

Joëlle Lötscher / Dennis Tobler / Anne-Sophie Morand

## Brave New World of NFTs

---

Non-Fungible Tokens (NFTs) sind nicht nur in der Kunstszene beliebt, sondern gewinnen aktuell beispielsweise auch im Hinblick auf das Thema Metaverse stark an Bedeutung. Ausserhalb von Fachkreisen sind die weiteren, vielfältigen Anwendungsbereiche von NFTs allerdings noch wenig bekannt. Sodann stellen sich beim Thema NFT zahlreiche, ungeklärte Rechtsfragen, welche eingehende Untersuchungen erfordern. Diese sind in diversen Rechtsgebieten zu finden, bspw. im Zivilrecht, dem Finanzmarktrecht und dem Immaterialgüterrecht. Der vorliegende Beitrag soll einen ersten Einstieg in die Welt der NFTs geben. Zudem erläutert die Autorenschaft ausgewählte Anwendungsfälle und ordnet NFTs in die bestehende Distributed-Ledger-Technology-Gesetzgebung ein.

---

Category of articles: Articles

Field of Law: IT and law, intellectual property law, capital market law

Citation: Joëlle Lötscher / Dennis Tobler / Anne-Sophie Morand, Brave New World of NFTs, in: Jusletter 23 January 2023

## Contents

- I. Introduction
- II. What are NFTs?
  - 1. The creation of digital originals
  - 2. Blockchain as NFT technology
  - 3. Benefits of NFTs
  - 4. Classification of NFTs in the existing token classification
    - 4.1. Payment tokens
    - 4.2. Asset tokens
    - 4.3. Utility tokens
- III. Legal challenges of NFTs
  - 1. Copyright violations
  - 2. Theft of NFTs
  - 3. Money laundering
  - 4. Wash trading
- IV. NFTs under the existing legal framework
  - 1. Switzerland
    - 1.1. Existing regulation for DLT
    - 1.2. Private law classification of NFTs
    - 1.3. Classification of NFTs under financial market law
    - 1.4. Intellectual property
    - 1.5. Tax
  - 2. A glimpse of European legislation
- V. Conclusion

## I. Introduction

[1] In March 2021, an artwork called «*Everydays: The first 5000 days*» by the digital artist *Beeple* was auctioned by the famous auction house Christie's for over 69 million US dollars.<sup>1</sup> *Beeple* has posted one digital picture on the online platform Tumblr almost every day since 2007. Years later, he assembled tiny pictures of them into a collage of 5,000.<sup>2</sup> Apart from the spectacular auction revenue for *Beeple's* collage, what made this auction exceptional was the unusual character of the auctioned object: a unique digital object that was transferred to the buyer as an ERC-721 token on the Ethereum blockchain.<sup>3</sup> Thus, not a physical artwork was sold but a «Non-Fungible Token» (NFT). Instead of money in currencies (e.g. US dollars), it was paid for with Ether – the cryptocurrency of the Ethereum blockchain, on which the transaction of the NFT took place. The sensational success of *Beeple's* NFT has led to an explosion of interest in NFTs. Hence, what started as a niche topic for crypto and gaming fans has in the meantime also aroused great interest beyond this particular community. The global NFT trading volume reached almost 13 billion US dollars by 28 December 2021. In 2020, the volume had only reached 33 million US dollars.<sup>4</sup>

---

<sup>1</sup> Christie's, «*Beeple's opus*», available at <https://www.christies.com/features/Monumental-collage-by-Beeple-is-first-purely-digital-artwork-NFT-to-come-to-auction-11510-7.aspx> (all websites last visited on 27 November 2022); Christie's, «*The first 5000 days*», available at <https://onlineonly.christies.com/s/beeple-first-5000-days/lots/2020>.

<sup>2</sup> *Ibid.*

<sup>3</sup> MICHEL JOSÉ RAYMOND, *Mises au point sur la notion de Non Fungible Token*, in: Jusletter 31 May 2021, para. 1; ELIANE SPIRIG, «*Kunst-Token*» – Eine anregende Tagung über Sinn und Unsinn der Blockchain-Technologie in der Kunstwelt, in: sic! 2022, p. 141.

<sup>4</sup> YOGITA KHATRI published on 28 December 2021, *The Block*, «*NFT trading volume surpassed \$13 billion in 2021*», available at <https://www.theblock.co/linked/128676/nft-trading-volume-surpassed-13-billion-in-2021>; Chain-

[2] In addition to *Beeple's* NFT, other well-known NFT sales have made headlines. *Grimes*, a Canadian pop musician, sold a series of short videos for 6 million US dollars. A clip of basketball star *LeBron James* changed hands for more than 200,000 US dollars. Twitter founder *Jack Dorsey* also auctioned off his first tweet as an NFT for 2.9 million US dollars.<sup>5</sup> Also, more and more musicians and influencers are interested in the NFT world, e.g. the US rock band *Kings of Leon* released a special edition of their new album as a limited NFT version.<sup>6</sup> Looking at the hype of NFTs, questions arise about the pros and cons. On the one hand, NFTs guarantee authenticity and limit copies. NFTs are investment and speculative objects – they can be bought and potentially resold just like classical art. On the other hand, there is increasing talk in the media that the NFT hype has become a veritable paradise for scammers, and that the sums involved in fraud run into millions. This can be challenging for courts and law enforcement. The purpose of this essay is to investigate the criticism aimed at NFTs and clarify the question of whether NFTs actually encourage new forms of online crime. The authors then also discuss the current legal situation of NFTs in Switzerland.

## II. What are NFTs?

### 1. The creation of digital originals

[3] While an artwork created in physical form is unique, meaning that possible copies can be distinguished from the original, digital creations can be copied easily and the copies are identical to the original. As a result, there has been no equivalent to the physical original in the sense of a «digital original» for computer data. This has put creators of digital art in a worse position because while in the case of physical art both the ownership of the embodied artwork can be sold and, in addition, the copyrights can also be licensed to third parties, creators of digital art had been limited to copyright commercialisation.<sup>7</sup> Even on online stock photography sites only copyright licenses to digital images are sold but not «ownership» of a JPG file. In short, a «digital original» has been missing until now. This has changed with the introduction of NFTs. With NFTs, it is possible to create a quantitatively limited *token* of any asset (digital or physical) and make it tradable – this creation process is called *minting*.<sup>8</sup> Thus, NFTs are unique digital assets

---

analysis, The Chainalysis 2021 NFT Market Report, available at <https://hkifoa.com/wp-content/uploads/2021/12/Chainalysis-NFT-Market-Report.pdf>, p. 2 ff.

<sup>5</sup> SAUMYA KALIA published on 15 March 2021, The Swaddle, «From Cat Memes to LeBron James's Dunks, NFT Art Is Selling At Record Prices. But What Is It?», available at <https://theswaddle.com/from-cat-memes-to-lebron-james-dunks-nft-art-is-selling-at-record-prices-but-what-is-it/>; TAYLOR LOCKE published on 22 March 2021, CNBC, «Jack Dorsey sells his first tweet ever as an NFT for over \$2.9 million», available at <https://www.cnbc.com/2021/03/22/jack-dorsey-sells-his-first-tweet-ever-as-an-nft-for-over-2point9-million.html>.

<sup>6</sup> SAM MOORE published on 12 March 2021, NME, «Kings Of Leon have generated \$2million from NFT sales of their new album», available at <https://www.nme.com/news/music/kings-of-leon-have-generated-2million-from-nft-sales-of-their-new-album-2899349>.

