
Consultation Response

Financial Stability Board - Addressing the regulatory, supervisory and oversight challenges raised by “global stablecoin” arrangements

15 July 2020

The Global Financial Markets Association (GFMA) welcomes the opportunity to comment on the Financial Stability Board (FSB) Consultation Paper (referred to hereafter as “the CP”) on ADDRESSING THE REGULATORY, SUPERVISORY AND OVERSIGHT CHALLENGES RAISED BY “GLOBAL STABLECOIN” ARRANGEMENTS. The GFMA represents the common interests of the world’s leading financial and capital market participants, to provide a collective voice on matters that support global capital markets. We advocate on policies to address risks that have no borders, regional market developments that impact global capital markets, and policies that promote efficient cross-border capital flows, benefiting broader global economic growth.

The Association for Financial Markets in Europe (AFME) in London, Brussels and Frankfurt, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong and the Securities Industry and Financial Markets Association (SIFMA) in New York and Washington are, respectively, the European, Asian and North American members of GFMA.

Our high-level response to the CP is provided below and followed by a response to each question.

Our response is focused on the potential impacts of Global Stablecoin (GSC) arrangements on wholesale financial markets; however, we acknowledge that there are broader risks implications for retail markets and consumers that are not addressed in this response but require further consideration.

High-Level Response:

GFMA welcomes the FSB in providing a comprehensive overview of GSC arrangements, their potential risks to financial stability and the appropriate regulatory tools to address these risks. In the response provided below, we consider stablecoins as a subcategory of value stable cryptoassets as defined in Annex A of our response, and therefore we refer only to that subcategory as defined in Annex A. We note that this does not include digital representations of money, which should be regulated under existing laws that apply to the instruments they represent.

We put forward the following proposals to support the implementation of the 10 recommendations provided in this CP:

- **Establish a taxonomy for crypto-assets:** The FSB should utilise a crypto-asset taxonomy that clearly differentiates stablecoins from other types of crypto-assets, in order to assign the appropriate regulatory treatment that is calibrated to the risks and level of oversight required. We recommend that the FSB consider our proposed approach to the classification and understanding of crypto-assets, outlined in Annex A of this response, as an initial effort towards building this taxonomy.¹ In relation to this CP, it will be important to clearly establish “stablecoins” as a subcategory of “value stable crypto-assets”.
- **Apply the principle of ‘same activity, same risk, same regulation’:** The principle of ‘same activity, same risk, same regulation’² should be applied to the regulation of stablecoins in order to maintain a level playing field and ensure effective supervision and oversight. We recommend the FSB to clearly identify which types of crypto-assets would be considered as stablecoins, in respect to the recommendations for their regulation and oversight. We believe the scope of application of these recommendations should clearly exclude the digital forms of money that are already regulated under existing rules or that are subject to Financial Market Infrastructure (FMI) regulation.

¹ This approach was formulated as part of the GFMA response to the BCBS Discussion Paper on Designing a Prudential Treatment for Crypto-assets. For more detail please see Annex A or the full response at: <https://www.gfma.org/wp-content/uploads/2020/04/gfma-bcbs-prudential-crypto-assets-final-consolidated-version-20200427.pdf>

² We recommend using this wording (as opposed to ‘same business, same risk, same rules’) which we believe most accurately describes this principle.

