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The Path to the EU Regulation Markets in Crypto-assets (MiCA)

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Abstract: This paper provides background to the upcoming EU regulation on Markets in Crypto-Assets (MiCA). The first step to regulate crypto-assets at EU level was taken by including virtual currencies in the revision of the Anti-Money Laundering Directive (5AMLD) which came into force 2018. Initial coin offerings fueled growth to a market with a variety of crypto-assets (payment, investment/security, utility and hybrid tokens). In principle, MiFID II should cover investment/security tokens by treating these as financial instruments. In January 2019, EBA and ESMA identified regulatory gaps at EU level. The announcement on the stablecoin project Libra in June 2019 sent shockwaves and led to defensive reaction against global stablecoins by regulators in light of significant risks and challenges posed. The EU institutions adopted strict positions against global stablecoins taken by the G7 and the G20. In September 2020, the European Commission launched the MiCA draft legislation to plug regulatory gaps concerning payment (including stablecoins) and utility tokens. Issuers, offerors and service providers of crypto-assets that are not financial instruments would be regulated under MiCA at EU level. Stricter rules should apply for stablecoins. After negotiations between the EU institutions, the final agreed MiCA text will go to plenary vote soon. The EU regulation will come into force in the EU member states in 2024. Many additional areas of action (Decentralized Finance, non-fungible tokens, EU taxonomy for sustainable activities) had to be left out from the MiCA scope for the sake of finalising the legislation.

Keywords: Bitcoin, crypto-assets, crypto-asset service providers, cryptocurrencies, distributed ledger technology (DLT), Diem, electronic money, initial coin offering (ICO), Libra, Meta, Markets in Crypto-assets (MiCA), non-fungible token (NFT), payment tokens, security tokens, stablecoins, TerraUSD, Transfer of Funds Regulation (ToFR), utility tokens

JEL classification: E42, G15, G28, O33

I. Introduction

On 24 September 2020, the European Commission published a legislation proposal to comprehensively regulate crypto-assets at level of the European Union (EU). The naming convention for the new EU regulation, Markets in Crypto-assets (MiCA), draws an analogy to an established EU directive, Markets in Financial Instruments Directive (MiFID II). Since then, there have been ongoing negotiations between representatives of the EU institutions and many stakeholders to finalise this draft legislation. A publication in the Official Journal of the EU is expected around December 2022/January 2023. The regulation would come into force in the EU member states in 2024.

Crypto-assets or crypto tokens are privately generated digital assets that depend primarily on cryptography and distributed ledger technology (DLT). Many observers see a differentiation of three basic types of crypto-assets: payment tokens, investment/security tokens and utility tokens (Table 1).

| Source | Term | Definition |
|---------------|----------------------------------|---|
| EBA 2019 | Crypto-asset | A type of private asset that depends primarily on cryptography and DLT as part of their perceived or inherent value |
| | Payment/exchange/currency tokens | Typically do not provide rights but are used as a means of exchange (e.g. to enable the buying or selling of a good provided by someone other than the issuer of the token) or for investment purposes or for the storage of value |
| | Investment/security tokens | Typically provide rights e.g. in the form of ownership rights and/or entitlements similar to dividends |
| | Utility tokens | Typically enable access to a specific product or service often provided using a DLT platform but are not accepted as a means of payment for other products or services |
| ESMA 2019a | Crypto-asset | A type of private asset that depends primarily on cryptography and DLT or similar technology as part of their perceived or inherent value. Unless otherwise stated, ESMA uses the term to refer to both so-called “virtual currencies” and “digital tokens”. Crypto-asset additionally means an asset that is not issued by a central bank. |
| | Payment-type crypto-asset | A type of crypto-asset that is meant to be used as a means of payment or exchange for goods or services that are external to the DLT ecosystem on which they are built |
| | Investment-type crypto-asset | A type of crypto-asset that resembles a financial instrument |
| | Utility-type crypto-asset | A type of crypto-asset that provides some ‘utility’ function other than as a means of payment or exchange for external goods or services |
| ECB CATF 2019 | Crypto-asset | Any asset recorded in digital form that is not and does not represent either a financial claim on or a financial liability of any natural or legal person, and which does not embody a proprietary right against an entity |

Table 1: Basic token types. Source: Own representation based on EBA 2019, ESMA 2019a, ECB Crypto-Assets Task Force 2019.

Crypto-assets also appear in the market in hybrid forms. Well-known cryptocurrencies or virtual currencies like Bitcoin and Ether belong to the category of payment tokens. Supervisory authorities have been using this categorisation, trying to draw analogies for example with traditional means of payment or with traditional financial instruments, in order to assess the regulatory treatment of crypto-assets on the basis existing rules.

A special token type has recently raised to prominence, namely the non-fungible token (NFT). An NFT is defined as a cryptographically unique token that verifies the ownership of a physical or digital asset (VALETONI ET AL. 2021), e.g. any kind of art, collectible, in-game or fashion item. NFTs are stored on a blockchain and normally paid for in cryptocurrencies (CONTI/SCHMIDT 2020). As the name states, NFTs are not interchangeable with other digital assets (CHOHAN 2021). This differentiates them from payment and investment tokens considering the definitions above. However, to arrive at a legal token classification of a particular NFT, a careful individual analysis would be needed (DI BERNARDINO ET AL. 2021).

The announcement of the stablecoin project Libra in June 2019 triggered significant efforts by regulators in many countries to comprehensively regulate crypto-assets in particular with strict rules for stablecoins. More recently, regulators have been reassured in their willingness to act following the spectacular crash of the algorithmic stablecoin USDTerra in May 2022.

Not considered as crypto-assets are central bank digital currencies (CBDC). These are currently under conception or in a test phase by many central banks around the world. These digital currencies are in fact a liability of the issuing central bank (ECKHARDT/WARHEM 2020, p. 6–7). On 2 October 2020, a few days after the MiCA proposal launch, the European Central Bank (ECB) published a report on the possible issuance of a digital euro (EUROPEAN CENTRAL BANK 2020a and 2020b). The timing and the speed of this initiative was by no means a coincidence but rather a coordinated reaction of the EU institutions to the perceived threat by the Libra project.

There is a number of academic research papers on the regulation of crypto-assets in Europe or at the EU level that include the release of the September 2020 MiCA draft legislation, e.g. SANDNER/BLASSL 2020, FERREIRA/SANDNER 2021, FERREIRA/SANDNER/DÜNSER 2021.

This working paper provides background on the upcoming EU regulation on Markets in Crypto-Assets (MiCA). First, in section II, we present stablecoins as an important subgroup of payment tokens. In section III, we walk through the initial steps taken towards regulating aspects of crypto-assets at EU level. Section IV describes the negotiation process 2020–2022 around the

MiCA draft legislation. A detailed analysis of the regulation itself is not intended here and will be covered in a separate publication when the regulation becomes official, probably in January 2023. Our paper closes with an outlook in section V.

II. Stablecoins

II.1 Definition and Taxonomy of Stablecoins

Due to the high volatility of cryptocurrencies like Bitcoin, Ether and Ripple, a demand in the crypto-asset market emerged for payment tokens that maintain a stable value. Roughly from 2018 onwards the market interest increased for payment tokens which promised a stable value in fiat currency, e.g. USD. The promise of stability is being conveyed under the label “stablecoin”. In the remainder of this paper, the term “stablecoin” will normally be used without quotation marks for ease of reading without implying acceptance of the purported stability. Until now, there is no legal definition of stablecoins.

The August 2019 research paper “In search for stability in crypto-assets: are stablecoins the solution?” by ECB research staff BULLMANN/KLEMM/PINNA appears to be the first major publication by any EU institution concentrating on stablecoins. The paper draws attention on the market growth, with the total value of stablecoins increasing from EUR 1.5 billion in January 2018 to EUR 4.3 billion in July 2019. The ECB researchers laid down the following definition: “Stablecoins are digital units of value that are not a form of any specific currency (or basket thereof) but rather, by relying on a set of stabilisation tools, try to minimise fluctuations in their price in such currencies” (BULLMANN ET AL. 2019, p. 3).

