EUROPEAN CENTRAL BANK
EUROSYSTEM

European System of Central Banks (ESCB) response to the European Commission's public consultation on EU framework for markets in crypto-assets

ESCB responses are marked in **blue colour.**

For ease of reference, the relevant questions answered by the ESCB are also listed in the table below.

Section	Questions
II. Classification of crypto-assets	5; 5.1; 6; 6.1; 7; 8; 8.2; 9
III. Crypto-assets that are not currently covered by EU legislation	
A. General questions	10.2; 11; 11.1; 11.2; 12; 13; 13.1; 13.2; 17; 17.1; 18
B. Specific questions on service providers related to crypto-assets 1. Issuance of crypto-assets	20; 20.1; 21; 21.1; 23; 23.2; 24; 25.1; 25.1a); 25.1b); 25.2; 25.2a); 25.2b); 26, 26.1
C. Horizontal questions 4. Supervision and oversight of crypto-assets service providers	52
IV. Crypto-assets that are currently covered by EU legislation	
B. Assessment of legislation applying security tokens	
5. Central Securities Depositories Regulation (CDSR)	88; 88.2; 89; 89.1; 91; 91.2
6. Settlement Finality Directive (SFD)	93; 93.2; 94; 96; 96.1
7. Financial Collateral Directive (FCD)	97; 97.2; 98; 100
8. European Markets Infrastructure Regulation (EMIR)	102; 102.2; 103; 104
C. Assessment of legislation for e-money tokens	113; 113.1; 114; 114.1; 115; 115.1; 116; 116.2; 117; 117.1

Introduction

The European Commission has launched a public consultation covering a range of issues from the use of distributed ledger technology (DLT) in financial services, to crypto-assets as the first and most prominent application of DLT so far, and more recent developments such as "stablecoins".

The European System of Central Banks (ESCB) closely monitors innovation in the financial sector and actively explores new technologies. The ESCB analyses crypto-assets and stablecoins with a view to understanding their potential implications for monetary policy, the stability of the financial system, and the safety and efficiency of market infrastructures and payments. Moreover, new service providers and arrangements could fall under central bank oversight.

The ESCB response to the Commission's consultation concurs with the need for a harmonised taxonomy at the EU level. This taxonomy is at the core of a technology neutral approach to regulation – existing rules should not discriminate against the use of new technologies and innovative arrangements should be subject to the same requirements as traditional ones in line with the "same risk, same regulation" principle.

Overall, the ESCB considers that the specific design of innovative arrangements plays a critical role in determining their ability to comply with existing requirements. For example, a high degree of decentralisation of responsibilities may be at odds with existing rules. The ESCB's response also suggests clarifying how existing rules should be applied in the light of new business models in a way that allows risks to be comprehensively addressed.

Finally, the ESCB calls upon the regulator to align the approach towards new technologies across the EU with the guidance of standard setting bodies, such as the Committee on Payments and Market Infrastructures and the Basel Committee on Banking Supervision, and with the outcome of ongoing international projects, such as the Regulatory issues of stablecoins coordinated by the Financial Stability Board.

Questions 5 and 5.1

Do you agree that the scope of this initiative should be limited to crypto-assets (and not be extended to digital assets in general)? Please explain the reasoning for your answer.

Yes. We support a narrow scope as outlined above. Within this scope, we urge the European Commission to consider clearly differentiating between crypto-assets as a new asset class on the one hand and the use of DLT to issue, record and transfer existing asset categories or funds on the other hand. The latter may nonetheless warrant a review of the current regulatory framework to ensure that it does not discriminate against the use of new technologies.

Questions 6 and 6.1

In your view, would it be useful to create a classification of crypto-assets at EU level? Please indicate the best way to achieve this classification (non- legislative guidance, regulatory classification, a combination of both, etc.)

Yes. A classification of crypto-assets at EU level should be implemented via EU regulation, with the regulation being sufficiently clear and detailed to avoid as much as possible the need for complementary non-binding instruments. In case the latter are required, in particular to achieve a very high level of harmonisation across the EU, it is understood this would be in the form of RTS or ITS and other instruments like guidelines (where EBA and ESMA may take part). This classification should be closely coordinated with the work of the Basel Committee on Banking Supervision (BCBS) on this topic.

Question 7

What would be the features of such a classification?

The main purpose of an EU classification of crypto-assets is to lay the foundations for technology neutral regulation. To this end, the classification should not hinge on a specific technology but should be rather based on the economic function of the asset and arrangement. On this basis, existing rules should be assessed to ensure that they do not discriminate against the use of a new technology. At the same time, arrangements based on new technologies should abide by the same requirements as traditional arrangements following the "same risk, same regulation" principle.

In 2018, the ESCB characterised crypto-assets as a new type of asset recorded in digital form and enabled by the use of cryptography that is not and does not represent a financial claim on, or a liability of, any identifiable entity, and which does not constitute a proprietary right against an entity. The emergence of crypto-assets has been facilitated by new technologies and in particular DLT. Their distinctive feature compared to regulated instruments is the lack of an underlying claim/liability. This characterisation provided a tool to distinguish new assets from initiatives that use DLT to record, bookkeep and transfer existing assets or funds. In fact, crypto-assets as defined above would fall outside of the current EU regulatory framework for financial instruments, e-money, and payment services.