- **Clarify the application of the rules:** We request further clarification on who the rules and recommendations proposed in this CP are addressed to (i.e. issuers, node validators, custodians, etc.), as there are many actors within a decentralised network that provide the various functions described in this CP. This clarity is essential for providing the necessary regulatory certainty for market participants and encouraging innovation in this area. We encourage the FSB to consider not only the functions and activities of a stablecoin arrangement but also the service providers that interact with it.
- **Prioritise global coordination:** International consistency is important to avoid gaps in regulation and provide clarity around jurisdictional oversight. Without this, it is not always clear which jurisdiction should be applying supervision/regulation based on the location of the issuer, the validation node, or the wallet provider. A globally consistent regulatory approach is also needed to provide consistent treatment to the various types of stablecoins, as the classification and regulation of a stablecoin and its structure could differ between different jurisdictions. We request that the FSB continues to collaborate with other international and national supervisors/regulators in the development of a globally consistent regulatory treatment of stablecoins and other crypto-assets. Any potential conflict of laws or extraterritoriality provisions should be addressed in the case of cross border networks with participants based in different jurisdictions. Further, the FSB should continue to encourage the development of global standards and principles for interoperability.
- **Implement technology agnostic and agile regulation:** An internationally consistent regulatory framework must also be dynamic and flexible to take account of any changes to the potential emerging risks of a stablecoin over time and the rapid development of the underlying technology. This could, for instance, include an ongoing regulatory review process. To remain agile and encourage innovation, the regulatory framework must be technology agnostic (to the extent possible). As with other forms of digitisation, technology risk should be addressed in the same way it is governed today (i.e. through operational risk assessments).
- **Focus on determining whether stablecoins arrangements are systemically important:** We believe any stablecoin arrangement has the potential to become global, therefore we would not recommend distinguishing between “stablecoin arrangements” and “global stablecoin arrangements”. The FSB could instead distinguish between “stablecoin arrangements” and “systemically important stablecoin arrangements”. Regardless of the term used, we request the FSB to provide further detail on what would constitute “global” or “systemic” importance, and to identify which participants any associated regulatory requirements would apply.

Consultation response:

1. Do you agree with the analysis of the characteristics of stablecoins that distinguish them from other crypto-assets?

We welcome the FSB’s comprehensive efforts in analysing and characterising stablecoins to better understand and address their risks to financial stability. We broadly support this analysis; however, we would like to build upon it by recommending the following amendments to the CP’s characterisation of stablecoins.

We believe the FSB definition of a stablecoin provided in the report (restated below) is too broad:

“A crypto-asset that aims to maintain a stable value relative to a specified asset, or a pool or basket of assets.”

We believe this definition is appropriate for a broader category of “value-stable crypto-assets”³, however, based on the principle of ‘same activity, same risk, same regulation’, stablecoins should be defined in a way that distinguishes them

³ Crypto-assets generally used for payment that are designed to minimise/eliminate price fluctuations relative or in reference to other asset(s). They may represent a claim on the issuing entity, if any, and/or the underlying assets. For further detail please see Annex A of this response.

from other activities that already fit within existing regulations. We therefore recommend that the FSB consider the following definition of stablecoins:

“Tokens (crypto-assets) designed to minimize/eliminate price fluctuations relative or in reference to other asset(s), which are not issued by a central bank, FMI, bank, credit institution or highly-regulated depository institution. They may represent a claim on the issuing entity, if any, and/or the underlying assets.”⁴

This definition excludes other digital forms of money such as “tokenised commercial bank money” (a digital form of money that represents single fiat currency and is issued by/structured as a claim on a bank, credit institution or other similarly highly regulated depository institution⁵ that may or may not pay interest) or “financial market infrastructure tokens” (a digital form of money representing claims on an FMI and reflecting deposits held at a central or commercial bank in a single fiat currency that may or may not pay interest).

This distinction is important because those other forms of digital money should operate under existing rules and regulations.

2. Are there stabilisation mechanisms other than the ones described, including emerging ones, that may have implications on the analysis of risks and vulnerabilities? Please describe and provide further information about such mechanisms.

We agree that the two stabilisation mechanisms described (asset-linked and algorithm-based) are the two broad types of stabilisation mechanisms in the market today. This is reflected in our approach to classification in Annex A. We note however that as the market continues to develop at pace, it will be important to continuously assess the emergence of new stabilisation mechanisms and/or stablecoins.

Further, we note that stablecoins, as well as other types of crypto-assets, can be hybrid, i.e. they can exhibit multiple characteristics at issuance or at any single point in their lifecycle. Further consideration should be given to these types of stablecoins, as well as when and how the rules should apply to them.

