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Mr. Klaas Knot, Chair
Mr. Rupert Thorne, Acting Secretariat General
Financial Stability Board
Basel, Switzerland

By email: fsb@fsb.org

December 15th, 2022

Dear Chair Knot,

The Global Financial Markets Association ([GFMA](#)¹) welcomes the opportunity to respond to the Financial Stability Board's (FSB's) [questions for consultation](#) on the **'INTERNATIONAL REGULATION OF CRYPTO-ASSET ACTIVITIES – A PROPOSED FRAMEWORK'**. We support the continued efforts by the FSB to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies for crypto-assets, coordinating a balanced approach across national financial authorities and international standard setters. Given recent market developments in the crypto-asset ecosystem and the uncertainty brought by the collapse of key market players, we support global regulators and standard setters in their mission to bring order and financial stability to crypto-asset markets. The GFMA believes that regulated financial institutions have a key role to play in reducing risk and increasing transparency in crypto-asset markets.

Our high-level response to the consultation and answers to the individual questions within the consult are provided below.

Executive Summary

The Global Financial Markets Association ([GFMA](#)) welcomes the opportunity to respond to the Financial Stability Board's (FSB's) [questions for consultation](#) on the **'INTERNATIONAL REGULATION OF CRYPTO-ASSET ACTIVITIES – A PROPOSED FRAMEWORK'**. We support the FSB's continued efforts to develop and promote the implementation of effective regulatory, supervisory, and other financial sector policies for crypto-assets, coordinating a balanced approach across national financial authorities and international standard setters.

The GFMA recognises the increasing importance of developing a global framework for the regulation of crypto-asset activities for financial services and the wider economy, and the need to continue supporting common horizontal rules to mitigate risks to financial stability from the crypto-asset ecosystem. We support approaches by national financial authorities and international standard setters to ensure that crypto-assets are subject to appropriate regulation, while still encouraging digital innovation in financial services. This is crucial to develop a robust digital economy that is accessible to existing and new entrants, subject to appropriate and proportionate crypto-asset regulation and security safeguards. In a fast-evolving and competitive environment, it is important for global standard setting bodies to promote the coordination of an effective and aligned global regulatory framework. Uniformity will help fill any unintended gaps to prevent market failures we have recently seen in centralised exchanges and lenders. The GFMA remains supportive of a global regulatory framework that enables the adoption and scaling-up of innovations in digital finance while also developing provisions for appropriate supervisory, market integrity, investor, and consumer protection mandates, including transparency, accountability and anti-money laundering/counter-terrorist financing

¹ 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 Global Financial Markets Association ([GFMA](#)) brings together three of the world's leading financial trade associations to address the increasingly important global regulatory agenda and to promote coordinated advocacy efforts. 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.

(AML/CFT) defences, as well as safety and soundness and financial stability mandates, as crypto-assets become part of the broader financial services ecosystem.

Overall, the GFMA welcomes this initial discussion towards the development of a global crypto-assets framework that could reduce fragmentation and promote consistency in national approaches, as well as promoting financial stability across the global financial system through the broadening of existing guidance as well as the development of new regulation where appropriate. A global framework is vital to develop a level playing field, where new entrants as well as existing capital market participants can participate in a robust crypto-asset ecosystem, within an appropriate regulatory perimeter. Without the development of a robust global regulatory framework, there is a risk of the development of a bifurcated financial system. In this scenario, regulated financial institutions are prevented from meaningful participation in the emerging crypto-asset ecosystem, which continues to grow and develop but is dominated by institutions outside the regulatory perimeter. This would have a range of negative consequences for all crypto-asset market participants and for the overall stability and development of global capital markets. Our comments seek to improve the mutual understanding of current and emerging risks, the role of existing processes and frameworks for regulated financial institutions² to manage such risks, and to identify balanced solutions to help in the design of a global framework that supports enhancing financial stability while avoiding overly restrictive limits to innovation.

To support our response, we have provided the following five key Guiding Principles that we believe are critical for the development of a robust financial services ecosystem as crypto-assets and their related infrastructure grow to support financial stability, safety, soundness, innovation, and competition for all market participants.

