E-money Tokens: Licensing and Substantive Regime

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Publication date
2025

UNIVERSITY OF AMSTERDAM

AMSTERDAM CENTER FOR LAW & ECONOMICS

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Amsterdam Center for Law & Economics Working Paper No. 2025-03

E-MONEY TOKENS

LICENSING AND SUBSTANTIVE REGIME

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THIS PAPER IS FORTHCOMING AS A CHAPTER IN "MARKETS IN CRYPTO-ASSETS REGULATION" (OUP) EDITED BY FILIPPO ANNUNZIATA AND ROSA LASTRA

ABSTRACT

This chapter analyses the regime applicable to stablecoins referencing one official currency—the e-money tokens—under the Markets in Crypto-Assets Regulation (MiCAR). The analysis highlights the dual nature of e-money tokens, which are characterised both as a type of crypto-assets and as electronic money. From this dual nature stems a complex interplay between MiCAR's bespoke provisions and the existing framework for electronic money and payment services. The chapter explores in detail the licensing requirements, substantive obligations, and prudential safeguards applicable to issuers of e-money tokens, including the stricter regime for significant issuers. Finally, it addresses the challenges of extraterritoriality, and the mechanisms designed to preserve EU monetary sovereignty, particularly in relation to non-MiCAR compliant stablecoins and non-euro denominated e-money tokens. The analysis contributes to a broader understanding of how EU financial regulation adapts to the evolving landscape of digital private money.

KEYWORDS: cryptocurrencies, e-money tokens, market in crypto-asset regulation

JEL CLASSIFICATION: G23; K22; K23

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1. INTRODUCTION

The release of the Bitcoin white paper in 2008 marks the beginning of the crypto economy, whose main promise was to decentralise and democratise money and finance.[1] Since then, the crypto industry has changed and evolved dramatically, both in terms of size and available instruments.[2] The rise of stablecoins represents one of the most consequential developments towards the maturity of the industry.[3]

First generation cryptocurrencies have a highly volatile nature that largely depends on the users' expectations about the future value of the currency itself.[4] In contrast, stablecoins purport to maintain a stable value and utilise stabilisation mechanisms to make this credible.[5] This innovation is driven by the demand, both in the retail and wholesale markets, for near-instant, low-cost cross-border transfers in the on-chain environment. Stablecoins can act as a medium of exchange on the blockchain, allowing users to avoid converting their crypto activities into fiat currencies and so increasing their ability to carry out complex transactions completely on-chain. On the other hand, stablecoins also showcase a trend whereby what was promised to revolutionise the financial system, decentralising and democratising it, started to align with the mechanisms of traditional finance.[6] The creation and circulation of assets promising safety and liquidity so as to

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[1] Satoshi Nakamoto, 'Bitcoin: A Peer-to-Peer Electronic Cash System' (2008) <https://bitcoin.org/bitcoin.pdf> accessed 10 June 2025. For an overview of the key promises of the blockchain technology, see Sinclair Davidson, Primavera De Filippi, and Jason Potts, 'Blockchains and the economic institutions of capitalism' (2018) 14(4) Journal of Institutional Economics 639.

[2] The market capitalisation of the crypto market is around 3.4 trilion dollars in June 2025. See CoinMarketCap, Crypto Market Overview <https://coinmarketcap.com/charts/> accessed 10 June 2025. Beyond cryptocurrencies, the blockchain technology is also used for several other applications, such as smart contracts, decentralised autonomous organisation and non-fungible tokens.

[3] Lennart Ante, Ingo Fiedler, and Elias Strehle, 'The influence of stablecoin issuances on cryptocurrency markets' (2021) 41 Finance Research Letters 1.

[4] Christian Catalini, and Joshua S. Gans, 'Some simple economics of the blockchain' (2020) 63(7) Communications of the ACM 80.

[5] For this definition see Financial Stability Board, 'Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements - Final Report and High-Level Recommendations' (2020), 5 <https://www.fsb.org/wp-content/uploads/P131020-3.pdf> accessed 10 June 2025.

[6] See Arnoud Boot, Peter Hoffmann, Luc Laeven, and Lev Ratnovski, 'Fintech: what's old, what's new?' (2021) 53 Journal of Financial Stability 1. From a legal perspective on the same aspect, see Fatjon Kaja, Edoardo D. Martino, and Alessio M. Pacces, 'Fintech and The Law and Economics of Disintermediation' in Iris Chiu and Gudula Deipenbrock (eds), *Routledge Handbook of Financial Technology and Law* (Routledge 2021).

broaden the scope of financial transactions represent the cornerstone of modern finance.[7] These characteristics enable stablecoins to be used as a means of payment for on-chain transactions, with a reasonable ambition to become widely accepted and be used also in off-chain contexts, posing them in direct competition with fiat money.[8]

From the perspective of the EU legislator, these developments have attracted considerable attention within the realm of the European Commission's "Digital Finance Package," which, since September 2020, has sought to "future-proof" the EU's payments.[9]

However, the existing legislative framework of electronic money and payments—principally the Electronic Money Directive (hereinafter "EMD")[10] and the Payment Services Directive (hereinafter "PSD")[11]—was conceived before the advent of distributed-ledger technologies and stablecoins, so that its applicability to this new phenomenon posed considerable legal and operational challenges. Accordingly, the goal to future-proof EU payments has led to a bespoke regulation of stablecoins in the Market in Crypto-asset Regulation (hereinafter "MiCAR").[12]

MiCAR introduces two categories of stablecoins: 'e-money tokens' and 'asset-referenced tokens'. This chapter focuses on the legal regime of e-money tokens; however, to appreciate their specific financial and legal meaning, it is useful to briefly compare the two. Under MiCAR, an 'e-money token' is defined as a crypto-asset that purports to maintain a stable value by referencing the value of one official currency,[13] whereas an 'asset-referenced token' is defined as a crypto-asset that purports to maintain a stable value

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[7] Gary Gorton, 'The history and economics of safe assets' (2017) 9(1) Annual Review of Economics 547.

[8] Edoardo D. Martino, 'Monetary sovereignty in the digital era. The law & macroeconomics of digital private money' (2024) 52 Computer Law & Security Review 1.

[9] Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a retail payments strategy for the EU' COM(2020) 592 final, 11.

[10] Directive 2009/110/EC of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money [2009] OJ L267/7 (EDM).

[11] Directive 2015/2366 of 25 November 2015 on payment services in the internal market [2015] OJ L337/35 (PSD).

[12] Regulation 2023/1114 of 31 May 2023 on markets in crypto-assets [2023] OJ L150/40 (MiCAR).

[13] Article 3(1)(7) MiCAR.

by referencing another value or right or a combination thereof, including one or more official currencies.[14] Looking comparatively at these two definitions, both focus on the promise made by the issuer to maintain a stable value. The key difference lies in the reference point for such value stability, with e-money tokens promising to maintain a stable value only with reference to one official currency. This distinction implies a different regulatory treatment and, in the wider context of EU financial regulation, the designation of e-money tokens as a crypto-asset class that is equivalent to electronic money, as defined and regulated in the EMD.[15]

This Introduction highlights the economic and societal relevance of e-money tokens as well as their peculiar and intricate legal status. Three dimensions are particularly relevant. First, e-money tokens' technological innovativeness raises novel legal questions regarding their interoperability with traditional payment systems.[16] Second, e-money tokens exhibit systemic importance, so much so that their failure could threaten financial stability, whereas their generalised adoption could challenge monetary sovereignty.[17] Third, e-money tokens sit at the intersection of two regulatory regimes: they must satisfy both MiCAR's bespoke token rules, including white paper disclosure and marketing controls, and the prudential requirements of the EMD, including own-funds and safeguarding of customer funds. The resulting regulatory overlay is both rich and complex, warranting close examination.

The remainder of the chapter unfolds as follows. Section 2 analyses the licensing regime for e-money tokens, including content- and procedure-related aspects. Section 3 examines substantive requirements for e-money token issuers, including MiCAR's token-specific rules alongside the continuing applicability of the EMD and the PSD where

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[14] Article 3(1)(6) MiCAR.

[15] See article 2(1)(2) EMD. Section 2.3 and 3.2.1 focus on the applicability of the EMD to e-money tokens. It is worth noting that the reference to electronic money only applies with reference to e-money tokens and is never mentioned in relation to asset-referenced tokens.

[16] On the issue, see Andrea Minto, 'E-money tokens and coordination issues between the Market in Crypto-assets Regulation (MiCAR) and the payment services legislation (PSD2)' (2024) 19(4) Capital Markets Law Journal 362.