With the advent of ‘stablecoins’, this approach proved useful to analyse this business model. Stablecoins that entail an a claim/liability on an identifiable entity (which are not crypto-assets as per the above definition) should be subject to the existing regulatory regimes as amended to impose additional prudential requirements as needed. These initiatives do not warrant a new targeted regulatory classification and regime. Moreover, in our view, the term ‘stablecoins’ is a misnomer and should not be used, as it may give the false impression that the regulatory community endorses the ‘stability of value’ claimed by stablecoin sponsors.

Since 2018, rapid developments including in the area of stablecoins have led to intensifying international coordination. The EU classification should take into account the outcome of ongoing international workstreams and the work of international standard setting bodies with a view to achieving a high degree of international coordination. This work would also have a bearing on how existing regulation and oversight is applied to new and emerging arrangements.

Our answers to this questionnaire are premised on the ESCB characterisation of crypto-assets. That does not prevent us from answering questions beyond the scope of the above characterisation to cover DLT-enabled business models more broadly.

Questions 8 and 8.2

Do you agree that any EU classification of crypto-assets should make a distinction between ‘payment tokens’, ‘investment tokens’, ‘utility tokens’ and ‘hybrid tokens’? Please explain the reasoning for your answer.

No. We consider this classification of crypto-assets to be without clear purpose and possibly misleading.

We also foresee that most initiatives will fall within the hybrid category. Borderline cases can only be resolved on a case-by-case basis. Whatever the criteria for the classification between different types of “tokens”, there is substantial room for legal uncertainty.

Furthermore, if the proposed classification is meant to (also) cover potentially regulated asset types, such as tokens representing existing assets or funds as well as 'native' digital assets such as securities issued on a distributed ledger, it is unclear whether this classification would bring value or rather regroup asset types that have different risk profiles.

Question 9

Would you see any crypto-asset which is marketed and/or could be considered as 'deposit' within the meaning of Article 2(3) under the Deposit Guarantee Scheme Directive (DGSD)?

The key element of the definition provided by Article 2(3) of the DGSD appears to be the notion of funds. The concept of fund encompasses the notion of banknotes and coins, scriptural money or electronic money. Crypto-assets as defined in answer to question 7 are not scriptural money in the form of commercial bank money (which consists of commercial bank liabilities i.e. deposits held at a commercial bank), and for this reason are not considered as 'deposit' within the meaning of Article 2(3) DGSD. Neither do crypto-assets qualify as e-money for EMD2 (to the extent that crypto-assets are not and do not represent a claim on the issuer).

On the other hand, tokenised funds, which are units of monetary value that are stored electronically to represent a claim on the issuer or on the underlying funds (and hence are not crypto-assets), could qualify as electronic money.

Question 10.2

In your opinion, what is the importance of each of the potential benefits related to crypto-assets? Please explain the reasoning for your answer.

(i) Crypto-assets as defined in answer to question 7 have not proven their economic and social value proposition; on the contrary, they may be highly speculative and could expose investors to large losses.

(ii) Many of the benefits attributed to crypto-assets are in fact potential gains resulting from the use of DLT in the context of existing assets (e.g. improved liquidity and tradability of tokenised assets, although gains are more probable for assets which currently have limited liquidity). The legislator should continue to monitor any developments related to DLT and other innovative technologies leveraging tokenisation and to explore their application.

Question 11

In your opinion, what are the most important risks related to crypto-assets?

	1 Not important at all	2	3	4	5 Very important	Don't know / no opinion / not relevant
Fraudulent activities					✔	
Market integrity (e.g. price, volume manipulation, etc.)					✔	
Investor/consumer protection						
Anti-money laundering and CFT issues						
Data protection issues						
Competition issues						
Cyber security and operational risks					✔	
Taxation issues						
Energy consumption entailed in crypto-asset activities						
Financial stability	✔					
Monetary sovereignty/monetary policy transmission	✔					

Question 11.1

Is there any other important risks related to crypto-assets not mentioned above that at you would foresee? Please specify which one(s) and explain your reasoning.

If used in the context of services offered by financial market infrastructures (FMIs), crypto-assets as defined by the ECB may negatively impact FMIs' safety and efficiency. However, this risk is currently limited as the existing regulatory and oversight framework for FMIs in line with international standards serves as a first line of defence (see also answer to question 11.2).

Question 11.2

Please explain your reasoning for your answers to question 11.

In answering question 11, we have refrained from rating risks that are not directly relevant to the ESCB mandate. That does not mean that the risks themselves (e.g., consumer and investor protection, AML/CFT) are not relevant.

Answers to question 11 refer to crypto-assets as defined in the answer to question 7. At this juncture of the crypto-asset market, risks to financial stability and market infrastructures as well as implications for monetary policy are limited. Depending on crypto-asset market developments, particularly the deepening of links between the crypto-assets market on the one hand and the financial sector and the wider economy on the other hand, this assessment may be subject to change. Continuous monitoring is warranted.