<sup>7</sup> RAEESEH CHOCHAN/JEANNETTE PASCHEN published on December 2021, ResearchGate, «What marketers need to know about non-fungible tokens (NFTs)», p. 2, available at [https://www.researchgate.net/publication/357160372\\_What\\_marketers\\_need\\_to\\_know\\_about\\_non-fungible\\_tokens\\_NFTs](https://www.researchgate.net/publication/357160372_What_marketers_need_to_know_about_non-fungible_tokens_NFTs); SIMON MACKENZIE/DIANA BÉRZIŅA, NFTs: Digital things and their criminal lives, *Crime, Media, Culture: An international Journal*, Volume 18 Issue 4, p. 2 f.

<sup>8</sup> FOTEINI VALEONTI et al., *Crypto Collectibles, Museum Funding and OpenGLAM: Challenges, Opportunities and the Potential of Non-Fungible Tokens (NFTs)*, *Applied Sciences*, 24 October 2021, Volume 11, p. 1 f.; RACHEL MARTIN, *ArtEssere*, «What Does it Mean to «Mint» an NFT and How Do You Do It?», available at <https://artessere.com/blog/37-what-does-it-mean-to-mint-an-nft-and-how-do-you-do-it/>; GWYNETH IREDALE published on 24 March 2021, 101 Blockchain, «The Difference between Fungible and Non-Fungible Tokens», available at

in the forms of art, videos, audio, and any other form of digital creation. «Non-Fungible» means that one cannot interchange one asset from another.<sup>9</sup> Thus, creators of a digital artwork can create NFTs of their creations and stipulate that these NFTs cannot exist twice. This unique digital artwork can then be resold to third parties at any time, and in doing so, the creator loses the power of ownership of this NFT.<sup>10</sup> NFTs can be created from all presumed valuable objects for which «digital originals» shall be created.<sup>11</sup>

[4] Even outside the digital world, NFTs are already being used. The purpose of NFTs and tokenisation in general is to make previously illiquid assets easier to trade. It is quite possible, e.g., to mint collectibles such as vintage cars or physical paintings but also other assets such as gold or even real estate as NFTs.<sup>12</sup> Unlike in digital worlds, where the main purpose of NFTs is to limit assets and create «digital originals», the fractionability of NFTs creates new opportunities for physical assets. This allows multiple NFTs to be minted from a single asset and to be traded separately so that each NFT represents a co-ownership share in the asset. This could be of interest to private investors who will be able to add assets to their portfolios that were previously unaffordable for them.<sup>13</sup>

## 2. Blockchain as NFT technology

[5] NFTs rely on the blockchain technology, a type of the Distributed Ledger Technology (DLT) – a protocol that enables the secure functioning of a decentralised digital database.<sup>14</sup> The units of value stored in a register based on DLT are referred to as tokens. The ledger consists of a data structure in which all relevant data is recorded and a protocol that determines how devices exchange data among the various decentralised databases (*nodes*). This data structure is based on a blockchain, which acts as a data archive documenting all transactions involving the tokens in question. The data is stored by chaining blocks together in the blockchain.<sup>15</sup> Thus, data is not collected in a central database but processed and verified by the nodes.<sup>16</sup> The system is decentralised

---

<https://101blockchains.com/fungible-vs-non-fungible-tokens/>; ROLF H. WEBER, «Non-Fungible Tokens als neue rechtliche Herausforderung», Bratschi Newsletter June 2022, available at <https://www.bratschi.ch/en/anwalt/rolf-h-weber.html>.

<sup>9</sup> MACKENZIE/BĒRZIŅA (n 7), p. 2.

<sup>10</sup> KRISTIN CORNELIUS, *Betraying Blockchain: Accountability, Transparency and Document Standards for Non-Fungible Tokens*, Information, 31 August 2021, Volume 12 Issue 9, p. 2.

<sup>11</sup> CORNELIUS (n 10), p. 4.

<sup>12</sup> OpenSea, «Crypto Classic Cars», available at <https://opensea.io/collection/cryptoclassiccars>; OpenSea, «GOLD NFT by Lohko», available at <https://opensea.io/collection/goldnft>; VIRGINIA SMITH published on 10 December 2021, Mansion Global, «When Purchasing a Real Estate NFT, What Are You Really Buying?», available at <https://www.mansionglobal.com/articles/when-purchasing-a-real-estate-nft-what-are-you-really-buying-01639137564>.

<sup>13</sup> MARC HOWARD published on 4 November 2018, Hackernoon, «The Future of Virtual Assets: Introducing the Fractional NFT», available at <https://hackernoon.com/the-future-of-virtual-assets-introducing-the-fractional-nft-84c218da73c9>; BYBIT LEARN published on 9 February 2022, «Explained: Fractional NFTs (F-NFTs) and How They Work», available at <https://learn.bybit.com/nft/what-are-fractional-nfts/>; ROLF H. WEBER, *Non-Fungible Tokens – A New (Legal) Phenomenon in the Crypto Universe*, in: *sic! 2022*, p. 487, 488.

<sup>14</sup> CASPAR VON DER CRONE/FRANZ J. KESSLER/LUCA ANGSTMANN, *Token in der Blockchain – privatrechtliche Aspekte in der Distributed Ledger Technology*, in: *SJZ 2018*, p. 337 ff.; JAKE FRANKENFIELD published on 27 August 2021, Investopedia, «Distributed Ledger Technology (DLT)», available at <https://www.investopedia.com/terms/d/distributed-ledger-technology-dlt.asp>.

<sup>15</sup> CASPAR VON DER CRONE/MERENS DERUNGS, *Aktien als digitalisierte Werte*, in: *SZW 2019*, p. 3; CORNELIUS (n 10), p. 4.

<sup>16</sup> JACQUES IFFLAND/ALESSANDRA LÄSER, *Die Tokenisierung von Effekten in IPOs*, in: *GesKR 04/2018*, p. 416.

because the nodes each maintain a complete set of the data archive.<sup>17</sup> The protocol regulates the validation of the authorisation to the respective token and the execution of transactions involving tokens. In the process, system participants (*miners*) are to confirm the authenticity of the transaction by solving complex mathematical tasks and using computing power. Once the transaction in question has been validated, the blockchain is extended and stored in the nodes.<sup>18</sup>

[6] DLT is also used to prove authorisation to an NFT. The majority of NFTs is based on the Ethereum blockchain according to the ERC-721 standard.<sup>19</sup> However, other blockchains are also enabling NFT transactions via their ledgers.<sup>20</sup> The ERC-721 contract standard describes a program code («smart contract») that can be stored and executed on the Ethereum blockchain. Smart contract refers to a self-executing software code that is designed to fulfil predefined conditions, functions or actions. Key properties are self-enforceability and immutability.<sup>21</sup> After minting an NFT, it is uniquely identifiable in the ERC-721 standard by the address of the smart contract that minted the NFT and the token ID given in the course of minting. In addition, the address of the wallet for which the NFT is generated is stored in the smart contract. Thus, the smart contract manages the information indicating that a specific NFT belongs to a user who is the owner of the wallet with the wallet address stored in the smart contract. This technically enables the ownership of an NFT to be transferred to the buyer when a token is traded.<sup>22</sup>

### 3. Benefits of NFTs

[7] With the help of NFTs, it is easier for digital artists to sell unique ownership certificates associated with their work. In the music industry, artists hope to earn higher royalties from selling NFTs of their albums and songs than would be possible through e.g. streaming platforms.<sup>23</sup> Not only is art traded on these platforms but also any digital collectibles. Nevertheless, digital art still forms the main component of NFT sales.<sup>24</sup> One example of an enthusiastic NFT artist is *Kenny Schachter*, a video artist who has made hundreds of thousands of dollars in a very short time, having previously spent three decades working in an art world where video art was rarely sold.<sup>25</sup> It is also possible for an artist and creator – thanks to smart contracts – to automatically receive

---

<sup>17</sup> VON DER CRONE/DERUNGS (n 15), p. 338.