The authors look at three criteria that characterise crypto-assets:

- existence or absence of an issuer that is responsible for satisfying any attached claim,
- decentralisation or centralisation of responsibilities over the stablecoin initiative,
- what underpins the value of a stablecoin and its stability in the currency of reference.

Based on the above criteria they differentiate following types of observed stablecoin arrangements (BULLMANN ET AL. 2019, p. 11):

- Tokenised funds: An issuer with centralised responsibilities over the stablecoin initiative holds funds in one fiat currency and is committed to redeemability of the units of the stablecoin. The safekeeping of the funds is done by a custodian. Examples: single currency Libra/Diem concept, USD Tether.

- Off-chain collateralised stablecoin: Similar to above, except that the stablecoin is backed by traditional asset classes like securities or commodities (in more than one fiat currency). The stablecoin is redeemable but the value of the portfolio of assets may not be stable. Examples: basket currency Libra/Diem concept.
- On-chain collateralised stablecoins: The stablecoin is backed by other crypto-assets. The issuer may or may not be accountable. The responsibilities over the stablecoin initiative are decentralised. Example: Dai.
- Algorithmic stablecoins: Backing of the stablecoin happens only by users' expectations about the future purchasing power of their holding. The issuer cannot be held accountable and the responsibilities over the stablecoin initiative are decentralised. Examples: NuBits, TerraUSD.

The observed stablecoin types can be assessed in terms of innovation potential and volatility risk (Table 2). The tokenised currency category is the least affected by volatility risk whereas the subgroup of algorithmic stablecoins is the most exposed.

| Stablecoin type | Innovation Potential | Volatility Risk |
|---------------------------------------|--|--|
| Tokenised currency or tokenised funds | Low: involves accountable party, equals electronic money | Low: only in the cases of fraud and operational accident |
| Off-chain collateralised stablecoin | Low: involves accountable party, traditional forms of collateral | Comparably low: depends on eligible collateral |
| On-chain collateralised stablecoin | Medium: smart contract replaces accountable party, uses collateral | Comparably high: eligible collateral inherently volatile |
| Algorithmic stablecoin | High: smart contract replaces accountable party, works on expectations | High: subject to crisis of confidence |

Table 2: Assessment of stablecoin types by ECB research staff. Source: Own representation based on BULLMANN ET AL. 2019, p. 35.

Currently, the four most important stablecoins are Tether (USDT), USD Coin (USDC), Binance USD (BUSD) and Dai. All of them peg their value to the USD. The market capitalisation of stablecoins grew significantly up to USD 170 billion in January 2022, accounting for 7% of the market (MAI 2022, p. 2). According to an analysis by the Digital Euro Association in August 2022, Tether is now the third-largest cryptocurrency and USDC the fifth-largest by market capitalisation with over USD 60 billion and USD 50 billion respectively. Binance USD and Dai have market capitalisations between USD 5–20 billion (DIGITAL EURO ASSOCIATION 2022, p. 5–7).

II.2 Abortion of the Stablecoin Project Libra/Diem

In June 2019, the privately managed Libra Association, a consortium of firms under Swiss law with prominent backing by the social media firm Facebook Group (renamed Meta in November 2021), announced the intention to launch a stablecoin called Libra early 2020. The stablecoin initiative, essentially a mobile payment system, was roughly explained in a white paper released on 18 June 2019 (LIBRA ASSOCIATION 2019a; ZETZSCHE ET AL. 2019; BRÜHL 2020). In this first version of Libra, the issuer of the cryptocurrency would use part of the proceeds of the Libra coin issues in order to build up a so-called Libra Reserve, a portfolio of liquid investments in some of the main fiat currencies of the world like USD, EUR, GBP, JPY and SGD. This arrangement can be interpreted as an off-chain collateralised stablecoin. Note that alone due to exchange rate movements the currency basket portfolio of assets would fluctuate in value in any chosen single fiat currency (SCHÄFER/READ 2020).

On 11 September 2019, the Libra Association concretely announced its intention to pursue a payment system license in Switzerland (LIBRA ASSOCIATION 2019b). The Swiss Financial Market Supervisory Authority (FINMA) acknowledged receipt of an enquiry for a legal assessment or ruling under Swiss supervisory law. FINMA identified a series of regulatory issues to be taken into consideration including management of cyber risks, anti-money laundering standards and capital allocation for bank-like risks (FINMA 2019, p. 2–3).

The Facebook initiative sent shockwaves around the world and led to an immediate and strong defensive reaction at the international level by governments, central banks, supervisory authorities and standard-setting bodies. The G7 group of countries quickly established a Working Group on Stablecoins in July 2019 (G7 FRANCE 2019a). The working group published a report with recommendations which highlighted various challenges and risks associated with stablecoins (Table 3) (G7 WORKING GROUP ON STABLECOINS 2019). The position was endorsed in October 2019 by the G7 Finance Ministers and Central Bank Governors as well as the G20 during a convention in Washington (G7 FRANCE 2019b; G20 JAPAN 2019).

| Group of Stablecoins | Challenges and Risks |
|-------------------------------------|---|
| All stablecoins regardless of scale | <ul style="list-style-type: none"> • Legal certainty • Sound governance • Financial integrity (Anti-Money Laundering/Countering the Financing of Terrorism) • Safety, efficiency and integrity of payment systems • Cyber and other operational risk considerations • Market integrity • Data protection • Consumer/investor protection • Tax compliance |
| Potential global stablecoins | <ul style="list-style-type: none"> • Fair competition in financial markets • Financial stability implications • Monetary policy transmission |

Table 3: Challenges and risks of stablecoins. Source: Own representation based on G7 WORKING GROUP ON STABLECOINS 2019.

It became evident that governments, central banks and supervisory authorities in the main economies have no interest in allowing the rise of a private stablecoin payment system with global reach. This would circumvent the regulated and established monetary and financial systems.

As a countermeasure to the regulatory reaction, the Libra Association worked out a revised concept and published a white paper on Libra 2.0 on 15 April 2020 (LIBRA ASSOCIATION 2020). The revision included among others four single currency Libra coins for USD, EUR, GBP and SGD (essentially tokenised funds) and a multicurrency Libra coin like previously planned but composed of the four single currency coins. FINMA confirmed the start of the licensing process for a payment system license under Swiss law and informed the public that it had established contact with a number of supervisory authorities and central banks worldwide (FINMA 2020). Later, Libra was rebranded as Diem in December 2020 (COINDESK 2020). In May 2021, the Diem Association announced withdrawal of the application process in Switzerland and establishment of a partnership with the US bank Silvergate Capital to focus only on a USD Diem coin (DIEM ASSOCIATION 2021). In January 2022, the project was finally buried as the Diem Association sold its assets including intellectual property to Silvergate Capital (DIEM ASSOCIATION 2022). Actions and reactions by the Libra/Diem consortium and the regulators clearly show that a regulatory cat and mouse game was taking place. In the end, the global stablecoin project had to be aborted due to high regulatory hurdles that were set up.

II.3 Collapse of the Algorithmic Stablecoin TerraUSD

Existing stablecoins are mostly used for trading, lending and borrowing crypto-assets. They are a building block for so-called “Decentralized Finance” (DeFi). The term refers to financial services performed by applications on a permissionless blockchain (MAI 2022, p. 2) which is challenging the traditional centralised banking system.

The Terra-Luna system was a DeFi project around an algorithmic stablecoin that consisted of

- the TerraUSD (UST) stablecoin pegged to the USD,
- the Luna coin designed to absorb the price volatility of the Terra stablecoin,
- the Anchor protocol which provides “interest” on UST deposits to Terra stablecoin holders.