The main types of stabilisation mechanisms, in addition to other stablecoin characteristics such as structuring, collateral, stress testing capabilities, holders redemption rights, etc. should be reviewed in detail in order to identify any potential risks and address them with appropriate regulation.

3. Does the FSB properly identify the functions and activities of a stablecoin arrangement? Does the approach taken appropriately deal with the various degrees of decentralisation of stablecoin arrangements?

We support the analysis undertaken by the FSB in identifying the functions and activities of a stablecoin arrangement in Table 1. Regarding additional considerations on functions and activities of a stablecoins arrangement, we recommend that the FSB consider the findings presented in the Committee on Payments and Market Infrastructures (CPMI) report on *Wholesale Digital Tokens*.⁶ This report outlines several potential design choices for wholesale digital tokens, and provides a non-exhaustive list of questions that token developers may need to consider regarding the various functions and activities of a digital token arrangement.

It is important to consider how different market participants and service providers would be included in scope of relevant regulations and what mechanisms would trigger this. For example, clarity may be needed regarding the treatment of validator nodes, including the circumstances in which they would fall in scope of a GSC arrangement and therefore take on liability. Further, it will be important to consider the implications of this for the issuer of the GSC.

⁴ This definition is part of our proposed approach to the classification of crypto-assets, formulated as part of as part of the GFMA response to the BCBS Discussion Paper on Designing a Prudential Treatment for Crypto-assets. For more detail please see Annex A or the full BCBS response at: <https://www.gfma.org/wp-content/uploads/2020/04/gfma-bcbs-prudential-crypto-assets-final-consolidated-version-20200427.pdf>

⁵ I.e. a traditional financial institution (such as a GSIB) that is subject to extensive regulatory and capital requirements.

⁶ <https://www.bis.org/cpmi/publ/d190.pdf>

4. What criteria or characteristics differentiate GSC arrangements from other stablecoin arrangements?

We support that the regulation of stablecoin arrangements should be proportional to the risks involved.

Any stablecoin arrangement has the potential to become global, therefore we would not recommend distinguishing between “stablecoin arrangements” and “global stablecoin arrangements”. It may instead be helpful to distinguish between “stablecoin arrangements” and “systemically important stablecoin arrangements”. However, it is important to note that it would not be helpful to make this distinction on the stablecoin itself, as stablecoins are simply a type of asset, but rather the distinction should be made on the operator of the system. Moreover, regarding systemically important stablecoins, the supporting infrastructure/actors may also be critical for regulatory oversight. Regardless of the term used, we request the FSB to propose a clear framework for determining what would constitute “global” or “systemic” importance.

We also request clarification on whether regulatory requirements for GSC arrangements would apply only to the stablecoin issuer or its operator, or whether other service providers (e.g. exchanges, wallet providers) would also be considered systemically/globally important. There should be a clear framework for determining accountability within stablecoin arrangements, including the management of third-party providers.

We have examined Q4 from this perspective. We believe the key criteria that differentiate “systemically important stablecoin arrangements” should at a minimum include:

- Whether the initiative is predicated upon an existing, large and/or cross-border user base that is likely to enable rapid scalability;
- The nature of the issuer and the issuer’s footprint;
- The volume of estimated transactions;
- The number of currencies/securities and countries/profile of countries involved; and the underlying composition of the value references of the stablecoin (e.g. is the reference value of the stablecoin an index of multiple sovereign currencies, and what are the currencies used (i.e. G-4)).