Question 12

In your view, what are the benefits of 'stablecoins' and 'global stablecoins'? Please explain your reasoning.

Stablecoins, particularly global stablecoins, promise to facilitate cross-border payments and increase financial inclusion. However, these benefits are predicated on appropriate design to manage risks and ensure compliance with oversight and other potentially relevant regulatory requirements.

Question 13

In your opinion, what are the most important risks related to "stablecoins"?

	1 Not important at all	2	3	4	5 Very important	Don't know / no opinion / not relevant
Fraudulent activities					✔	
Market integrity (e.g. price, volume manipulation, etc.)					✔	
Investor/consumer protection						
Anti-money laundering and CFT issues						
Data protection issues						
Competition issues						
Cyber security and operational risks					✔	
Taxation issues						
Energy consumption entailed in crypto-asset activities						
Financial stability					✔	
Monetary sovereignty/monetary policy transmission					✔	

Question 13.1

Is there any other important risks related to "stablecoins" not mentioned above that you would foresee? Please specify which one(s) and explain your reasoning.

In answering question 13, we have refrained from rating risks that are not directly relevant to the ESCB mandate. That does not mean that the risks themselves (e.g., consumer and investor protection, AML/CFT) are not relevant. The October 2019 G7 report provides a comprehensive overview of risks stemming from global stablecoins.

In addition to the risks listed in question 13, we have identified the following issues of concern:

(i) Stablecoin arrangements (or significant parts thereof) may fulfil a payment system function, which, if not properly managed and overseen, can be a source of large-scale disruption and even systemic risk.

(ii) If successfully designed and launched, stablecoin initiatives could affect current business models. This could be part of monetary stability risks but could also merit a separate attention.

(iii) Global stablecoins backed by fiat currencies could lead to the creation of a “mega fund” with potential systemic risk implications. In addition, depending on the reserve asset allocation, this may lead to a shortage of certain types of assets (e.g., low risk assets such as government bonds).

Question 13.2

Please explain in your answer potential differences in terms of risks between “stablecoins” and ‘global stablecoins’.

In answering question 13, we have in mind recent initiatives that may become operational in the short/medium term. Currently, a risk assessment of stablecoins may not significantly differ from the stance on crypto-assets (see answers to question 11). However, recent global stablecoin initiatives may warrant revising this assessment along the lines shown in answers to question 13.

Both ‘stablecoins’ and ‘global stablecoins’ can, if widely used, impact the smooth operation of payment systems, financial stability, monetary policy transmission and monetary sovereignty. As global stablecoin initiatives are expected to be built on an existing large and/or cross-border customer base, they may have the potential to scale more rapidly to achieve a global or other substantial footprint.

Stablecoins and global stablecoins differ with regard to their geographic scope, the latter potentially raising implications also for the global financial system. Indeed, global stablecoins may potentially increase trans-national capital flows and, depending on the domestic monetary regime, increase the volatility of foreign exchange rates and/or or official foreign reserves.

Question 17

Do you think that the use of crypto-assets in the EU would be facilitated by greater clarity as to the prudential treatment of financial institutions’ exposures to crypto- assets[1]?

Yes. Clarity should be provided through EU legislation (e.g. CRD/CRR), as well as EBA guidelines or other instruments, in line with the work of the BCBS.

Question 17.1

Please explain the reasoning for your answer to question 17.

A prudential treatment of financial institutions’ exposures to crypto-assets via EU regulation complemented by EBA guidelines or other instruments would allow for a harmonised and swift implementation across the EU with a view to adequately covering financial institutions’ exposures to crypto-assets. Taking into account the rapid technological evolution, it seems suitable at this stage to develop an approach based on harmonised prudential principles on each type of crypto-assets activity a financial institution may perform. More concretely, these principles can be embedded at several regulatory levels: (i) in directly applicable regulations, such as the CRR for the Pillar 1 and Pillar 3 treatment in banks for instance; (ii) in directives, such as the CRD or the AMLD for more specific AML issues; (iii) in guidelines such as the ones produced by the EBA and by supervisors such as the ECB; (iv) in guidelines for supervisors such as the ones provided by the BCBS.

[1] See the discussion paper of the Basel Committee on Banking Supervision (BCBS)

Question 18

Should harmonisation of national civil laws be considered to provide clarity on the legal validity of token transfers and the tokenisation of tangible (material) assets?

Yes, the harmonisation of civil laws could be considered. Jurisdictions may differentiate the legal requirements for claims, mobile and immobile property. Special formal requirements apply e.g. to the transfer of real estate with a view to protecting the parties to a contract. Tokenisation should not allow circumventing such requirements. Different approaches to the legal classification or qualification of tokenised assets (coupled with the plethora of jurisdictions potentially concerned) may result in legal uncertainty, and, therefore, increased risk. Such uncertainty could be mitigated – to an extent – by a harmonised classification or qualification of tokenised assets, but to be fully eliminated, national laws would have to expressly embrace tokenisation by (i) either clearly extending their current provisions on transfer, set-off, pledge, etc. to tokens, or (ii) creating an ad hoc (ideally uniform) token transfer regime.