Principle 1: The GFMA supports routine collaborative public and private sector engagement to identify risks and opportunities from financial innovation.

- Crypto-assets are a fast-evolving asset class that requires continued dialogue and engagement between the public and private sector to ensure the regulatory framework remains fit for purpose.
- We believe that a joint public-private sector task force merits formation in the near-term to facilitate ongoing discussions in this area and to develop global standards and a taxonomy. The task force should meet on a regular basis.
- It is crucial to both extend the regulatory perimeter where appropriate, but also to ensure that existing currently regulated institutions are enabled to operate effectively in the crypto-asset ecosystem under the existing regulatory framework for financial services. We support the design of a crypto-asset regulatory framework that brings regulated financial activities within the appropriate existing prudential and market regulatory frameworks where associated risks will be subject to robust capital and liquidity regulation, sound risk management, resolution planning, custody/segregation/consumer protection provisions, stress testing as part of supervision, auditability, conflict of interest management, and ongoing supervisory oversight.
- The design should continue to support engagement between regulated financial institutions and both global and regional authorities throughout the ongoing development of a risk-focused framework that implements appropriate capital safeguards.
- This dialogue can address how distributed ledger technology (DLT) innovation and blockchain infrastructure (e.g., private permissioned chains and other emerging solutions) can meet regulatory goals of market safety and stability, market integrity, and customer protection from within the appropriate regulatory perimeter. To foster innovation, several jurisdictions have created pilot regimes to enable regulated market participants' use of DLT and blockchain infrastructure for all types of trading and settlement use cases and beyond.

² In this context, 'regulated' financial institutions refers to market participants whose activities are overseen by the regulatory and supervisory agencies that govern current capital markets participants, such as banking and prudential regulators, securities and commodities regulators, and SROs.

Principle 2: The GFMA supports tenets of good risk management for the safety and soundness of regulated financial institutions.

- Regulatory proposals should incentivize the use of risk management hedging tools. This is important as regulated financial institutions continue to make the necessary investments that will be both economically viable and rational for clients' needs in crypto-asset-related activities.
- Furthermore, new technology does not change or negate the need for proper controls. The GFMA supports a tailored approach to specific risks of the technology and the various activities conducted using it. Additionally, it is important to distinguish between regulating products as opposed to the technology and identifying where the real underlying risk lies. This is in support of technology neutrality as further discussed under Principle 4.
- The GFMA supports the design of a crypto-asset exposure framework that facilitates bringing regulated financial activities related to crypto-markets within the appropriate existing prudential framework where associated risks will be subject to robust capital and liquidity regulation, sound risk management and ongoing supervisory oversight. This will help to promote financial stability, while avoiding overly restrictive limits on innovation for regulated institutions.
- A prudential framework that permits regulated financial institutions to support responsible innovation, benefits supervisors by providing better insight into the evolution and growth of new technologies and activities (e.g., by requiring the reporting of crypto-asset exposures). At the same time, customers and investors will benefit from more transparent, trusted regulated financial institutions and the protections of fully regulated institutions providing services. Otherwise, un-and-lesser-regulated entities are likely to be predominant providers of crypto-asset-related services. The result would be an unlevel playing field and a lack of transparency in the build-up of leverage and risk in the financial system outside the regulatory perimeter. This point is further discussed in our response to question 5 and we also further expand upon this principle in our response to the Basel Committee's Second Consultation on the Prudential Treatment of Cryptoasset Exposures.³ Further to this, the prudential framework should also be extended to cover new entrants (i.e., entities other than regulated financial institutions) which are not yet in the perimeter of the BCBS consultation.
- Finally, we would emphasise that risk management standards for the use of crypto-assets should not be conflated with the use of DLT or blockchain infrastructure for existing, regulated financial services and processes. This technology neutral approach would support this use of the DLT or blockchain falling under the existing appropriate risk management framework.

Principle 3: The GFMA supports the safety and soundness of the financial system through responsible innovation by regulated financial institutions.

