabilities, targeting children with gambling-like mechanisms, using aggressive marketing practices, and more. The Norwegian Consumer Council has published a report that

In the game Call of Duty Mobile, players can purchase bundles of the premium currency COD Points. These points

can be spent on Credit Crates, which are loot boxes. The loot

skins, as well as the in-game primary currency Credits. Once

boxes can contain in-game items, such as weapons and



125 Odds 3.00

CREDITS

Figure 27: Call of Duty Mobile (22.11.2023)



IS IT LEGAL?

Loot boxes in general are not yet illegal, but the way they are constructed and marketed might be. If the publishers use probability in their marketing, it must be done with language and numbers that do not mislead the consumer.

Numerous games have systems that grant the player guaranteed content if a given number of loot boxes are opened without any significant reward.

In-game mechanics like this are called mercy systems, as the games show "mercy" by rewarding players who have persevered in their spending even when facing losses. ⁵⁶

Players often discuss how to beat the probability, mercy systems and other random events when lootboxes are involved.⁵⁷

Discussions like this show how probability and randomness biases come into play. The use of designs that manipulate players based on their biases could constitute unfair commercial practices. It is almost impossible to determine whether a loot box will hold true to its advertised probability. This also leads to difficulties when it comes to enforcement.

When children or other vulnerable consumers are targeted by marketing, the unfairness threshold is lowered. Children have a reduced ability to exert self-control and have more difficulty understanding valuation and probabilities in games.

This makes children more vulnerable to unfair game design than adults, as well as to marketing that obscures information or manipulates the player into making a purchasing decision.



No refunds

Premium currencies are bound by terms and conditions that set out the terms of how they may be used, the rights of the consumer, and the rights of the company selling the currency.

Such terms are often blatantly unfair to the consumer, by giving the company a number of rights to take away any purchased currency at its discretion and depriving consumers of their basic rights.

One common term is to exclude players from requesting refunds once a premium currency has been purchased. As described above, currencies are usually sold in bundles of predetermined amounts. Any surplus currency after the player purchases the in-game items they want is essentially worthless.

This arguably creates a compulsion loop,⁵⁸ where players need to purchase more bundles to be able to spend their surplus, which only generates new surplus.

Added to this is the industry's opinion that spending premium virtual currencies on in-game items is not a transaction, and thus not covered by consumer protection laws. This is faulty logic and a legally dubious conclusion from the industry. We will return to this problem toward the end of the report.

Game: PUBG Mobile

Publisher: Krafton, Tencent, VNG Games

Premium virtual currency: UC

The game **PUBG Mobile** asks players to accept a user agreement that states that "goods and game currency have no monetary value and cannot be redeemed for cash. [...] [V]irtual goods and game currency are licensed, not sold."

This statement is clearly in place to protect the publisher, even though certain **PUBG** goods can be redeemed for real-world value on independent market sites, such as Steam.⁵⁹

This is hidden inside a lengthy user agreement pop-up, which is particularly difficult to read on a phone screen. It is also impossible to enter or play the game without accepting these terms.

If the player has leftover currency and wants to stop playing the game or if their account gets locked or banned, the currency is lost.

As many games are required to be online to function, they are also dependent on having access to actively maintained servers. This incurs a continuous cost to the game's publisher, which is sometimes used to justify the inclusion of in-game purchases. If the publisher decides that the cost of maintaining the



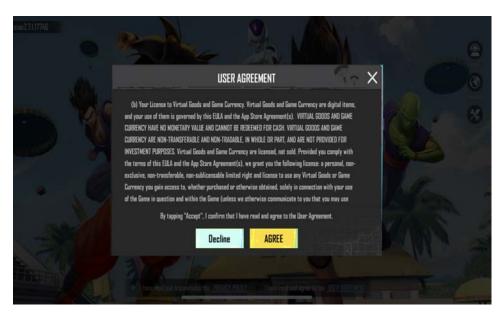


Figure 28: PUBG Mobile (14.07.2023)

game is too steep, they may shut down the server, thus killing the game. When this happens, players lose all in-game purchases and premium virtual currencies that they may have purchased, usually without the right to a refund.

Game: Harry Potter: Wizards Unite

Publisher: Niantic

Premium virtual currency: Gold

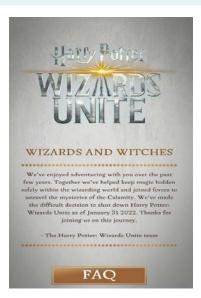


Figure 29: Message to Harry Potter: Wizards Unite players.