However, we also provide more specific feedback on the criteria listed in Annex 5:

- Bullet 3: We believe the type of reserve assets that are used, in addition to the size of the reserve, should be a relevant consideration for systemic importance;
- Bullet 7: Our understanding is that this bullet aims to assess the reach and breadth of a stablecoin arrangement; however, this may not be specifically dependent on market share, but rather the presence (if measurable) of the stablecoin in a number of jurisdictions; and
- Bullet 9: In addition to interconnectedness with Financial Institutions (FIs), we would recommend also considering interconnectedness with other financial instruments, service providers and payment networks, and also to evaluate whether interoperability with other Distributed Ledger Technology (DLT) networks and other traditional market infrastructures could be a factor in determining interconnectedness.

We recommend that stablecoin arrangements are continuously monitored by regulators/supervisors, that roles and responsibilities for monitoring are set out and agreed upon, and that objective criteria for differentiation are aligned. This may include setting up a data collection effort to gather key data for financial stability/interconnection purposes.

5. Do you agree with the analysis of potential risks to financial stability arising from GSC arrangements? What other relevant risks should regulators consider?

There are important financial stability considerations relating to the potential exposure of FIs in the case of an operational failure of a GSC arrangement. For instance, we note that there could be knock-on effects to financial stability

relating to the operational failure of a stabilisation mechanism or a run on a GSC that impacts the availability of reserve assets, and therefore the availability of short-term funding for FIs.⁷ Further, FIs will in many cases be required to act as a lender of last resort in stress scenarios, but it may be difficult to assess the extent of their risk due to the operational complexity of a GSC arrangements. These issues should be considered further.

It is also important to address gaps in the regulation of entities that provide certain stablecoin services to ensure financial stability. Where stablecoins are linked to fiat currency and issued by an institution that is not a regulated credit institution (e.g. or generally where stablecoins do not reflect fiat held by a regulated entity as a deposit or pursuant to a custodial or similar relationship), it will be important to put the necessary safeguards in place. These safeguards should account for how the underlying fiat currency is kept and/or invested and what protections (such as deposit insurance) if any, apply, as well as the exact rights the holders may have, particularly during events of stress. Care should be taken to regulate these types of stablecoins in alignment with current regulatory frameworks, to avoid knock-on impacts to other financial markets or FIs.

6. Do you agree with the analysis of the vulnerabilities arising from various stablecoin functions and activities (see Annex 2)? What, if any, amendments or alterations would you propose?

We broadly support the analysis of the vulnerabilities arising from various stablecoin functions and activities.

When assessing the risks and vulnerabilities of stablecoin arrangements, we recommend remaining technology agnostic and risk-based (where possible) while providing guidance and clarity on how DLT can be leveraged in financial transactions, rather than assessing based on a specific network (e.g. permissioned versus permissionless networks) or technology. This is an important principle for future-proofing regulatory frameworks, encouraging innovation and fostering a level playing field. While the design of the network will impact current feasibility in alignment with regulatory frameworks and guidance, as the underlying technology continues to evolve, solutions may rapidly arise to allow the technology to later be used in alignment with regulatory requirements.

7. Do you have comments on the potential regulatory authorities and tools and international standards applicable to GSC activities presented in Annex 2?

We support the application of the existing international standards that are outlined in the report to market participants who are engaged in GSC activities, which is based on the principle of ‘same activity, same risk, same regulation’. As the technology evolves and users of the assets and ecosystem grows, constant monitoring and assessment will be required.

Further, we support the view that the asset management function of a stablecoin arrangement (or other value-stable crypto-asset) could require various licensing and registrations where existing regulations would apply; however, there are also cases where some functions may fall outside the scope of existing regulations, therefore creating a regulatory gap.⁸ The question of whether a coin holder has a claim on the issuer or the assets backing the stablecoin arrangement plays an important role in characterising these arrangements. This differentiation should be made clear by regulatory authorities.

8. Do you agree with the characterisation of cross-border issues arising from GSC arrangements?

We agree that cross-border issues are a concern for GSC arrangements. We welcome efforts by the FSB and other global organisations to coordinate policy work in this area.