While acknowledging that harmonisation, as a matter of principle, could be helpful, we are aware of the existing differences between the legal systems within the EU and the difficulties experienced in the past when trying to harmonise civil law issues. Should full harmonisation not be feasible, an alternative solution could be to focus mainly on conflict-of-laws issues, so as to make clear at least, in the interest of legal certainty, which national legal system applies to a particular transaction or legal aspect. This could be coupled with a few substantive provisions addressing specific legal issues (e.g., requirements to hold or transfer assets or enforceability against third parties or definition of financial instrument). A similar approach has been followed in many other dossiers, e.g., settlement finality, financial collateral.

Questions 20 and 20.1

Do you consider that the issuer or sponsor of crypto-assets marketed to EU investors/consumers should be established or have a physical presence in the EU? Please explain the reasoning for your answer.

This question is not relevant to crypto-assets as defined in answer to question 7, as crypto-assets do not have an identifiable entity subject to any underlying claims or liabilities.

When there is an identifiable issuer:

- It is likely that issuance qualifies as a regulated activity and hence the relevant requirements (including also standards, standardisation, LEI, information requirements) should apply. Without authorisation, firms are prohibited from carrying out e.g.:

    (i) electronic money issuance, Art. 10 of the Second Electronic Money Directive (EMD2);

    (ii) payment services, Art. 37(1) of the Revised Payment Services Directive (PSD2);

    (iii) deposit taking business, Art. 9(1) of the Capital Requirements Directive (CRD IV);

    (iv) activities of undertakings for collective investment in transferable securities (UCITS), art. 5(1) UCITS Directive;

(v) the management of alternative investment funds (AIFs), Art. 6(1) of the Alternative Investment Fund Managers Directive (AIFMD); and,

(vi) investment services and/or investment activities as a regular occupation or business on a professional basis, Art. 5(1) of the Markets in Financial Instruments Directive (MiFID).

Entities established in third countries thus need to have an established presence in the EU e.g. in the form of an EU-based subsidiary and seek authorisation from the national competent authority. Alternatively, third country entities may seek to access to the EU market via an equivalence system where it is explicitly provided for in EU legislation.

- If existing legislation cannot be applied, the general principle of "same business, same risks, same regulation" should be followed in filling any regulatory gaps.

Questions 21 and 21.1

Should an issuer or a sponsor of crypto-assets be required to provide information (e.g. through a 'white paper') when issuing crypto- assets?

Please indicate the entity that, in your view, should be responsible for this disclosure (e.g. the issuer/sponsor, the entity placing the crypto-assets in the market) and the content of such information (e.g. information on the crypto-asset issuer, the project, the rights attached to the crypto-assets, on the secondary trading, the underlying technology, potential conflicts of interest, etc.)

This question is not relevant to crypto-assets as defined in answer to question 7, as crypto-assets do not have an identifiable entity subject to any underlying claims or liabilities.

When there is an identifiable issuer:

- It is likely that issuance qualifies as a regulated activity and hence the relevant requirements (such as the Prospectus Regulation) should apply.

- If existing legislation cannot be applied, the general principle of "same business, same risks, same regulation" should be followed in filling any regulatory gaps.

Question 23

Beyond any potential obligation as regards the mandatory incorporation and the disclosure of information on the offer, should the crypto-asset issuer or sponsor be subject to other requirements?

	1 Completely irrelevant	2	3	4	5 Highly relevant	Don't know / no opinion / not relevant
The managers of the issuer or sponsor should be subject to fitness and probity standards						✔
The issuer or sponsor should be subject to advertising rules to avoid misleading marketing/promotions						✔
Where necessary, the issuer or sponsor should put in place a mechanism to safeguard the funds collected such as an escrow account or trust account						✔

Question 23.2

Please explain your reasoning for your answers to question 23.

Please refer to the answers to question 21.

Question 24

In your opinion, what would be the objective criteria allowing for a distinction between "stablecoins" and "global stablecoins" (e.g. number and value of "stablecoins" in circulation, size of the reserve, etc.)? Please explain your reasoning.

(i) The geographic scope of global stablecoins must encompass several jurisdictions in terms of users, and possibly in terms of the investment of the reserve, whereby a geographic (and currency) mismatch between the location of the users and the reserve holdings would normally occur.

(ii) From a financial stability perspective, size of the reserve, interconnectedness with the financial system and substitutability by other coins/payment system would provide the most useful benchmarks, but other benchmarks could also describe different risk dimensions (e.g. number of users may be more relevant for gauging social impact). Given the inherent difficulty in establishing objective criteria, this distinction calls for some qualitative judgement, similarly to the designation of global systemically important bank (GSIBs). Finally, it should remain possible to make a case-by-case decision.