In 2022, the publisher Niantic shut down its mobile game Harry Potter: Wizards Unite. The game had been available since 2019 and offered a variety of in-game purchases. With the announcement of the impending shutdown, Niantic announced that any purchased in-game currencies would not be refunded. It clearly does not make much sense to spend the currency in-game, as any purchases would be lost once the game shut down. The problem of virtual currency losing value must be addressed when the game is launched. Offering a refund of the currency left just before the servers shut down is too late.

An obvious legal consequence of this shutdown is that the premium virtual currency remaining in the consumers account should be refunded. That did not happen.

In addition to losing any in-game currencies and purchases, the shutting down of games generally places players in an awkward position. It is impossible for a player to know when a game might be shut down, especially as this often hinges on how much money the publisher makes.



In practice, you do not know the underlying risk of the game being shut down when spending money on it. Both large and small publishers have this risk, even if larger publishers have less risk of bankruptcy. A publisher does not need to go bankrupt for servers shutting down; a corporate decision based on the game not earning enough revenue is sufficient.

IS IT LEGAL?

The terms and conditions of video games often allow game producers to cancel some or all features of the game, including the premium virtual currencies.

Unbalanced terms like this are likely to be unfair since they are obliging the consumer to fulfil all their obligations, even when the seller does not perform theirs. In accordance with European contract law, unfair contract terms are not binding for the consumer.⁶¹

The courts, and possibly also the complaint boards, are obliged on their own initiative (ex officio) during the handling of a case to assess whether contract terms in agreements between businesses and consumers are unfair and whether they must be set aside. ⁶²

While all digital services are technically licensed to the consumer rather than owned, it is questionable whether this is clear to the player. Strong enforcement on unfair contract terms is needed to protect the consumer in this field. Enforcement should also include the ex officio application of European contract law by the courts and complaint handling bodies.



The consumer regulations in Europe offer broad protection and cover all consumer markets including the video game industry. There is no specific legislation on in-game and in-app sectors at the EU level.⁶³

The legal frameworks in the UCPD, CRD and Unfair Contract Terms Directive (UCTD) remain fully applicable to both sectors.

However, although parts of EU legislation are relevant to the sale and use of premium virtual currencies in video games, new legislation might be needed to reduce the potential for consumer harm.

THE UNFAIR COMMERCIAL PRACTICES DIRECTIVE

The UCPD is a relevant EU tool to tackle problematic practices in video games and apps, including the lack of transparency about the actual costs of in-game and in-app premium currencies and purchases.

Under the UCPD, game or app publishers offering in-game or in-app purchases must comply with the information obligations defined in Article 7, which are considered material information to allow consumers to make a fully informed transactional decision.

Therefore, before any invitation to purchase, publishers should provide the main characteristics of the products or services and, among other things, must provide the prices of virtual items (in this case premium virtual currencies), clearly and prominently in real and local money. The European Commission also confirms this in the updated UCPD guidelines.⁶⁴

When offering in–game purchases, publishers must ensure that they comply with the information obligations in Article 7 UCPD and the CRD. 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. If the price cannot reasonably be calculated in advance, the publisher should indicate the manner in which the price is to be calculated. The prices of virtual items must be clearly and prominently displayed in real currency when the commercial transaction takes place. ⁶⁵

Despite this interpretation by the European Commission in the guidelines, there is no consensus between enforcers on in-game and in-app (premium) virtual currencies, nor on how and when the information about the price should be displayed to consumers. There is a need for further clarification by the Commission, to make enforcement a more potent tool.



THE CONSUMER RIGHTS DIRECTIVE

The CRD lists mandatory precontractual information that should be given to consumers for distance contracts.

Before the consumer is bound by a distance contract, or any corresponding offer, the publisher must provide the consumer with the total price of the services, in a clear and comprehensible manner. In cases where the nature of the goods or services is such that the price cannot reasonably be calculated in advance, the way the price is to be calculated must be made clear. The CRD also states that publishers must provide consumers with mandatory precontractual information, as defined in Article 6(1), in an appropriate, plain, and intelligible manner adapted to the mode of distance communication. ⁶⁷

INDUSTRY SELF-REGULATION

Industry self-regulation has generally proven ineffective to protect consumers. The use of voluntary transparency measures like PEGI⁶⁸ will not be sufficient to offset the consumer harm illustrated in the examples in this report. For instance, the presence of in-game purchases like premium virtual currencies in the video game does not trigger specific age ratings, exposing young consumers to purchasing incentives.