⁷ For more detail see ECB bulletin (May 2020) *A regulatory and financial stability perspective on global stablecoins* - https://www.ecb.europa.eu/pub/financial-stability/macprudential-bulletin/html/ecb.mpbu202005_1~3e9ac10eb1.en.html#toc1

⁸ https://www.ecb.europa.eu/pub/financial-stability/macprudential-bulletin/html/ecb.mpbu202005_1~3e9ac10eb1.en.html#toc4

International consistency is important to avoid gaps in regulation and provide clarity around jurisdictional oversight. Without this, it is not always clear which jurisdiction is applying supervision/regulation based on the location of the issuer, the validator node, or the wallet provider.

A globally consistent regulatory approach is also needed to provide consistent treatment to the various types of stablecoins, because the classification and regulation of a stablecoin and its structure could differ between different jurisdictions. For instance, a stablecoin that is pegged to an underlying basket of currencies (i.e. an index) may be classified and regulated as a security in some jurisdictions or a financial instrument, such as a collective investment scheme, in others (depending on how the stablecoin is structured). Once a stablecoin that is designed for payment purposes is subject to securities regulations (e.g. prospectus requirements, trading rules and investor protection standards) it may become legally and pragmatically difficult for the stablecoin to continue to be used as a payment instrument.

We request that the FSB continues to collaborate with other international and national supervisors/regulators in the development of a globally consistent regulatory treatment of stablecoins. The principle of ‘same activity, same risk, same regulation’ should apply, even in cases where the activity is currently out of scope of current regulatory provisions.

9. Are the proposed recommendations appropriate and proportionate with the risks? Do they promote financial stability, market integrity, and consumer protection without overly constraining beneficial financial and technological innovation?

We welcome that the recommendations are intended to be high-level and flexible, as this approach is appropriate to consider any changes to the regulatory status of a stablecoin over time and the rapid development of the underlying technology. We also support that the recommendations aim to be technology neutral, apply the principle of ‘same activity, same risk, same regulation’ and apply regulations on a functional basis that is proportionate to the risks.

Regarding recommendation 1, we note that global alignment in the regulation, supervision, and oversight of GSCs will be key to avoiding gaps in regulation and providing regulatory certainty for market participants.

Regarding recommendation 4, it will be important for regulators to consider who is held responsible for overall governance of the arrangement (e.g. issuer, counterparty), and whether this responsibility could shift based on the decentralised nature of the issuer or stability mechanisms, as well as how that governance should be implemented in cases of links between different members, which could lead to conflicts of interest or other issues.

Finally, it will be important to consider the various roles and networks that may be used and how each role should be treated. For instance, a GSC may be issued on an open network and the GSC issuer may itself embed the controls required. While it may be true that aligning with regulatory requirements in this instance may be more challenging, the network may be supported on a global scale, with some events being outside of the control of the issuer. Further, as the underlying technology evolves, these challenges may be reduced.

a. Are domestic regulatory, supervisory and oversight issues appropriately identified?

We support the findings in the report on domestic regulatory, supervisory and oversight issues.

b. Are cross-border regulatory, supervisory and oversight issues appropriately identified?

We believe that the cross-border regulatory, supervisory and oversight issues were appropriately identified. We would like to add that international forums and networks provide important opportunities to share best practise and identify specific cross border issues. The Global Financial Innovation Network (GFIN), Bank of International Settlements (BIS) Innovation Hub and the International Organisation of Securities Commissions (IOSCO) FinTech Network provide a few such examples.

c. Do the recommendations adequately anticipate and address potential developments and future innovation in this sector?

We believe the current recommendations are appropriate. We note that the crypto-assets market is still developing at pace and therefore propose that these recommendations be frequently reviewed to assess for potential developments in the market. We also note that regulatory sandbox initiatives could provide further opportunities to identify potential developments.

10. Do you think that the recommendations would be appropriate for stablecoins predominately used for wholesale purposes and other types of crypto-assets?

We consider that wholesale transactions should be conducted using regulated digital forms of money such as tokenised commercial bank money⁹, FMI tokens¹⁰ or Central Bank Digital Currencies¹¹ (if they were to exist).