(iii) As a complement and from a payment system oversight perspective, it is important to assess the systemic importance, i.e. the potential to trigger or transmit systemic shocks, of a stablecoin at different levels: individual sovereign jurisdiction, currency area, international level. Systemic importance is measured by a set of quantitative and qualitative criteria defined in the Eurosystem oversight framework. To the extent that a stablecoin arrangement has a potential global reach, a cooperative oversight arrangement in line with international standards should be established. Such cooperation is of course also warranted from a supervisory perspective.

Question 25.1

To tackle the specific risks created by “stablecoins” and “global stablecoins”, what are the requirements that could be imposed on their issuers and/or the manager of the reserve? Please indicate for “stablecoins” if each is proposal is relevant.

	Relevant	Not relevant	Don’t know / no opinion
The reserve of assets should only be invested in safe and liquid assets (such as fiat-currency, short term-government bonds, etc.)	✔		
The issuer should contain the creation of “stablecoins” so that it is always lower or equal to the value of the funds of the reserve	✔		
The assets or funds of the reserve should be segregated from the issuer’s balance sheet	✔		
The assets of the reserve should not be encumbered (i.e. not pledged as collateral)	✔		
The issuer of the reserve should be subject to prudential requirements rules (including capital requirements)	✔		
The issuer and the reserve should be subject to specific requirements in case of insolvency or when it decides to stop operating	✔		
Obligation for the assets or funds to be held in custody with credit institutions in the EU	✔		
Periodic independent auditing of the assets or funds held in the reserve	✔		
The issuer should disclose information to the users on: (i) how it intends to provide stability to the “stablecoins” (ii) on the claim (or the absence of claim) that users may have on the reserve (iii) on the underlying assets or funds placed in the reserve	✔		
The value of the funds or assets held in the reserve and the number of stablecoins should be disclosed periodically	✔		
Requirements to ensure interoperability across different distributed ledgers or enable access to the technical standards used by the issuer	✔		

Question 25.1 a)

Is there any other requirements not mentioned above that could be imposed on “stablecoins” issuers and/or the manager of the reserve? Please specify which one(s) and explain your reasoning.

(i) To the extent a stablecoin arrangement serves as a payment system and/or payment scheme, the entity, or entities, responsible for the governance and operation of the system should be subject to oversight and adhere to applicable oversight requirements such as the ECB Regulation on oversight requirements for systemically important payment systems (SIPS Regulation).

(ii) Stablecoin arrangements could also involve economic functions akin to investment funds, bank deposits or e-money issuance should be subject to relevant prudential requirements, even if the user cannot directly exercise a claim against the issuer

(iii) With regard to the obligation for the assets or funds to be held in custody with credit institutions in the EU, more clarity would be needed on the additional requirements and the prudential treatment of this activity.

Question 25.1 b)

Please illustrate your responses to question 25.1.

The function of a stablecoin arrangement that caters for the execution of transfers of stablecoins may qualify as a payment system and would hence be subject to the Eurosystem oversight framework. Provided there is an entity responsible for operating the transfer mechanism and the technical platform, and regardless of the technology used, the Eurosystem payment systems oversight framework, which is based on the CPMI-IOSCO Principles for Financial Market Infrastructures and other relevant international standards, would apply.

In addition, stablecoin arrangements that set standardised and common rules for the execution of payment transactions between end-users may be characterised as a "payment scheme". The Eurosystem is currently preparing a single oversight framework for payment instruments, schemes and arrangements that would extend the scope of the Eurosystem oversight to innovative solutions including "digital payment tokens".

Question 25.2

To tackle the specific risks created by "stablecoins" and "global stablecoins", what are the requirements that could be imposed on their issuers and/or the manager of the reserve? Please indicate for "global stablecoins" if each is proposal is relevant.

	Relevant	Not relevant	Don't know / no opinion
The reserve of assets should only be invested in safe and liquid assets (such as fiat-currency, short term-government bonds, etc.)	✔		
The issuer should contain the creation of "stablecoins" so that it is always lower or equal to the value of the funds of the reserve	✔		
The assets or funds of the reserve should be segregated from the issuer's balance sheet	✔		
The assets of the reserve should not be encumbered (i.e. not pledged as collateral)	✔		
The issuer of the reserve should be subject to prudential requirements rules (including capital requirements)	✔		
The issuer and the reserve should be subject to specific requirements in case of insolvency or when it decides to stop operating	✔		
Obligation for the assets or funds to be held in custody with credit institutions in the EU	✔		
Periodic independent auditing of the assets or funds held in the reserve	✔		
The issuer should disclose information to the users on: (i) how it intends to provide stability to the "stablecoins" (ii) on the claim (or the absence of claim) that users may have on the reserve (iii) on the underlying assets or funds placed in the reserve	✔		
The value of the funds or assets held in the reserve and the number of stablecoins should be disclosed periodically	✔		

Question 25.2 a)

Are there any other requirements not mentioned above that could be imposed on "stablecoins" issuers and/or the manager of the reserve? Please specify which one(s) and explain your reasoning.

Please refer to the answer to question 25.1 a). In addition, global stablecoin arrangements may be subject to additional prudential requirements (akin to the SIB regulation). Please also refer to answer to question 24.

Question 25.2 b)

Please illustrate your responses to question 25.2.