<sup>18</sup> ADAM HAYES published on 27 September 2022, Investopedia, «Blockchain Explained», available at <https://www.investopedia.com/terms/b/blockchain.asp>.

<sup>19</sup> CORWIN SMITH published on 15 August 2022, Ethereum, «ERC-721 Non-Fungible Token Standard», available at <https://ethereum.org/en/developers/docs/standards/tokens/erc-721/>.

<sup>20</sup> IAN KANE published on 4 January 2022, DappRadar, «TRON introduces NFT standard TRC-721», available at <https://dappradar.com/blog/tron-introduces-nft-standard-trc-721>.

<sup>21</sup> ELEONOR GYR, *Blockchain und Smart Contracts: Die vertraglichen Implikationen einer neuen Technologie*, Basel 2019, para. 224 ff.

<sup>22</sup> TOMASZ ZALEWSKI published on 22 March 2022, Bird&Bird, «How to conduct a due diligence review of NFTs?», available at <https://www.twobirds.com/en/insights/2022/poland/how-to-conduct-a-due-diligence-review-of-nfts>.

<sup>23</sup> CAROLIN KASSELLA published on 3 January 2022, FinanzBusiness, «Non-fungible token hatten 2021 ihren globalen Durchbruch», available at <https://finanzbusiness.de/nachrichten/fintech/article13600561.ece>; NFT Agentur Silberback published on 20 December 2022, «Die Vor- und Nachteile von NFTs», available at <https://www.nftagentur.at/nft-blog/die-vor-und-nachteile-von-nfts>.

<sup>24</sup> SPIRIG (n 3), p. 141.

<sup>25</sup> Kate Vass Gallery, «Kenny Schachter», available at <https://www.katevassgalerie.com/kenny-schachter>.

a resale royalty, if the NFT owner later resells the NFT for profit, and if the artist has included a royalty functionality in the contract.<sup>26</sup>

[8] NFTs are technically well-qualified for the trading of digital objects. What makes NFTs interesting is their uniqueness, transferability, indivisibility and also the ability to verify ownership. NFTs have embedded metadata that can be used to prove authenticity and genuineness. Furthermore, NFTs cannot be exchanged, which again guarantees their uniqueness.<sup>27</sup> NFTs are also advantageous and helpful in areas where one would not expect them to be. One example is the use of NFTs to combat speedometer fraud in the used car trade: the manipulation of car data in the used car trade is a serious problem.<sup>28</sup> In the fight against speedometer fraud, NFTs have now become relevant. The car manufacturer creates an NFT when purchasing the car. The NFT contains the manufacturer's data such as equipment, colour, vehicle version and other vehicle data. The customer receives a wallet in a special cloud. It is managed via a mobile app, with a special link to mint a new NFT when the car is resold.<sup>29</sup>

[9] NFTs cannot be changed or replaced if their authenticity is stored in the blockchain. Thus, the «intrinsic value» of authenticity becomes a «real, extrinsic value».<sup>30</sup> NFTs may also be used more generally for practical purposes such as the general storage of sensitive social information that could be vulnerable to misuse. For example, records such as vote tallies, ownership titles and medical records could all benefit from protection in a public NFT framework.<sup>31</sup> However, as the popularity of NFTs increases, so do the risks and challenges.

#### 4. Classification of NFTs in the existing token classification

[10] In order to better understand how NFTs are legally classified, it is necessary to clarify under which type of token NFTs are classified in the existing DLT system. Swiss Financial Market Supervisory Authority (FINMA) already classified tokens under financial market law in 2018 as part of a guidance document on Initial Coin Offerings (ICOs).<sup>32</sup> FINMA's approach has been adapted internationally by individual regulators, including the European Union (EU).<sup>33</sup> From an economic

---

<sup>26</sup> MACKENZIE/BĒRZIŅA (n 7), p. 11 f.; PRATIN VALLABHANENI/ADAM CHERNICHAW, TALKSONLAW, «How do NFT royalties work?», available at <https://www.talksonlaw.com/briefs/how-do-nft-royalties-work>.

<sup>27</sup> SPIRIG (n 3), p. 140 f.

<sup>28</sup> OLIVER ADEY, get to text, «This SUV relies on the blockchain», available at <https://gettotext.com/this-suv-relies-on-the-blockchain/>.

<sup>29</sup> JONATHAN GITLIN published on 8 February 2022, «Alfa Romeo's first plug-in hybrid crossover comes with an NFT», available at <https://arstechnica.com/cars/2022/02/alfa-romeos-first-plug-in-hybrid-crossover-comes-with-an-nft/>; DANIEL HOPPMANN published on 17 February 2022, «Wie dieser SUV auf die Blockchain setzt», available at <https://www.btc-echo.de/news/nft-gegen-tacho-betrug-suv-setzt-auf-blockchain-135274/>; SABINE MELICHAR, «Car tokens: How your investment works», available at <https://token-information.com/car-tokens-how-your-investment-works/>.

<sup>30</sup> NFT Agentur Silverback (n 23).

<sup>31</sup> STEVE NOURI published on 17 December 2021, LinkedIn Post, «Web 3.0, NFTs & AI art», available at <https://www.linkedin.com/pulse/web-30-nfts-ai-art-researchers-asked-advanced-whether-steve-nouri/>.

<sup>32</sup> FINMA, Guidance for Submission Requests Regarding Initial Coin Offerings (ICOs), 16 February 2018, available at <https://www.finma.ch/de/news/2018/02/20180216-mm-ico-wegleitung/>; Federal Council Report as of 14 December 2018, «Legal framework for distributed ledger technology and blockchain in Switzerland», available at <https://www.news.admin.ch/newsd/message/attachments/55153.pdf>, p. 83.

<sup>33</sup> Securities and Markets Stakeholder Group, Advice to ESMA, Own Initiative Report on Initial Coin Offerings and Crypto-Assets, 19 October 2018 (ESMA22-106-1338), p. 4: «[...] has found Switzerland's FINMA's taxonomy useful, based on the economic function of tokens: payment tokens, utility tokens and asset tokens.», available at

perspective, FINMA distinguishes between *asset tokens*, *utility tokens* and *payment tokens*. The individual categories of tokens are not necessarily mutually exclusive; in particular, investment and utility tokens can simultaneously qualify as payment tokens (*hybrid tokens*). According to FINMA's economic approach<sup>34</sup>, the assessment of the applicability of regulatory provisions to individual tokens must be based on the specific functional design and purpose of the NFT in the individual case. The main criterion here is the economic approach.<sup>35</sup> The categorisation made by FINMA can facilitate the assessment in individual cases but cannot completely replace it.<sup>36</sup>

#### 4.1. Payment tokens

[11] Payment tokens are tokens «that are actually, or according to the organizer's intention, accepted as a means of payment for the purchase of goods or services, or are intended to serve the transfer of money or value.»<sup>37</sup> This category is synonymous with cryptocurrencies<sup>38</sup> and thus also the best-known category of DLT. NFTs are unlikely to be classified as payment tokens as they are not a substitute for money, as payment tokens are made for payment by means of a value transfer.<sup>39</sup> Nevertheless, there are also legal scholars that classify NFTs as payment tokens, e.g. when they are used as a means of payment in online games.<sup>40</sup> However, this classification must be called into question. NFTs are usually non-fungible<sup>41</sup> and are therefore not suitable as a means of payment. Taking the example of an online game, any exchange item would constitute a means of payment. However, this does not mean that the item generally wants to be used as a means of payment by ICOs. The classification of NFTs as payment tokens is therefore inconclusive and practically irrelevant.<sup>42</sup>

#### 4.2. Asset tokens

[12] In economic terms, asset tokens have a predominant investment or speculative element. In contrast to pure payment tokens, they represent assets such as debt claims against the issuer or a membership right in terms of company law.<sup>43</sup> According to the economic function, asset tokens particularly represent shares, bonds or derivatives.<sup>44</sup> Moreover, the category of asset tokens can also include tokens that are intended to make physical items of value tradable on the block-

---

[https://www.esma.europa.eu/sites/default/files/library/esma22-106-1338\\_smsg\\_advice\\_-\\_report\\_on\\_icos\\_and\\_crypto-assets.pdf](https://www.esma.europa.eu/sites/default/files/library/esma22-106-1338_smsg_advice_-_report_on_icos_and_crypto-assets.pdf).