We note that these digital forms of money are used to conduct activities that are equivalent to existing regulated wholesale payment and settlement activities. We believe institutions conducting the same activities using DLT should be subject to the same regulatory requirements or oversight applicable to those activities. For instance, a tokenised form of commercial bank money that in risk/activity is the same as a books and records system facilitating wholesale payments may not require additional oversight, but rather existing regulation and oversight requirements should apply.

However, if there are new risks that are not accounted for in existing regulation, further consideration to regulation and oversight may be required. Further, it is important to be cognisant of the interrelations between retail and wholesale markets and account for this when considering the appropriate regulation and oversight.

11. Are there additional recommendations that should be included or recommendations that should be removed?

We do not currently note any additional recommendations that should be included, or any recommendations that should be removed, at this stage. However, we note that while out of scope of this paper, there are several other issues, for instance relating to monetary policy, competition, data protection, etc. that will also need to be considered in respect to the regulation and oversight of stablecoins arrangements.

12. Are there cost-benefit considerations that can and should be addressed at this stage?

It is difficult to provide a cost-benefit analysis at this stage without a specific example, therefore it will be important to use an agile and flexible, approach to regulation that can be updated over time as knowledge of stablecoin arrangements and the underlying technology develops.

⁹ Digital form of money that represents single fiat currency and is issued by/structured as a claim on a bank, credit institution or other similarly highly regulated depository institution. It may or may not pay interest.

¹⁰ Digital form of money representing claims on an FMI and reflecting deposits held at a central or commercial bank in a single fiat currency that may or may not pay interest.

¹¹ Digital form of money that represents a liability of a central bank in a single fiat sovereign currency that may or may not pay interest.



Allison Parent

Executive Director

The Global Financial Markets Association (GFMA)

GFMA contacts

Andrew Harvey, aharvey@gfma.org

+44 (0)20 3828 2694

David Ostojitsch, david.ostojitsch@afme.eu

+44 (0)20 3828 2761

Madeline Taylor, madeline.taylor@afme.eu

+44 (0)20 3828 2688

About GFMA

The GFMA represents the common interests of the world's leading financial and capital market participants, to provide a collective voice on matters that support global capital markets. We advocate on policies to address risks that have no borders, regional market developments that impact global capital markets, and policies that promote efficient cross-border capital flows, benefiting broader global economic growth. The Association for Financial Markets in Europe (AFME) in London, Brussels and Frankfurt, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong and, the Securities Industry and Financial Markets Association (SIFMA) in New York and Washington are, respectively, the European, Asian and North American members of GFMA. The members of GFMA have published several whitepapers on crypto-asset regulatory and operational initiatives.¹²

¹² AFME whitepaper on 'Recommendations for delivering supervisory convergence on the regulation of crypto-assets in Europe' ([link](#)); ASIFMA whitepaper on 'Tokenised securities: a roadmap for market participants and regulators' ([link](#)); SIFMA is developing a whitepaper that captures key considerations on operationalizing security tokens with a focus on broker-dealers, regulators, and issuers (expected in 2020).

Annex A - Approach to classification and understanding of crypto-assets¹³

Broadly, crypto-assets¹⁴ may serve a variety of economic functions, such as an agent for payments,¹⁵ a vehicle for investment or trading,¹⁶ or a utility to access other goods or services.¹⁷ Within those functions, when those assets have the characteristics of existing regulated instruments, a specific regulatory framework may apply. However, given the features of crypto-assets, other key attributes beyond economic function, may need to be taken into consideration by regulators in order to classify those assets and determine what regulations should apply, if any (similar to how frameworks such as those that are leveraged for classifying a security/financial instrument function today). For this initial proposal¹⁸ we focused on defining features of crypto-assets such as:

- A. Issuer (e.g., central bank)
- B. Mechanism or structure underlying the asset value (e.g., pegged to or in reference to an underlying asset or access to a network product or service)
- C. Rights conferred (e.g., entitlement to cash flows, redemption rights, voting)
- D. Nature of the claim (e.g., claim on an issuer or claim on an underlying asset)

While not part of the feature set used in the proposal below to define a crypto-asset, there are additional features that should be assessed against each type of crypto-asset to help differentiate and evaluate the risk, including types of users/holders (e.g., retail versus wholesale), systemic importance, and if an asset is linked to a real or off-chain asset, who or what type of entity has custody of that asset, if any.