[17] See, respectively, Edoardo D. Martino, 'Regulating Stablecoins as Private Money between Liquidity and Safety. The Case of the EU 'Market in Crypto Asset' (MiCA) Amsterdam Center for Law & Economics Working Paper No. 2022-07 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4203885> accessed 10 June 2024, and Martino (n 8).

relevant and the special regime for significant e-money tokens. Section 4 explores the extraterritoriality problem, looking at the effectiveness of MiCAR's rules for foreign issuers not registering under MiCAR and for non-euro denominated stablecoins. Finally, Section 5 offers brief concluding reflections.

2. E-MONEY TOKENS LICENSING REQUIREMENTS

2.1 GENERAL PRINCIPLES

Title IV of the MiCAR sets the regulatory requirements for the offer to the public or admission to trading of e-money tokens. Crucially, MiCAR does not allow issuers to select the regulatory regimes by designing their token in a particular way.[18] The defining characteristics of e-money tokens are the promise to maintain a stable value and reference to one official currency.[19] The first characteristic distinguishes e-money tokens and asset-referenced tokens from the general category of crypto-assets;[20] whereas the second characteristic distinguishes e-money tokens and asset-referenced tokens. Therefore, any token, including algorithmic stablecoins, purporting to maintain stable value and referencing one official currency is considered an e-money token and falls within the scope of e-money tokens regulation.[21]

MiCAR carves out certain categories of digital assets from its scope of application. First, MiCAR applies to natural and legal persons and certain other undertakings;[22] accordingly, it does not apply to crypto-asset services that are provided in a fully decentralised manner without any intermediary.[23] This general formulation brings about

[18] See Recital 41 MiCAR.

[19] See article (3)(7) for the definition of e-money tokens. "Official currency" is defined as official currency of a country that is issued by a central bank or other monetary authority. See article 3(1)(8) MiCAR.

[20] "Crypto-asset" represent the broadest legal category and are defined 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" – See article 3(1)(5) MiCAR.

[21] See Recital 41. For the problems arising from the qualification of algorithmic stablecoins, see Edoardo D. Martino E and Yannick Roos 'The Law of Algorithmic Stablecoins in Europe' (2024) 41(1) Banking and Finance Law Review 75

[22] See article 2 MiCAR. On the interpretative problems of the meaning of 'other undertakings' see Filippo Annunziata, 'Taxonomy of Crypto-Assets and Financial Instruments: Where Do We Stand?' (2024) Bocconi Legal Studies Research Paper No. 4989905, 37 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4989905> accessed 10 June 2025.

[23] See Recital 22 MiCAR.

considerable interpretative problems when it comes to understanding what should be considered 'fully decentralised' and the metric used to measure decentralisation.[24] In the context of e-money tokens, this problem can arise specifically with algorithmic stablecoins.[25]

MiCAR also does not apply to tokens that qualify as transferable securities under MiFID.[26] deposits or structured deposits under the Deposit Guarantees Directive, or securitisation positions under the Securitisation Regulation.[27] From the perspective of e-money qualification, this may become particularly problematic in case of the issuance of a tokenised Money Market Fund which would issue an instrument functionally comparable to an e-money token but would not be subject to MiCAR.[28]

The Regulation also does not apply 'funds' as defined in the PSD, unless they qualify as e-money tokens.[29] This specification goes hand in hand with the EU legislator's decision to qualify e-money tokens as electronic money;[30] which implies that, unless MiCAR provides otherwise, the EMD applies to e-money tokens both in terms of prudential requirements and the issuance and redeemability of tokens.[31] This highlights the EU legislators' approach to stablecoins as functionally equivalent to electronic money so that the principle of 'same activity, same risk, same regulation' applies to the largest extent possible.[32] This regulatory architecture created the problem of classifying as 'payment services' the services provided by crypto asset service providers (CASPs) with the

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[24] On the technical impossibility of a 'fully decentralised' blockchain application, see Katrin Schuler et al., 'On DeFi and On-Chain CeFi: How (Not) to Regulate Decentralized Finance' (2024) 10(2) Journal of Financial Regulation, 213.

[25] Martino and Ross (n 21), 91.

[26] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments [2014] OJ L173/349 (MiFID)

[27] Article 2(4) MiCAR. For a conceptual analysis of the borders between crypto-assets and financial instruments, see Matthias Lehmann and Fabian Schinerl, 'The Concept of Financial Instruments: Drawing the Borderline between MiFID and MiCAR' (2024) 19(4) Capital Markets Law Journal 330.

[28] Ugo Malvagna, 'Asset-referenced tokens (ART) ed e-money tokens (EMT): caratteristiche ed elementi qualificanti' (2025) 103 Quaderni di Ricerca Giuridica di Banca D'Italia 58.

[29] Article 2(4)(c) MiCAR. Funds are defined as "banknotes and coins, scriptural money or electronic money", see article 4(1)(25) PSD.

[30] Article 48(2) MiCAR.

[31] Article 48(3) MiCAR explicitly refers to the Title II and Title III of the EMD.

[32] See Recital 9 MiCAR. The need to apply the same regulation to assets that are considered equivalent drives the legislative decisions of the policy makers, especially with regards to the redemption rights. On this specific aspect, see Recital 19 MiCAR.

consequence that these CASPs should also seek a license as payment institution.[33] Recently, the European Banking Authority (EBA) clarified the matter with a 'no action letter' differentiating between different services.[34] A first group of services, including exchange of e-money tokens for funds and exchange of e-money tokens for other crypto-assets, should not be considered as payment services.[35] This group of exempted services also includes the case where crypto-asset service providers intermediate the purchase of any crypto assets with e-money tokens. A second group of services, including transfer of e-money tokens carried out by an entity on behalf of the client, and custody and administration of the e-money tokens, are considered payment services so that the CASPs should be appropriately licensed. However, the EBA advised the national competent authorities to grant a grace period for all services until March 2026.

Piecing together all these legislative data, we can conclude that any natural or legal person–and not a decentralised protocol–offering tokens that purport to maintain a stable value by referencing one official currency and not qualifying for any other regulatory regime mentioned in article 2(4) MiCAR is bound by the specific regulatory requirements for e-money tokens; i.e., Title IV of MiCAR.

MiCAR restricts the possibility of offering to the public or seeking admission to trading of e-money tokens to credit institutions and electronic money institutions.[36] Therefore, e-money tokens regulation applies on an activity-based basis restricted only to two specific licensed entities.[37] This design mirrors the regulation of electronic money that can be issued mainly by credit institutions and electronic money institutions.[38]

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[33] Minto (n 16).

[34] EBA, 'Opinion of the European Banking Authority on the interplay between Directive EU 2015/2366 (PSD2) and Regulation (EU) 2023/1114 (MiCA) in relation to crypto-asset service providers that transact electronic money tokens' [2025] EBA/Op/2025/08 < https://www.eba.europa.eu/publications-and-media/press-releases/eba-publishes-no-action-letter-interplay-between-payment-services-directive-psd23-and-markets-crypto> accessed 10 June 2025.

[35] See Chapter __ in this book.

[36] Article 48(1)(a) MiCAR.

[37] For a functional distinction between activity- and entity-based financial regulation, see Edoardo D. Martino, Hossein Nabilou, and Alessio M. Pacces, 'An analytical framework' in Edoardo D. Martino, Hossein Nabilou, and Alessio M. Pacces (eds) *Comparative Financial Regulation* (Edward Elgar Publishing 2025), 10.

[38] See Article 1(a) and (b) EMD.

To underline the meaning of this choice and the parallel between e-money tokens and electronic money, it is fitting to look at the regulatory approach to the other categories of crypto-assets. The regulatory regime of asset-referenced tokens is entity-based regulation, since these tokens can be issued either by an entity that has sought an ad-hoc MiCAR authorisation to issue an asset-referenced token or by a credit institution that complies with a series of MiCAR-specific requirements.[39] On the other side of the spectrum, crypto-assets not qualifying as asset-referenced tokens or e-money tokens are regulated on an activity-based basis, so that they can be issued by any person as long as in compliance with MiCAR.[40]

The remainder of this section provides an overview of the licensing regime for credit institutions (2.2) and electronic money institutions (2.3). Finally, the analysis focuses on the MiCAR-specific procedural aspects for offering to the public or seeking admission to trading of e-money tokens (2.4).

2.2 CREDIT INSTITUTIONS LICENSING

In the EU, credit institutions (aka banks) are defined as undertakings the business of which consists of taking deposits or other repayable funds from the public and granting credits for its own account.[41] Only undertakings licensed as credit institutions can carry out such activity,[42] and such a license demands compliance with the prudential requirements set out in the Capital Requirements Directive (CRD)and the Capital Requirement Regulation (CRR) including capital and liquidity requirements, governance standards, and large-exposure limits.[43]

Title III of the CRD sets down the substantive criteria for granting undertakings a license to act as a credit institution within the Union.[44] A thorough analysis of this body

[39] See Article 16(1) and 17 MiCAR.

[40] See Article 4 MiCAR.