The Swedish consumer organization Sveriges Konsumenter published a report in 2019 looking at in-app purchases marketed toward children. Among 240 of the most popular apps tested, 145 were marketed toward children. Only 26 did not include in-app purchases, highlighting the scale of children's exposure to in-game and in-app purchases.⁶⁹

Strict regulation and strong enforcement are needed to ensure that the consumers are protected from practices that strongly manipulate their economic behavior. The European authorities need to use the "vulnerable consumer" threshold to a greater extent to assess practices, given the enormous number of gamers that are children and teenagers.

IS THE USE OF PREMIUM VIRTUAL CURRENCY A SEPARATE PURCHASE?

The lack of price transparency for premium virtual currencies is due to the lack of clarity regarding the status of in-game and in-app purchases with premium in-game and in-app virtual currencies.

The legal status of virtual goods in video games has been unclear for a long time.⁷⁰ Purchases made using premium virtual currencies are generally regarded only as an exercise of a license granted to consumers.⁷¹ This interpretation excludes the application by professionals of all relevant consumer



protection, including the CRD, UCPD, legal guarantees and national transpositions European consumer law.

If you use premium virtual currency to make the purchase, no legal protection applies—according to the video game industry.

Such practices would not be tolerated in any physical market. If a grocery or clothing store engaged in similar practices to those of the video game industry, it would undoubtedly—and quite rapidly—be deemed unlawful.

The coordinated action taken by the CPC Network against TikTok, subsequent to the BEUC's 2021 external alert, strongly suggests that the industry cannot maintain that the use of premium virtual currencies exists in a legal vacuum.

The CPC authorities assert that consumers should benefit from (a) full transparency about the price of virtual gifts before sending them to content creators, (b) right of withdrawal, and (c) guaranteed rights under the Digital Content Directive. This appears to be the case when the gifts are purchased buy TikTok's own *Coins*. The same should be applied to video games, as the legal framework is the same as with TikTok's *Coins*.

Uncertainty remains as to whether consumer rights apply to transactions made using premium virtual currency. Price information and right of withdrawal under the CRD or legal guarantees under the Digital Content Directive are examples where the legal basis might still be uncertain. Similar concerns have been raised by Dutch consumer authorities.⁷²

The Digital Content Directive clarified a part of this problem in the following:

Digital representations of value such as electronic vouchers or e-coupons are used by consumers to pay for different goods or services in the digital single market. Such digital representations of value are becoming important in relation to the supply of digital content or digital services and should therefore be considered as a method of payment within the meaning of this Directive. Digital representations of value should also be understood to include virtual currencies, to the extent that they are recognised by national law. Differentiation depending on the methods of payment could be a cause of discrimination and provide an unjustified incentive for businesses to move towards supplying digital content or a digital service against digital representations of value.

In other sectors, where representations of value are used, consumers conclude contracts every time they pay with such abstractions, without being deprived of their consumer rights and other applicable regulations.

This is the case of contracts concluded for air travel with miles or other airline credits, tokens at festivals, and those determined with points on loyalty cards.



When the consumer uses a coupon to buy a carton of milk or airline miles to purchase an airline ticket, consumer regulations apply. The Flight Compensation Regulations still apply for tickets issued under a frequent flyer program, even if no money changes hands.

In our interpretation of the European and national regulations, it should be impossible to circumvent fundamental consumer protection through transactions involving premium virtual currencies as intermediate steps.

One of the core objectives of consumer law is to provide consumers with all essential information before concluding contracts. If it is easy to circumvent the legal framework, the law is not working correctly.

The entire consumer law framework applies to contracts concluded with digital representation of value. We are of the opinion that the same is the case for in-game and in-app purchases.

This interpretation will likely be challenged by the video game industry, and the EU Commission should incorporate this in the interpretive guidelines for the Digital Content Directive, to remove all doubts.

WHAT IS NEEDED?



As one of the largest entertainment industries on a global scale, the video game industry has largely evaded regulatory scrutiny. The sheer size of the industry and the enormous number of consumers it affects should place it high on the agenda for both enforcement agencies and legislators.

As with any industry, video game companies first and foremost aim to make money. The companies need to keep the players engaged—and spending—and employ immersion tactics to archive this. However, intense immersion makes consumers susceptible to unfair commercial practices and less likely to understand that they are being manipulated. When children are targeted, the problematic aspects worsen.