Many crypto-assets have functions and features spanning more than one of the categories identified herein (“Hybrid Crypto-Assets”) or may not even be contemplated at this time¹⁹. These types of crypto-assets may have characteristics that enable their use for more than one purpose (means of payment or investment) at any single point in the lifecycle of the asset, or have characteristics that change during the course of their lifecycle. Further consideration should be given to these types of assets as well as when and how the rules should apply to them. GFMA would encourage an approach that is agile and remains robust, providing the market clarity while also allowing innovation as market structures develop, uses evolve, and technology changes, or new assets are created.

While we have used the term “crypto-asset”, as the overarching category to group together a number of instruments, not all the categories (and associated uses and attributes) should be treated as instruments for which a new financial regulatory framework is necessary or appropriate. A robust regulatory framework (including customer/investor protection safeguards) may already exist for the instruments or activity represented by the “crypto-asset”.

The proposal below is an initial starting point for a classification of crypto-assets. It is designed to help regulators evaluate which types of regulations should apply to which type of assets. We note however that as these assets evolve and potentially new ones are created, this classification may need to be updated over time.

Types of Crypto-Assets^{20, 21}

A. Cryptocurrencies

¹³ This approach was formulated as part of the GFMA response to the BCBS Discussion Paper on Designing a Prudential Treatment for Crypto-assets. For more detail please see the full response at: <https://www.gfma.org/wp-content/uploads/2020/04/gfma-bcbs-prudential-crypto-assets-final-consolidated-version-20200427.pdf>

¹⁴ A crypto-asset is generally any digital asset whose provenance is tracked via a blockchain or DLT infrastructure, with ownership or control determined by a cryptographic key.

¹⁵ Payment tokens may also be referred to as exchange tokens in some jurisdictions. Key uses may include, the crypto-asset being held and transferred primarily for the purposes of buying or selling other assets or being used as a store of value.

¹⁶ Security/ Investment/Financial instrument tokens provide entitlement to proceeds or a right to vote and could also meet the characteristics or definition of a financial instrument or equivalent regulatory classification

¹⁷ Crypto-asset's use as a means of accessing a DLT platform and/or a medium of exchange for the provision of goods and services provided on the DLT platform, and does not have value or application, outside of the DLT platform on which it was issued (Note that the crypto -asset may be used as a means for data and database management, data recordation, or other bookkeeping or recordkeeping activity. As these do not constitute financial instruments, they are intentionally excluded here)

¹⁸ This approach has not been formally endorsed by all GFMA members and is intended as a basis for discussion.

¹⁹ As the crypto-asset market evolves and the understanding of uses matures, additional uses beyond those identified as payment, investment, or utility may need to be addressed or identified

²⁰ GFMA also notes that the term “coin” and “token” are synonymously leveraged below and are not intending to insinuate differences between the two terms.

²¹ Some of those instruments may meet the ‘e-money’ criteria in those jurisdictions where that regulatory classification exists and be classified as such for regulatory purposes

- Digital representations of value with no redemption rights against a central party and may function within the community (enabled through peer-to-peer networks) of its users as a medium of exchange, unit of account or store of value, without having legal tender status. They may also act as an incentive mechanism and/or facilitate functions performed on the network they are created in; their value is driven by market supply/demand therein

B. Value-Stable Crypto-Assets

1. Central Bank Digital Currencies (CBDC²²) (e.g., e-Krona)

- a. Digital form of money that represents a liability of a central bank in a single fiat sovereign currency that may or may not pay interest