<sup>34</sup> FINMA Guidance (n 32), p. 2 para. 3.

<sup>35</sup> MAGDA AREF/LUCA FABIÀN/SIMON WEBER, Digitale Originale dank NFTs?, in: GesKR 2021, p. 395.

<sup>36</sup> Press release of FINMA from 16 February 2018, «FINMA publiziert Wegleitung zu ICOs», available at <https://www.finma.ch/de/news/2018/02/20180216-mm-ico-wegleitung/>.

<sup>37</sup> FINMA Guidance (n 32), p. 3.; DLT Report (n 32), p. 84.

<sup>38</sup> AREF/FABIÀN/WEBER (n 35), p. 394.

<sup>39</sup> ROLF H. WEBER, Non-Fungible Tokens – A New (Legal) Phenomenon in the Crypto Universe, in: sic! 2022 p. 487 ff., p. 494.

<sup>40</sup> PAULA ZIMMERMANN/DOMINIC GRUNDER published on 6 May 2022, Härting, «NFT – eine finanzmarktrechtliche Beurteilung», available at <https://haerting.ch/wissen/nft-eine-finanzmarktrechtliche-beurteilung/>.

<sup>41</sup> AREF/FABIÀN/WEBER (n 35), p. 395.

<sup>42</sup> WEBER, Bratschi Newsletter (n 8); NFT Mag, «Kann NFT als Krypto-Token angesehen werden?» published on 7 December 2021, available at <https://www.nftmag.tech/kann-nft-als-krypto-token-angesehen-werden/>.

<sup>43</sup> DLT Report (n 32), p. 88.

<sup>44</sup> FINMA Guidance (n 32), p. 3 para. 3.1.

chain.<sup>45</sup> In this respect, NFTs representing digital works of art may well also have an investment purpose.<sup>46</sup> Whether an NFT serves an investment purpose in accordance with financial market law and qualifies as an asset token must be assessed in each individual case. If the rights to certain images are depicted on the NFT and these would then be traded, it is possible that these art trade NFTs would be classified as asset tokens.<sup>47</sup> However, there are several requirements for this classification, which will be discussed in chapter IV. 1.3.

#### 4.3. Utility tokens

[13] Utility tokens provide access to a digital usage or service that is provided on or using a blockchain infrastructure. They are based on a contractual relationship in the form of a claim.<sup>48</sup> Unlike asset tokens, however, utility tokens do not qualify as securities, provided they are usable and fully functional at the time of issue. In addition, the Financial Market Infrastructure Act (FinMIA) requires a financial market reference, which means that standardised claims that are geared towards real performance outside the capital market do not fall within the scope of the FinMIA.<sup>49</sup> If utility tokens can be used as a means of payment, their issuance is covered by the scope of application of the Anti-Money Laundering Act (AMLA).<sup>50</sup> For example, if an NFT includes the rights to a football player in a computer game, it may be classified as a utility token because it guarantees the rights holder exclusive use to the player in the game.<sup>51</sup>

### III. Legal challenges of NFTs

#### 1. Copyright violations

[14] The assets represented by NFTs are often artistic and literary works. These are protected by copyright law. The thriving trade in NFTs therefore raises copyright questions.<sup>52</sup> To begin with, what exactly does the purchaser of an NFT legally acquire? NFTs usually contain links to an asset hosted elsewhere.<sup>53</sup> The digital item is hosted off-chain.<sup>54</sup>

[15] When it comes to «conventional art», a distinction must always be made between the transfer of ownership of the physical painting and the copyrights of the artwork. Since the purpose of NFTs is to close the gap that currently exists in the context of digital assets with regard to tradability similar to that of ownership, a distinction must also be made in the case of NFTs between

---

<sup>45</sup> ROLF H. WEBER/RAINER BAISCH, DLT-basierte Finanzprodukte, in: SZW 2021, p. 686.

<sup>46</sup> AREF/FABIAN/WEBER (n 35), p. 396.

<sup>47</sup> WEBER, Non-Fungible Tokens (n 13), p. 494.

<sup>48</sup> FINMA Guidance (n 32), p. 3; DLT Report (n 32), p. 8.

<sup>49</sup> DLT Report (n 32), p. 83.

<sup>50</sup> DLT Report (n 32), p. 84.

<sup>51</sup> ZIMMERMANN/GRUNDER (n 40).

<sup>52</sup> REYMOND (n 3), para. 17.

<sup>53</sup> ERIC RAVENSCRAFT published on 12 March 2022, WIRED, «NFTs Don't Work the Way You Might Think They Do», available at <https://www.wired.com/story/nfts-dont-work-the-way-you-think-they-do/>.

<sup>54</sup> MAEDER CHRISTIAN/JANN ALEYXANDRE published on 14 February 2022, Reichlin Hess, «Non-fungible token (NFT) – Rechtliche und regulatorische Erwägungen», available at <https://www.reichlinhess.ch/2022/02/14/non-fungible-token-nft-rechtliche-und-regulatorische-erwaegungen-schweiz/>.



the transfer of rights of disposal of the NFT similar to ownership (the buyer has something similar to a physical copy of the artwork) and the copyright usage rights to the work represented by the NFT. Usually, the general terms stipulate that the copyrights of the underlying work are not transmitted together with the NFT. The right for private use is thus only granted as a license right and is restricted to non-commercial use.<sup>55</sup> This means that the buyer does not necessarily acquire copyright, storage or usage rights with the sale of an NFT. It is often unclear which copyright, storage and usage rights are to be licensed.<sup>56</sup>

[16] It is also questionable whether or not the act of minting an NFT in itself actually constitutes a copyright-relevant act. If the right to mint an NFT in itself constitutes a copyright-relevant act, this would mean that only the respective copyright holder could always mint an NFT from a work (e.g. a song) and sell it. If the exclusive copyrights were comprehensively transferred to a third party, only the current rights holder would have the right to mint an NFT of that work, but the original creator would no longer do so. Contrary to this, the creator of a work would always have the right to mint and commercially release an NFT from a work he or she created, even if the creator sold the exclusive copyrights to a third party. In this case, the right to mint an NFT would be independent of that transfer of copyrights – the creator of a work could mint an NFT from the work and sell it separately from the (already transferred) copyrights.<sup>57</sup> In summary, courts and legislators would thus have to clarify the question of whether the right to mint an NFT in itself constitutes a copyright-relevant act. This issue directly relates to one of the criticisms aimed at NFTs: recently, there have been reports from artists who suddenly discovered their works as NFTs on platforms where they have been offered for sale without the artists consent. Thus, if the right to mint an NFT does not in itself constitute a copyright-relevant act, anyone could easily create an NFT from a digital work and profit from the monetisation of someone else's content.<sup>58</sup> Compared to the conventional art world, it is easier to make «counterfeits» in the blockchain space. On platforms like *OpenSea*, anyone can offer someone else's work for sale or lie about their true identity.<sup>59</sup> It is also harder to fight counterfeiters. How do you sue an anonymous crypto wallet owner? And which jurisdiction applies?