Please see answers to question 25.1 b). The scope of operations (which is the difference between stablecoins and global stablecoins) does not affect the relevance of requirements listed in questions 25.1 and 25.2. Yet, as mentioned in 25.2, global stablecoins may be subject to additional requirements.

Questions 26 and 26.1

Do you consider that wholesale "stablecoins" (those limited to financial institutions or selected clients of financial institutions, as opposed to retail investors or consumers) should receive a different regulatory treatment than retail "stablecoins"? Please explain the reasoning for your answer.

No. Both retail and wholesale stablecoin arrangements have a core payment system component and should be subject to oversight. Unlike wholesale stablecoin arrangements, retail stablecoin arrangements may also include a user interface that entails the provision of payment instruments to end-users. In these cases, the oversight framework for payment instruments and schemes may also apply.

Similarly to large-value payment systems, wholesale stablecoin arrangements would be used to settle payment obligations arising between financial institutions. These systems/arrangements are likely to transmit systemic shocks to the financial system. Systemically important payment systems must observe the ECB's SIPS Regulation or, if outside its scope, the PFMI.

Question 52

Which, if any, crypto-asset service providers included in Section III B do you think should be subject to supervisory coordination or supervision by the European Authorities (in cooperation with the ESCB where relevant)? Please explain your reasoning.

From an oversight perspective, the approach to crypto-asset service providers is twofold. First, digital wallets that provide end-users with payment instruments or offers payment schemes should be adequately overseen. Second, the Eurosystem single oversight framework for payment instruments, schemes and arrangements (work-in-progress) would extend the scope of the Eurosystem oversight to "digital payment tokens" (defined consistently with the understanding of tokenisation outlined in answer to question 8). By following this approach, we aim at facilitating the level playing field in the provision of payment services.

Question 88

Would you see any particular issue (legal, operational, technical) with applying the following definitions in a DLT environment?

	1 Not a concern	2	3	4	5 Strong concern	Don't know / no opinion
Definition of 'central securities depository' and whether platforms can be authorised as a CSD operating a securities settlement system which is designated under the SFD						✔
Definition of 'securities settlement system' and whether a DLT platform can be qualified as securities settlement system under the SFD						✔
Whether records on a DLT platform can be qualified as securities accounts and what can be qualified as credits and debits to such an account						✔
Definition of 'book-entry form' and 'dematerialised form	✔					
Definition of settlement (meaning the completion of a securities transaction where it is concluded with the aim of discharging the obligations of the parties to that transaction through the transfer of cash or securities, or both						✔
What could constitute delivery versus payment in a DLT network, considering that the cash leg is not processed in the network						✔
What entity could qualify as a settlement internaliser						✔

Question 88.2

Please explain the reasoning for your answer to question 88.

We found it difficult to answer question 88 on the basis of a generic DLT arrangement. DLT arrangements can be designed in a number of ways and accommodate for numerous forms of governance. Therefore, whether any issues regarding the application of CSDR arise and their extent would depend on the arrangement's design choice. For example, CSDR sets expectations to be met by the legal entity that operates the CSD. Therefore, decentralised arrangements with no identified responsible entity may face higher challenges in observing CSDR requirements. However, current projects appear similar to existing FMI structures, whereas fully decentralised arrangements remain hypothetical.

Questions 89 and 89.1

Do you consider that the book-entry requirements under CSDR are compatible with security tokens? Please explain the reasoning for your answer.

Yes. CSDR does not prescribe the use of a particular technology to register financial instruments.

Question 91

Would you see any particular issue (legal, operational, technical) with applying the current rules in a DLT environment?

	1 Not a concern	2	3	4	5 Strong concern	Don't know / no opinion
Rules on settlement periods for the settlement of certain types of financial instruments in a securities settlement system						✔
Rules on measures to prevent settlement fails						✔
Organisational requirements for CSDs						✔
Rules on outsourcing of services or activities to a third party						✔
Rules on communication procedures with market participants and other market infrastructures						✔
Rules on the protection of securities of participants and those of their clients						✔
Rules regarding the integrity of the issue and appropriate reconciliation measures						✔
Rules on cash settlement						✔
Rules on requirements for participation						✔
Rules on requirements for CSD links						✔
Rules on access between CSDs and access between a CSD and another market infrastructure						✔

Question 91.2

Please explain the reasoning for your answer to question 91.

Please refer to answers to question 88.2.

Question 93

Would you see any particular issue (legal, operational, technical) with applying the following definitions in the SFD or its transpositions into national law in a DLT environment?

	1 Not a concern	2	3	4	5 Strong concern	Don't know / no opinion
Rules on settlement periods for the settlement of certain types of financial instruments in a securities settlement system						✔
Rules on measures to prevent settlement fails						✔
Organisational requirements for CSDs						✔
Rules on outsourcing of services or activities to a third party						✔
Rules on communication procedures with market participants and other market infrastructures						✔
Rules on the protection of securities of participants and those of their clients						✔
Rules regarding the integrity of the issue and appropriate reconciliation measures						✔
Rules on cash settlement						✔
Rules on requirements for participation						✔
Rules on requirements for CSD links						✔
Rules on access between CSDs and access between a CSD and another market infrastructure						✔

Question 93.2

Please explain the reasoning for your answer to question 93.