Deeply immersed consumers may suffer from biases when making economic decisions. They may have a strong focus on the game but are unlikely to be protective or aware of their consumer rights, which is likely to result in economic consumer detriment.⁷⁵

Legislators and enforcers need to accept the consumer vulnerability that stems from manipulation coupled with immersion in the video game industry. New regulations and more vigorous enforcement are necessary to reduce consumer detriment in the video game market.

To address the problematic issues highlighted throughout this report, the European Commission should ban the use of premium in-game currency or at least enforce the existing regulations to ensure that price information is provided in real-world currency before the transaction begins. Enforcement of convertibility of premium virtual currency back to money is also something that could be explored further.

In line with the BEUC's position paper, we call on the European Commission to

- introduce better consumer protection "by default" and "by design" in-games and inapps,
- allow consumers to avoid algorithmically driven decision making that aims to influence their economic behavior or the value of in-game contents (including the value of premium virtual currencies)
- guarantee the same consumer rights in in-game and in-app transactions as in any monetary transactions.

This can be done by new regulations or by combining regulations and new interpretive guidelines.

A similar recommendation was also made by the Dutch Authority for Consumers and Markets, in its response to the Digital Fairness Fitness Check of EU Consumer Law: "Therefore, it should be considered whether in-game and in-app currencies serve consumers in any way. These virtual currencies should therefore be prohibited."

Recommendations

The issues highlighted in this report call for quick and decisive action from lawmakers to protect consumers from potential and ongoing consumer harm. We offer the following recommendations to regulate the use of in-game and in-app premium virtual currencies and to better enforce existing EU legislation in the video game and platform sectors.



We believe that the following new consumer policies on video games are needed:

- · A ban must be instituted on the sale of premium virtual currencies in video games.
- Consumer protection must be implemented by stipulating how the default settings in games and digital services should be, for example by disabling mechanisms meant to push consumers into spending money.
- A ban must be instituted on hidden algorithmically driven systems in video games that aims to influence the economic behavior of consumers.
- Regulators must enforce current consumer law to eradicate illegal practices in the video game industry.

If a ban is not considered, European consumer law should establish strict transparency requirements. This should consist of the following:

- Developers must be obligated to provide an equivalence in real currency clearly and transparently next to the premium virtual currency before each transaction.
- Amend the Consumer Rights Directive to clarify that a right of withdrawal applies also when buying virtual items, including premium virtual currencies.
- Consumers should be allowed to choose the amount of virtual currency they wish to buy.

Other policies should also be considered:

- If in-game and in-app premium currencies remain authorized, the Commission should conduct a behavioral study as part of the Digital Fairness Fitness Check.
- Restrict how consumers are automatically redirected to the "in-game" shop of virtual currency.
- Ban the use of paywall design in video games.
- Separate the different types of (premium) virtual currencies to ensure that consumers fully understand how much they spend in games.
- Ban in-game advertising for premium virtual currency in games played by people under 18.



ENDNOTES

- 1 https://ec.europa.eu/info/law/ better-regulation/have-your-say/ initiatives/13413-Digital-fairness-fitness-check-on-EU-consumer-law_en
- 2 https://www.engadget.com/2006-04-04bethesda-responds-to-oblivion-backlash.html
- 3 Lentis: The Social Interface of Technology (ISBN: B004SHJBNI)
- 4 https://www.ign.com/articles/2010/11/18/ is-smurfs-village-a-rip-off
- 5 https://www.statista.com/statistics/217474/electronic-arts-ea-ultimate- and https://www.statista.com/ statistics/274761/electronic-arts-ea-extra-content-revenues/
- 6 https://www.forbes.com/sites/insertcoin/2018/04/18/fortnite-is-earning-1ma-day-on-mobile-players-are-spendingmore-time-with-it-than-tinder/
- 7 https://en.wikipedia.org/wiki/Digital_cur-rency
- 8 European Banking Authority. 4 July 2014, page 5.
- 9 Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC (so called eMoney Directive).
- 10 BEUC: The great illusion (2024)
- 11 For example, grey markets exist in which consumers buy and sell virtual items. One such example is "skin gambling," where consumers can spend real money to try to win in-game cosmetic items from other players. Such practices are usually in breach of the games' terms and conditions. https://www.esports.net/wiki/guides/skin-gambling/
- 12 https://www.egdf.eu/documentation/7-balanced-protection-of-vulnerable-players/consumer-protection/ in-game-currencies-2023/