[17] The matter is increasingly bordering on the absurd: for example, an entire YouTube channel of the well-known influencer *Stephanie Sterling* was offered for sale as an NFT. When the YouTuber got upset about this on Twitter, someone quickly turned this tweet into an NFT and also offered it for sale.<sup>60</sup> In our view, the problem is that no one is monitoring the sale and minting of NFTs. Everything happens in a space that is supposed to regulate itself.

---

<sup>55</sup> *Ibid.*

<sup>56</sup> MACKENZIE/BĒRZIŅA (n 7), p. 5, 8 f.; JETSE SPREY, *versteeg wigman spreyc advocaten*, «What does ownership of an NFT mean?», available at <https://www.vwsadvocaten.nl/en/nft-ownership/>.

<sup>57</sup> *Ibid.*

<sup>58</sup> JAMES PURTILL from 15 March 2021, ABC Science, «Artists report discovering their work is being stolen and sold as NFTs», available at <https://www.abc.net.au/news/science/2021-03-16/nfts-artists-report-their-work-is-being-stolen-and-sold/13249408>; DINA MANEVICH published on 17 January 2022 PC Games, «NFT-Wahnsinn: YouTube-Kanäle werden gestohlen und verkauft», available at <https://www.pcgames.de/YouTube-Thema-163920/News/NFT-Verkauf-Kanal-Content-Creator-Twitch-Alanah-Pearce-Sony-Santa-Monica-minting-1387371/>.

<sup>59</sup> MACKENZIE/BĒRZIŅA (n 7), p. 10.

<sup>60</sup> *Ibid.*; STEPHANIE STERLING, Tweet published on 16 January 2022, available at <https://twitter.com/JimSterling/status/1482521198642831363>; IAN DEAN published on 18 January 2022, Creative Bloq, «The dark side of NFTs ignites controversy among gaming YouTubers», available at <https://www.creativebloq.com/news/nfts-ignite-controversy-amongst-gaming-youtubers>; MACKENZIE/BĒRZIŅA (n 7), p. 9.

[18] Addressing the copyright question raised at the beginning is certainly the first step in order to clarify (also for the courts) whether the person who owns the copyright of a work can defend themselves under copyright law against an unauthorised third party who mints an NFT from that work. We would argue that the minting of an NFT from a work should in itself constitute a copyright-relevant act – thus, creators could defend themselves in court against the minting of an NFT from their work. In such a case, however, it will probably be impossible to «take down» the NFT because the blockchain is unalterable, which means that copyright-infringing art could continue to circulate even after it has been declared illegal by a court.<sup>61</sup> Because of the described issues, it is therefore recommended for minters to check if, when creating an NFT, no copyrights are violated.<sup>62</sup>

## 2. Theft of NFTs

[19] In February 2022, an NFT theft through a phishing attack caused a public stir. Criminals were able to steal NFTs worth around 2 million US dollars from the OpenSea platform. The criminals took advantage of the fact that OpenSea was in the process of updating its smart contract. They pretended to be OpenSea employees and asked NFT owners to update their smart contract. However, the digital contract created by the criminals was incomplete, and the victims of this fraud effectively signed a blank cheque. The smart contract was then amended to allow a transfer of the NFT.<sup>63</sup> The Ethereum blockchain has no mechanism to distinguish between legal ownership of a token and possession thereof. If someone steals an original physical painting of *Picasso*, it is still generally considered to belong to the person who has been robbed. With an NFT, the «owner» is the person who has the token in their wallet. Hence, if an NFT is stolen, the blockchain treats the thief as the new owner.<sup>64</sup>

[20] Another scam method is to disguise the origin of an NFT. The smart contract is modified in a way that it falsely displays the wallet of a well-known artist as the origin of an NFT on the user interface, instead of the actual origin. This is possible because the scammer controls how the data is displayed via the malicious smart contract used to create the NFT. Any unaware buyers who check whether the NFT was really created by that artist would not suspect anything based on the data displayed on the user interface and would supposedly buy the NFT of the famous artist.<sup>65</sup>

---

<sup>61</sup> MACKENZIE/BĒRZIŅA (n 7), p. 10.

<sup>62</sup> MAEDER/JANN (n 54).

<sup>63</sup> DIKLA BARDA et al., Check Point, «New OpenSea attack led to theft of millions of dollars in NFTs», available at <https://blog.checkpoint.com/2022/02/20/new-opensea-attack-led-to-theft-of-millions-of-dollars-in-nfts/>; JULIAN DOSSETT published on 21 February 2022, CNET, «OpenSea Says at Least \$1.7M in NFTs Stolen in Phishing Attack», available at <https://www.cnet.com/personal-finance/crypto/opensea-says-at-least-1-7m-in-nfts-stolen-in-phishing-attack/>.

<sup>64</sup> RAVENSCRAFT (n 34).

<sup>65</sup> PHILIPP GOLLMER published on 22 March 2022, NZZ. «Cybersicherheit im Web 3: wo die Risiken lauern und wie man sich schützen kann», available at <https://www.nzz.ch/amp/technologie/web3-so-handelt-man-sicher-mit-nfts-und-kryptowaehrungen-ld.1671329>; SAMANTHA HISSONG published on 24 January 2022, Rolling Stone, «NFT Scams Are Everywhere. Here's How to Avoid Them», available at <https://www.rollingstone.com/culture/culture-features/nft-crypto-scams-how-to-not-get-scammed-1286614/>.

### 3. Money laundering

[21] Another problem related to NFTs is money laundering. Money from illegal sources can be brought into the economy by criminals through the NFT market. Here, a purchased NFT will be sold to an unwitting individual who will compensate the criminals with clean funds. The pseudonymity in the crypto world offers another advantage to criminals – since the purchase is made in a digital currency, there are possibilities to disguise the identity and the origin of the money.<sup>66</sup> Unlike in mainstream crypto asset exchanges, there are no know-your-customer checks required to purchase products on metaverse marketplaces. However, there are some providers (like Otherside) which require a KYC.<sup>67</sup> The U.S. Securities and Exchange Commission (SEC) concludes in a recent study that the ability to conduct NFTs across borders via the Internet without regard to geographic distance and with almost no delay makes NFTs vulnerable to money laundering of illegal criminal proceeds. The SEC identifies the problem in the fact that «*the movement of value can be accomplished without incurring potential financial, regulatory, or investigative costs of physical shipment*».<sup>68</sup> Thus, NFTs are often used for money laundering and tracking the money is not trivial for non-specialised crypto investigators. In our opinion, NFT marketplaces in particular have a more important role to play in combating money laundering – e.g., they should ensure that there is an option for two-factor authentication for consumers and confirm that cyber security measures are in place. This could also mitigate the risks of counterfeits and theft of NFTs.<sup>69</sup>

[22] In the view of the Swiss Federal Council, the greatest risk in connection with crypto-based assets is the anonymity of the transactions and the associated money-laundering risks. This risk is further amplified by the speed and mobility of transactions on the blockchain.<sup>70</sup> The issuance of payment tokens may fall under Article 4(1) (b) Anti-Money Laundering Ordinance (AMLO), as it involves values which are easy to transfer to third parties. An ICO of payment tokens constitutes an issuance of a means of payment subject to subordination as soon as the tokens can be technically transferred on a blockchain infrastructure.<sup>71</sup> Tokens issued in an ICO qualify as a means of payment if they are intended to be used either in actuality or according to the intention of the issuer as a means of payment for the purchase of goods or services. Pure usage or asset tokens do not fall under the AMLA.<sup>72</sup> Since we believe that NFTs can only be usage or asset tokens, if at all, the AMLA does not apply and the problem of money laundering therefore remains eminent.