We found it difficult to answer question 93 on the basis of a generic DLT arrangement. DLT arrangements can be designed in a number of ways and accommodate for numerous forms of governance. Therefore, whether any issues arise regarding the application of SFD would depend on the arrangement's design choices. Some designs may render it difficult for the arrangement to comply with SFD requirements. See also question 94 below. More broadly, considering the early stage of DLT development, a clarification as to the feasibility of legally determining whether a DLT based network falls under the SFD seems be premature but should not be excluded in future.

Question 94

SFD sets out rules on conflicts of laws. According to you, would there be a need for clarification when applying these rules in a DLT network (in particular with regard to the question according to which criteria the location of the register or account should be determined and thus which Member State would be considered the Member State in which the register or account, where the relevant entries are made, is maintained)? Please explain your reasoning.

To the extent that the 'formal arrangement' underpinning the DLT network can be considered a 'system' and such 'system' becomes designated under the SFD, Articles 8 and 9.2 of the latter would directly apply. Hence, (i) the law governing the system would be the sole applicable law in the event of insolvency proceedings, and (ii) determination of rights of 'system' participants as collateral holders would be governed by the law of the member state where the register, account or CSD are located. The same would hold true as regards collateral held in a DLT based register under Art. 9.2 SFD.

Question 96

Do you consider that the effective functioning and/or use of DLT solution is limited or constrained by any of the SFD provisions?

Don't know / no opinion / not relevant

Question 96.1

If you do agree that the effective functioning and/or use of DLT solution is limited or constrained by any of the SFD provisions, please provide specific examples (e.g. provisions national legislation transposing or implementing SFD, supervisory practices, interpretation, application, etc.). Please explain your reasoning.

DLT arrangements can be designed in a number of ways and accommodate for numerous forms of governance. Therefore, whether any issues arise regarding the application of SFD would depend on the arrangement's design choices. For instance, the determination of the applicability of SFD provisions concerning moment of entry irrevocability and knowledge of the systems require formalised rules and a responsible entity.

Question 97

Would you see any particular issue (legal, operational, technical) with applying the following definitions in the Financial Collateral Directive (FCD) or its transpositions into national law in a DLT environment?

	1 Not a concern	2	3	4	5 Strong concern	Don't know / no opinion
If crypto-assets qualify as assets that can be subject to financial collateral arrangements as defined in the FCD						✔
If crypto-assets qualify as book-entry securities collateral						✔
If records on a DLT qualify as relevant account						✔

Question 97.2

Please explain the reasoning for your answer to question 97.

Under the current FCD understanding of collateral, assets issued/held on DLT must be categorised as either (i) cash (i.e. fiat money, to be understood as legal tender), (ii) financial instruments (mainly debt and equity securities) or (iii) credit claims (bank loans). Hence, direct application of the FCD could be envisaged, provided that the assets issued/held on the distributed ledger qualify as a financial instrument under the Markets in Financial Instruments Directive (MiFiD2). Crypto-assets as defined in answer to question 7 do not qualify under FCD for the purposes of question 97.

Question 98

FCD sets out rules on conflict of laws. Would you see any particular issue with applying these rules in a DLT network?

Art. 9 FCD would in theory apply to collateral issued/held on DLT, designating as applicable law "the law of the country in which the relevant account is maintained". While one could interpret the DLT ledger to be an "account" under the FCD, this does not shed any light as to its location, which might be difficult to determine due to the arrangements decentralised nature. As a result, a specialised connecting factor as regards collateral issued/held on DLT would be apposite.

Question 100

Do you consider that the effective functioning and/or use of DLT solution is limited or constrained by any of the FCD provisions?

Don't know / no opinion / not relevant

Question 102

Would you see any particular issue (legal, operational, technical) with applying the current rules in a DLT environment?

	1 Not a concern	2	3	4	5 Strong concern	Don't know / no opinion
Rules on margin requirements, collateral requirements and requirements regarding the CCP's investment policy						✔
Rules on settlement						✔
Organisational requirements for CCPs and for TRs						✔
Rules on segregation and portability of clearing members' and clients' assets and positions						✔
Rules on requirements for participation						✔
Reporting requirements						✔

Question 102.2

Please explain the reasoning for your answer to question 102.

We are not aware of DLT being used for central clearing.

Question 103

Would you see the need to clarify that DLT solutions including permissioned blockchain can be used within central counterparties (CCPs) or trade repositories (TRs)?

No. The European Markets Infrastructure Regulation (EMIR)does not prescribe CCPs or TRs to use a particular technology.

Question 104

Would you see any particular issue with applying the current rules to derivatives the underlying of which are crypto assets, in particular considering their suitability for central clearing? Please explain your reasoning.