[41] Article 4(1)(a) Regulation 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms [2013] OJ L176/1 (CRR).

[42] Article 9(1) Directive 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms [2013] OJ L176/338 (CRD).

[43] For a broad overview, see Kern Alexander '*Principles of Banking Regulation*' (CUP 2019).

[44] Articles 8-32 CRD.

of law is beyond the scope of this chapter; however, a few notes help to appreciate how burdensome this process can be and how heavily regulated EU banks are. At a minimum, Member States shall require the applicant to provide:[45] financial information about the undertaking; a programme of activities; a programme of operations, structural organisation, internal control systems and auditors; the amount of initial capital which should comply with regulatory requirements and be no less than €5 million;[46] information about the effective direction of the undertaking;[47] information about shareholders or members with qualifying holdings[48] as well as information about the 20 largest shareholders or members.[49]

Within the perimeter of the principles set by the CRD, Member States establish the conditions for granting the authorisation and, if all the conditions are complied with, the competent authority of the Member State grants the authorisation. The authorisation to commence operations in a Member State also provides the undertaking a passport to operate in other EU countries.[50] In the Euro Area countries the authorisation is granted and withdrawn directly by the ECB based on a draft decision of the national competent authority.[51]

Given the complexity of the process and the heavy regulatory requirements attached to the status of credit institutions, it is unlikely that new crypto-space players will seek a banking license for the specific purpose of issuing e-money tokens. The next subsection shows that the alternative, i.e. the license to operate as an Electronic Money Institution,

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[45] For a more detailed account of the necessary information, see Commission Delegated Regulation 2022/2580 of 17 June 2022 supplementing Directive 2013/36/EU with regard to regulatory technical standards specifying the information to be provided in the application for the authorisation as a credit institution, and specifying the obstacles which may prevent the effective exercise of supervisory functions of competent authorities [2022] OJ L335/64.

[46] Article 12(1) CRD.

[47] Article 13 CRD.

[48] See article 4(1)(36) CRR: "direct or indirect holding in an undertaking which represents 10 % or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that undertaking"

[49] Article 14 CRD.

[50] According to the procedures and conditions set down by article 33-52 CRD.

[51] See article 14 Council Regulation 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions [2013] OJ L287/63.

is rigorous but much less burdensome, at least with regards to capital requirements and supervision. Therefore, the provision of article 48(1) MiCAR giving the possibility for credit institutions to offer e-money tokens must be interpreted as a way to facilitate the digital transition of incumbent commercial banks who seek to expand their operation into the digital and blockchain world.

2.3 E-MONEY INSTITUTION LICENSING

The licensing regime for electronic money institutions can be derived from a composite body of norms featured in both the EMD and the PSD. In fact, article 3(1) of the EMD cross-refers to the authorisation requirements and procedure of 'Payment Institutions' that should be applied *mutatis mutandis*. Specifically, the EMD incorporates the provisions on the application procedure[52] and the criteria for granting, maintaining or withdrawing the authorisation.[53] On the other hand, there are e-money token-specific norms in relation to qualifying holdings and initial capital.[54]

The application for the authorisation is submitted by the undertaking to the competent authority of the home Member State.[55] Together with the application, the undertaking shall provide a wide range of information on which the authorisation decision will be based. Specifically, the applicant shall draft a programme of operations; a business plan; evidence that the undertaking holds the necessary initial capital; a description of the applicant's governance arrangements and internal mechanisms, including administrative, risk management and accounting procedures as well as arrangements for use of ICT services, demonstrating that those arrangements and mechanisms are proportionate, appropriate, sound and adequate; a description of the applicant's structural organisation; the identity of persons directly or indirectly holding qualifying interests in the applicant, the size of their holdings and evidence of their suitability;[56] the identity of directors and

[52] Article 5 PSD.

[53] Article 11 to 17 PSD.

[54] See, respectively, article 3(3) and 4 EMD.

[55] See article 5(1) PSD. The authorised Electronic Money Institution will also have to establish its registered office and head office in the Member State and run at least part of its business in that Member State. See article 11(3) PSD.

[56] See supra n 48.

persons responsible for the management of the payment institution; as well as further information detailed in the Directive.[57]

The competent authority decides on the authorisation based on the information provided by the applicant under article 5 PSD. Specifically, the authorisation is granted if the overall assessment of the application is favourable.[58] This phrasing highlights a certain degree of discretion of the competent authority in assessing the application. Looking at the regulatory architecture of the PSD, such discretion should be exercised in relation to the prudential assessment the competent authority shall carry out. In fact, the competent authority, irrespective of the applicant's fulfilment of the formal requirements listed in article 5, shall grant the authorisation only if it is satisfied that the Electronic Money Institution maintains sound and prudent management with regard to its governance arrangements, organisational structure, risk management and internal controls; as well as the suitability of shareholders with a qualifying holding to carry out such safe and prudent management.[59]

The decision to grant or refuse authorisation shall be communicated to the applicant within three months from the receipt of a complete application.[60] If the authorisation is granted in a Member State, it provides a passport to the whole internal market.[61]

The licensing regime for electronic money institutions largely relies on the PSD requirements and procedure, applied *mutatis mutandis*. However, reflecting the different nature of electronic money institutions and payment institutions, the requirement for initial capital is structurally higher for the former.[62] At the moment of authorisation, the undertaking must hold at least €350,000 of capital.[63]

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[57] Article 5(1)(a) to (q). This regime has been amplified by EBA Guidelines pursuant article 5(5) PSD. See European Banking Authority 'EBA Guidelines under Directive (EU) 2015/2366 (PSD2) on the information to be provided for the authorisation of payment institutions and e-money institutions and for the registration of account information service providers' (Guidelines) EBA/GL/2017/09.

[58] Article 11(2) PSD.

[59] Article 11(4) and (6) PSD

[60] Article 12 PSD.

[61] Article 11(9) PSD.

[62] Article 4 EMD.

[63] For Payment Institutions the amount is lower and ranges from 20.000 € to 125.000 € depending on the activities that the institution carries out. See article 7 PSD.

The strong prudential component of the authorisation regime for electronic money institutions has the potential to play a decisive role in relation to the issuance of e-money tokens. In the previous section, it was emphasised that new players are unlikely to file for a credit institution license, so that fintech and crypto firms are more likely to seek electronic money institution licenses. Against this backdrop, the competent authority shall evaluate the soundness of the business plan, internal mechanisms and governance arrangements with specific reference to the issuance of e-money tokens.[64]

2.4 MiCAR-SPECIFIC PROCEDURAL ASPECTS

As detailed in Sections 2.2 and 2.3, the regimes for obtaining a license either as a credit institution or an electronic money institution heavily focus on the prudential side of the e-money token activities. However, before offering e-money tokens to the public or seeking admission to trading, the issuer needs to comply with further procedural requirements.

The e-money token issuer must notify the competent authority the crypto-asset white paper drafted in compliance with the requirements of article 51 MiCAR.[65] The content and form of the e-money token's white paper is discussed in Section 3.1.1. However, article 51 MiCAR is clearly a provision that aims to inform potential investors in e-money tokens about the crypto-asset's quality and risks, functionally but not legally equivalent to the role of the prospectus for off-chain financial instruments.[66] Therefore, this notification does not serve a prudential purpose; rather, it addresses investor protection and market efficiency.[67]

The notification must occur at least 20 working days before the publication of the crypto-asset white paper.[68] Together with the notification of the white paper, the e-money

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[64] Such a discretion is coupled by MiCAR specific norms, especially in relation to significant e-money tokens are analysed in Section 3.3.

[65] Article 48(1)(b) MiCAR.

[66] See Regulation 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market [2017] OJ L168/12 (Prospectus Regulation). On the 'mifidisation' of MiCAR, see Filippo Annunziata 'An Overview of the Markets in Crypto-Assets Regulation (MiCAR)' (2023) European Banking Institute Working Paper Series no. 158, 50 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4660379> accessed 10 June 2025.

[67] On the multiplicity of policy goals, see Edoardo D. Martino, 'Cryptocurrencies and Stablecoins Regulation' in Edoardo D. Martino, Hossein Nabilou, and Alessio M. Pacces (eds) *Comparative Financial Regulation* (Edward Elgar Publishing 2025), 324.

[68] Article 51(11) MiCAR.

token's issuer should also provide the competent authority with the information necessary for the registration of the issuance of the e-money tokens in the centralised registry. The competent authority will forward the relevant information to the European Securities and Markets Authority (ESMA) within 5 working days.[69] Before the offer or the admission to trading, the white paper must be published at least on the issuer's website.[70] Moreover, the issuer of e-money tokens must notify the competent authority about its intention to offer or seek admission to trading of the token at least 40 working days in advance; therefore, this notification should precede the notification of the white paper.[71]

3. E-MONEY TOKENS SUBSTANTIVE REQUIREMENTS

The complexity of the substantive regime for e-money tokens stems from their dual legal characterisation. E -money tokens are considered a 'type of crypto-asset',[72] and, at the same time, e-money tokens are also 'deemed electronic money'.[73] This double nature shapes e-money tokens' composite regulatory regime. Accordingly, this section distinguishes the rules pertaining to e-money tokens as a type of crypto-asset (3.1) from the rules pertaining e-money tokens in their 'electronic money' configurations (3.2). Next, this section analyses the rules specifically applying to 'significant e-money tokens' (3.3).

