The Legal Framework for Non-Fungible Tokens Under the European Union Regulation on Markets in Crypto-Assets[1]

Professor **Romana MATANOVAC VUČKOVIĆ**[2]
Professor **Dubravka AKŠAMOVIĆ**[3]
Associate professor **Lidija ŠIMUNOVIĆ DIKONIĆ**[4]

Abstract

Non-fungible tokens (NFTs) have witnessed a surge in popularity within digital marketplaces. In both commercial and legal practice, the prevailing view is that NFTs constitute a form of crypto-asset recorded on a blockchain as metadata associated with a specific physical or digital object. As NFTs are often linked to copyright-protected works, particularly works of art, it is unsurprising that their defining characteristics are uniqueness and non-fungibility. The growing popularity of NFTs, alongside the broader crypto-asset industry, poses a regulatory challenge within the European Union single market. In response, the European Union has adopted the Markets in Crypto-Assets Regulation (MiCAR), which seeks to harmonise the legal regime governing crypto-assets with a view to enhancing consumer protection and promoting transparency in the crypto-asset market and related activities across the Union. While this paper does not examine the relationship between the rights of NFT holders and those of intellectual property owners in the underlying works, it considers whether MiCAR applies to NFTs. It begins by defining NFTs and analysing the relevant provisions of MiCAR, before offering guidance for regulators and identifying circumstances in which MiCAR will apply. The conclusion assesses the de lege lata *position and advances* de lege ferenda *recommendations.*

Keywords: *non-fungible tokens (NFT), intellectual property right, crypto-asset, blockchain, markets in crypto-assets regulation (MiCAR).*

JEL Classification: K11, K12, K24

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[2] Romana Matanovac Vučković - Faculty of Law, University of Zagreb, Croatia, romana.matanovac.vuckovic@pravo.unizg.hr, ORCID: 0000-0003-3335-4473. **Corresponding author.**

[3] Dubravka Akšamović - Faculty of Law, Josip Juraj Strossmayer University of Osijek, Croatia, daksamov@pravos.hr, ORCID: 0000-0003-4714-7440.

[4] Lidija Šimunović Dikonić - Faculty of Law, Josip Juraj Strossmayer University of Osijek, Croatia, lsimunov@pravos.hr, ORCID: 0000-0003-4753-5590.

1. Introduction

Non-fungible tokens (NFTs) have rapidly gained popularity in the digital world.[5] In both the literature and the marketplace, the prevailing view is that NFTs constitute a unique digital representation of an object, such as a work of art existing in either physical or digital form, recorded on a blockchain.[6] Although popular and widespread, the legal regulation of their status remains neither entirely clear nor harmonised at the international, European Union, or national level.[7] At first glance, the decentralisation of NFTs and their exclusion from complex international and national regulatory frameworks may appear reasonable, as this facilitates the everyday use and exchange of NFTs among rightholders — that is, between the owners of intellectual property rights in the underlying works and the holders of NFTs. On the other hand, this regulatory underdevelopment contributes to legal uncertainty and gives rise to a range of legal ambiguities in the event of disputes concerning the scope of the rights held by NFT holders, including the interpretation of those rights and their relationship to the underlying intellectual property rights.[8]

The situation concerning NFTs on the European Union single market has become even more nuanced following the adoption of the Markets in Crypto-Assets Regulation (MiCAR), whose primary objectives are to enhance transparency in all activities relating to crypto-assets and to strengthen consumer protection within the Union.[9] The difficulty lies in the fact that MiCAR defines the term *crypto-asset* in broad terms, thereby encompassing NFTs within a general category of such assets. However, while the Regulation expressly provides that it does not apply to unique and non-fungible tokens, it also stipulates that, even where certain tokens are regarded as unique and non-fungible, they may, under specific conditions, be deemed fungible and thus fall within its scope.[10]

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[5] For more about the phenomenon of NFTs, see Hadar Y. Jabotinsky and Michal Lavi, 'NFT for Eternity', *University of Michigan Journal of Law Reform* 56, no. 3 (Spring 2023): 830; Baiyang Xiao, 'Copyright Law and Non-Fungible Tokens: Experience from China', *International Journal of Law and Information Technology* 30, no. 4 (Winter 2022): 444; Matthias Hornung and Michael Sperling, 'Non-Fungible Token (NFT) und Ertragsteuern', *DStR* (2023): 2142; Zeynep Ekinci, 'Non-Fungible Tokens and Select Art Law Considerations', *Arts* 12, no. 5 (2023): 3.