- Regulated financial institutions have been working to implement DLT/digital solutions and blockchain infrastructure (e.g., private permissioned chains and other emerging solutions) to enable financial innovation that brings greater efficiency and speed, along with reduced risks, while maintaining operational, legal, credit and market integrity. DLT has successfully enabled these results in support of legacy products as well as a range of tokenised instruments comprising payment and investment products.
- Regulation already pertaining to these underlying activities should be applied in a technology neutral manner as emphasised above, and not conflated with the creation of new crypto-assets. It is critical to decouple these uses of the technology. Failing to do so would create barriers to entry and compliance costs for regulated actors, as well as potential regulatory confusion and regulatory risks.

³ <https://www.gfma.org/wp-content/uploads/2022/10/joint-trades-comment-letter-second-consultation-on-prudential-treatment-of-cryptoasset-exposures.pdf>

- Responsible innovation is crucial to support competition as well as new entrants and business models, but as discussed above, this must be accompanied by appropriate oversight, supervision, and (where relevant) stress testing.

Principle 4: The GFMA supports technology neutrality and the application of the ‘same activity, same risk, same regulatory outcome’ principle should be the foundations of a future global crypto-assets regulatory framework.

- Based on the underlying principles ‘same activity, same risk, same regulatory outcome,’ sustained, iterative dialogue between supervisors and regulated financial institutions can help in the design and implementation of a regulatory framework that supports enhancing financial stability while avoiding overly restrictive limits to innovation.
- At the same time, it is important to understand that crypto-asset use cases are very diverse: some represent existing types of asset classes on a new type of decentralised technology; others are entirely new asset classes or governance models (e.g., Decentralised finance [DeFi] platforms). Because of how these new types of decentralised infrastructures function, a regulatory framework needs to apply the principle of ‘same activity, same risk, same regulatory outcome’ wherever possible and consider the novel nature of other use cases; and in both cases respect the principle of technology neutrality.
- We support the approach of the FSB as set out by Dietrich Domanski, former Secretary General, Financial Stability Board who stated that, “Technology openness and neutrality underpin the FSB’s work on financial innovation, including cross-border payments and crypto assets. These principles recognise that it is not the role of regulation to prescribe particular solutions to economic problems – in terms of technologies used, in terms of business models employed, etc --, but rather to focus on the economic functions performed through innovations and their potential associated risks.”⁴ We support this approach to technology neutrality and openness, as it acknowledges that upgrading technology is not a risk in and of itself, but rather it is important to implement the appropriate controls and risk management framework for the new solutions and products developed with new and emerging technology.
- The GFMA supports a principles-based approach and the application of ‘same activity, same risk, same regulatory outcome’ regardless of the new form that actors conducting financially regulated, or yet unregulated, activities or new products might take (e.g., Decentralised Autonomous Organisations (DAOs) or Non-fungible tokens (NFTs)). As discussed under principle one, it will be important to develop tailored solutions for novel risks without being overly restrictive. A principles-based approach would enable the development of a future-proofed framework that includes robust capital and liquidity regulation, sound risk management, resolution planning, custody/segregation/consumer protection provisions, stress testing as part of supervision, auditability, conflict of interest management, and ongoing supervisory oversight.
- The GFMA believes that regulated institutions should not face additional prudential, licensing or capital treatment as an automatic add-on when implementing new technology and conducting responsible innovation. We would emphasise that regulated institutions have recovery mechanisms as well as mitigants and safeguards against operational risk. For example, existing systems have risks, but these are carefully controlled for within risk management frameworks. Overly restrictive requirements could prevent regulated financial institutions from meaningfully engaging and scaling with new technology and may result in a bifurcated market as discussed in our response to question 5.
- Technology neutrality will enable national regulators as well as global standard setters to strike a balance between fostering innovation, enhancing systemic resilience and stability, and protecting both retail and corporate consumers. The importance of this principle is also further discussed in the AFME response to the ESMA Call for Evidence on the distributed ledger technology (DLT) Pilot Regime.⁵

⁴ <https://www.fsb.org/wp-content/uploads/S310822.pdf>

⁵ <https://www.afme.eu/Portals/0/DispatchFeaturedImages/ESMA%20DLT%20Pilot%20Regime%20CFE%20-%20AFME%20Final.pdf>

Principle 5: The GMFA supports Interoperability and leveraging the role of existing processes and frameworks for regulated financial institutions to manage risks