Before delving into the e-money tokens regime, it is interesting to note that the first bulk of rules pertaining to e-money tokens as crypto-assets mainly aim at investor protection, whereas the second group of requirements specifically targets financial stability as its primary goal.[74]

3.1 E-MONEY TOKENS AS A SUBSET OF CRYPTO-ASSETS

When looking at e-money tokens as a 'type of crypto-assets', MiCAR unsurprisingly sets down requirements mirroring and adapting those applicable to general crypto-assets.[75]

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[69] Article 53(14) and 109(4) MiCAR.
[70] Article 51(13) MiCAR.
[71] Article 48(6) MiCAR.
[72] Article 3(1)(7) MiCAR.
[73] Article 48(2) MiCAR.
[74] For this distinction, see Martino (n 67), p. 326. See also Recital 6 MiCAR for the multiple and potentially competing policy goals pursued by the Regulation.
[75] See Articles 4-15 MiCAR. See Chapter __ in this book.

Specifically, MiCAR disciplines the regime for e-money tokens white paper,[76] the liability regime related to the white paper,[77] and the marketing communication.[78]

3.1.1 CRYPTO-ASSET WHITE PAPER

As discussed in Section 2, before issuing an e-money token, a credit or an e-money institution shall notify the white paper to the competent authority. The notification shall occur at least 20 working days before offering the e-money token to the public or seeking its admission to trading. Prior, the white paper shall also be published on the issuer's website.[79]

MiCAR itself makes clear that the white paper is not a prospectus.[80] Indeed, a prospectus shall be published when offering to the public transferable securities, which are financial instruments,[81] while MiCAR does not apply to financial instruments.[82] However, it is undeniable that the white paper regime for crypto-assets, and accordingly for e-money tokens, is heavily inspired by the same approach to the dissemination of information in financial markets, so much so that the white paper regime can be understood as a 'prospectus-lite' regime.[83] This implies that all the debate about the structural shortcomings of prospectuses as a disclosure tool to protect investors apply, *mutatis mutandis*, to the crypto-asset white paper.[84]

Like for a prospectus under the Prospectus Regulation, MiCAR disciplines the content and format of the disclosure document as well as its summary. Specifically, the white paper shall contain all the information that are necessary for a potential investor to make an informed decision, featuring six parts: (1) Information about the issuer of the e-money token; (2) Information about the e-money token; (3) Information about the offer

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[76] Article 51 MiCAR.

[77] Article 52 MiCAR.

[78] Article 53 MiCAR.

[79] Article 51(11) MiCAR.

[80] Article 51(6)(d) MiCAR. The prospectus is the document that must be drawn up, approved and published when offering to the public securities within the Union. It shall be draft in accordance with the Prospectus Regulation.

[81] Annex I, Section C (1) MiFID

[82] See article 2(4)(a) MiCAR. See Chapter __ in this book.

[83] See Annunziata (n 66), 15.

[84] Luca Enriques, 'EU Prospectus Regulation: Some Out-of-the-Box Thinking' (2016) 4 Revista Lex Mercatoria 39.

to the public of the e-money token or its admission to trading; (4) Information on the rights and obligations attached to e-money tokens; (5) Information on the underlying technology; (6) Information on the risks.[85] Issuers of e-money tokens must explicitly and prominently state the conditions for the redemption of the tokens in crypto asset white paper.[86]

One crucial element that must be featured in the white paper is the information about the adverse impact on the climate and the environment of the e-money tokens, especially in relation to the consensus mechanism used.[87] This aspect entered MiCAR in the final phase of the negotiations and is particularly emphasised in the final version. ESMA was required to draft regulatory technical standards with regard to the content, methodology and implementation of the environmental-related disclosure. The Commission adopted the technical standards in December 2024.[88]

The information provided in the white paper must be complemented by a summary that provides potential holders with key information about e-money tokens. The summary should be written in non-technical language, be easily understandable and clearly laid out.[89] Beyond the key information, the summary must warn the potential buyer that it should be read as an introduction to the white paper, that any decision to purchase the e-money tokens should not be based solely on the summary, that the offer of the e-money token does not constitute the offer of a financial instrument and, accordingly, that the white paper does not formally constitute a prospectus.[90] Finally, the legislator makes an important reference to an aspect that is specific only to e-money tokens: requiring the issuer to include in the summary the fact that holders have a right of redemption at any time and at par value.

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[85] Article 51(1) and Annex III MiCAR.

[86] Article 49(5) MiCAR. On the relevance of this specific feature, see Section 3.2.

[87] Article 51(1)(g). For an overview of the problem, see Moriiz Wendl et al., 'The environmental impact of cryptocurrencies using proof of work and proof of stake consensus algorithms: A systematic review' (2023) 326 Journal of Environmental Management 1.

[88] Commission Delegated Regulation 2025/422 of 17 December 2024 supplementing Regulation (EU) 2023/1114 with regard to regulatory technical standards specifying the content, methodologies and presentation of information in respect of sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts [2025] OJ L2025/1.

[89] Article 51(6) MiCAR.

[90] Article 51(6)(a-d) MiCAR.

Once the white paper inclusive of the summary is appropriately notified and published, licensed institutions can offer the e-money token to the public and seek its admission to trading. However, any significant new factor as well as any material mistake and inaccuracy that could affect the assessment of potential buyers triggers the duty for the issuer to draft a modified white paper, notify it to the competent authority and publish it on its website.[91]

To limit compliance costs and ensure uniformity, ESMA was required to draft implementing technical standards establishing standard forms, formats, and templates, and ensuring machine-readable white papers.[92] Such implementing technical standards were adopted by the Commission in November 2024.[93]

Beyond substantive and procedural requirements, MiCAR also mandates that white paper information be "fair, clear, and not misleading," a standard crucial to its liability regime, as discussed later in this section.[94] Interestingly, this standard mirrors the regime for the provision of information with regard to financial instruments.[95] Accordingly, the public must be warned that the white paper was not approved by any authority and such warning should be prominent and in the first page of the white paper.[96] MiCAR also requires the white paper to make further e-money tokens-specific warnings, including that e-money tokens are not covered by investor compensation schemes for investment firms or deposit guarantee schemes for credit institutions.[97]

3.1.2 WHITE PAPER LIABILITY

The detailed rules on the crypto-asset white paper for e-money tokens are complemented by the regime for white paper liability.[98] In case of infringements of the rules pertaining to the white paper, the issuer and the members of its administrative, management or

[91] Article 51(12) MiCAR.

[92] Article 51(9) MiCAR.

[93] Commission Implementing Regulation 2024/2956 of 29 November 2024 laying down implementing technical standards for the application of Regulation (EU) 2022/2554 of the European Parliament and of the Council with regard to standard templates for the register of information [2024] OJ L2024/1.

[94] Article 51(2) MiCAR.

[95] See article 24(3) MiFID II.

[96] Article 51(3) MiCAR.

[97] Article 51(4) MiCAR.

[98] Article 52 MiCAR.

supervisory body are liable to holders of e-money tokens for any loss resulting from such infringements.

Specifically, the liability is triggered when the information is incomplete or not provided in a 'fair, clear, and not misleading' manner.[99] Such liability cannot be excluded contractually.[100] The holders of e-money tokens must prove both that the white paper rules were infringed and that reliance on the information influenced their purchase decision.[101] Even though the Regulation is silent in this specific point, the holder must also bear the burden of proving any loss incurred.

The liability cannot arise from the sole reliance of the holder of e-money tokens on the summary of the white paper, unless the summary is inconsistent with the white paper or does not provide the key information to make an informed decision.[102]

MiCAR explicitly states that this liability regime is without prejudice to any other civil liability based on national law. This should be interpreted in the sense that further regimes are admissible and not superseded by this uniform liability regime, which adds to national remedies, providing a minimum level of protection to holders of e-money tokens. The phrasing of the provision raises a further interpretative problem as to the meaning of 'loss incurred' in relation to e-money tokens. In fact, 'loss' seems to refer specifically to monetary losses, as opposed to the wider category of 'damage'.[103] Therefore, in the case of tokens which are always convertible at par, only the issuer default is capable of causing a loss.