[6] Dieter Redeker, *Rechtsprobleme von Internet und Telekommunikation*, 8th ed. (C.H. Beck, 2023), paras. 1429 and 1432, accessed via Beck Online, https://www.beck-online.de; Wolfram Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', in Heinz-Bernd Wabnitz, Thomas Janovsky, and Lothar Schmitt (eds.) *Handbuch Wirtschafts- und Steuerstrafrecht*, 6th ed., C.H. Beck, 2025, para. 37, accessed via Beck Online, https://www.beck-online.de; Iza Razija Mešević, 'NFTs and Copyright – A Special Reference to So-Called "Art NFTs"', *Pravni vjesnik* 39, no. 3–4 (2023): 148.

[7] In this line, see Olga S. Kulakova, 'Digital Art in the Light of NFT: Market Role and Legal Uncertainty', *Digital Law Journal* 3, no. 2 (2022): 39, https://doi.org/10.38044/2686-9136-2022-3-2-36-50.

[8] The legal nature of such a contract may be that of a licensing agreement. Sofia Maria Teodora Dume, 'Navigating the NFT Landscape: Intellectual Property Challenges and Opportunities', *AGORA International Journal of Juridical Sciences* 17, no. 2 (2023): 30–31.

[9] Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, PE/54/2022/REV/1, OJ L 150, 9.6.2023, pp. 40–205.

[10] Regulation (EU) 2023/1114 on markets in crypto-assets (MiCAR), Recitals 10–11.

The structure of the present paper is determined by the current state of the market. The first part elaborates the conceptual definition of NFTs and analyses the relevant provisions of the MiCAR. The central part provides guidelines for regulators to facilitate the application of the Regulation and provides clarification as to the circumstances in which it should apply to NFTs. The concluding section assesses the current *de lege lata* position and advances *de lege ferenda* recommendations.

2. What Is, and What Is Not, a Non-Fungible Token?

One of the phenomena that has attracted considerable attention in the digital world in recent years is the NFT.[11] Although no uniform definition has yet been established, both commercial and legal practice generally regard an NFT as a unique, non-fungible digital representation of an object on a blockchain.[12] NFTs constitute original and identifiable digital representations of an object—that is, crypto-assets created through blockchain technology.[13] In most cases, an NFT merely represents an author's work, most often a work of art, which exists in either physical or digital form and to which the token refers by means of a link.[14]

The essential characteristics of NFTs are uniqueness and non-fungibility, which distinguishes them from fungible tokens (for example, cryptocurrencies).[15] Unlike

[11] Redeker, *Rechtsprobleme von Internet und Telekommunikation*, para. 1429; Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 37. For further discussion on tokens and cryptocurrencies, see Tomislav Jakšić and Siniša Petrović, 'Investicijski DLT/BC token kao financijski instrument (vrijednosni papir) te moguće pravne posljedice takve kvalifikacije', in *Nove tehnologije i pravo društava,* ed. Jakša Barbić (Hrvatska akademija znanosti i umjetnosti, 2021), 140–141, https://dizbi.hazu.hr/a/?pr=i&id=2529 295; Rino Siffert, Siniša Petrović, and Tomislav Jakšić, 'Payment of the Capital Contribution of a Company Limited by Shares in a Cryptocurrency', *Zagrebačka pravna revija* (ZPR) 8, no. 2 (2019): 96–97.