Algorithmic stablecoins rely on a buy and sell mechanism to maintain a peg. The Terra-Luna system works as follows (KALINOV/VIEHOF 2022; FINANCIAL STABILITY BOARD 2022c, p. 3-4):

- If the value of UST rises above the peg with the USD, users can burn Luna worth one USD and mint one UST. The increased amount of UST in the system should lead to a UST price drop down to the peg with the USD.
- The other way around, when the UST price drops below parity with the USD, users can burn UST for one USD worth of Luna. The reduced supply of UST should lead to a UST price increase to return to the peg with the USD.

The mechanism depends on arbitrage activity and active trading market. The problem in a market crash is that there might not be enough buyers of Luna to absorb the additional supply of Luna when UST is burned. UST lost its peg to the USD on 5 May 2022 and fell into a downward spiral. Anchor deposits dropped from USD 11.1 billion on 5 May 2022 to USD 300 million by 12 May 2022 and the UST price collapsed (FINANCIAL STABILITY BOARD 2022c, p. 4). According to a Twitter thread by SANDNER from the Frankfurt School Blockchain Center on 13 May 2022, the price drop of the stablecoin from USD 1.00 to USD 0.17 reduced market capitalisation from USD 19 billion to USD 2 billion. At the same time, the price of the Luna token collapsed from USD 81 to practically zero which meant a loss in market value of USD 31 billion. Hence, roughly USD 48 billion were erased within days.

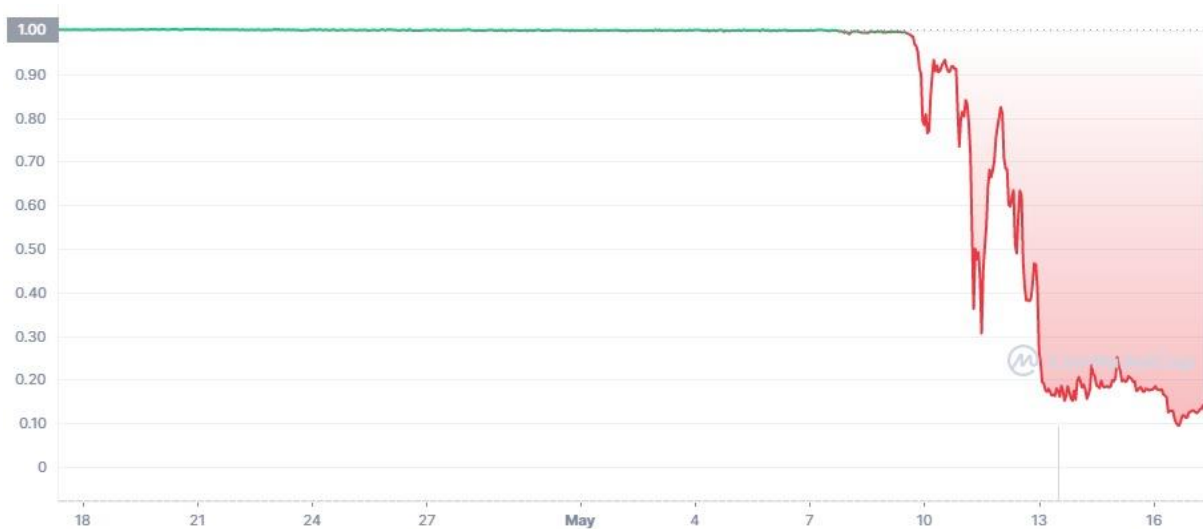


Figure 1: USD price of stablecoin TerraUSD. Source: <https://coinmarketcap.com/currencies/terrausd/>.



Figure 2: USD price of Luna coin. Source: <https://coinmarketcap.com/currencies/terra-luna/>.

The failure of the Terra-Luna system was due to the lack of an appropriate and effective stabilisation mechanism (FINANCIAL STABILITY BOARD 2022c, p. 4). Following this market crash, there was a call within the EU for stricter regulation of stablecoins (DIGITAL EURO ASSOCIATION 2022). This probably influenced the overall mood in the final stages of the negotiations of the MiCA draft legislation.

III. Initial Steps Towards Regulating Crypto-Assets at EU Level

III.1 Relevant EU Directives and Regulations

At EU level, there is a number of directives and regulations that set a common framework for electronic money, payments, anti-money laundering and financial instruments (Table 4). This framework is also relevant for regulating crypto-assets at EU level, either by direct application of existing laws based on a wide interpretation or simply by setting a reference point when drafting new laws. Until 2018, crypto-assets did not appear in any piece of EU legislation, neither in the Electronic Money Directive (EMD), the Payment Services Directive (PSD), the Markets in Financial Instruments Directive (MiFID) nor in the Anti Money Laundering Directive (AMLD).

| Directive or regulation | Current version | Relevant definitions or mentions |
|--|--|--|
| Electronic Money Directive (EMD) | EMD2: 2009/110/EC, 16.09.2009 | Electronic money |
| Payment Services Directive (PSD) | PSD2: (EU) 2015/2366, 25.11.2015 | Money (bank notes, coin, cashless money, electronic money) |
| Markets in Financial Instruments Directive (MiFID) | MiFID II: 2014/65/EU, 15.05.2014 | Financial instruments |
| Anti-Money Laundering Directive (AMLD) | 5AMLD: (EU) 2018/843, 30.05.2018 | Virtual currency, custodian wallet provider, providers engaged in exchange services between virtual currencies and fiat currencies |
| European Crowdfunding Service Providers Regulation and Directive (ECSPR und ECSPD) | ECSPR: (EU) 2020/1503; ECSPD: (EU) 2020/1504, both 07.10.2020 | Initial coin offering (mentioned in the preamble) |

Table 4: Relevant EU directives and regulations. Source: Own representation.

Cryptocurrencies entered the stage of EU legislation when a revision of the 4th Anti-Money Laundering Directive (4AMLD) was set in motion in 2015 which ultimately led to the release of the 5th Anti-Money Laundering Directive (5AMLD) in 2018. The following terms were introduced:

- virtual currencies (nowadays roughly meaning cryptocurrencies or payment tokens),
- custodian wallet provider, and
- providers engaged in exchange services between virtual currencies and fiat currencies.

This was the first time that payment tokens and some crypto-asset service providers were subject to EU rules. The EU member states were mandated to take care of the licensing process of the service providers for purposes of anti-money laundering measures. From then on, the

identity of users and their wallet addresses had to be stored and self-reporting alternatives had to be made available. The exchange between cryptocurrencies was left unregulated at EU level. In the years 2017-2018, a variety of crypto-assets was publicly marketed with informal white papers and placed with users/investors. The label “initial coin offerings” (ICO) drew an analogy to the properly regulated initial public offerings (IPO) of company shares. Many of these crypto-assets being issued (e.g. utility and security tokens) were not covered by the updated directive 5AMLD.

The European Crowdfunding Service Providers Directive (ECSPD), which underwent the EU legislation process 2018–2020, contains a mention of ICOs, only once in the preamble of the directive. The Member of the European Parliament (MEP) Ashley Fox appointed as rapporteur by the Committee on Economic and Monetary Affairs (ECON) to propose the draft version of the directive by the European Parliament, tried to include regulatory relief elements for ICOs below EUR 8 million capital (EUROPEAN PARLIAMENT 2018a and 2018b). In the end, representatives of the EU institutions agreed not to regulate anything relating to ICOs in this directive but to postpone it to a comprehensive regulating approach for crypto-assets.

III.2 March 2018 FinTech Action Plan

In March 2018, the European Commission published a FinTech Action plan looking to foster a more competitive European financial sector (EUROPEAN COMMISSION 2018), including the development of an EU market in crypto-assets. On one hand, EU firms, investors and consumers should be in the position to take advantage of the technological innovation. On the other hand, a number of risks and vulnerabilities should be properly addressed (EUROPEAN COMMISSION 2018, p. 6–7). The Commission was interested in an assessment of the suitability of the existing EU legal framework concerning ICOs and crypto-assets in general.