This means that white paper liability for e-money tokens differs compared to general crypto-assets or asset-referenced tokens and can only materialise for incomplete, unclear, or misleading information where there is a causal link to the e-money token's default. For instance, this could apply to information on potential conflicts of interest if these are

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[99] Article 52(1) MiCAR.

[100] Article 52(2) MiCAR.

[101] Article 52(3) MiCAR.

[102] Article 52(4) MiCAR.

[103] To support this interpretation, one can refer to a recent EU law liability provision in the GDPR, whereby liability stemming from the violation of the regulation attach to all material and non-material demages. This clearly aims at capturing instances going beyond pure monetary losses. See article 82 GDPR. Another argument in favor of this interpretation is provided by the MiCAR version in other official language. For instance, in the italian translation, article 52(1) refers to 'perdita' and not to 'danno'.

undisclosed and, eventually, such conflicts lead to default;[104] to the information on conditions and procedure for redemption;[105] or to the information concerning the right of holders in the context of the implementation of the recovery or the redemption plans.[106] Moreover, also the information related to the risk associated with the issuers and the e-money tokens can trigger white paper liability if a default was caused by risks that were not properly disclosed.[107] On the contrary, misleading disclosure on 'environment-related adverse impacts of the consensus mechanism' would amount to an infringement of white paper rules but would not raise white paper liability as there is no loss. This infringement can only be handled via supervisory measures.[108]

This liability regime is relevant from a systemic perspective on the EU financial law since it diverges substantially from the prospectus liability regime whereby the EU legislator only requires Member States to have a liability regime in place, resulting in a highly fragmented landscape throughout Member States.[109]

3.1.3 MARKETING COMMUNICATION

The final regulatory aspect of e-money tokens as a 'type of crypto-asset' pertains to the regime for marketing communications. Deceptive communications and fraud are a widespread problem for the protection of investors in financial markets. The problem is even more acute in the crypto sphere because of its highly speculative nature and complexity.[110] The regime envisaged by MiCAR is meant to have a wide scope of

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[104] See Annex III, Section A (10).

[105] See Annex III, Section D (1).

[106] See Annex III, Section D (4) and (5).

[107] See Annex III, Section F.

[108] See article 94(1)(i), empowering the competent authority "*to require offerors, persons seeking admission to trading of […]e- money tokens to amend their crypto-asset white paper or further amend their modified crypto-asset white paper, where they find that the crypto-asset white paper or the modified crypto-asset white paper does not contain the information required by Article […] 51*".

[109] For a comparative overview over the fragmented prospectus liability regime, see Danny Busch, Guido Ferrarini, and Jan Paul Franx, *Prospectus Regulation and prospectus liability* (OUP 2020). For a proposal on amending and unify the prospectus liability regime, including a reference to MiCAR as an example of uniform liability, see Danny Busch and Matthias Lehmann, 'Uniform Prospectus Liability Rules for Europe' (2023) 14(2) Journal of European Tort Law 113.

[110] See Menesh S. Patel, 'Fraud on the Crypto Market' (2022) 36 Harv. JL & Tech. 171.

application, including traditional and innovative means of communication, including promotion through financial influencers.[111]

Against this backdrop, MiCAR requires all the information in marketing communication to be clearly identifiable as such and be 'fair, clear, and not misleading'. Moreover, marketing communications must be consistent with the white paper and clearly state that a white paper has been published.[112] Beyond these general rules, MiCAR also mandates e-money issuers to clearly state in all marketing communications that the holders of these tokens have the right of redemption at any time at par value.[113] These requirements are supposed to inform prospective investors and enhance their confidence in licensed e-money token issuers that comply with MiCAR, as opposed to exotic instruments traded in decentralised or peer-to-peer settings.

Marketing communications, just like white papers, do not need prior approval.[114] However, they must be notified to the competent authority upon request.[115] In turn, the competent authority has the power to require the amendment of such communications or, if necessary, to suspend and prohibit them.[116]

3.2 E-MONEY TOKENS AS A SPECIAL FORM OF ELECTRONIC MONEY

When looking at e-money tokens as 'electronic money', the key element of the regulatory architecture is the set of rules according to which they are issued and redeemed. Those rules shape the promise that the issuer of e-money tokens is allowed to make to their holders. All other rules and requirements surrounding the rules on issuance and redeemability can be understood as a way to ensure that such promise can be kept.

E-money tokens are issued at par upon the receipt of funds.[117] Holders of e-money tokens have a direct claim against the issuer.[118] Accordingly, upon request, the holder is

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[111] See Recital 24 MiCAR. On the rise of financial influencers and the relative risks of this trend, see Sue S. Guan, 'The rise of the finfluencer' (2022) 19 NYU J L & Bus. 489.
[112] Article 53(1) MiCAR.
[113] Article 53(2) MiCAR.
[114] Article 53(4) MiCAR.
[115] Article 53(5) MiCAR.
[116] Article 94(1)(j) and (p) MiCAR.
[117] Article 49(3) MiCAR.
[118] Article 49(2) MiCAR.

entitled to redeem their e-money tokens at any time and at par value.[119] Redemption cannot generally be subject to any fee.[120] This means that MiCAR allows (and requires) issuers to make a very strong promise to the holders, strengthening the characteristics that make these tokens functionally similar to 'money'–i.e., claims that are considered safe, liquid and are accepted 'no questions asked'.[121] Therefore, the issuers of e-money tokens are issuers of 'private money'. Crucially, money-like promises do not only raise concerns in terms of investor protection but also, prominently, financial stability concerns, especially in relation to potential runs happening upon adverse information about the issuer's solvency.[122]

To appreciate the relevance of this aspect, it is instructive to compare this construction with that of general crypto-assets and asset-referenced tokens.[123] The holders of crypto assets are not entitled to any specific monetary value and do not have a claim against the issuer and are not entitled to redeem their token. To the contrary, the issuer is obliged to include in the white paper a clear statement that crypto-assets could lose their value, may not always be transferable or liquid.[124] Asset-referenced tokens are close to e-money tokens as they also purport to maintain a stable value. Indeed, also the holders of asset-referenced token are at all times entitled to the redeem their tokens.[125] However, such right is not to the par value token at issuance, but for the market value of the reserve assets, meaning that the redemption value can fluctuate based on market fluctuations or idiosyncratic conditions.[126] Moreover, also issuers of asset-referenced tokens are required to include in the white paper a clear statement about the fact that crypto-assets could lose their value, may not always be transferable or liquid.[127]

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[119] Article 49(4) MiCAR.

[120] Article 49(5) MiCAR.

[121] On this aspect, see Bengt Holmstrom, 'Understanding the role of debt in the financial system' (2015). BIS Working Papers No 479 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2552018> accessed 10 June 2025.

[122] See the standard banking model by Douglas W. Diamond and Philip H. Dybvig, 'Bank runs, deposit insurance, and liquidity' (1983) 91(3) Journal of Political Economy 401. For a model that focuses on information insensitivity and runs, see Tri Vi Dang, Gary Gorton, and Bengt Holmström, 'The information view of financial crises' 2020 12(1) Annual Review of Financial Economics 12, 39.

[123] More widely on the legal design of money-like claims in stablecoin regulation, see Martino (n 17) 25.

[124] Article 6(5) MiCAR. See Chapter __ in this book.

[125] Article 39(1) MiCAR. See Chapter __ in this book.

[126] Article 39(2) MiCAR.

[127] Article 19(4) MiCAR.

Contrasting the promise made by the issuer of e-money tokens to those made by other issuers of crypto-assets and asset-referenced tokens helps illustratethe need of strict requirements to sustain such promise and minimise the risks for financial stability. MiCAR introduces a series of prudential requirements for e-money token issuers. Some of these requirements directly come from the EMD and are explicitly deemed applicable by MiCAR (3.2.1), while others are specific to e-money tokens (3.2.2).

3.2.1 ELECTRONIC MONEY DIRECTIVE APPLICABILITY

Consistent with their legal characterisation as electronic money, the regime on e-money tokens largely borrows from the EMD, particularly regarding to prudential requirements.[128] The applicability of the EMD covers the authorisation requirements which were already discussed in Section 2.3. It is worth noting that these rules are applicable to all e-money token issuer, irrespective of their license as a credit or electronic money institutions. Beyond the authorisation regime, the key applicable rules pertain to own funds calculation and asset safeguarding requirements.[129]

When looking at own funds requirements, issuers of e-money tokens must hold, at all times, at least 2% of equity capital of the average outstanding electronic money.[130] The competent authority can require the e-money token issuer to hold up to 20% own funds

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[128] Article 48(3) MiCAR.

[129] MiCAR deems applicable Title II and Title III of the EMD. Beyond the rules on authorisation, own funds and safeguarding requirements, these titles also feature rules on activities and on issuance and redeemability which are not treated here. The rules on issuance and redeemability are explicitly derogated by article 49 MiCAR. On the other hand, article 6 EMD state that that e-money institutions can legitimately provide also payment services the activities ancillaries to such services. However, these rules do not add regulatory framework since these services can be provided by virtue of the issuer's license either as a credit institution or as an electronic money institution itself.