Should a positive conclusion on eligibility of crypto-asset derivatives for clearing by CCPs under EMIR prevail, then the (prospective) clearing of these products would most likely imply an extension of CCP services and activities, and hence trigger a consultation of the CCP's EMIR college. Certain EMIR requirements might need consideration with regard to their applicability in light of crypto-asset-based products. Particularly regarding financial risk management, a CCP undertaking clearing of crypto-asset-based products would need to ensure that sufficient financial resources are allocated to the new clearing business. Crypto-assets pricing uncertainties and historic high volatility would be critical elements in the assessment of adequacy of financial resources by the college. The screening of eligible crypto-assets should be very strict and it is likely that the number of crypto-asset-based products eligible for CCP clearing will be limited to well-known and recognised projects. If EMIR requirements turn out to be difficult to meet in light of the clearing of crypto-asset derivatives, CCPs may be prevented from offering the service in practice. Alternatively, CCPs and their competent authorities may be incentivised to apply stricter risk management standards so as to minimise the possible spill-over risk between clearing of crypto-assets derivatives and other products (e.g., via the establishment separate default funds).

Questions 113 and 113.1

Have you detected any issue in the e-money directive (EMD2) that could constitute impediments to the effective functioning and/or use of e-money tokens? Please provide specific examples (EMD2 provisions, national provisions, implementation of EU acquis, supervisory practice, interpretation, application, etc.) and explain the reasoning for your answer.

No. We do not consider that EMD2 constrains the use of a specific technology in the conduct of e-money business. This emanates directly from the definition of electronic money, which is meant to be "technically neutral" and to "cover all situations where the payment service provider issues a pre-paid stored value in exchange for funds, which can be used for payment purposes because it is accepted by third persons as a payment." On the contrary, EMD2 does put constraints on not technologically related issues such as redemption policies and investment strategies, which some business models might not be able to meet.

Questions 114 and 114.1

Have you detected any issue in the Payment Services Directive (PSD2) which would constitute impediments to the effective functioning or use of payment transactions related to e-money token? Please provide specific examples (PSD2 provisions, national provisions, implementation of EU acquis, supervisory practice, interpretation, application, etc.) and explain the reasoning for your answer.

No. We do not consider that PSD2 constrains the use of a specific technology to conduct payment service business, because PSD2 definitions and requirements are technology neutral. For instance:

(i) “payment service” includes the following services: “Execution of payment transactions, including transfers of funds on a payment account with the user’s payment service provider or with another payment service provider”; “Execution of payment transactions where the funds are covered by a credit line for a payment service user”; “Issuing of payment instruments and/or acquiring of payment transactions” and “Money remittance”;

(ii) “payment account” means “an account held in the name of one or more payment service users which is used for the execution of payment transactions”.

Questions 115 and 115.1

In your view, do EMD2 or PSD2 require legal amendments and/or supervisory guidance (or other non-legislative actions) to ensure the effective functioning and use of e-money tokens? Please provide specific examples and explain the reasoning for your answer.

Yes. Supervisory guidance or other instruments (e.g. ad hoc opinions, Q&As) might be warranted to ensure the consistent qualification of tokenised funds under EMD2 and application of PSD2.

In addition, some amendments may be necessary. For instance, EMD2 would benefit from a clarification regarding redeemability, e.g., whether the lack therefor prevents a scheme from qualifying under EMD2.

Furthermore, the rules on initial capital or the implementation of capital buffer might need to be revised. This is because it is questionable if the requirements under EMD2 are appropriate to global stablecoins. At the moment e-money-providers must hold an initial capital in the amount of 350.000€. This amount is relatively high when compared to the PSD2 requirements for payment institutions, but appears to be too low in comparison to the requirements for credit institutions. Finally, EMD2 needs a broader review, because it is still linked to CRD II (2006) and PSD1, and not to CRD IV/V and PSD2.

Question 116

Do you think the requirements under EMD2 would be appropriate for “global stablecoins” (i.e. those that reach global reach) qualifying as e-money tokens?

	1 Completely inappropriate	2	3	4	5 Completely appropriate	Don’t know / no opinion
Initial capital and ongoing funds		✔				
Safeguarding requirements		✔				
Issuance					✔	
Redeemability					✔	
Use of agents					✔	
Out of court complaint and redress procedures						✔

Question 116.2

Please explain the reasoning for your answer to question 116.

In answering question 116, we have refrained from commenting on requirements are not directly relevant to the ESCB mandate, such as out of court complaints and redress procedures. That does not mean that these requirements are not relevant per se.

The fact that a stablecoin arrangement might operate in multiple jurisdictions does not invalidate EMD2 requirements for conducting e-money business in the EU. However, initial capital and safeguarding requirements proportionate to the scope of activities would have to be considered.

Questions 117 and 117.1

Do you think that the current requirements under PSD2 which are applicable to e-money tokens are appropriate for “global stablecoins” (i.e. those that reach global reach)? Please explain the reasoning for your answer.

Rather agree. We are of the view that global stablecoins should abide by EU requirements to provide payment services within the Union, and EMD2 or PSD2 should not be changed to cater to the design choices of global stablecoins. That does not mean that the risks associated with global stablecoins would be fully addressed by EMD2 and PSD2; in fact, additional prudential requirements may be necessary.