As follow-up point, the European Banking Authority (EBA) and die European Securities and Markets Authority (ESMA) were mandated to take stock of the EU crypto-assets market. The EBA report focused on payment tokens and the ESMA report dealt mainly with the existing gaps on security/investment tokens. The common view by the agencies was that utility tokens in the basic form are not covered at EU level.

Both European supervisory authorities (ESAs) published reports with recommendations on 9 January 2019. Stablecoins were not mentioned anywhere in the ESMA report and only once in the EBA report.

III.3 January 2019 Report on Crypto-assets by the European Banking Authority

The EBA report assessed the applicability and suitability of the EU legal framework concerning crypto-assets. The report set the foundations with a basic taxonomy of crypto-assets in payment, investment and utility tokens (EBA 2019, p. 7). The analysis concluded that typically crypto-assets fall outside the scope of the existing EU financial services regulation (e.g. EMD, PSD, MiFiD). Only in limited cases would crypto-assets qualify as electronic money. The provision of custodian wallets and trading platforms were not regulated activities. Therefore, risks relating to these activities would arise with regard to consumer protection, operational resilience and market integrity. Furthermore, a level playing field in the EU would be at risk due to the proliferation of legislative and supervisory actions at the EU member state level (EBA 2019, p. 4, 29).

The EBA took stock of a variety of activities with crypto-assets carried out by financial institutions as reported by national competent authorities (NCAs). The institutions covered were “banks” (credit institutions/investment firms within the meaning of the Capital Requirements Regulation), payment institutions (under PSD2) and electronic money institutions (under EMD2). The activities reported included: owning crypto-assets directly, providing custody or wallet services for crypto-assets, providing exchange services, lending against crypto-asset collateral, clearing or trading derivatives with crypto-asset underlying, investing in products with crypto-assets underlying and lending to entities dealing with crypto-assets (EBA 2019, p. 23).

III.4 January 2019 Report on Crypto-assets by the European Securities and Markets Authority

The ESMA report analysed the applicability of the existing rules for financial instruments under MiFID II. The ESMA stated that existing rules do apply for crypto-assets that qualify as financial instruments under MiFID II (ESMA 2019a). Financial instruments include for example transferable securities, money market instruments, units in investment funds and financial derivatives. Transferable securities are securities that are tradeable on the financial market but are not means of payment. According to the ESMA report, the full set of EU financial rules would apply to the issuer and service providers including the Prospectus Directive (PD), the Market Abuse Regulation (MAR), the Short Selling Regulation (SSR), the Transparency Directive and others.

However, because MiFID II is a EU directive instead of a EU regulation, the actual classification of crypto-assets as financial instruments lies with the national competent authority depending on the specific national implementation of the EU directive. ESMA carried out a survey in 2018 with a sample of 6 crypto-assets with characteristics from the basic token types (payment, investment and utility) or hybrids thereof. The survey covered FINOM, Polybius, Crypterium, PAquarium, Filecoin, AlchemyBite (ESMA 2019b). It became evident, already with this tiny sample, that the classification of a crypto-asset as a MiFiD II financial instrument was not consistently applied across the EU member state jurisdictions. According to ESMA, this would make regulation and supervision of crypto-assets challenging (ESMA 2019a, p. 4–5).

The ESMA report uncovered the following gaps:

- For crypto-asset that qualify as MiFID II financial instruments (mainly security tokens), there are a number of issues that need fixing. Some of the risks specific to the underlying technology may be left unaddressed.
- For crypto-assets that do not qualify as MiFID II financial instruments (mainly utility and payment tokens), consumers may be left exposed to significant financial risks. ESMA believes that all crypto-assets and related activities should be subject to anti-money laundering provisions.

The ESMA report also voiced concerns about EU member states considering bespoke rules at a national level to try to deal with existing gaps for crypto-assets (e.g. France, Malta).

III.5 Publications by the European Central Bank

The ECB and ECB research staff published various articles and research papers on crypto-assets and stablecoins between 2019 and 2020.

First, the ECB Crypto-Assets Task Force, established in 2018 to analyse potential implications of crypto-assets for monetary policy and the functioning of market infrastructures and payments, published a research paper in May 2019. The conclusion at the time was that the risks or potential implications were limited and/or manageable on the basis of the existing regulatory frameworks but that this assessment may change (ECB CRYPTO-ASSETS TASK FORCE, p. 2). One paragraph mentions the development of stablecoins in order to overcome the

price volatility in other crypto-assets. Also, a broad categorisation of collateralised and algorithmic stablecoins was touched upon (ECB CRYPTO-ASSETS TASK FORCE, p. 14).

Second, the August 2019 issue of the ECB Economic Bulletin included an article by ECB research staff CHIMIENI/KOCHANSKA/PINNA titled “Understanding the crypto-asset phenomenon, its risk and measurement issues”. The authors made a significant effort to gather data of the crypto-asset market from high-quality public available sources like CoinMarketCap complemented with data from some commercial sources like CryptoCompare. They undertook a market analysis and produced several interesting price and trading volume charts. One conclusion is that important gaps and challenges remained, e.g. exposure of financial institution to crypto-assets and interlinkages with the regulated financial sectors (CHIMIENI ET AL. 2019).

Third, the August 2019 ECB research staff paper on stablecoins by BULLMANN/KLEMM/PINNA presented a definition and a taxonomy of stablecoins. The paper also includes analysis on typical examples of tokenised funds (Tether), collateralised stablecoins (Dai) and algorithmic stablecoins (NuBits). The Libra project, most likely the driving force for the publication itself, is only mentioned once in the text and in one footnote. The authors concluded that the governance framework of stablecoin initiatives required improvements and that regulatory treatment was uncertain (BULLMANN ET AL. 2019). In November 2019, the ECB adopted the views of the research staff in an ECB official article “Stablecoins – no coins, but are they stable?” (EUROPEAN CENTRAL BANK 2019).

Fourth, a May 2020 article in the ECB Macroeconomic Bulletin by ECB research staff ADACHI/COMINETTA/KAUFMANN/VAN DER KRAAIJ for the first time explicitly addressed the impact of a potential Libra stablecoin on the European money market. The authors took the view that the Libra Reserve, which would be mainly invested in short-term government debt in USD (50%), EUR (18%), JPY (14%), GBP (11%) and SGD (7%), might have the potential to become one of Europe’s largest money market funds (ADACHI ET AL. 2020). A money influx into the euro area was expected because the EUR share of 18% was larger than the share of Facebook users in the EUR area of 10%. Also, the authors stated that a stablecoin arrangement could either fall under a number of EU regulatory frameworks or none of them:

- The stablecoin may qualify as electronic money, hence the Electronic Money Directive (EMD2) may apply for the coin and its issuer.
- The asset management function may qualify as an investment fund, therefore the Undertakings for Collective Investment in Transferable Securities (UCITS) Directive, the

Alternative Investment Fund Manager (AIFM) Directive and the Money Market Fund Regulation may apply.

- The stablecoin may be regarded as equivalent to a deposit, so EU banking regulation may apply.

Fifth, in September 2020, the ECB Crypto-Assets Task Force published a working paper on the implications of stablecoins for monetary policy, financial stability, market infrastructure and payments, and banking supervision in the euro area (ECB CRYPTO-ASSETS TASK FORCE 2020). The analysis builds upon the definitions and taxonomy established in BULLMANN ET AL. 2019 (Table 5).

| Stablecoin Type | Issued on the Receipt of | Collateralisation | Redemption |
|-------------------------------------|---|---|--|
| Tokenised funds | Funds (i.e. cash, deposits or electronic money) | Collateralised by funds and/or close substitutes | Redeemable at market value of the collateral at the time of redemption or face value of the stablecoin |
| Off-chain collateralised stablecoin | Assets held through an accountable entity | Collateralised by assets held through an accountable entity | Redeemable at market value of the collateral at the time of redemption |
| On-chain collateralised stablecoin | Crypto-assets held directly | Collateralised by crypto-assets held directly on the DLT | Redeemable at market value of the collateral at the time of redemption |
| Algorithmic stablecoin | Crypto-assets or given away for free | No collateral – value of stablecoin is based purely on the expectation of its future market value | Not redeemable |

Table 5: Stablecoin types and characteristics. Source: ECB CRYPTO-ASSETS TASK FORCE 2020, p. 9.