[12] In section 2.3 (Definitions) of its 2025 guidelines for the qualification of crypto-assets as financial instruments, the European Securities and Markets Authority (ESMA) states: 'non-fungible tokens refer to crypto-assets that are unique and not fungible with other crypto-assets as mentioned in Article 2(3) of MiCAR.' See European Securities and Markets Authority (ESMA), *Guidelines on the conditions and criteria for the qualification of crypto-assets as financial instruments*, 19 March 2025, https://www.esma.europa.eu/sites/default/files/2025-03/ESMA75453128700-1323_Guidelines_on_the_conditions_and_criteria_for_the_qualification_of_CAs_as_FIs.pdf; Mešević, 'NFTs and Copyright', 148; Ifeanyi E. Okonkwo, 'NFT, Copyright and Intellectual Property Commercialization', *International Journal of Law and Information Technology* 29, no. 4 (Winter 2021): 297; Udita Kanwar and Sourav Dan, 'Rolling in the Deep: NFTs Interfacing in the Metaverse and Intellectual Property', *Journal of Intellectual Property Studies* 6, no. 2 (July 2022): 33; DeJuawn Griffin, 'Mining the NFT Goldrush; A Prospective Guide to Drafting NFT Contracts', Mercer Law Review 74, no. 2 (Winter 2023): 693–694; Christos A. Makridis, Tim Bates, Neil Barnes, and JiNan Glasgow-George, 'The Future of Intellectual Property: The Complementary Role of Artificial Intelligence and Blockchain', *Journal of the Patent and Trademark Office Society* 104, no. 2 (April 2024): 293; Edward Lee, 'NFTs as Decentralized Intellectual Property', *University of Illinois Law Review* 2023, no. 4 (2023): 1053–1054; Anna Bigda-Wójcik, 'Unlocking the Digital Realm: Exploring NFTs as Catalysts for Digital Copyright Exhaustion', *Journal of Intellectual Property Law & Practice* 18, no. 11 (2023): 808–821; Linnea Kjellberg, 'Copyright and Non-Fungible Tokens' (master's thesis, Uppsala University, 2022), 8–9.

[13] Redeker, *Rechtsprobleme von Internet und Telekommunikation*, para. 1429; Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 37.

[14] Redeker, *Rechtsprobleme von Internet und Telekommunikation*, para. 1429.

[15] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 37.

NFTs, fungible tokens are not unique but generic and can therefore be easily replaced by other tokens of identical value.[16] These characteristics explain why NFTs are used primarily in the arts, in the field of collectibles, and in other forms of unique assets, particularly in relation to digital works of art.[17]

The non-fungibility of NFTs is reflected in the fact that they are generally created on blockchain platforms such as Ethereum, on which each token has its own unique, non-fungible record.[18] Such records are unique because they contain specific information that distinguishes them from all others.[19] This information typically includes data on the NFT's owner, as well as on the origin and authenticity of the object it represents.[20] Although NFTs are most commonly associated with works of art and evoke the notion of art collecting, they can also be used for a variety of other purposes, such as trading in electricity, music streaming, and the representation of corporate structures.[21]

The growing popularity and widespread use of NFTs have not contributed to the harmonisation of their regulatory framework, either at the international or at the EU level.[22] As this paper does not address the relationship between NFTs and the copyrights in the underlying object, whether in physical or digital form, it does not analyse the relationship between NFT holders and intellectual property owners. Accordingly, in order to determine whether the provisions of MiCAR apply to NFTs, the paper first examines the objectives of MiCAR and its key provisions relevant to NFTs.[23]

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[16] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 37. Dirk Zetzsche and Jannik Woxholth, *The EU Law on Cryptoassets: A Guide to European Fintech Regulation* (Cambridge University Press, 2025): 3.

[17] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', paras. 37 and 38.

[18] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 38; Hadar Y. Jabotinsky and Michal Lavi, 'NFT for Eternity', *University of Michigan Journal of Law Reform* 56, no. 3 (Spring 2023): 843.

[19] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 38.

[20] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 38.

[21] Niedernhuber, 'Blockchain und Kryptowerte im Strafrecht', para. 38; Redeker, *Rechtsprobleme von Internet und Telekommunikation*, para. 1429; Luo Han and Du Tinghuan, 'Copyright Law Regulatory Framework for NFT Collections Transactions: Origins, Controversies and Approach Exploration', *Technium Social Sciences Journal* 63 (2024): 73; Corinne Tan, 'Rights in NFTs and the Flourishing of NFT Marketplaces', *International Journal of Law and Information Technology* 32 (2024): 3; Dume, 'Navigating the NFT Landscape', 30.

[22] In this line, see Olga S. Kulakova, 'Digital Art in the Light of NFT: Market Role and Legal Uncertainty', *Digital Law Journal* 3, no. 2 (2022): 39.

[23] In German legal literature, which closely aligns with the legal tradition of Croatian law, it is noted that copyright — namely, moral and economic rights—and the content of those rights are not transferred to an NFT. Certain rights, such as the right of use, may be transferred to the holder of an NFT through a smart contract. It is also emphasised that an NFT does not constitute ownership or possession of a physical object, most commonly a work of art in physical form, to which it refers. Redeker, *Rechtsprobleme von Internet und Telekommunikation*, para. 1429; see also Dume, 'Navigating the NFT Landscape', 30–31.