- Applying to crypto-assets some of the principles established within the existing capital markets regulatory frameworks would be a pragmatic approach that builds on decades of experience. National regulatory frameworks around the world cover the full lifecycle of many assets, which are largely already in a digital (or dematerialised) format today, from issuance to trading, to clearing and settlement, to client suitability and investor protection.
- These frameworks, (such as frameworks for appropriate liquidity for deposits, custody practices, etc.) are designed to support accurate pre-trade disclosure to customers, fair execution at transparent prices, appropriate market conduct that reinforces fairness of execution and avoidance of manipulative practices, appropriate management and/or avoidance of conflicts of interest, post-trade transparency and operational integrity, with requisite supervisory, control and risk functions. Crucially, they also place customer protection, market integrity, and safety and soundness at the forefront. Leveraging the principles of existing frameworks for crypto-asset activities will ensure they are held to the same high standards. We believe regulators should apply the rules and principles established in existing capital markets frameworks to the extent possible to crypto-assets, consistent with a broader 'technology neutral' and 'risk-based' approach to regulation in this space as discussed above, as well as in the main body of our response.
- We value the work of the FSB in coordination with the other global standard setting bodies on this important topic. The GFMA also appreciates the steps that regulators are already taking to ensure international coordination, cooperation and alignment. Driving development of the crypto-asset ecosystem outside the regulatory perimeter would undermine the official sector's efforts to address potential financial stability and customer and investor protection concerns. Established best practice risk management capabilities and market oversight increase overall visibility into the development of the sector. A globally harmonised regulatory framework for crypto-assets that permits meaningful involvement of regulated financial institutions, allows customers and institutional clients to benefit from the robust consumer and client protections.

The GFMA welcomes the opportunity to discuss the recommendations made in response to this consultation as well as its associated reports and looks forward to continuing to identify opportunities to support the FSB, international standard setters and national authorities in this important initiative.

NOTE TO THE READER

For consistency with the FSB's consultation and report we have used their term 'crypto-asset' throughout this response. However, as we set out below in our response to question one, we believe that there is a critical distinction which must be made (but not limited to) between digital assets, cryptocurrencies, and tokenised assets, as well as the underlying distributed ledger technology (DLT) and blockchain infrastructure which may differ in use across these functions and activities including how they facilitate existing regulated financial services activities. The focus should be on the underlying activity. With the exception of question one, where we set out the importance of these distinctions, we have used 'crypto-asset' throughout the document, mirroring the FSB's approach.

CALL FOR A TAXONOMY TASKFORCE

We would reiterate our views shared in our [response](#) to the Basel consultation on the prudential treatment of crypto-assets and note that the key to this regulatory framework is a taxonomy to clearly define the crypto-asset in question, followed by the development of a risk-based framework that looks to the particular crypto-asset and the various activities that regulated financial institutions engage in. Taken in its totality, this framework will therefore help to assign the appropriate capital and liquidity standards for the crypto-asset and involved activity.

Our views on a potential approach to the classification and understanding of 'crypto-assets' are in Annex 1 of this response.

We believe that a first priority for global standard setters should be to establish a joint taskforce between industry and regulators in Q1 and Q2 of 2023 to develop such a global taxonomy as a foundation for the broader framework.

Consultation Questions

I. General

Q1. Are the FSB's proposals sufficiently comprehensive and do they cover all crypto-asset activities that pose or potentially pose risks to financial stability?

The GFMA believes that while the FSB's report discusses the range of functions and 'crypto-asset' activities, it is important to first differentiate between 'cryptocurrencies' (e.g., Bitcoin, Ether) and other digital asset types. Overall (as set out in the box above), a globally agreed taxonomy for the definition of what are referred to as crypto-assets, digital assets, virtual assets, bank issued tokenised deposits, non-bank crypto issued tokens, or stablecoins, to name a few, would be highly beneficial. These may differ in use across functions and activities, as well as their use in the facilitation of regulated financial services activities. The distinctions made in the FSB's Annex 1: Essential functions, risks and relevant international standards⁶ are appreciated, but it is crucial to also make these distinctions throughout the development of recommendations and proposals.