The paper assessed implications for the EUR area based on the following three scenarios for the uptake of stablecoins:

- stablecoins as a crypto-assets accessory function (i.e. continuation of the current state),
- stablecoins as a new payment method,
- stablecoins as an alternative store of value (being the least likely scenario).

The conclusions included (ECB CRYPTO-ASSETS TASK FORCE 2020, p. 31):

- The term stablecoin may be perceived to have positive connotations in terms of intrinsic stability and usability as a form of money. As regulatory principles are established and approaches are defined, the term should be replaced by a choice of terminology to shift the emphasis away from the issuer's promise of stability.

- The implications of stablecoins for monetary policy, financial stability, market infrastructure and payments, and banking supervision depend on the specific scenario for the uptake of stablecoins as a result of their concrete features and EU user demand.
- Under more plausible scenarios, the Eurosystem has a range of instruments to manage the impact of stablecoins on its mandate and tasks.
- The application of these tools needs to be underpinned by adequate, internationally coordinated regulation and cooperative oversight. Due to the global nature of stablecoin arrangements, an EU regulatory approach cannot be developed in isolation.

III.6 Basel Framework for Banks

Parallel to the MiCA legislation process at EU level, international standards on the regulation of banks that hold crypto-assets positions (directly or through derivatives) are being discussed by the standard-setting body Basel Committee on Banking Supervision (BCBS). The focus is mainly on capital requirements (prudential treatment) to account for the risks of crypto-asset positions being held by banks. After an initial discussion paper from December 2019 (BCBS 2019), the committee launched two consultations, the first one in June 2021 (BCBS 2021) and the second one in June 2022 (BCBS 2022), to develop a detailed approach on the prudential treatment. The Basel Framework for banks will very likely be extended by a new chapter (SCO60: Cryptoasset exposures). A final text is expected by January 2023 after wrapping up the second consultation on the prudential treatment of crypto-asset exposures. At a later stage, this standard will also find its way into the Capital Requirements Regulation (CRR) for banks at EU level.

III.7 Statements and Reports by EU Institutions on Stablecoins 2019–2020

In December 2019, the Council of the European Union and the European Commission released a joint statement on stablecoins along the same strict lines like the G7 and the G20, mainly with the Libra project in mind. The Council and the Commission would take all necessary measures to ensure appropriate standards of consumer protection and orderly monetary and financial conditions. No global stablecoin arrangement should begin operation in the EU until the legal, regulatory and oversight challenges and risks were adequately identified and addressed (COUNCIL OF THE EUROPEAN UNION 2019).

To back the above joint statement the European Commission launched a consultation document called “On an EU framework for markets in crypto-assets” on 19 December 2019 which ran until 19 March 2020. The findings of the consultation process were to be considered for a new EU legislation on crypto-assets also covering stablecoins (EUROPEAN COMMISSION 2019).

A comprehensive study from April 2020 on regulating crypto-assets, produced by academics HOUBEN/SNYERS from the University of Antwerp at the request of the European Parliament’s ECON committee, recommended rulemaking on crypto-assets including global stablecoins at EU level to avoid regulatory arbitrage due to the fact that national initiatives of the EU member states would not be aligned (EUROPEAN PARLIAMENT 2020).

Around 10 September 2020 an early draft version of a proposal for a regulation on Markets in Crypto-assets (MiCA) by the European Commission was leaked on the journalistic website politico.eu. MEP Sven Giegold confirmed the authenticity of the leak and informed that the ECON adopted a report proposing a regulation of crypto-assets (GIEGOLD 2020).

IV. Negotiation Process around the MiCA Draft Legislation 2020–2022

IV.1 September 2020 Digital Finance Package Including MiCA

On 24 September 2020, the European Commission announced the adoption of a new Digital Finance Package including a Digital Finance Strategy, a Retail Payments Strategy, a legislative proposal on digital operational resilience, and a provisional version of the MiCA regulation proposal (which was leaked two weeks before). According to the press release, the MiCA regulation should protect investors from risks and provide legal clarity and certainty for crypto-asset issuers and providers (EUROPEAN COMMISSION 2020a). The MiCA draft version (EUROPEAN COMMISSION 2020b) was accompanied by draft versions of the annexes (EUROPEAN COMMISSION 2020c), an impact assessment (EUROPEAN COMMISSION 2020d) and an executive summary of the impact assessment (EUROPEAN COMMISSION 2020e).

The Commission stated in the press release that crypto-assets already subject to EU legislation would stay regulated (e.g. as financial instruments under MiFID II). For previously unregulated crypto-assets, the Commission proposed a bespoke regime setting strict requirements for issuers of crypto-assets and crypto-asset service providers (CASP). Safeguards would include capital requirements, custody of assets, a mandatory complaint holder procedure available to investors,

and rights of the investor against the issuer. Issuers of global stablecoins would be subject to more stringent capital requirements, liquidity management and interoperability requirements.

IV.2 Impact Assessment Accompanying the September 2020 MiCA Commission Draft

The impact assessment on an EU framework on crypto-assets is a study by the European Commission (EUROPEAN COMMISSION 2020d) which essentially backs the policy choices made in the September 2020 MiCA Commission draft.

The impact assessment document defines the problem, sets objectives, formulates policy options, assesses the impact of the options and arrives at a preferred choice. The results are summarised in an executive summary (EUROPEAN COMMISSION 2020e).

The policy options considered in the impact assessment were grouped into three areas of action:

- crypto-assets that are currently unregulated at EU level,
- crypto-assets that qualify as financial instruments under MiFID II,
- stablecoins and global stablecoins.

Several policy options were considered for each area of action (Table 6):

| Area of Action | Policy Options | Preferred Option |
|--|--|------------------|
| Crypto-assets that are currently unregulated at EU level | Option 1: Opt-in regime | No |
| | Option 2: Full harmonisation regime | Yes |
| Crypto-assets that qualify as financial instruments under MiFID II | Option 1: Non-legislative measures | Yes |
| | Option 2: Targeted amendments to sectoral legislation | Yes |
| | Option 3: Pilot/experimental regime for creating DLT market infrastructure for security tokens | Yes |
| Stablecoins and global stablecoins | Option 1: Bespoke legislative measure on stablecoins/global stablecoins | Yes |
| | Option 2: Bringing stablecoins and global stablecoins under the EMD2 | Yes |
| | Option 3: Measures limiting the use of stablecoins and global stablecoins in the EU | No |

Table 6: Policy options assessed in the Impact Assessment from September 2020. Source: EUROPEAN COMMISSION 2020d, p. 32; EUROPEAN PARLIAMENT 2021, p. 4–6.

The policy options were compared against the criteria of effectiveness, efficiency and coherence but not against proportionality (EUROPEAN PARLIAMENT 2021, p. 6). The preferred solution was a combination of various options (EUROPEAN COMMISSION 2020e, p. 3):

- For the area of action on unregulated crypto-assets: option 2 offering full harmonisation instead of a voluntary opt-in regime regulating issuers of crypto-assets and crypto-asset service providers.
- For the area of action on financial instruments under MiFID II: a combination of all three options including
 - non-legislative measures, in particular the Commission and ESMA, to issue communications and guidelines regarding qualification of crypto-assets under MiFID II, conditions for platforms trading crypto-assets to fall under MiFID II, application of the Prospectus Regulation to security token offerings etc;
 - targeted amendments to sectoral legislation governing the securities lifecycle (e.g. Prospectus Regulation, MiFID II) with the aim of removing obstacles to the use of DLT;
 - pilot/experimental regime for creating DLT market infrastructure for security tokens under MiFID allowing some innovative business models.
- For the area of action on stablecoins and global stablecoins: a combination of options 1 (bespoke legislative measure) and 2 (bringing them under EMD2) but not option 3 which could leave some financial stability risks unaddressed if EU consumers widely use stablecoins issued in third countries.