3. The MiCAR Through the Prism of NFTs

3.1. Objectives, Definition of Crypto-Assets, and the Notions of Uniqueness and Non-Fungibility Under MiCAR

The MiCAR was conceived as an instrument to address deficiencies in regulatory development and the legal uncertainty surrounding the status of crypto-assets within the European Union single market.[24] It entered into application on 30 December 2024, with the objective of harmonising the legal framework governing crypto-assets, as well as the related activities and services, across the Union. The Regulation seeks primarily to safeguard consumer interests and to establish a more transparent regulatory environment for crypto-assets.[25]

One of the defining features of the MiCAR is its definition of a crypto-asset as 'a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology'.[26] An examination of the conceptual nature of NFTs reveals that this definition clearly places them within the broader category of crypto-assets.[27] Nevertheless, although NFTs satisfy MiCAR's definition of a crypto-asset, the legal question remains whether the Regulation applies to them, given that it primarily governs three specific types of crypto-tokens: utility tokens, asset-referenced tokens, and e-money tokens.[28]

The response to this question is not straightforward, as the Regulation expressly provides in several instances that it does not apply to crypto-assets that are unique and not fungible.[29] This is reflected, *inter alia*, in Recitals 10 and 11 and in Article 2(3), which establishes a general derogation from the application of MiCAR to unique and

[24] The draft of the MiCAR was presented in November 2020. In accordance with Article 149, the Regulation applies in principle as of 30 December 2024, although certain provisions have applied since 29 June 2023 and others since 30 June 2024.

[25] In Croatia, MiCAR has been transposed through the Act Implementing Regulation (EU) 2023/1114 on Markets in Crypto-Assets. Niels Vandezande, *Crypto-Assets: The European Legal Framework* (Intersentia, 2023), 332; Saša Nikšić, 'Utjecaj prava Europske unije na razvoj odgovornosti za štetu kod pojedinih vrsta digitalnih usluga u hrvatskom pravu', *Zbornik Pravnog fakulteta Sveučilišta u Rijeci* 46, no. 1 (2025): 166. On the implications of the above Act for insolvency proceedings, see Dejan and Martina Tičić, 'Zakon o provedbi Uredbe (EU) 2023/1114 o tržištima kriptoimovine – odabrana pitanja stečaja pružatelja usluga povezanih s kriptoimovinom', *Informator* 6855 (27 September 2024): 3, https://informator.hr/strucni-clanci/zakon-o-provedbi-uredbe-eu-2023-1114-o-trzistima-kriptoimovine-odabrana-pitanja-stecaja-pruzatelja-usluga-povezanih-s-kriptoimovinom.

[26] MiCAR, Recital 2; MiCAR, Article 3(1)(5); Nikšić, 'Utjecaj prava Europske unije na razvoj odgovornosti za štetu', 179.

[27] In this line, see Vandezande, *Crypto-Assets*, 332.

[28] Vandezande, *Crypto-Assets*, 332. The text of the Regulation enumerates three categories of crypto-assets: (i) e-money tokens (EMTs), (ii) asset-referenced tokens (ARTs), and (iii) other crypto-assets that are neither EMTs nor ARTs. Croatian Financial Services Supervisory Agency (HANFA) and Croatian National Bank (HNB), 'Pojašnjenje o kriptoimovini: Što Uredba MiCAR znači za vas kao potrošača?', 2024, accessed 22 October 2025, https://www.hnb.hr/documents/20182/5178340/hp06102025_pojasnjenje-o-kriptoimovini.pdf/.

[29] MiCAR, Recitals 10–11; MiCAR, Article 2(3); HANFA and HNB, 'Pojašnjenje o kriptoimovini'. See also Ermias, 'NFTs & MiCARR: Understanding the Regulatory Landscape', *Storm Partners*, 27 March 2025, https://www.storm.partners/blog-post/nfts-MiCARr-understanding-the-regulatory-landscape.

non-fungible crypto-assets.[30]

The MiCAR introduces an additional degree of ambiguity by expressly providing that even where such unique and non-fungible crypto-assets are traded on a marketplace, they are nevertheless to be regarded as unique within the meaning of its provisions if, by virtue of their artistic distinctiveness, they are not readily interchangeable.[31] At first sight, this might suggest that MiCAR does not apply to NFTs at all, since their defining characteristics are precisely those of uniqueness and non-fungibility.