---

<sup>66</sup> DANIEL CASSIDY published on 8 February 2022, The Art Newspaper, «NFT market is vulnerable to money laundering, according to US Treasury study of the art trade», available at <https://www.theartnewspaper.com/2022/02/08/us-treasury-study-art-market-money-laundering-nfts>; GRAF NADINE published on 6 March 2022, t3n digital pioneers, «NFT-Betrug: Kriminelle könnten das Vertrauen in den gesamten Markt schädigen», available at <https://t3n.de/news/nft-betrug-schadet-vertrauen-in-markt-1452508/>.

<sup>67</sup> Elliptic Metaverse Report 2022, «The Future of Financial Crime in the Metaverse», available at <https://www.elliptic.co/hubfs/Crime%20in%20the%20Metaverse%202022%20final.pdf>, p. 18.

<sup>68</sup> The Department of the Treasury, «Study of the Facilitation of Money Laundering and Terror Finance Through the Trade in Works of Art», 4 February 2022, p. 27.

<sup>69</sup> ALLISON OWEN/ISABELLA CHASE published on 2 December 2021, RUSI, «NFTs: A New Frontier for Money Laundering?», available at <https://rusi.org/explore-our-research/publications/commentary/nfts-new-frontier-money-laundering>.

<sup>70</sup> DLT Report (n 32), p. 143.

<sup>71</sup> FINMA Guidance (n 32), p. 6, section 3.6.

<sup>72</sup> *Ibid.*

## 4. Wash trading

[23] When wash trading, criminals fake a higher market value: they sell their own NFTs for a higher value to a wallet that belongs to themselves. These self-financed NFT transactions are carried out by criminals several times, as this increases the price of the NFT with each trade. To the outside world, the NFTs appear to be traded by different people and are in high demand – pushing up the value because the fear of missing out is a powerful force in the crypto world. In reality, however, the NFTs are just shifted back and forth between the wash trader's own wallets. Ultimately, the NFT is sold to an unsuspecting victim who buys the NFT far above its real value.<sup>73</sup>

[24] While money laundering is illegal, wash trading remains in a legal grey area – a prohibition is not yet subject to any regulations in the NFT world. There have been no court rulings yet. Wash trading is not only inconvenient for the victims of this fraud who pay exaggerated prices but could also have negative consequences for the entire NFT market.<sup>74</sup> Nevertheless, it is important to note that to date wash trading on Ethereum, as identified by experts, represents only a small fraction of the total NFT trading volume.<sup>75</sup>

## IV. NFTs under the existing legal framework

### 1. Switzerland

#### 1.1. Existing regulation for DLT

[25] The Swiss government proudly claims that Switzerland is a progressive hub in the area of fintech and blockchain. It is therefore essential for Switzerland to provide an ideal framework regarding innovation in this area.<sup>76</sup> The State Secretariat for International Finance (SIF) further sets goals for Switzerland to grant legal certainty. According to the Swiss Federal Council, the main goal of the regulation of DLT and blockchain is to set the conditions so that Switzerland can use the opportunities in this area and to grant the integrity and reputation of the Swiss financial sector.<sup>77</sup>

[26] The Federal Council also sees a particular need for adjustments to legal certainty in the transfer of rights and has therefore created a new register law for digital securities. However, this law does not yet solve all legal issues, as has been and will be shown.<sup>78</sup>

---

<sup>73</sup> VICTOR VON WACHTER published on 7 February 2022, «NFT Wash Trading – Quantifying suspicious behaviour in NFT markets», available at <https://arxiv.org/pdf/2202.03866.pdf>, p. 3; SANIS RAPHAEL published on 9 February 2022, currency, «NFT wash-trading: What you need to know», available at <https://currency.com/nft-wash-trading-what-you-need-to-know>.

<sup>74</sup> GRAF (n 66).

<sup>75</sup> VON WACHTER (n 73), p. 5 f.; MAEDER/JANN (n 54).

<sup>76</sup> Federal Department of Finance (FDF), Factsheet «Blockchain and cryptoassets in the financial sector: Switzerland's pioneering role on the international stage», available at [https://www.sif.admin.ch/dam/sif/en/dokumente/finanzmarktpolitik/digitalisierung/factsheet\\_crypto.pdf.download.pdf/Factsheet%20Crypto.pdf](https://www.sif.admin.ch/dam/sif/en/dokumente/finanzmarktpolitik/digitalisierung/factsheet_crypto.pdf.download.pdf/Factsheet%20Crypto.pdf), p. 2.

<sup>77</sup> DLT Report (n 32), p. 234.

<sup>78</sup> DLT Report (n 32), p. 240.

## 1.2. Private law classification of NFTs

[27] NFTs are not defined by law, and in order to capture them legally, determining their legal nature is key. The first question is whether NFTs are to be regarded as objects in accordance with the Civil Code (CC). According to Article 713 CC, «chattel ownership relates to movable physical objects and to forces of nature that may be the subject of legal rights and which do not form part of any immovable property». According to the prevailing opinion of legal scholars, only movable physical objects have the quality of property.<sup>79</sup> NFTs clearly do not meet the requirement of being «movable physical objects», which means that – in line with the majority opinion of legal scholars – they do not qualify as objects in accordance with the CC.<sup>80</sup>

[28] The majority of legal scholars also rejects the qualification of NFTs as bonds, arguing that there is no central counterparty due to the decentralised functioning of the blockchain.<sup>81</sup> Nevertheless, there are voices in legal doctrine that affirm mandatory claims between the system participants.<sup>82</sup>

[29] Furthermore, the question arises whether NFTs constitute securities in accordance with Article 965 Swiss Code of Obligations (CO). A negotiable security is a document to which a right is attached in such a way that it can neither be asserted nor transferred to others without the document. In principle, electronic storage media can also be used as a deed.<sup>83</sup> However, in these cases, the documented right must be sold by physically transferring the storage medium.<sup>84</sup> When an NFT is transferred, it is precisely not an electronic storage medium that is physically sold, which securitises the right to be transferred. The already existing information in the Ethereum blockchain is merely extended by additional information and stored in a decentralised manner on the computers of the *nodes*.<sup>85</sup> Accordingly, this data is not to be regarded as a deed, which means that NFTs do not constitute securities in accordance with Article 965 CO. With the entry into force of the DLT revision of the CO<sup>86</sup>, so-called register value rights were created in Article 973d et seq. CO. A register value right is a right which, according to an agreement between the parties: 1. is registered in a register of value rights pursuant to Art. 973 (2) CO; and 2. can only be asserted and transferred to others via this register of value rights (Article 973d(1) CO). In general, all rights that can be converted into tokens and securitised in securities can be structured as register value rights. The rights must be transferable, but their representability is not a pre-

---

<sup>79</sup> BSK ZGB II-WOLF/WIEGAND, Preliminary remarks regarding Art. 641 N 5 f.

<sup>80</sup> VON DER CRONE/KESSLER/ANGSTMANN (n 14), p. 339; HARALD BÄRTSCHI/CHRISTIAN MEISSER, Virtuelle Währungen aus finanzmarkt- und zivilrechtlicher Sicht, in: Rolf H. Weber/Florent Thouvenin (eds.), *Rechtliche Herausforderungen durch webbasierte und mobile Zahlungssysteme*, Zurich 2015, p. 139 ff; AREF/FABIAN/WEBER (n 35), p. 391.