As a consequence of the impact assessment, the Commission issued a legislative package made out of the following components (ANZINI 2021, p. 3):

- a proposal for the new MiCA regulation in order to regulate issuance of crypto-assets and the provision of related services,
- an amendment to the existing EU directive MiFID II clarifying that the directive also applies to financial instruments based on DLT (essentially investment-type crypto-asset),
- a proposal for a new regulation for a pilot regime for market infrastructures based on DLT (not further covered in this working paper).

IV.3 September 2020 MiCA Commission Draft

The September 2020 MiCA Commission draft follows four objectives, listed in an explanatory memorandum ahead of the legislation text itself (EUROPEAN COMMISSION 2020b, p. 3–4):

- to provide legal certainty for crypto-assets not covered by existing EU financial services legislation;
- to support innovation by promoting the development of crypto-assets and the wider use of DLT;
- to instal appropriate levels of consumer and investor protection and market integrity;
- to ensure financial stability.

The intention of the proposal is to replace existing national frameworks applicable to crypto-assets not covered by existing EU financial services legislation and also to establish specific rules for so-called stablecoins, including when these qualify as electronic money.

The MiCA Commission draft is structured in nine titles (Table 7).

| Title Number | Title Headline |
|--------------|---|
| I | Subject Matter, Scope and Definitions |
| II | Crypto-Assets, other than asset-referenced tokens or e-money tokens |
| III | Asset-referenced tokens |
| IV | Electronic money tokens |
| V | Authorisation and operating conditions for Crypto-Asset Service providers |
| VI | Prevention of Market Abuse involving crypto-assets |
| VII | competent Authorities, the EBA and ESMA |
| VIII | Delegated acts and implementing acts |
| IX | Transitional and final provisions |

Table 7: Structure of the MiCA draft legislation by the Commission from September 2020. Source: Own representation based on EUROPEAN COMMISSION 2020b.

Surprisingly, the draft legislation did not follow the established taxonomy of crypto-assets (payment, security and utility token) already documented in the EBA and ESMA 2019 reports. Instead, the draft differentiates the following three categories of crypto-assets with new designations (Table 9):

- electronic money token (EMT),
- asset-referenced token (ART),
- crypto-assets other than EMT and ART (as a catch-all category).

EMT and ART would be subject to more strict requirements. In our interpretation, EMT are intended to cover stablecoin arrangements designed as tokenised funds. Similarly, ART are meant to cover stablecoin arrangements as collateralised stablecoins (off-chain and on-chain). Not surprisingly, the aim of this logic was to set a high regulatory bar for Libra 2.0 in the pipeline at the time in Summer 2020. Nevertheless, it does not seem logical that the riskiest

stablecoin type (algorithmic stablecoins) was not singled out for stricter requirements. This means that algorithmic stablecoin arrangements like in Terra-Luna would be treated under the MiCA catch-all category of crypto-assets (Table 8).

| Definition | Meaning |
|-------------------------------|---|
| Crypto-asset | A digital representation of value or rights which may be transferred and stored electronically, using DLT or similar technology |
| Issuer of crypto-assets | Legal person who offers to the public any type of crypto-assets or seeks the admission of such crypto-assets to a trading platform for crypto-assets |
| Crypto-asset service | Any of the services and activities listed below relating to any crypto-asset: (a) the custody and administration of crypto-assets on behalf of third parties (b) the operation of a trading platform for crypto-assets (c) the exchange of crypto-assets for fiat currency that is legal tender (d) the exchange of crypto-assets for other crypto-assets (e) the execution of orders for crypto-assets on behalf of third parties (f) placing of crypto-assets (g) the reception and transmission of orders for crypto-assets on behalf of third parties (h) providing advice on crypto-assets |
| Crypto-asset service provider | Any person whose occupation or business is the provision of one or more crypto-asset services to third parties on a professional basis |
| Electronic money token | A type of crypto-asset with the main purpose to be used as a means of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender |
| Asset-referenced token | A type of crypto-asset that purports to maintain a stable value by referring to the value of several fiat currencies that are legal tender, one or several commodities or one or several crypto-assets, or a combination of such assets |
| Utility token | Type of crypto-asset which is intended to provide digital access to a good or service available on DLT, and is only accepted by the issuer of that token |

Table 8: Important definitions in the MiCA proposal from September 2020. Source: Own representation based on EUROPEAN COMMISSION 2020b.

Non-fungible tokens (the term used in the preamble was “crypto-assets that are unique and not fungible with other”) were not intended to be regulated at EU level at the time.

Important provisions of the Commission draft are listed below (EUROPEAN COMMISSION 2020b; ANZINI 2021; ECKHARDT 2021):

- The regulation applies to crypto-assets that do not qualify as financial instruments, deposits or structured deposits under EU financial services legislation.
- The regulation applies to issuers of crypto-assets and crypto-asset service providers.
- Uniform requirements for transparency and disclosure in relation to issuance, operation, organisation and governance of crypto-asset service providers are established.
- Consumer protection rules and measures to prevent market abuse are established.

- Issuers of crypto-assets other than EMT and ART can offer crypto-assets to the public in the EU or seek admission to trading on a trading platform. They have to publish a white paper and submit it to the national competent authority but no pre-approval is required.
- EMT can only be issued by authorised banks or electronic money institutions. EMT are deemed electronic money under EMD2.
- Issuers of ART need to get authorisation as an issuer.
- Issuers of ART need pre-approval of their white paper by national competent authorities (and would then be valid for the entire EU). White papers for EMT need to be notified.
- Issuers of EMT and ART have to fulfil further requirements including holding prudential capital in addition to the reserve assets.
- Issuers of EMT and ART are not allowed to grant interest or other benefits to the coin holders.
- Significant EMT and ART are subject to stricter requirements. There are six criteria for classifying stablecoins as significant.
- The classification of EMT and ART as significant is carried out by a college of supervisors including EBA and ESMA.
- The national competent authorities, the EBA and the ESMA are granted regulatory powers. EBA supervises significant issuers of EMT and ART. The national competent authorities supervise issuers of non-significant EMT and ART and all other crypto-assets.
- Crypto-asset service providers (widely defined, see Table 9) have to register as legal entity with the authorities in one of the EU-member states.
- A market abuse regime for crypto-assets is introduced in analogy to financial instruments.

IV.4 Reactions to MiCA Commission Draft by Academics and Market Participants

Market participants and academics showed mixed reactions to the Commission draft. SANDNER/BLASSL 2020 saw opportunities in terms of professionalisation and growth of the market in Europe, however, the companies in the field of crypto-assets would face considerable challenges with this comprehensive regulation, in particular FinTech start-ups. bitkom e. V., a German trade association representing companies in the digital economy, praised the fully

harmonised and directly applicable approach of the proposed regulation across the EU member states with the principle of EU passporting across the Union for issuers and service providers being an advantage (BITKOM 2020; RINGE 2020).

Also, some criticism was voiced. The legislative proposal based on a completely new taxonomy EMT/ART/other appears to be driven by political fear to the Libra project (RINGE 2020). The main intention was to impede the launch of the stablecoin (BITKOM 2021). Another shortcoming was seen in the disproportionate treatment of non-financial crypto-assets/utility tokens under MiCA only due to the fact that they are based on DLT (ANZINI 2021; BITKOM 2020). Furthermore, MiCA would ignore crypto-assets that do not have an identifiable issuer like Bitcoin (ANZINI 2021).