- 13 https://www.pocketgamer.biz/mobile-mavens/59105/is-the-rise-of-engagement-focused-in-game-currenciesconfusing-player/
- 14 Predatory Monetisation? A Categorisation of Unfair, Misleading and Aggressive Monetisation Techniques in Digital Games from the Player Perspective, October 2021, Journal of Business Ethics 181(3):1-17, DOI: 10.1007/s10551-021-04970-6, last consulted on 14 November 2023.
- 15 Lehdonvirta, V. (2009). Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. Electronic Commerce Research, 9(1), 97-113. https://doi.org/10.1007/s10660-009-9028-2
- 16 Castronova, E., Williams, D., Cuihua, S., Ratan, R., Li, X., Yun, H., & Keegan, B. (2009). As real as real? Macroeconomic behavior in a large-scale virtual world. New Media & Society, 11(5), 685-707. https://doi.org/10.1177/1461444809105346
- 17 Robertson, Matthew, Freemium Pricing; or, the Whale(s) (August 13, 2019).
 Available at SSRN: https://ssrn.com/abstract=3450415 or http://dx.doi.org/10.2139/ssrn.3450415
- 18 https://link.springer.com/article/10.1007/ s10551-021-04970-6
- 19 https://www.gamedeveloper.com/busi-ness/new-insights-into-the-spending-patterns-of-whales
- 20 Consumer protection in online video games: a European single market approach (EU-Commission): https://www.europarl.europa.eu/doceo/document/TA-9-2023-0008_EN.pdf
- 21 Colin M. Gray, Nataliia Bielova, Cristiana Santos, and Thomas Mildner. 2023. An Ontology of Dark Patterns: Foundations, Definitions, and a Structure for Transdisciplinary Action. 1, 1 (September 2023), 31 pages. https://doi.org/10.1145/nnnnnnn. nnnnnnn
- 22 The Norwegian Consumer Council has published several reports looking at deceptive design in digital services. https://

- www.forbrukerradet.no/dark-patterns/
- 23 https://jurnal.itpln.ac.id/petir/article/ view/1151/1043
- 24 https://core.ac.uk/download/ pdf/301007767.pdf
- 25 Tomic, 2019. quoted in Katerina Zhirkova & Nermina Saric, Cushioning the Pain of Paying through Microtransactions in Online Gaming, MSc in Strategic Marketing Management, BI Norwegian Business School Oslo, Norway, 2020. Available here. Last consulted on 14 November 2023.
- 26 https://www.metacritic.com/browse/ games/score/metascore/all/all/filtered?sort=desc&view=detailed
- 27 https://www.forbes.com/sites/paultassi/2023/08/05/baldurs-gate-3s-statement-on-microtransactions-warms-theheart/
- 28 https://www.pcgamer.com/games/rpg/ the-dragons-dogma-2-microtransactions-are-real-and-bafflingly-silly-sincenearly-all-of-them-can-be-found-inthe-game-without-too-much-trouble/
- 29 https://thedecisionlab.com/reference-guide/psychology/pain-of-paying
- 30 https://biopen.bi.no/bi-xmlui/bitstream/ handle/11250/2687988/2638707.pdf?sequence=3&isAllowed=y
- 31 See Katerina Zhirkova & Nermina Saric, Cushioning the Pain of Paying through Microtransactions in Online Gaming, MSc in Strategic Marketing Management, BI Norwegian Business School Oslo, Norway, 2020. Available here. Last cvonsulted on 14 November 2023.
- 32 See Lapuz & Griffiths, 2010 and Raghubir & Srivastava, 2008, quoted in the IMCO study "Loot Boxes in Online Games and Their Effect on Consumers, In Particular Young Consumers," available here.
- 33 See Zendle et al., 2020a, quoted in the IMCO study "Loot Boxes in Online Games and Their Effect on Consumers, In Particular Young Consumers," available here.
- 34 In this regard, see Katerina Zhirkova & Nermina Saric, Cushioning the Pain of