<sup>81</sup> BENJAMIN ENZ, Kryptowährungen im Lichte von Geldrecht und Konkursaussonderung, p. 179 and p. 293, with further references; BENEDIKT SEILER/DANIEL SEILER, Sind Kryptowährungen wie Bitcoin (BTC), Ethereum (ETH) und Ripple (XRP) als Sachen im Sinne des ZGB zu behandeln?, in: *sui generis* 2018, p. 149 et seq., p. 162, with further references; cf. also DLT Report 2018 (n 35), p. 54.

<sup>82</sup> AREF/FABIAN/WEBER (n 35) p. 392; VON DER CRONE/KESSLER/ANGSTMANN (n 11), p. 340.

<sup>83</sup> VON DER CRONE/DERUNGS (n 15), p. 4; VON DER CRONE/KESSLER/ANGSTMANN (n 11), p. 341; JEAN NICOLAS DRUEY/EVA DRUEY JUST/LUKAS GLANZMANN, *Gesellschafts- und Handelsrecht*, 11th edition, Zurich 2015, § 27 N 2.

<sup>84</sup> AREF/FABIAN/WEBER (n 35), p. 392.

<sup>85</sup> *Ibid.*

<sup>86</sup> Federal Council, Press release as of 18 June 2021, «Federal Council brings DLT Act fully into force and issues ordinance», available at [https://www.efd.admin.ch/efd/de/home/das-efd/nsb-news\\_list.msg-id-84035.html](https://www.efd.admin.ch/efd/de/home/das-efd/nsb-news_list.msg-id-84035.html).

requisite.<sup>87</sup> A payment token cannot be classified as an effect *per se*.<sup>88</sup> NFTs only fall under the concept of registered securities according to Article 973d CO if they represent transferable rights that can be securitised in securities and if the other aforementioned requirements are met.<sup>89</sup> The fact that an NFT actually fulfils all requirements is likely to be rather rare. In particular, the existence of a right is often likely to be problematic, since in cases where an NFT merely certifies the authenticity of a digital object or establishes a link thereto, no right is yet established and consequently, in the absence of this requirement, no register value right can exist. It is therefore only conceivable for an NFT to be structured as a register value right if the token itself contains a right that is freely transferable.<sup>90</sup>

### 1.3. Classification of NFTs under financial market law

[30] As already explained in chapter II. 4. above, NFTs are difficult to classify in the existing token classification. The legal classification, however, depends primarily on this classification. The legislator has created a new category of DLT effects as part of the DLT law amendments. This is regulated in Article 2(b<sup>bis</sup>) FinMIA. In order to be a DLT effect of this category, this effect must either contain a register value right according to Article 973d CO or another value right. These DLT effects can then be qualified without further ado as effects in accordance with Article 2(b) FinMIA.

[31] Tokens must therefore contain a legal position, which is not the case with payment tokens; they are therefore not classifiable as effects.<sup>91</sup> However, since NFTs cannot be classified as payment tokens, as mentioned above, this is of minor importance. FINMA also does not classify utility tokens as effects due to the lack of a capital market reference.<sup>92</sup> Asset tokens, on the other hand, generally qualify as securities pursuant to Article 2(b) FinMIA if they represent a security right and are suitable for mass trading.<sup>93</sup> Tokens can also be registered as securities, as explained in chapter II. 4. above.

[32] However, an NFT may be classified as an asset token under certain circumstances. It is debatable whether NFTs are therefore also subject to the FinMIA as securities. If tradability presupposes the fungibility of tokens, NFTs would not be considered tradable. If, however, it is not assumed that tokens are identical but only have to contain certain comparable properties, then tradability would possibly be given.<sup>94</sup>

[33] In the case of comparable properties, an effect must be tradable pursuant to Article 2(b) FinMIA. Tradability in turn presupposes fungibility of a token, which is given if an object is fungible. Since the term *Non-fungible Token* excludes this, it may not be obvious at first glance why an NFT should be fungible. However, the term is misleading and should be understood in a

---

<sup>87</sup> AREF/FABIAN/WEBER (n 35), p. 394.

<sup>88</sup> FINMA Guidance (32), p. 4.

<sup>89</sup> AREF/FABIAN/WEBER (n 35) p. 393.

<sup>90</sup> SPIRIG (n 3), p. 143.

<sup>91</sup> AREF/FABIAN/WEBER (n 35), p. 394.

<sup>92</sup> DLT Report (n 32), p. 100; FINMA Opinion as of 9 January 2019 in connection with WISECoin AG's No Action Letter, available at <https://docs.wisekey.com/site/justdownload.html?id=112>, p. 4.

<sup>93</sup> DLT Report (n 32), p. 100; FINMA Guidance (n 32), para. 3.2.1. ff.

<sup>94</sup> AREF/FABIAN/WEBER (n 35), p. 395.

purely technical sense; NFTs can also be the subject of fungible items if they are determined by number, measure or weight.<sup>95</sup> Article 2(1) Financial Market Infrastructure Ordinance (FinMIO) establishes the presumption that fungibility is to be confirmed in the case of a public offering or a placement with more than 20 customers.

[34] If several NFTs are issued as identification tokens and these are then offered to the public, tradability can be affirmed. FINMA has already confirmed this in the case of *WISeCoin AG*.<sup>96</sup> However, the assessment must be carried out separately for each NFT. The NFT is only a technical basis which must be reassessed depending on the type of rights that are mapped on it. If an NFT is classified as an effect, this may result in supervisory obligations. These obligations may also arise from the Financial Services Act (FinSA), which defines an effect the same way (Article 3(b) FinSA).

#### 1.4. Intellectual property

[35] The use of the metaverse by companies trying to market their brands in the metaverse is already a reality today. The question therefore arises as to how these digital objects, which are authenticated by NFTs, are to be classified. Due to the topicality of NFTs and the importance of protecting the associated intellectual property rights, the Swiss IPI (Swiss Federal Institute of Intellectual Property) and the EUIPO (European Intellectual Property Office) have taken a position on this topic.<sup>97</sup> While most applicants try to register their trademarks in Class 9 for digital goods, it is questionable whether these products should be classified in this class at all.<sup>98</sup> For example, manufacturers of watches which are primarily active in the analogue world want to market the digital versions of their watches in the metaverse. For this purpose, they register their trademark in Class 9.

[36] In the 12<sup>th</sup> edition of the Nice Classification, which entered into force on 1 January 2023<sup>99</sup>, the goods in Class 9 was amended by «downloadable digital files authenticated by non-fungible tokens».<sup>100</sup> The IPI has however spoken out against a classification of NFTs in Class 9 in a newsletter published in June 2022. Contradictorily, however, in the same newsletter the IPI adopts the argumentation of the EUIPO that a distinction has to be made between the aforementioned goods «authenticated by NFTs» and «marketing through product placement in online games or in virtual environments» in Class 35.<sup>101</sup> Whether this more restrictive view of the IPI is merely due to imprecise wording remains to be seen.

---

<sup>95</sup> TIFFANY ENDER, Effekten mit einem rechtlichen und einem wirtschaftlichen Emittenten, Diss. Zurich 2016, para. 73 et seq; AREF/FABIAN/WEBER (n 35), p. 395.

<sup>96</sup> FINMA Opinion (n 92), p. 1 et seq.

<sup>97</sup> Newsletter IPI published on 28 June 2022, available at <https://www.ige.ch/de/newsletter-2022/06-marken-und-designs>; Newsletter EUIPO published on 23 June 2022, «Virtual goods, non-fungible tokens and the metaverse», available at [https://euipo.europa.eu/ohimportal/en/news-newsflash/-/asset\\_publisher/JLOyNNwVxGDF/content/pt-virtual-goods-non-fungible-tokens-and-the-metaverse](https://euipo.europa.eu/ohimportal/en/news-newsflash/-/asset_publisher/JLOyNNwVxGDF/content/pt-virtual-goods-non-fungible-tokens-and-the-metaverse).