According to ECKHARDT 2021, the proposed EU rules would increase legal certainty, address the risks to investors, financial stability, monetary transmission and the monetary order and may foster markets for stablecoins. In the details, he saw various critical points:

- More clarity for the competent authorities is required to distinguish the crypto-asset types, including ART and EMT.
- The authorisation procedure for stablecoin issuers is in some aspects illogical. For example, a bank issuing an ART would not have to request an explicit authorisation. Also, the option to refuse authorisation by the competent authorities is too vague.
- The level of detail required in a white paper may be too burdensome for small issuers.
- The proposed provisions on the right of token holders are not clear enough.
- It is not clear why the additional requirements on conflicts of interest and governance only apply to issuers of ART, but not EMT.
- A division of supervisory responsibilities between national authorities and the EBA seems appropriate, but coordination is required to avoid burdensome or contradictory measures by different supervisors.

IV.5 March 2022 MiCA Report and MiCA Draft Version by the European Parliament

On 14 March 2022, the ECON committee in the European Parliament adopted its negotiating position including its own MiCA Parliament draft version (EUROPEAN PARLIAMENT 2022a). It included several amendments to the MiCA Commission draft. The basis for this decision was

the MiCA report by rapporteur MEP Stefan Berger, released to the public on 17 March 2022 (EUROPEAN PARLIAMENT 2022b).

Establishing a connection between blockchain activities (including crypto-asset mining) with the corresponding energy consumption and carbon footprint is going to be high on the EU regulatory agenda in the near future (EU BLOCKCHAIN OBSERVATORY AND FORUM 2021, GSCHOSSMANN/VAN DER KRAAIJ/BENOIT/ROCHER 2022). An amendment to ban or restrict proof-of-work based crypto-assets (proof-of-work ban or Bitcoin ban) under MiCA was rejected by the ECON committee considering massive opposition by market participants.

Many new points were brought in the March 2020 MiCA Parliament draft, including the following (EUROPEAN PARLIAMENT 2022a):

- To reduce the high carbon footprint of some crypto-assets, particularly of the mechanisms used to validate transactions, the Commission should link crypto-asset mining to the EU Taxonomy of sustainable activities. The wording under Title I, Article 2a new reads: “By 1 January 2025, the Commission shall include crypto-asset mining in the economic activities that contribute substantially to climate change mitigation in the EU Sustainable Finance Taxonomy, in accordance with Article 10 of Regulation (EU) 2020/852”.
- The new term “offeror of crypto-assets” was included in order to deal with crypto-assets that do not have an identifiable issuer. The following wording was added under Title I, Article 2 (Scope): “If an offeror of crypto-assets or a crypto-asset service provider offers to the public crypto-assets other than asset-referenced tokens or e-money tokens, or requests that such crypto-assets be authorised for trading on a trading platform for crypto-assets, the offeror or crypto-asset service provider shall comply with the requirements of this Regulation concerning issuers of such crypto-assets”.
- The wording on non-fungible tokens was amended in such a way that fractionable NFTs are not excluded from MiCA.
- Specific types of utility tokens such as those used to ensure access to services, reward schemes to customers, mining reward tokens and others should be exempt from the regulation.
- ESMA should be single authority supervising the issuance of ART and EBA should be in charge of supervising EMT (Table 9).

Also, the concept of significant crypto-asset service providers was introduced. ESMA would be tasked to develop draft regulatory standards to determine the criteria to assess whether crypto-asset service providers are significant.

| Supervised Entities | Supervision According to September 2020 MiCA Commission Draft | Supervision According to March 2022 MiCA Parliament Draft |
|--|--|--|
| Issuers of non-significant EMT | NCA | EBA |
| Issuers of significant EMT | EBA | EBA |
| Issuers of non-significant ART | NCA | ESMA |
| Issuers of significant ART | EBA | ESMA |
| Issuers of crypto-assets other than EMT and ART | NCA | NCA |
| (Non-significant) Crypto-asset service providers | NCA | NCA |
| Significant crypto-asset service providers | | ESMA and NCA |

Table 9: Supervision of issuers of crypto-assets and crypto-asset service providers. Source: Own representation.

Market participants expressed their concerns about some of these inclusions and developments in the negotiation (e.g. proof-of-work ban, anti-money laundering issues, unclear exclusion of NFTs). For example, bitkom e. V. complained about the following points (BITKOM 2022a):

- In general, the scope of MiCA must be clear for market participants. The provided definitions are subject to many uncertainties. The scope should not be widened in the EU negotiation process because of the added complexity.
- Regulatory overlaps should be overcome by addressing the issues in their respective frameworks. In particular, there is no specific need for additional provisions within MiCA overlapping AMLD, the Transfer of Funds Regulation (ToFR), the Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy Regulation.
- NFTs, even after the amendments concerning fractionable NFTs, are still not consistently defined.
- Concerning the new term “offeror” it is unclear, whether an offeror that is not the issuer of a crypto-asset other than an ART or EMT would actually need to draft and publish a white paper. Also, it is unclear if an offeror would become liable for the information given in the white paper. Additionally, it must be clarified if an offeror for ART or EMT shall be included as well.
- Efforts to now regulate the developing Decentralized Finance products and decentralised exchanges should be kept out of scope of MiCA to avoid unintended consequences.

- The ongoing supervision of crypto-asset service providers should stay with the NCAs as it is a common practice also in financial services and banking regulation. To achieve harmonisation and raise efficiency, ESMA and EBA should provide clear guidelines to avoid “gold-plating” and deviations at the national level.
- Consensus mechanisms should not be limited. Within a proof-of-work based infrastructure, the energy consumption of mining nodes is part of the network safety regime itself. The energy consumption of DLT networks should be taken into consideration for further developments. Several DLT infrastructures are based on a proof-of-stake consensus mechanisms which requires much less energy consumption. For example, Ethereum managed to successfully shift from proof-of-work to proof-of-stake on 15 September 2022.

IV.6 March 2022 Report by the European Parliament on the Transfer of Funds Regulation

On 30 March 2022, MEPs from the ECON committee and the Committee on Civil Liberties, Justice and Home Affairs (LIBE) in the European Parliament adopted their negotiating on draft legislation concerning the Transfer of Funds Regulation (ToFR) (EUROPEAN PARLIAMENT 2022c). This is new EU legislation to ensure that crypto-asset transfers can be traced and suspicious transactions blocked in the same way as traditional money transfers. The legislation is part of the new EU anti-money laundering package and would be aligned with MiCA.

The basis for this decision was the report by co-rapporteurs MEP Ernest Urtasu for the ECON committee and MEP Assita Kanko for the LIBE committee, released to the public on 6 April 2022 (EUROPEAN PARLIAMENT 2022d).

New requirements brought in covered the following points (EUROPEAN PARLIAMENT 2022c):

- All transfers of crypto-assets should include information on the source of the asset and its beneficiary. This information is to be made available to the competent authorities. The rules would also cover transactions from a so-called unhosted wallet. This is a wallet address that is in the custody of a private user. The rules would not apply to transfers conducted without a provider, such as bitcoin trading platforms, or among providers acting on their own behalf.
- There should be no minimum thresholds and exemptions for low-value transactions (e.g. EUR 10,000 in anti-money laundering rules). This would be justified by the assumption that crypto-asset transactions can easily circumvent rules based on transaction thresholds.

- The EBA should be tasked with creating a public register of businesses and services involved in crypto-assets that may have a high risk of money-laundering, terrorist financing and other criminal activities, including a non-exhaustive list of non-compliant providers. Before making the crypto-assets available to beneficiaries, providers would have to verify that the source of the asset is not subject to restrictive measures and that there are no risks of money laundering or terrorism financing.

IV.7 June 2022 Trilogue Agreements on MiCA and Transfer of Funds Regulation

On 30 June 2022, negotiators of the ECON committee struck a provisional political agreement with the Council of the EU on the final MiCA draft (EUROPEAN PARLIAMENT 2022f).