Additionally, it is critical to keep sight of the differences between digital/crypto-assets (products), how these digital/crypto-assets are used (activities/services), and the distributed ledger technologies underpinning them (infrastructure), as well as key differences within each of these categories. One category can transmute the others. Therefore, whilst the functions and activities set out by the FSB are comprehensive, there is a critical distinction which must be made between digital assets, cryptocurrencies, and tokenised assets, as well as the underlying distributed ledger technology (DLT) and blockchain infrastructure (e.g., private permissioned chains and other emerging solutions) which may differ in use across functions and activities depending on the design choice. For example, there are different levels of risk associated with tokenised assets issued on public chains versus private chains, DLT-based derivatives that provide exposure to traditional financial assets (e.g.,

⁶ <https://www.fsb.org/wp-content/uploads/P111022-3.pdf> (pg. 30-43)

Synthetic), listed financial derivatives giving exposure to crypto-assets (e.g., CME bitcoin futures ['BTCZ2']), and asset management activities that span from utilising traditional investment strategies on crypto-assets to native crypto investment strategies on crypto-assets (e.g., Harvestfinance), hybrids like tokenised financial assets with Automated Market Makers (AMM) concepts used in the DeFI space and multimodal ones.

The spectrum of digital assets, DLT and blockchain infrastructure encompasses risk-creating assets, but also risk-reducing permissioned processes that can mitigate key concerns such as settlement risks. Furthermore, there are nuances distinguishing 'crypto-assets' and other DLT and blockchain infrastructure-based products and systems in terms of operating models, markets, infrastructure deployment, permissions (or lack thereof), and operational and technological considerations. It is critical for policy makers to be mindful of these differences and not overgeneralize as to all manifestations of the underlying technology.

As a starting point, regulators should establish clear definitions that identify the rights conferred by, and risks involved in, different products (e.g., digital securities, stablecoins, cryptocurrencies). Across the spectrum of 'crypto-assets' and processes there are many different products used for different purposes, as well as services based upon blockchain technology, with different levels of risk. Similarly, policy makers should take care to avoid arbitrary distinctions between different types of underlying DLT and blockchain infrastructure configurations, an issue we discuss at greater length below in our exploration of understanding and managing risk. There are meaningful differences in how risk is managed by way of permissioning and other design features, and these differences should be recognised in the regulatory treatment of different 'crypto-assets' and services.

Whilst it is key to differentiate between different digital assets, as discussed above, perhaps the most important distinction is between purely on-chain decentralised public chain 'crypto-assets' with no central administrator or location, and other types of digital assets, as well as the use of DLT and blockchain for infrastructure purposes without creating a distinct digital asset. This distinction is foundational and must come before a general analysis of the functions and activities that could be undertaken using either 'crypto-assets', digital assets, or the underlying DLT infrastructure. Policy makers should keep the distinction forefront when making digital asset policy and be cautious to avoid extrapolating risks or technology issues found in crypto-assets to the broader world of blockchain-based assets and infrastructure. These distinctions are: 1) technological, reflecting the unique features of many of the most common crypto-assets; and 2) regulatory, depending upon how the relevant digital asset or application of DLT/blockchain technology is characterised for the purpose of jurisdiction of a given regulator and application of its laws and regulations.

Finally, expanding on the above point on the underlying DLT and/or underlying blockchain infrastructure, regulated financial institutions and the broader financial services industry have for some time recognised that DLT is a secure method of recordkeeping. The benefits of DLT and blockchain infrastructure extend to the internal recordkeeping function of regulated financial institutions, many of which have spent considerable resources to implement solutions that drive efficiencies and reduce risk. As such, if adopted broadly, DLT, blockchain infrastructure and other similar technological innovations have the potential to materially strengthen the resilience of the financial system. Accordingly, we recommend that the FSB's proposals avoid supporting regulation that would limit the design option for regulated financial institutions' internal books and records systems.

Q2. Do you agree that the requirements set out in the CA Recommendations should apply to any type of crypto-asset activities, including stablecoins, whereas certain activities, in particular those undertaken by GSC, need to be subject to additional requirements?