However, closer analysis reveals that the legal position of NFTs under MiCAR is rendered even more complex by Recital 11, which provides that fractional parts of a unique and non-fungible crypto-asset issued in a large series or collection should not automatically be regarded as unique and non-fungible, even if marketed as such.[32] Moreover, MiCAR further stipulates that it applies to crypto-assets whose 'de facto features or whose features that are linked to their de facto uses, would make them either fungible or not unique', and that, in this context, regulators, when exercising their discretionary judgment in determining the Regulation's applicability, should adopt a substance-over-form approach.[33]

It follows that, on the basis of a teleological interpretation of Recital 11, the notions of uniqueness and non-fungibility under MiCAR do not correspond to the market understanding of NFTs.[34] This conclusion is reinforced by the wording of Recital 11 itself, which provides that a token is to be regarded as fungible where it is fractionalised in such a way that the holders of individual parts of the NFT possess proportionate rights in the underlying crypto-asset, even though, in market practice, issuers may present such fractional parts as unique.[35]

Further to the foregoing, the provisions of MiCAR concerning the application of NFTs should be interpreted teleologically, in line with the objectives of the Regulation. In this context, it is essential to recognise that the notion of uniqueness in the crypto-asset marketplace differs from its meaning in law, that is, under MiCAR. Accordingly, the following section sets out the legal interpretation of the concept of fungibility and applies it to the specific issue of the Regulation's applicability to NFTs.

3.2. The Legal and Market Understanding of Fungibility in the Context of Crypto-Assets

In private law, fungible goods are generic items that can be readily substituted with others of the same kind, quantity, and value, while retaining equivalent quality.[36]

[30] MiCAR, Article 2(3); John, 'Behandlung von NFT und Utility Token', 162–164; Ermias, 'NFTs & MiCARR'.
[31] MiCAR, Recitals 10–11. See also Ermias, 'NFTs & MiCARR'.
[32] MiCAR, Recital 11.
[33] MiCAR, Recital 11.
[34] MiCAR, Recital 11 and Article 2(3); Ermias, 'NFTs & MiCARR'.
[35] MiCAR, Recital 11.
[36] Ermias, 'NFTs & MiCARR'. Vedriš, Martin, i Petar Klarić, *Građansko pravo*. Zagreb: Narodne novine, 2025, 78.

They typically include goods such as wine, flour, sugar, and similar commodities.[37] By contrast, non-fungible goods are specific and unique, and cannot be substituted with equivalent items of the same quality.[38] Such things are called res species in law.[39] When assessing whether something is fungible or non-fungible in law, not only the objective criterion of natural quality is crucial, but the will of the subject is also taken into account.[40]

In the crypto-asset marketplace, the notion of fungibility differs from its legal understanding and depends on the type of crypto-asset concerned.[41] For instance, in the case of fungible tokens, such as bitcoin, each unit of the cryptocurrency is interchangeable with any other unit that is identical in value and function. Conversely, non-fungible crypto-assets, such as NFTs, are unique and cannot be replaced or exchanged with any other crypto-asset.[42]

The MiCAR therefore distinguishes between NFTs that are truly non-fungible, both legally and technically, and those that, although designated as NFTs, are in essence not non-fungible but rather fungible tokens. Such ostensibly non-fungible tokens include, for example, fractionalised NFTs or NFTs issued in large series or collections that lack any genuine collecting purpose and instead operate as disguised financial instruments serving functions such as capital raising or value preservation.[43]

Moreover, the interpretation of uniqueness and fungibility under MiCAR differs from the understanding of uniqueness and non-fungibility in the broader crypto-asset market. Consequently, while most NFTs are likely to fall outside the scope of the Regulation, certain NFTs may, in specific circumstances, fall within its ambit.[44] Determining whether a crypto-asset designated as an NFT is genuinely unique and non-fungible within the meaning of MiCAR therefore requires distinguishing between the Regulation's interpretation of these notions and their treatment in both market practice and legal discourse.[45]

As the assessment of uniqueness and non-fungibility must be undertaken on a case-by-case basis, the European Securities and Markets Authority (ESMA) has published guidelines on the qualification of crypto-assets as financial instruments in order to assist regulators in exercising their discretionary judgment.[46] This publication is of particular significance, as the guidelines are intended to support regulatory decision-making and are therefore examined in the following section of this paper.