[130] Article 5(3) EMD. The methods for the calculation of own funds are primarily regulated in article 9 of the PSD, which applies mutatis mutandis to EMD and features three methods (A, B or C). Article 5 EMD differentiates the methods for calculating own funds based on the activities they perform. The calculation methods for the activities of electronic money institutions not linked to the issuance of electronic money follow the methods described in the PSD. However, when issuing electronic money, the EMD provides the additional 'method D' looking at the average outstanding electronic money. Since MiCAR looks at the issuance of e-money tokens which are deemed electronic money, it can be concluded that the EMD applies only in relation to method D. Under the EMD the definition of capital is less strict than what is currently applicable to banks. Article 5(1) of the EMD refers to the old regime for bank capital regulation which was significantly more lenient than the new regime in the CRR. See Directive 2006/48/EC of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions [2006] OJ L177/1. This wider and less stringent definition of capital should be considered still appliocable to non-significant e-money tokens since MiCAR explicitly derogates it when regulating significant e-money tokens. See Section 3.3.

in excess of the minimum requirement on the basis of the risk-management process, internal control mechanisms and risk loss databases of the issuer. Conversely, if the issuer does not pose particular risks, the competent authority can also allow the reduction of the minimum own funds requirement by 20%.[131] The capital allocated to comply with this own funds requirement shall not be used to meet other prudential purposes.[132]

The other key provision of the EMD that is applicable to e-money token issuers pertains to safeguarding requirements. The funds received in exchange for e-money tokens must be safeguarded immediately after their transfer is executed or credited and, in any case, no later than five business days after the issuance of the e-money token.[133] In this context, the safeguarding requirement can be satisfied in two different ways.[134] First, the funds received must not be commingled with the funds of any person other than e-money token users on whose behalf the funds are held.[135] Accoridngly, these funds should be deposited in an account in a credit institution or, where available, with a central bank. Alternatively, the funds may be covered by an insurance policy or comparable guarantee from an insurance company or a credit institution which is not part of the same group of the issuer for an amount equivalent to the amount that would have been segregated. The guarantee shall be payable in the event the issuer is unable to meet its financial obligations.[136]

3.2.2 MiCAR-specific Requirements

MiCAR features rules pertaining to the electronic money nature of e-money tokens which derogate or specify those of the EMD. These rules include the prohibition of granting interest, the investment of the funds received in exchange for e-money tokens and the recovery and redemption plans in case of the issuer's crisis. The first two rules derogates or specify those of the EMD, whereas the rules on recovery and redemption plans adds to the prudential toolkit for e-money.

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[131] Article 5(5) EMD.
[132] Article (6) EMD.
[133] Article 7(1) EMD.
[134] For significant e-money token only segregation is allowed as a safeguarding mechanism. See Section3.3
[135] Article 10(1)(a) PSD.
[136] Article 10(1)(b) PSD.

Issuers of e-money tokens are prohibited from granting interest in relation to the holding of their tokens.[137] This prohibition also applies to crypto-asset service providers for the services related to e-money tokens.[138] Such prohibition mimics the prohibition of bearing interest included in the proposal for a digital euro,[139] as well as the prohibition related to off-chain electronic money issued by e-money institutions.[140] The rationale for such a strong stance is to limit the use of these types of money as a store of value, which would bring about issues with bank disintermediation and increased financial stability risks.[141] This approach was criticised by the advocates of stablecoins as it would limit their mass adoption;[142] however, the social desirability of the mass adoption of stablecoins is far from a straightforward argument.[143]

The prohibition of granting interest is wide and includes all sorts of arrangements for granting benefits which are comparable to granting interest.[144] In particular, it is worth mentioning that any remuneration related to the length of the holding of e-money tokens is treated as granting interest and, hence, prohibited. This is of key relevance for the evolution of the crypto industry in Europe as remunerating holders through 'reward programs' for their long holding positions is key for consensus protocols based on staking.[145]

Complementing the prohibition of granting interests on tokens, MiCAR regulates the ways in which the issuers of stablecoins can invest the funds received in exchange for the e-money tokens. Functionally, this means imposing liquidity requirements on e-money

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[137] Article 50(1) MiCAR.

[138] Article 50(2) MiCAR.

[139] Commission, 'Proposal for a Regulation on the establishment of the digital euro' COM/2023/369 final, article 16(8)

[140] Article 12 EMD.

[141] Martino (n 8) 9

[142] See, for instance Willem Buiter, Anne Sibert, Nicolaes Tollenaar, 'E-money Tokens, Tokenised Money-market Shares, and Tokenised Bank Deposits' (*VoxEU*, 18 August 2022) <https://cepr.org/voxeu/columns/e-money-tokens-tokenised-money-market-shares-and-tokenised-bank-deposits> accessed 10 June 2025.

[143] Martino (fn 8) 6.

[144] Article 50(3) MiCAR.

[145] The Cryptonomist, 'The MiCA regulation penalizes returns: Coinbase halts the rewards program for USDC in Europe' (Binance Square, 29 November 2024) <https://www.binance.com/en/square/post/16892652660233> accessed 10 June 2025.

token issuers to make sure they can always satisfy redemption requests. At least 30% of the funds are always deposited in a separate account in a credit institution.[146]

The remaining funds can be invested in 'secure, low-risk assets that qualify as highly liquid financial instruments with minimal market risk, credit risk and concentration risk'. These assets should be denominated in the currency referenced by the e-money token to limit foreign exchange risk.[147] The specific designation of which assets shall be included in this category is delegated to regulatory technical standards drafted by the EBA.[148] The draft technical standards refer to "Level 1 Assets with no haircut" that are listed in the delegated regulation concerning liquidity requirements for credit institutions.[149] Essentially, these includes banknotes, coins, exposure on Central Banks, claims on or guaranteed by Central Governments and extremely high quality covered bonds.[150] These stringent liquidity requirements limit the extent to which issuers of e-money tokens can perform liquidity transformation activities, increasing their resilience but reducing their profitability. This restriction is said to be one of the key reasons for the decision by Tether, the world's largest stablecoin issuer based in Hong Kong, not to seek a MiCAR license.[151]

Finally, MiCAR features rules to ensure that the issuers of e-money tokens are prepared to withstand potential crises. Specifically, issuers of e-money tokens must draw up and maintain recovery and redemption plans.[152] Recovery plans refer to the requirement to back issued tokens one-to-one with deposited funds or eligible investment assets. The recovery plan must be notified by the issuer to the competent authority within

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[146] Article 54(1)(a) MiCAR.

[147] Article 54(1)(b) MiCAR, explicitly referring to article 38(1) MiCAR dealing with the investment of funds received by asset-referenced token issuers.

[148] Article 38(5) MiCAR. European Banking Authority, 'Draft Regulatory Technical Standards to specify the highly liquid financial instruments with minimal market risk, credit risk and concentration risk under article 38(5) of Regulation (EU) 2023/1114' EBA/RTS/2024/11 [not yet in adopted by the Commission].

[149] Commission Delegated Regulation 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions [2015] OJ L11/ 1

[150] See article 10 of the Delegated Regulation 2015/61.

[151] James Field, 'Tether ends EURT stablecoin support citing EU's MiCA regulations' (*CoinGeek*, 29 November, 2024) <https://coingeek.com/tether-ends-eurt-stablecoin-support-citing-eu-mica-regulations/> accessed 10 June 2025.

[152] Article 55 MiCAR making Title III, Chapter 6 of the same regulation in relation to asset-referenced tokens applicable, mutatis mutandis, to the issuers of e-money token. See Chapter __ in this book.

six months from the offer to the public or admission to trading,[153] and the competent authority can require amendments within 40 working days.[154] The issuer must have a plan to restore compliance with this requirement in times of crisis. The plan must be promptly implementable; to this end, it must feature a wide range of recovery options, including liquidity fees on redemption, which are possible only to facilitate recovery; redemption limits per working day and suspension of redemptions. These are the same liquidity management tools provided for money market funds.[155] Interestingly, these tools proved ineffective during the dash-for-cash saga in 2020 because of their discretionary nature.[156] To address this shortcoming, MiCAR empowers the competent authority to require the issuer to implement a compliance-restoring recovery plan..[157]

In contrast, a redemption plan refers to instances in which the issuer of e-money tokens is unable or likely to be unable to meet its obligations, including the case of insolvency or resolution.[158] The redemption plan is an operational plan to support orderly redemptions in this critical instance without causing excessive economic harm to the holders and ensuring the continuity of any critical function of the issuer that is necessary for the orderly redemption of the tokens.[159] A redemption plan must be notified to the competent authority within six months from the offer to the public or admission to trading[160] and the competent authority can require amendments within 40 working days.[161] The competent authority must, in turn, notify the redemption plan to the resolution authorty and the prudential supervisor of the issuer.[162]

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153 Article 55(2) MiCAR.