The GFMA agrees that global stablecoins (GSCs) need to be subject to additional requirements compared to all other crypto-assets as GSCs have additional implications including monetary policies and cross-border contagion risks. However, as already stated in question 1, due to the distinctions that should be drawn between different types of crypto-assets and their associated activities, the GFMA also encourages the FSB to identify a category of non-global stablecoins which is separated from GSC and separate from crypto-assets in a broad sense. For example, are tokenised bank deposits stablecoins or is any tokenised asset with a consistent value of \$1 a stablecoin? If so, it would not be appropriate that they are treated as any other crypto-asset.

For the sake of clarity, it may also be useful to specify that CA Recommendations 2 and 9 would also be applicable to GSCs. Additionally, CA Recommendation 4 and its principles for conflicts of interest should also be applied as necessary to GSCs.

The GFMA agrees with the general principle of the CA Recommendations that authorities should apply effective regulation, supervision, and oversight to crypto-asset activities and markets in line with the principle ‘same activity, same risk, same regulatory outcome’. Technology itself is neutral and regulations should not be the driver that leads to one type of technology being favoured over another in the commercial and financial sectors (for example, permissioned versus public blockchains). However, technology can be used and repurposed for different goals. Therefore, we encourage a technology neutral approach and also would emphasise that the latter part of this principle does not mean ‘identical regulation’, but rather equivalent regulatory outcomes for similar risks and activities so that this principle could also be read as follows: ‘same activity, same risk, same regulatory principles’.

The GFMA believes the principle importantly recognises the need for similar regulatory requirements when different entities’ activities pose similar risks. However, the principle also embraces the reality that different actors can conduct the same activity and produce very different risks, depending on a host of factors including scale, scope of services, and other regulated functions, meriting a different regulatory approach. As we discuss below, crypto-asset activities should be included in the appropriate regulatory perimeter based on their respective risk profile, just as the activities of regulated financial institutions already are, be that at national, EU-wide, federal or state regulatory frameworks depending on the jurisdiction. The GFMA supports that the requirements in the CA Recommendations be applied to crypto-asset activities and the assessment of risks in such a way that considers proportionality and addresses the size, scope, and complexity of specific entities. Furthermore, we encourage increased specific scrutiny on single service providers executing multiple functions and/or activities, or organisations with common ownership that may pose increased risks due to the amalgamation of activities, while recognising that integrated organisation structures reflect a current unevenness of the crypto-asset market structure and ecosystem completeness. Regulators should also take into account that this is still a developing asset class, and that any regulatory regime will need to be sufficiently future-proof while still promoting prudent innovation, investor and client protection, financial stability, and market integrity.

As policymakers continue to consider legislation, they should also bear in mind the range of existing regulatory frameworks that currently could already be applicable to many aspects of the crypto-asset marketplace in certain jurisdictions. For example, while still nascent, many crypto-asset brokerage and derivatives activities should be regulated at the federal level in the United States given existing frameworks.

Other developing activities, such as issuing a reserve-backed ‘payment stablecoin,’ could be governed under a variety of regulatory regimes depending on their design and scale. Another useful distinction is to consider separating tokenised deposits within credit institutions from stablecoins and other crypto-asset activities. As a matter of scope, tokenised bank deposits, whether issued on public or permissioned blockchains, are different from GSCs and CAs and any stablecoin regulation should recognise the difference between these instruments. Deposits are one side of a banking balance sheet and are not cash collateralised. They are an intrinsic part of a bank’s risk taking activities and subject to extensive prudential capital and liquidity requirements in light of that fact, which allows for fractional reserve banking and therefore different from the full-reserve asset backing requirements proposed for GSCs. Tokenised deposits are the same as deposits recorded in a traditional bank database, the difference being they are recorded in an external database (permissioned or permissionless blockchain). Legally, tokenised deposits retail the same status as existing deposits. It is important that stablecoins regulation acknowledges the distinction between these separate instruments. While remaining cognisant of the differences between activities and regulation across a range of criteria, such as their coverage of different entity types, products, and activities. The GFMA recognises the ongoing policy debate over how novel and still developing crypto-assets products align with the jurisdictional perimeters of regulators. It is critical that regulatory approaches globally follow the principles outlined above and that any more granular regulation (e.g., at national or state level) in this area should be no less stringent than broader regulation of like activities, consistent with current regulatory approaches.