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[37] In Latin res fungibiles; Vedriš, Martin, Petar Klarić, *Građansko pravo*. Zagreb: Narodne novine, 2025. Klarić and Vedriš, *Građansko pravo*, 78.
[38] Klarić and Vedriš, *Građansko pravo*, 78; Ermias, 'NFTs & MiCARR'.
[39] Klarić and Vedriš, *Građansko pravo*, 78.
[40] Klarić and Vedriš, *Građansko pravo*, 78.
[41] MiCAR, Recitals 10–11; Ermias, 'NFTs & MiCARR'.
[42] Ermias, 'NFTs & MiCARR'.
[43] MiCAR, Recital 11; Ermias, 'NFTs & MiCARR'.
[44] MiCAR, Article 2(3); Ermias, 'NFTs & MiCARR'.
[45] MiCAR, Article 2(3); Ermias, 'NFTs & MiCARR'.
[46] ESMA, *Guidelines*; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.

3.3. ESMA Guidelines Relevant to the Application of MiCAR to NFTs

On 19 March 2025, ESMA issued the *Guidelines on the conditions and criteria for the qualification of crypto-assets as financial instruments*.[47] Paragraphs 65 to 73 of the Guidelines specifically address crypto-assets that are unique.[48] The purpose of the publication, *inter alia*, is to assist regulators in assessing the uniqueness of such assets.[49]

In paragraph 67 of its Guidelines, ESMA reiterates MiCAR's position by stating that regulators should regard NFTs as unique only if they are genuinely non-substitutable.[50] Within the meaning of this paragraph, a unique NFT must possess clear and distinct characteristics and rights that clearly differentiate it from other crypto-assets.[51] In other words, under the ESMA Guidelines, the value of a unique crypto-asset should be determined by reference to its individual characteristics, meaning that it is neither comparable nor substitutable with any other asset, rather than by comparison with other crypto-assets exhibiting similar characteristics.[52] This interpretation confirms the substance-over-form approach set out in Recital 11 of MiCAR for assessing the uniqueness of NFTs.[53]

The prevailing view in the literature is that, according to the ESMA Guidelines, the assessment of uniqueness involves determining the degree of uniqueness or fungibility of a crypto-asset.[54] The Guidelines specify that, in making such an assessment, the following criteria should be considered on a case-by-case basis: 'intrinsic value and rarity, the specific functionality and rights of use, which are only available to the respective holder of the crypto-asset and which distinguish the crypto-asset from other crypto-assets from the holder's perspective'.[55] It should be noted that the indicators set out in the Guidelines are not exhaustive, and other criteria may also be taken into account.[56]

In this regard, it is not decisive whether a crypto-asset is used for investment purposes — for instance, where the holder of an NFT plans to resell the asset once the price increases.[57] The Guidelines clarify that uniqueness exists even where a crypto-asset is readily marketable. In other words, the market value of a crypto-asset must derive from its unique characteristics rather than from the frequency with which the

[47] ESMA *Guidelines*, paragraphs 65–73.
[48] ESMA *Guidelines*, paragraphs 65–73.
[49] ESMA *Guidelines*, paragraphs 65–73.
[50] ESMA *Guidelines*, paragraph 67.
[51] ESMA *Guidelines*, paragraph 67. In this line, see also MiCAR, Recitals 10–11.
[52] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73; MiCAR, Recital 11; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[53] ESMA *Guidelines*, paragraph 67. In this line, see also MiCAR, Recitals 10–11.
[54] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[55] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[56] ESMA *Guidelines*, paragraph 68.
[57] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.

NFT is transferred from one holder to another.[58] The frequency of transfer depends on market opportunities and trends, and it is even possible that an NFT may be traded more frequently precisely because of its uniqueness.[59]

The Guidelines provide that fractionalised NFTs may still be regarded as unique, provided that the uniqueness of their fractional parts remains the primary determinant of the collection as a whole, notwithstanding the potential combinations of those parts.[60] Such situations may arise where several NFTs together represent a single digital work of art, but each individual NFT confers distinct, unique, and non-fungible rights on its holder.[61] For instance, NFT-1 may grant its holder the right to participate in a personal 'meeting' with the artist, while NFT-2 grants the holder the right to attend an exhibition.[62] Uniqueness within the meaning of MiCAR may be established in relation to fractionalised NFTs if the individual value of specific fractional parts is determined solely by aesthetic criteria. For example, where NFT-1 represents a golden painting and NFT-2 a silver one.[63]

Having outlined the meaning of uniqueness and non-fungibility of crypto-assets under the ESMA Guidelines, the following section provides specific guidance to national regulators on the proper application of MiCAR to NFTs.