The following points on the MiCA trilogue agreement were highlighted in the Parliament press release:

- To reduce the high carbon footprint of cryptocurrencies, particularly of the mechanisms used to validate transactions, significant crypto-asset service providers (new definition in the MiCA draft for service providers with at least 15 million active users in one calendar year on average) will have to disclose their energy consumption. ESMA should prepare regulatory technical standards on these obligations to provide the market with clear guidance on how such disclosures should be carried out.
- MiCA should cover crypto-assets that are not covered as financial instruments by the existing EU financial services legislation. ESMA should be mandated to publish guidelines on criteria and conditions for the qualification of crypto-assets as financial instruments.
- ESMA should set up a public register for non-compliant crypto-asset service providers acting in the EU without authorisation in order to counter money-laundering risks.
- For NFTs, there should be a re-classification either as a financial instrument or as a crypto asset subject to MiCA dependent on their development.

Just one day before the above MiCA trilogue agreement, on 29 June 2022, Parliament and Council negotiators also reached a provisional deal on ToFR. The following points were listed in the Parliament press release (EUROPEAN PARLIAMENT 2022e):

- The agreement extends the so-called “travel rule”, already existing in traditional finance, to cover transfers in crypto-assets. This rule requires that information on the source of the asset and its beneficiary travels with the transaction and is stored on both sides of the transfer. Crypto-assets service providers will be obliged to provide this information to competent authorities if an investigation is conducted into money laundering and terrorist financing.
- Before making the crypto-assets available to beneficiaries, providers will have to verify that the source of the asset is not subject to restrictive measures or sanctions and there are no risks of money laundering or terrorism financing. Negotiators agreed that the set-up of a public register for non-compliant and non-supervised crypto-assets service providers, with which EU crypto-assets service providers would not be allowed to trade, will be covered in MiCA.
- The rules would also cover transactions from so-called unhosted wallets (a crypto-asset wallet address that is in the custody of a private user) when they interact with hosted wallets managed by crypto-assets service providers. In case a customer sends or receives more than EUR 1,000 to or from their own unhosted wallet, the crypto-assets service provider will need to verify whether the unhosted wallet is effectively owned or controlled by this customer. The rules do not apply to person-to-person transfers conducted without a provider, such as bitcoin trading platforms, or among providers acting on their own behalf.

On 13 June 2022, bitkom e. V. published two position papers criticising the impending MiCA and ToFR trilogue agreements reached end of June 2022.

- Regarding the MiCA trilogue negotiations, it complained about the lack of clarity of legal definitions and potential regulatory overlap (BITKOM 2022b). Definitions should be amended to provide greater clarity as to which tokens are outside scope of MiCA, particularly when they qualify as financial instruments under MiFID II or as electronic money under EMD2. Further clarity would also be needed to ensure that Decentralized Finance services, utility tokens and NFTs remain outside of scope of MiCA.
- Regarding the ToFR trilogue negotiations, it expressed concerns about the removal of the reporting threshold of EUR 1,000 which goes beyond the international anti-money laundering standard by the Financial Action Task Force (FATF) to the disadvantage of the crypto-assets market and against the principle of technology neutrality. Furthermore, the collection, recording, verification, and reporting requirements in connection with self-custody wallets was seen as problematic. Reporting requirements for transactions with self-

custody wallets of EUR 1,000, regardless of whether suspicious activity is suspected, would be disproportionate (BITKOM 2022c).

IV.8 Final Steps in Autumn/Winter 2022

The finalisation of the MiCA regime is a milestone in a lengthy EU legislation process (Table 10) involving various EU institutions including European Commission, European Parliament, Council of the EU, EBA, ESMA, ECB and the financial regulators of the EU member states.

| Date | Decision Maker or Publisher | Event |
|------------------------------------|---|--|
| 8 March 2018 | European Commission | FinTech Action Plan |
| 9 January 2019 | EBA and ESMA | EBA and ESMA reports on crypto-assets |
| June 2019 | Libra Association | Announcement of Libra project |
| 5 December 2019 | Council of the EU and European Commission | Joint statement on stablecoins |
| 9 December 2019–9 March 2020 | European Commission | Consultation on MiCA |
| April 2020 | European Parliament – ECON | Study on crypto-assets |
| 24 September 2020 | European Commission | Release of MiCA Commission proposal |
| 2 October 2020 | ECB | Announcement of digital euro project |
| February–June 2021 | ECB, EESC, EDPS | Publication of opinions concerning MiCA proposal |
| 14 March 2022 | European Parliament – ECON | Adoption of MiCA report with EP negotiation position |
| 30 March 2022 | European Parliament – ECON and LIBE | Adoption of ToFR report with EP negotiation position |
| 29 June 2022 | European Parliament – ECON and LIBE | Political agreement on ToFR trilogue |
| 30 June 2022 | European Parliament – ECON | Political agreement on MiCA trilogue |
| 5 October 2022 | Council of the EU | Publication of agreed MiCA text |
| 10 October 2022 | European Parliament – ECON | Vote on agreed MiCA text |
| Approx. November–December 2022 | European Parliament | Plenary vote on MiCA text (and ToFR) |
| Approx. December 2022–January 2023 | Official Journal of the EU | Publication of MiCA (and ToFR) in the OJEU |
| 2024 | | MiCA regime enters into force |

Table 10: The Path to the MiCA regime. Source: Own representation.

At the beginning of October 2022, it looked like the EU legislation process would be delayed into January 2023 (GROSS 2022; EUROPEAN SECURITIES AND MARKETS AUTHORITY 2022, p. 14). Surprisingly, an almost final MiCA text was agreed on 5 October 2022 and released by the Council to the public (COUNCIL OF THE EUROPEAN UNION 2022). On 10 October 2022, the ECON committee voted in favour of the text.

A vote on the MiCA text (and maybe on ToFR) by the European Parliament in the plenary session is expected soon, sometime November 2022. After translation of the English text in the official languages of the Union the final step is the publication in the Official Journal of

the EU (OJEU), expected around December 2022/January 2023. The MiCA regime would enter into force between 12 and 18 months later, i.e. in 2024.

V. Outlook

Still, a lot of work is outstanding. Many implementation action points for the Commission, ESMA, and EBA derive from the MiCA text itself, e.g. drafting of guidelines and regulatory technical standards, setting up registers, preparing for ongoing supervisory tasks.

For the sake of finalising the legislation, many areas of action which came up during the negotiations were left out from the MiCA scope (i.e. will have to be picked up elsewhere or in a future “MiCA2” regime):

- a potential regulation of DeFi products and services (e.g. see March 2022 descriptive report by INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS 2022),
- adequate treatment of NFTs,
- application of appropriate anti-money laundering measures in relation to crypto-assets,
- dealing with energy consumption and carbon footprint issues by proof-of-work validation/mining of some crypto-assets,
- and establishing a link to the EU Taxonomy for Sustainable Activities.

MiCA may become the blueprint for regulation of crypto-assets worldwide. On 11 October 2022, the Financial Stability Board (FSB), chaired by Klaas Knot, President of De Nederlandsche Bank, published a proposed framework for the international regulation of crypto-asset activities ahead of the meeting of the G20 Finance Ministers and Central Bank Governors on 12-13 October 2022 in Washington. The proposal includes (FINANCIAL STABILITY BOARD 2022a):

- a consultation document with recommendations that promote the consistency and comprehensiveness of regulatory, supervisory and oversight approaches to crypto-asset activities and markets (FINANCIAL STABILITY BOARD 2022b),
- a consultation report on revised high-level recommendations for the regulation, supervision, and oversight of global stablecoin arrangements (FINANCIAL STABILITY BOARD 2022c).

The ongoing coordination at international level of G20, FSB, FATF and other standard-setting bodies will have repercussions on the future of crypto-assets regulation at the EU level.

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