Q3. Is the distinction between GSC and other types of crypto-assets sufficiently clear or should the FSB adopt a more granular categorisation of crypto-assets (if so, please explain)?

As noted in our responses to question 1 and question 2, due to their particularities and the potential risks they might pose, the GFMA encourages the FSB to identify a category of non-global stablecoins which is separated from that of GSC and crypto-assets in a broad sense. Furthermore, we would note that not all stablecoins rely on the same stabilisation mechanisms.

Products that are akin to deposits should be treated and regulated differently than those that more closely resemble a money market fund. Consideration should be given to how those products are marketed to consumers, the rights conferred (including redemption rights), and disclosure and management of the risks involved, including know your customer/anti-money laundering KYC/AML, potential concentration risks and mismatches between the stablecoin and its reserve assets. Regulation should address those risks and should borrow, where relevant, from existing regulations (e.g., where products are akin to deposits). Additionally, as definitions may differ on a jurisdiction-by-jurisdiction basis, this may generate potential legal uncertainty and underlines the necessity to promote alignment across the adoption of similar technology. Our recommendations on GSCs are further expanded upon in the section below.

Additionally, while mentioned in the discussion on the applicability of FATF standards, the GFMA believes that further consideration should also be given to instances when non-fungible tokens (NFTs) should be treated as regulated instruments. These are not explicitly discussed in the FSB's report, but it is crucial to consider them within the recommendations in order to both limit potential harm and encourage responsible innovation. We believe that the 'same activity, same risk, same regulatory outcome' principle should also apply to NFTs if NFTs have characteristics of regulated instruments, and that the FSB principles should apply irrespective of the legal and operational structure of the crypto-asset service or platform and the fact that technologically NFTs may be uniquely identifiable. NFTs offer significant opportunities for innovation, but if in totality they are excluded from the regulatory perimeter this could also create major risks to operational resilience and consumer protection, as well as opportunities for arbitrage, market abuse, and money laundering. The GFMA would encourage policymakers not to treat NFTs differently from other regulated crypto-assets based purely on the fact that they are not fungible (in fact, some can be split in parts with those parts being fungible between themselves – NFTs lose their 'non-fungible' status as soon as there are fractions) and evaluate them in a similar manner, based on the rights conferred. NFTs used for financial purposes and traded on a secondary market as financial products should be included in the regulatory framework in a principles-based manner.

Furthermore, while the GFMA would welcome the FSB considering how NFTs may fall within scope of a future regulatory framework, we also believe further consideration and clarification is required on the status of a token that has not been fractioned but could be either through: (1) the contract used to create the token having a fractionalisation mechanism built in, or (2) a separate smart contract being used to wrap the token. The same would apply to a token which has been fractioned in such a way that the fractions remain unique and non-fungible. Given these outstanding issues and noting that rapid market developments in relation to NFTs are quickly evolving, we would encourage further analysis accompanied by regulatory treatment that is fit for purpose and adaptable to market developments.

Q4. Do the CA Recommendations and the GSC Recommendations each address the relevant regulatory gaps and challenges that warrant multinational responses?

The GFMA believes that the participation of 'traditional' financial services firms in the crypto-asset sector offers a broad range of benefits to help address some of the identified challenges by improving consumer protection as well as reducing risk and increasing transparency in crypto-asset markets. From a markets and oversight perspective, regulated financial institutions' participation can help improve crypto-asset market integrity and provide greater transparency to regulators and supervisors. Regulated financial institutions also offer a proven track record of responsible innovation, and new crypto-asset ventures can draw on such institutions' established and robust frameworks for technology and operational risk management, as well as existing client suitability frameworks, AML and KYC procedures, cybersecurity requirements and data protection processes.