154 Article 46(2) MiCAR.

155 Article 34 MMFR. For an analysis of the functional resemblance between stablecoins and money market funds, see Martino (n 17) 32. For an empirical analysis, see Iñaki Aldasoro et al., 'Stablecoins, money market funds and monetary policy' (2025) 247 Economics Letters 1.

156 On the dash for cash saga, see Erkko Etula et al., 'Dash for cash: Monthly market impact of institutional liquidity needs' (2020) 33(1) The Review of Financial Studies 75. On the ineffectiveness of the liquidity management tools with a proposal for reform, see Edoardo D. Martino and Enrico C. Perotti, 'Containing Runs on Solvent Banks: Prioritizing Recovery over Resolution' (2025) 7(1) Journal of Financial Crises 1.

157 Article 46(3) MiCAR.

158 Article 47(1) MiCAR.

159 Article 47(2) MiCAR.

160 Article 55(3) MiCAR.

161 Article 47(3) MiCAR.

162 Article 47(4) MiCAR.

3.3 THE REGIME FOR SIGNIFICANT E-MONEY TOKENS

The regulatory architecture for e-money tokens is completed by the more stringent norms applying to those issuers that may pose greater risks to financial stability.[163] These issuers are deemed 'significant' and, to cope with their potentially higher risks, are centrally supervised by the EBA and must comply with stricter prudential requirements.[164]

E-money tokens shall be classified as 'significant' by EBA if some specific thresholds are met.[165] The EBA classifies an e-money token as significant if at least three of the following criteria are met: (a) more than 10 million holders; (b) the market value, the value of the issuance or the value of the reserves exceeds €5 billion; (c) the average number and average aggregate value of transactions per day is higher than, respectively, 2.5 million transactions and €500 million; (d) the issuer is a provider of core platform services designated as a gatekeeper according to the Digital Market Act;[166] € the issuer has significant activities on an international scale; (f) the interconnectedness of the e-money token or its issuers with the financial system; (g) the issuer also provides at least one crypto-asset service.[167]

These criteria blend quantitative thresholds and qualitative assessments. National competent authorities report to the EBA and the ECB the relevant information to make this assessment twice a year.[168] If three of the criteria are met in the first report or, alternatively, in two consecutive reports, then the EBA shall make the classification decision. Notwithstanding, an issuer can proactively ask to be classified as significant if it considers itself likely to meet such thresholds.[169]

Procedurally, the EBA drafts the decision and notifies it to the issuer as well as the national competent authority and the ECB. They have 20 working days to provide observations. The EBA takes a final decision within 60 working days from the notification

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[163] Recital 71 MiCAR.

[164] On centralised supervision see article 117 and 121 MiCAR. See Chapter __ in this book.

[165] Article 56 MiCAR. The thresholds for significant are the same of those provided of asset-referenced tokens.

[166] Regulation 2022/1925 of 14 September 2022 on contestable and fair markets in the digital sector [2022] OJ L265/1.

[167] Article 43(1) MiCAR.

[168] Article 56(3) MiCAR.

[169] Article 57 MiCAR.

of the draft decision. After the decision, the supervisory responsibilities are transferred within 20 working days.[170]

Besides centralised EBA supervision, significant e-money tokens are subject to additional prudential obligations.[171] The main deviations from the general regime described in Section 3.2 pertains to the reserve assets, governance arrangements, and own funds requirements.

Looking at the treatment of reserve assets, the regime for asset-referenced tokens applies to significant e-money tokens as well. This regime is to a large extent compatible with that applicable to the generality of e-money tokens, but for some stricter requirements which are the only ones discussed in this part.[172] First, reserve assets must be legally and operationally segregated from the estate of the issuer so to ensure that the creditors of the issuer have no recourse on the reserve assets.[173] This is the only legitimate way to comply with the asset safeguarding requirement.[174] Second, the value of the reserve assets must be determined using market prices according to the mark-to-market or, when not available, mark-to-model methodology.[175] Third, reserve assets must be kept in custody in credit institutions or in investment firms if part of the reserves are held in financial instruments.[176] The issuer or the custodian should not be allowed to encumber or pledge the reserve assets as financial collateral.[177] Fourth, the issuer can invest part of

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[170] For these procedure aspects, see article 56(4) to (6) MiCAR. The same procedure applies for voluntary classification requests. See article 57(2) to (5) MiCAR.

[171] Article 58(1) MiCAR. Some or all of these additional prudential obligations can also be imposed by national competent authorities to non-significant e-money tokens if that is deemed necessary to address specific risks raised by such e-money token, see article 58(2) MiCAR.

[172] For a complete overview, see Chapter __ in this book..

[173] Article 36(2) and (3) MiCAR.

[174] See text to n 134.

[175] Article 36(7), (10) and (11) MiCAR. For a definition of the accounting standards, see article 2 (8) and 2 (9) of the Regulation 2017/1131 of 14 June 2017 on money market funds [2017] OJ L169/8. At first glance, this specification may see a minor detail, however it is dense of severe consequences in times of liquidity stress. In the context of the bank runs of 2023, see Erica Jiang, et al., 'Monetary tightening and US bank fragility in 2023: Mark-to-market losses and uninsured depositor runs?' (2024) 159 Journal of Financial Economics 1.

[176] Article 37(6) MiCAR.

[177] Article 37(1)(a) MiCAR. For the definition of financial collaterals and their treatment, see Directive 2002/47/EC of 6 June 2002 on financial collateral arrangements [2002] OJ L168/43. Once again, this may look like a technical detail. However, the impact of bankruptcy safe harbors for financial collateral are dense of consequences in stressed scenarios. See Philipp Paech, 'The value of financial market insolvency safe harbours' (2016) 36(4) Oxford Journal of Legal Studies 855.

its reserve assets in highly liquid financial instruments. While this is consistent with the baseline regime, MiCAR further specifies that also the financial instruments in which the reserves are invested must be kept in custody.[178]

Issuers of significant e-money tokens are also required to adopt enhanced governance arrangements to ensure their operational capacity and continuity.[179] First, issuers must adopt, implement and maintain a remuneration policy promoting sound and effective risk management; second, issuers must make sure that their tokens are interoperable and can be kept in custody by CASPs not belonging to the same group as the issuer; third, issuers must establish, maintain and implement a liquidity management policy and procedures to ensure that redemption requests can be met; fourth, issuer must conduct liquidity stress testing on a regular basis.

In terms of own funds requirement, issuers of significant e-money tokens must hold 3% of the average amount of reserve assets.[180] This requirement may only be met by holding high-quality instruments in line with the requirements for Common Equity Tier 1 capital for banks.[181] Moreover, based on the assessment of the issuer's risk profile, the EBA can increase the own funds requirements up to 20%.[182] Finally, issuers must carry out on a regular basis capital stress tests considering severe but plausible stressed scenarios.[183] Following this evaluation, the EBA can decide to increase own funds requirement by up to 40%.

4. FOREIGN 'THREATS' AND MONETARY SAFEGUARDS

After the analysis of the complex and entangled rules applicable to e-money tokens, the final aspect that deserves close consideration is the extent to which the European market for stablecoins is subject to cross-border risks. This issue is analysed by looking at two

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[178] Article 38(3) MiCAR. On the relevance of crypto custody, see Dirk Zetzsche, Julia Sinnig, and Areti Nikolakopoulou, 'Crypto custody' (2024) 19(3) Capital Markets Law Journal 207.

[179] Article 45(1) to (4) MiCAR

[180] Article 45(5) MiCAR.

[181] Article 35(2) MiCAR. See articles 26-30 CRR.

[182] Article 35(3) MiCAR.

[183] As amplified by Commission Delegated Regulation (EU) 2025/415 of 13 December 2024 supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council with regard to regulatory technical standards specifying adjustment of own funds requirement and minimum features of stress testing programmes of issuers of asset-referenced tokens or of e-money tokens [2025] OJ L415\1.

distinct and complementary aspects. First, the analysis of the regime for stablecoins issued by non-MiCAR compliant entities.[184] Second, the analysis of the safeguards for stablecoins issued by MiCAR-compliant issuers whose denomination is not the euro—or another official currency of a Member State—such as the US dollar. These two issues are of crucial importance to understand the impact that MiCAR has on the monetary sovereignty of the euro as well as on the probability of widespread adoption of e-money tokens.