<sup>98</sup> Newsletter IPI (n 98).

<sup>99</sup> Newsletter WIPO published on 2 June 2022, «Nice Classification NCL (12-2023): Advance Publication Now Available», available at [https://www.wipo.int/classifications/en/news/nice/2022/news\\_0003.html](https://www.wipo.int/classifications/en/news/nice/2022/news_0003.html).

<sup>100</sup> 12<sup>th</sup> edition of the Nice Classification, available at [https://www.wipo.int/classifications/nice/nclpub/en/fr/?basic\\_numbers=show&class\\_number=9&explanatory\\_notes=show&lang=en&menulang=en&mode=flat&notation=&pagination=no&version=20230101](https://www.wipo.int/classifications/nice/nclpub/en/fr/?basic_numbers=show&class_number=9&explanatory_notes=show&lang=en&menulang=en&mode=flat&notation=&pagination=no&version=20230101); Newsletter EUIPO (n 97).

<sup>101</sup> Newsletter IPI (n 98).

## 1.5. Tax

[37] Due to the difficult categorisation of NFTs, they also cannot be easily classified in the tax treatment of ICOs and ITOs. If NFTs are classified as asset tokens, the tax classification would depend significantly on the civil law basis. The tax authority divides these tokens into different categories: debt tokens, asset tokens with a contractual basis or asset tokens with participation rights.<sup>102</sup>

## 2. A glimpse of European legislation

[38] Only recently, the Presidency of the European Council and the European Parliament have reached a preliminary agreement on the proposal for a new regulation on crypto asset markets (MiCA).<sup>103</sup> However, it still needs to be approved by the European Parliament before the formal adoption procedure can be initiated.<sup>104</sup> It was originally planned that this regulation would also clearly refer to NFTs, but now the final text does not include any regulation for NFTs. The EU Commission, when giving its approval, made the reservation that NFTs do not fall under the regulation in principle, but in individual cases they do if they are part of collections.<sup>105</sup> It is dubious what such collections are, but presumably a similar element as the described recyclability is meant here. For example, NFTs must be part of a collection, such as a football team's trading cards, and then differ in small areas.<sup>106</sup>

[39] In Germany, too, the discourse surrounding NFTs begins with the question of how they should be classified under civil law. There is no comprehensive legal framework for NFTs in Germany either. In the opinion of the prevailing German legal doctrine, the ability to dispose of property must be denied due to the lack of physicality in accordance with § 90 of the German Civil Code (*Bürgerliches Gesetzbuch*, BGB). This also applies to NFTs. According to the narrow concept of § 90 BGB, corporeality requires the possibility of physical influence. Tokens do not meet this condition. Furthermore, according to German law, NFTs also do not meet the requirements that the law imposes on electronic securities in §§ 4 III, 16 et seq. (*Gesetz über elektronische Wertpapiere*, eWpG). Thus, in Germany NFTs do not qualify as crypto securities.

## V. Conclusion

[40] NFTs are not just a gimmick of nerds but have instead achieved the supposedly impossible in the digital space – the minting of a «digital original». New opportunities are emerging as a result.

---

<sup>102</sup> Federal Tax Administration, «Kryptowährungen – Besteuerung», available at <https://www.estv.admin.ch/estv/de/home/direkte-bundessteuer/fachinformationen-dbst/kryptowaehrungen.html>.

<sup>103</sup> European Commission, 24 September 2020, COM(2020) 593 final, «Proposal for a REGULATION OF THE PARLIAMENT AND OF THE COUNCIL on Markets in Crypto-assets, and amending Directive (EU) 2019/1937», available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>.

<sup>104</sup> Council of the EU, Press release as of 30 June 2022, «Digital finance: agreement reached on European crypto-assets regulation (MiCA)», available at <https://www.consilium.europa.eu/de/press/releases/2022/06/30/digital-finance-agreement-reached-on-european-crypto-assets-regulation-mica/>.

<sup>105</sup> LUTZ AUFFENBERG published on 14 August 2022, BTC ECHO, «Werden NFTs von der MiCA-Verordnung erfasst?», available at <https://www.btc-echo.de/news/mica-werden-nfts-von-der-eu-regulierung-erfasst-148336/>.

<sup>106</sup> *Ibid.*



However, the promise that NFT technology can help solve crime is overstated. Rather, NFTs could increase the risk of cybercrime. A closer look reveals a number of weaknesses, e.g. copyright violations. When minting an NFT, it is difficult to verify whether the minting is carried out by the (copy-)right holder of a work. It is therefore not surprising that cases have been reported where copycats have minted other people's original works and sold the respective NFTs.<sup>107</sup> To reduce the risk of cybercrime – especially in the NFT art world – and support law enforcement, a less corruptible link between the token, the artist, and the original artwork would be required. However, such an immutable and incorruptible link is currently technologically impossible.<sup>108</sup>

[41] It is also up to the NFT marketplaces to take action against criminal acts on their platforms and thus also against the loss of trust caused by this criminality. It should be possible to identify criminals using the publicly accessible blockchain data. In order for courts to ultimately be able to impose sanctions and for law enforcement to be able to successfully tackle criminals, the NFT marketplaces would have to cooperate with the judiciary and regulators of the various countries involved.<sup>109</sup>

[42] In addition, the classification of NFTs in the existing DLT legislation is very unclear. This is because NFTs can be designed very differently and thus the question of classification cannot be assessed conclusively at a first glance. However, depending on the elements contained in NFTs, it is possible to classify NFTs in the existing classification in individual cases. In our opinion, however, it seems clear that NFTs do not qualify as payment tokens. From a private, tax and intellectual property law perspective, classification is also difficult since the civil law classification as a basis for further legal assessment can only be determined in the respective individual case.

[43] The Swiss Federal Council has not yet revised its position on the need for action in the area of DLT legislation. It remains doubtful whether the Federal Council intends to address the legal classification difficulties of NFTs in the future or whether it continues to see no need for regulatory action and is of the opinion that the existing DLT legislation sufficiently covers NFTs. This is in contrast to the EU, which considers the extension of the MICA legislation to NFTs desirable but ultimately did not implement it. In the opinion of the authors, the need for regulation arises if NFTs are traded in masses on stock exchanges in the future. Then, however, it might already be possible to integrate them into the existing system. In any case, a specification by FINMA would be helpful.

---

JOËLLE LÖTSCHER, MLaw, LL.M., works as a trainee lawyer in the Regulated Markets, Competition, Information Technology and Intellectual Property Team at Walder Wyss in Zurich.

DENNIS TOBLER, MLaw, works as a trainee lawyer in the Regulated Markets, Competition, Information Technology and Intellectual Property Team at Walder Wyss in Zurich.

ANNE-SOPHIE MORAND, Dr. iur., LL.M., Attorney at Law, works at the law firm Walder Wyss AG and primarily advises on all aspects of data protection, information, and technology law.

*The authors gratefully acknowledge Corinne Gilgen's review of the paper.*

---

<sup>107</sup> STEPHEN BIJAN published on 20 March 2021, The Verge, «NFT mania is here, and so are the scammers», available at <https://www.theverge.com/2021/3/20/22334527/nft-scams-artists-opensea-rarible-marble-cards-fraud-art>.

<sup>108</sup> MACKENZIE/BĒRZIŅA (n 7), p. 12.

<sup>109</sup> GRAF (n 66).