- Paying through Microtransactions in Online Gaming, MSc in Strategic Marketing Management, BI Norwegian Business School Oslo, Norway, 2020. Available here. Last consulted on 14 November 2023.
- 35 https://www.acm.nl/system/files/ documents/acm-reactie-op-eu-fitness-check-on-digital-fairness_0.pdf (November 2023)
- 36 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 paragraph 4.2.9
- 37 Article 6(a) of the CRD.
- 38 Article 7(4) of the UCPD.
- 39 The CPC Network consists of authorities responsible for enforcing EU consumer protection laws to protect consumers' interests in EU and EEA countries.
- 40 https://commission.europa.eu/system/ files/2022-06/2022.06.15_tiktok_updated_commitments.pdf. See Point 28.
- 41 See BEUC paper: TikTok Without Filters (2021), available here.
- 42 https://kotaku.com/diablo-4-iv-season-malignant-battle-pass-platinum-1850671621
- 43 See TikToKs commitments following the CPC complaint by BEUC and its members.
- 44 See TikTok's commitments following the CPC complaint by BEUC and its members.
- 45 UCPD article 5 (3), annex 1 no. 28.
- **46** UCPD article 5 (3), annex 1 no. 28.
- 47 Sveriges Konsumenter, Ingen Leke (2024)
 https://www.sverigeskonsumenter.se/
 media/bmaezcoy/ingen-lek.pdf
- 48 https://www.forbrukerradet.no/reporton-loot-boxes-insert-coin/
- 49 Ibid.
- 50 Tassi, Paul (March 29, 2024). "Suicide Squad: Kill The Justice League's Joker Season Is Unbelievably Bad." Forbes. Retrieved April 2, 2024.
- 51 ... or 1.9-9 (1.9 to the minus ninth power)52 See Donnelly, 2018, Gilardoni, Ha &

- Ringland, 2014, quoted in Katerina Zhirkova & Nermina Saric, Cushioning the Pain of Paying through Microtransactions in Online Gaming, MSc in Strategic Marketing Management, BI Norwegian Business School Oslo, Norway, 2020. Available here. Last consulted on 14 November 2023.
- 53 Thinking, Fast and Slow (Daniel Kahneman), 2011
- **54** See Huang & Lin, 2017; and Hsee et al., 2003
- 55 https://www.forbrukerradet.no/report-on-loot-boxes-insert-coin/
- 56 https://raid-support.plarium.com/hc/enus/articles/4415727112722-Mercy-system
- 57 https://www.reddit.com/r/RaidShadowLegends/comments/17bgc29/mercy_system_on_ancientblue_shards/
- 58 Davidow, B. (2012). Exploiting the neuroscience of internet addiction. The Atlantic, 18.
- 59 https://steamcommunity.com/market/ search?appid=578080
- 60 https://kotaku.com/niantic-shuttingdown-pokemon-go-inspired-harry-potter-1847984292
- 61 See Council Directive 93/13/EEC of 5
 April 1993 on unfair terms in consumer
 contracts article 3(3) Annex 1 (1) letter o
- 62 This follows from the practice of the EU Court of Justice, see, among others, C-240/98 C-244/98 (Océano) and C-618/10 (Banco Español).
- 63 BEUC: The great illusion (2024))—update when done
- 64 See UCPD Guidance 4.2.9. on Gaming.
- 65 https://commission.europa.eu/law/
 law-topic/consumer-protection-law/
 unfair-commercial-practices-law/unfair-commercial-practices-directive_en
- 66 Article 6(1)(e) of the CRD.
- 67 Article 8 of the CRD.
- 68 PEGI is short for Pan-European Game
 Information, is a European video game
 content rating system established to help
 European consumers make informed decisions when buying video games or apps

- through the use of age recommendations and content descriptor.
- **69** https://www.sverigeskonsumenter.se/ media/04jd5hfe/app-app-app.pdf
- 70 https://www.forbes.com/sites/oliverherzfeld/2012/12/04/what-is-the-legal-status-of-virtual-goods/?sh=720d86de108a
- 71 PUBG Mobile EULA: https://www.pubg-mobile.com/terms/en.html
- 72 https://www.acm.nl/system/files/documents/acm-reactie-op-eu-fitnesscheck-on-digital-fairness_0.pdf_
- 73 https://eur-lex.europa.eu/legal-content/ EN/TXT/?uri=celex%3A32004R0261
- 74 Hyde, R., Cartwright, P. Exploring Consumer Detriment in Immersive Gaming Technologies. J Consum Policy 46, 335–361 (2023). https://doi.org/10.1007/s10603-023-09544-9
- 75 Petrovskaya, E., Zendle, D. Predatory Monetisation? A Categorisation of Unfair, Misleading and Aggressive Monetisation Techniques in Digital Games from the Player Perspective. J Bus Ethics 181, 1065–1081 (2022). https://doi.org/10.1007/ s10551-021-04970-6
- 76 BEUC-X-2024-000 dd/mm/2024 (oppdater før publisering)
- 77 https://www.acm.nl/system/files/documents/acm-reactie-op-eu-fitnesscheck-on-digital-fairness_0.pdf, (2022), last consulted 13 November 2023.



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