4.1 NON-MiCAR COMPLIANT STABLECOINS

MiCAR went into force on 30 June 2024.[185] Since that day, only MiCAR-compliant issuers are allowed to offer e-money tokens to the public or seek their admission to trading. The licensing regime for e-money tokens clearly states that only credit institutions and electronic money institutions can issue such stablecoins. Given these strict requirements, one possibility for foreign-issued stablecoins to enter the EU market may be through CASPs, the idea being that a non-MiCAR compliant stablecoin referencing one official currency and issued outside of the European Union may be listed on a crypto exchange with a MiCAR license and, hence, have access to the European market. However, as recently clarified by the Commission, an EU CASP cannot receive, transmit and execute orders to buy and sell non-MiCAR compliant stablecoins.[186]

MiCAR itself does not clarify whether a crypto-trading platform that is licensed under MiCAR could list a foreign-issued stablecoin. The question was brought to ESMA through the 'Question and Answer' (Q&A). The Commission answered negatively, highlighting that the provision of services such as trading would amount to an 'offer to the public' of the non-MiCAR compliant stablecoins. As already noted, only credit institutions or electronic money institutions that have notified their e-money white paper

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[184] For a deeper analysis, see Jonas Schürger and Luca Topp, 'Cross-Border Regulation of Crypto-Assets under MiCAR Regulating a Global Phenomenon' (2025) European Banking Institute Working Paper Series No. 187 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5190883> accessed 10 June 2024.

[185] Article 149(3) MiCAR.

[186] ESMA, 'Questions and Answers, ESMA_QA_2404' <https://www.esma.europa.eu/publications-data/questions-answers/2404> accessed 10 June 2024. For a similar answer, see also the answer in relation to the scope of public offering, 2024_7185 Scope of public offering EBA, 'Joint Q&A ID:MICA027' < https://www.eba.europa.eu/single-rule-book-qa/qna/view/publicId/2024_7185> accessed 10 June 2024.

to the competent authority are allowed to offer to the public an e-money token in the Union.[187]

ESMA followed up to the answer provided by the Commission, clarifying that some crypto-asset services, such as custody and transfer, automatically amount to an 'offer to the public' and, hence, may be allowed even for foreign-issued stablecoins.[188] On the contrary, services such as reception, transmission and execution of orders, and the exchange of crypto-assets for funds or other crypto-assets integrate the definition of 'offer to the public' and should not be allowed in relation to foreign issued stablecoins.[189]

However, there remains one possibility for non-MiCAR compliant stablecoins to enter within the European borders. This is still possible through the so-called 'reverse solicitation' exemption.[190] The reverse solicitation regime is, once again, inspired by MiFID for financial instruments.[191] It applies to the case in which a European client initiates on its own exclusive initiative the provision of a crypto-asset service, such as placing an order for foreign stablecoins. This specific case does not amount to offer to the public, disapplying the licencing requirement.. Therefore, holding and transferring non-MiCAR compliant stablecoins is allowed in the Union, but these cannot be traded on regulated CASPs.[192] However, the promise of non-MiCAR compliant stablecoins extremely becomes extremely illiquid, sharply reducing their 'money-like' characteristics.[193]

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[187] Article 48(1)(a) MiCAR. See Section 2 for the analysis of the licensing regime for e-money tokens.

[188] ESMA, 'Public Statement On the provision of certain crypto-asset services in relation to non-MiCA compliant Asset-referenced token and e-money tokens' [2025] ESMA75-223375936-6099 <https://www.esma.europa.eu/sites/default/files/2025-01/ESMA75-223375936-6099_Statement_on_stablecoins.pdf> accessed 10 June 2025.

[189] To avoid market disruptions and allow for a smooth transition, ESMA invited CASPS maintain crypto-asset services for these products on a 'sell only' basis for a longer period (until the end of Q1 2025)

[190] Article 61 MiCAR. For its level 2 amplification, see. ESMA, 'Guidelines On situations in which a third-country firm is deemed to solicit clients established or situated in the EU and the supervision practices to detect and prevent circumvention of the reverse solicitation exemption under the Markets in Crypto Assets Regulation (MiCA)' [2025] ESMA35-1872330276-2030 <https://www.esma.europa.eu/sites/default/files/2025-02/ESMA35-1872330276-2030_Guidelines_on_reverse_solicitation_under_MiCA.pdf> accessed 10 June 2025

[191] Annunziata (n 66) 59.

[192] This is in line with the Chinese experience where cryptocurrencies were banned. However, courts recognised that individuals can hold legitimate property rights over such digital assets. See John Riley, 'The Current Status of Cryptocurrency Regulation in China and its Effect around the World' (2021) 7 China and WTO Review 135, 144.

[193] Text to n 122.

4.2 NON-EURO DENOMINATED E-MONEY TOKENS

The second potential cross-border issue pertains to MiCAR-compliant e-money tokens whose denomination is not the euro or another official currency of a Member State. This is a sensitive case since it may impact the monetary sovereignty of Member States currencies, as well as the smooth transmission of monetary policy.[194]

In the very last round of amendments before MiCAR's final approval, specific 'monetary safeguards' were introduced in the final text. The legal construction of these safeguards in relation to e-money tokens is baroque and difficult to interpret. It is based on a norm included in Chapter 2 of Title IV, pertaining to significant e-money tokens. However, it applies to all e-money tokens that are not euro-deonominated.[195] Only this subset of e-money tokens are subject to the monetary safeguards that, in contrast, are applicable to all asset-referenced tokens.[196]

These safeguards are organised along two lines of defence. The first sets clear quantitative thresholds and empowers the competent authority to monitor and ensure compliance. In contrast, the second line of defence empowers the ECB with a broad discretionary power not calibrated over quantitative thresholds. The first line of defence empowers the competent authority to restrict the issuance of non-euro denominated e-money tokens that are widely used as a means of payment. Being widely used as a means of payment is defined based on two quantitative thresholds assessed based on the quarterly average number and volume of daily transactions. If these exceeds, respectively, €1 million and €200 million, the non-euro denominated stablecoin is considered as widely used as a means of payment. For the purpose of this safeguard, what is relevant is only the use of stablecoins as a means of payment and not the transactions associated simply the exchange of e-money tokens for funds or other crypto-assets.[197]

If these thresholds are exceeded, the issuer must cease issuance and, within 40 working days, submit a compliance restoration plan to the competent authority.[198] The

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[194] Martino (n 8) 9.
[195] Article 58(3) MiCAR
[196] Article 23 and 24(3) MiCAR.
[197] On the specific definition of 'transactions' for the purpose of this safeguard, see article 22(1) MiCAR.
[198] Article 23(1) MiCAR.

plan is evaluated by the competent authority which can require modifications, including a minimum denomination requirement. The competent authority allows the issuer to resume its activities only upon evidence that the thresholds will no longer be exceeded.

The second line of defence pertains to a non-euro denominated stablecoin that "poses a threat to the smooth operation of payment systems, monetary policy transmission or monetary sovereignty". In this case, the ECB can issue an opinion stating that a specific e-money token poses such a threat.[199] In this instance, the competent authority is required to limit the amount of the e-money token to be issued or impose a minimum denomination amount as specified in the ECB opinion. From an institutional perspective, the ECB has a general power to deliver opinions and such acts are subject to judicial review by the European Court of Justice.[200] It is important to highlight that the final decision remains with the competent authority, which is the EBA for significant e-money token issuers, but the content of the opinion issued by the ECB is binding on the competent authority. The fact that the final formal decision rests with the competent authority does not decrease the judicial oversight of the ECJ as it is well-established in case law that the ECB shall act in respect of EU law also when its acts are part of a more complex procedure leading to a legally binding decision adopted by another authority or institution.[201]

5. CONCLUDING REMARKS

This chapter has examined the composite regulatory architecture for e-money tokens under the Markets in Crypto-Assets Regulation (MiCAR). The analysis reveals that such a composite architecture is rooted in the double nature of e-money tokens as they are simultaneously deemed a form of electronic money and a type of crypto-asset. Accordingly, the regime for e-money tokens combines MiFID-inspired rules designed for crypto-assets with prudential requirements derived from the electronic money framework,

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[199] Article 24(3) MiCAR.

[200] See, respectively, article 132 TFEU and article 35 ESCB Statute.

[201] See, for instance the ECJ decision on the Cases C-8/15 P to C-10/15 P *Ledra Advertising Ltd, et al. v. European Commission and the European Central Bank* [2016]. The judgment comes in the context of the acts of the ECB when negotiating the Memorandum of Understanding between the ESM and a participating State. The ECJ held the ECB and the Commission responsible for the legality of the conditionalities attached to the aid received by the participating State from the ESM.

alongside MiCAR-specific provisions for e-money tokens, especially in relation to significant ones. The latter's requirements are designed to uphold monetary sovereignty and financial stability, while the former aims at investor protection. Furthermore, the extraterritoriality analysis underscores MiCAR's assertive stance in safeguarding EU monetary sovereignty against foreign-issued and non-euro denominated stablecoins.