2. Financial Market Infrastructure (FMI) Tokens (e.g., USC)

- a. Digital form of money representing claims on an FMI and reflecting deposits held at a central or commercial bank in a single fiat currency that may or may not pay interest

3. Tokenized Commercial Bank Money²³ (e.g., Signet)

- a. Digital form of money that represents single fiat currency and is issued by/structured as a claim on a bank, credit institution or other similarly highly regulated depository institution. It may or may not pay interest

4. Stablecoins: Tokens designed to minimize/eliminate price fluctuations relative or in reference to other asset(s) which are not issued by a central bank, FMI, bank, credit institution or highly- regulated depository institution. May represent a claim on the issuing entity, if any, and/or the underlying assets

- a. Asset Linked Crypto-Asset – value may be fixed or variable and in reference to individual structures or include a combination of:
 - Fiat currency linked (e.g., Tether, Paxos, USDC, Gemini)
 - Other real asset linked (e.g., Sendgold, Xaurum)
 - Crypto-asset linked (e.g., Maker)
- b. Algorithmic Crypto-Asset: Typically not linked to any underlying assets and each token can be pegged to a price level or a unit maintained through buying, selling or exchange²⁴ among assets²⁵ or some other pre-determined mechanism²⁶

C. Security²⁷ Token

- Token issued solely on DLT that satisfies the applicable regulatory definition of a security
 - i. or financial instrument under local law (e.g., World Bank's "Blockchain Bond")
- Token that represents on DLT underlying securities/financial instruments issued on a different platform (e.g., a traditional CSD, registrar, etc.), where such representation itself satisfies the definition of a security/financial instrument under local law

D. Settlement Token

²² CBDC can rely on non-DLT/blockchain technology, this taxonomy is intending to capture only those leveraging DLT/blockchain technology

²³ Note: Deposits recorded via DLT may not be considered true crypto-assets as they do not create a new asset class with separate intrinsic value from the fiat currency they represent. However, we have included this in our response to be responsive to varying definitions of crypto-asset under consideration, and to comprehensively articulate when the use of distributed ledger technology would not require new regulatory treatment, but would be governed by an existing regulatory framework

²⁴ "Buying, selling, or other exchange" may be facilitated algorithmically (pre-programmed) or through market practices (participant arbitrage)

²⁵ Asset may involve the native stablecoin itself or other crypto-asset used for exchange or collateralization

²⁶ Pre-determined mechanisms may involve pre-programmed economic policies, including, but not limited to, asset staking or exchange, dynamic transaction fees, seigniorage, asset supply control, recapitalizations and/or use of financial instrument.

²⁷ This category encompasses different regulated instruments from a legal perspective, which may attract different regulatory treatment amongst themselves and across jurisdictions

- Representation on DLT of underlying traditional securities/financial instruments issued on a different platform (e.g., a traditional CSD, registrar, etc.) where such representation itself does not satisfy the definition of a security or financial instrument under local law and is used solely to transfer or record ownership or perform other mid/back-office functions (e.g. collateral transfer, recording of ownership)

E. Utility Token

- A means of accessing a DLT platform and/or a medium of exchange which participants on that platform may use for the provision of goods and services provided on that platform (e.g. loyalty rewards programs/systems, gift card rewards, credit points that are only usable within the DLT platform, memory and network server space, and other utilities- based value); or
- Tokens that are not native to the underlying network but are used for accessing applications that are built on top of another DLT platform (dApp)

F. Other Crypto-Assets (not structured as value-stable crypto-assets)

- Representation on DLT of ownership in tangible or intangible underlying assets or of certain rights in those assets (such as interest, e.g. loans), which are not securities or financial instruments (e.g., real estate, art, intellectual property rights, precious metals, grains, or non-fungible assets that only exist in digital form on a DLT network); they may represent a claim on the issuing entity or the underlying assets.