4. Guidelines for Regulators on the Proper Application of MiCAR to NFTs

4.1. NFTs Falling Outside the Scope of MiCAR

The general exemption from the application of the MiCAR to NFTs, set out in Article 2(3), reflects the clear intention of the European legislator that unique and non-fungible tokens should fall outside the scope of the Regulation.[64] When assessing whether an NFT is unique and non-fungible within the meaning of MiCAR, regulators should be guided by the key instruction provided in its recitals and examine the true legal substance of the rights arising from NFTs, together with their essential characteristics, in accordance with the substance-over-form approach articulated in Recital 11. Accordingly, the assessment should focus on the economic uniqueness and non-fungibility of an NFT rather than on the mere designation or form of the crypto-asset as assigned by its issuer.[65] More broadly, in characterising and determining the uniqueness and non-fungibility of crypto-assets, regulators should concentrate on their economic rather than purely technical features.[66]

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[58] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73.
[59] In this line, see also HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[60] John, 'Behandlung von NFT und Utility Token', 162–164; ESMA *Guidelines*, paragraphs 65–73; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[61] John, 'Behandlung von NFT und Utility Token'.
[62] John, 'Behandlung von NFT und Utility Token'.
[63] John, 'Behandlung von NFT und Utility Token'.
[64] Ermias, 'NFTs & MiCARR'.
[65] MiCAR, Recitals 10–11; Ermias, 'NFTs & MiCARR'.
[66] MiCAR, Article 2(3); John, 'Behandlung von NFT und Utility Token', 162–164; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.

In applying MiCAR to NFTs, regulators should not classify them on the basis of their purpose (for example, whether a crypto-asset functions as a means of payment or as an investment), but should instead assess uniqueness on a case-by-case basis, taking into account the specific factors underlying the value of the crypto-asset.[67]

The frequency of NFT resales or their acquisition for investment purposes has no bearing on the proper regulatory assessment. What takes precedence are the specific rights and functional attributes of NFTs that influence fluctuations in their value—the so-called primary factors that create value.[68]

In conclusion, NFTs linked to digital works of art and used as collectibles or within the gaming industry fall outside the scope of MiCAR.[69] The element of collecting can readily be identified by examining the motives underlying an individual's acquisition of an NFT: if the holder has purchased it as a collector or to advance within a game, MiCAR does not apply.[70]

4.2. NFTs Falling Within the Scope of MiCAR[71]

As shown earlier in this paper, the MiCAR expressly provides that it applies to NFTs representing fractional parts of another NFT; those issued in large series or collections; and tokens designated as 'NFTs' by issuers who have ascribed to them the characteristics of uniqueness and non-fungibility, despite their actual fungible nature.[72]

The question of how to assess the uniqueness and non-fungibility of NFTs is an intricate one. Technological neutrality and a proportionate regulatory framework, designed to support and foster the development of the digital market rather than hinder it, should serve as guiding principles for regulators.[73] It should also be noted that asset-referenced tokens and e-money tokens, as forms of stable cryptocurrency, together with utility tokens, constitute the primary focus of MiCAR, whose objective is to protect consumers and investors and to prevent systemic risk.[74] The intention of the European legislator was therefore to include within the scope of the Regulation only those NFTs that function as means of preserving value or raising capital through their issuance, the so-called payment or investment tokens.[75]

On the one hand, regulators should proceed with caution, as the fact that NFTs are fractionalised or issued in large series or collections does not in itself entail the automatic application of the Regulation.[76] However, where NFTs are fractionalised or used for capital raising and marketed as crypto-assets that ensure stability or function

[67] John, 'Behandlung von NFT und Utility Token', 162–164; HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[68] HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[69] HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[70] HANFA and HNB, 'Pojašnjenje o kriptoimovini'.
[71] Ermias, 'NFTs & MiCARR'.
[72] MiCAR, Recitals 10–11.
[73] Ermias, 'NFTs & MiCARR'.
[74] Ermias, 'NFTs & MiCARR'.
[75] Ermias, 'NFTs & MiCARR'.
[76] Ermias, 'NFTs & MiCARR'.

as a means of payment, such tokens constitute, under MiCAR, asset-referenced tokens or e-money tokens that fall within the scope of the Regulation. Moreover, where fractionalised tokens are, in fact, generic tokens marketed as readily interchangeable goods, they should also fall within the scope of the Regulation.[77] Practitioners caution that, in such cases, these so-called NFTs closely resemble crowdfunding arrangements, as they function not as NFTs but as means of payment or stores of stable value, and should therefore fall within the scope of MiCAR on the basis that they are, in effect, fungible.[78]

On the other hand, however, fractionalised tokens and tokens issued in large series or collections may nonetheless be regarded as unique if they confer certain benefits on the holder, such as aesthetic or functional features, or if they are used as collectibles.[79] In such cases, regulators should assess whether, in the marketing of NFTs, issuers make statements suggesting that the tokens generate income, maintain a stable value, or attract a broad investor base, as this would indicate a risk that they qualify as financial instruments.[80]

It follows that NFTs are to be regarded as fungible where they form part of a series or collection that is itself fungible, or where they confer on the holder rights comparable to those attached to a financial instrument. Such NFTs therefore fall within the scope of MiCAR. Where the regulator determines that these tokens do indeed fall within the scope of the Regulation, issuers are required to obtain authorisation, prepare a white paper, and comply with the supervisory obligations imposed by the regulator, among other requirements.[81]

5. Conclusion

The European legislator adopted the MiCAR with the objective of ensuring a high level of consumer protection, fostering innovation, safeguarding financial stability, and promoting fair competition within the European Union single market.[82] The legislator thereby confirmed that NFTs fall within the broadly defined concept of crypto-assets established by the Regulation, as a category of crypto-assets that is unique and non-fungible.[83]

However, the objective was not to regulate the legal status of NFTs as tokens that are unique and non-fungible — that is, tokens relating to collectibles or works of art.[84] It can therefore be concluded that MiCAR will, as a rule, not apply to NFTs. Nonetheless, a teleological interpretation of the Regulation may lead to the conclusion that, in certain cases, tokens referred to as NFTs in the crypto-asset marketplace will fall within its scope where their true function is not to serve as collectibles or works of

[77] Ermias, 'NFTs & MiCARR'.
[78] Ermias, 'NFTs & MiCARR'.
[79] Ermias, 'NFTs & MiCARR'.
[80] Ermias, 'NFTs & MiCARR'.
[81] See MiCAR.
[82] Vandezande, *Crypto-Assets*, 332; Ermias, 'NFTs & MiCARR'.
[83] MiCAR, Recital 10 and Article 2(3).
[84] Ermias, 'NFTs & MiCARR'.

art but rather as means of payment, instruments for capital raising, or investment vehicles.[85] In other words, NFTs must be unique and non-fungible in both the legal and the economic sense to fall outside the scope of the Regulation.[86] It should also be noted that the mere designation of a token as an NFT is not sufficient for its exemption from the application of MiCAR; rather, it must be examined whether the token constitutes a disguised financial instrument merely marketed as an NFT.

In practice, regulators must exercise particular caution and apply strictly the substance-over-form approach set out in Recitals 10 and 11 of MiCAR, in order to avoid arbitrary discretionary judgments and the incorrect application of the Regulation's provisions. Fractionalised and serial NFTs may nevertheless be regarded as unique and non-fungible where they possess the degree of uniqueness required by MiCAR and are not, in substance, disguised financial instruments whose use may give rise to systemic or financial risks, such as stable coins or investment tokens.[87]

In summary, insofar as the fundamental purpose of NFTs is to function as collectibles and works of art, rather than as instruments for capital preservation, payment, or capital raising, they fall outside the scope of the MiCAR.[88] Given that the objectives of the Regulation are to ensure stability and transparency in the digital marketplace for crypto-assets, NFTs used as collectibles do not pose a threat to the stability or legal certainty of the European Union single market.[89]

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[85] Ermias, 'NFTs & MiCARR'.
[86] MiCAR, Article 2(3); John, 'Behandlung von NFT und Utility Token', 162–164.
[87] Ermias, 'NFTs & MiCARR'.
[88] Ermias, 'NFTs & MiCARR'.
[89] Ermias, 'NFTs & MiCARR'.

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