Regulatory Transparency into Crypto-asset Markets

Regulated financial institutions are supervised and examined on an ongoing basis by numerous regulators globally. For example, bank supervisors not only receive periodic reports from the institutions they supervise, but they also have access to information from the examination and onsite supervisory processes and through formal and informal data submissions. Similarly, broker-dealers are subject to extensive oversight and examination in different regulatory regimes globally. As a result, activities conducted within a regulated financial institution are fully transparent to supervisors, allowing them to monitor risk taking within individual institutions and providing them with the information necessary to help address potential financial stability concerns. The data required for regulatory reporting by financial institutions using a public blockchain will be totally traceable and immutable and provide a shared golden data source for both regulators and users in real time. Regulatory reporting becomes in effect self-service where the regulators have their own node access with a resulting reduction in the operational risk as compared to each regulated financial institutions' current reporting process.

In contrast, without opportunities for the meaningful involvement of regulated financial institutions in the crypto-asset space, consumers and institutional clients will seek related products and services from unregulated financial intermediaries or other unregulated entities which sit largely outside the scope of different comprehensive regulatory regimes globally. This is particularly relevant to cryptocurrency-centric firms that may only be subject to patchwork regulation or maybe no oversight whatsoever. This result would have the effect of concentrating risk in sectors of financial services outside the scope of comprehensive national regulation, and global regimes, while fragmenting existing customer relationships among banking service providers. The recent collapse of an algorithmic stablecoin and its associated network's participants, unstable concentration risk in the issuing firm's own cryptocurrency, along with the improper use of customer funds to engage in proprietary trading activity, demonstrated the harm and the lack of recourse that consumers could face when using untested and unregulated products and services without proper safeguards.⁷

Regulated financial institutions already have stringent regulation and supervision regarding safety and soundness and protection of customer assets. Further, regulated financial institutions have clear, long-standing prudential and market-based rules prohibiting activity that can be seen in the digital native space such as comingling of assets, use of customer assets for proprietary activity, front-running of customer trading activity, and use of customer information in proprietary trading activity.

Additionally, as the crypto-asset market grows, particularly in areas related to regulated functions of financial institutions in capital markets and payments, regulated financial institutions may be positioned to help stabilise the sector by being better able to absorb certain stresses that come from scaling. For example, a well supervised global systemically important bank (GSIB) may be capitalised and otherwise regulated in a manner that would support greater stability of payments related digital assets it issues at a large scale more so than a still growing and nascent stablecoin provider. This point is further discussed in our response to question 5.

Operational and Technology Risk Frameworks Already in Place

Regulated financial institutions already have robust frameworks in place for the management of operational and technology risk. These frameworks are informed by the expectations of national regulators globally. They cover the full lifecycle of technology development, from the development of new products to their integration within existing internal control frameworks, including structures for understanding and managing vendor risk internal controls. These risk frameworks have supported prior waves of responsible innovation, as noted above. Regulated financial institutions will ensure that any development of new products in crypto-asset markets and infrastructures using new technologies happens within these robust risk management frameworks, and such institutions' participation will raise the overall level of maturity and expectations of resiliency and sustainability across the broader crypto-assets sector and general application of DLT/blockchain to support traditional financial services.

⁷ Kharpal, Arjun and Browne, Ryan, Cryptocurrency luna crashes to \$0 as UST falls further from dollar peg, CNBC, May 13, 2022 4:12 AM EDT (updated May 13, 2022 7L49 PM EDT), available at:

<https://www.cnbc.com/2022/05/13/cryptocurrency-luna-crashes-to-0-as-ust-falls-from-peg-bitcoin-rises.html>

Additionally, regulated financial institutions draw on a range of established industry voluntary standards (such as those developed by the International Organization for Standardization (ISO), the National Institute of Standards and Technology [NIST]), and the Cyber Risk Institute [CRI]⁸, for understanding and managing technology and cyber risk, which can be leveraged for the development of new crypto-assets infrastructure and services, as well as frameworks for business continuity planning (BCP). SIFMA discussed this particular topic in further detail in their response to the Department of Commerce's RFC for 'Developing a Framework on Competitiveness of Digital Asset Technologies.'⁹

AML and KYC Programs Already in Place

Regulated financial institutions already have well-established, robust programs and experienced personnel in place for AML and KYC controls which can be extended to the digital space. To the degree these institutions are a venue or entry point for customers to participate in crypto-asset markets, these existing controls, coupled with advanced distributed ledger analysis technology, could provide oversight and in some cases provide greater insight in preventing crime. Greater regulated financial institution participation would also increase opportunities to develop digitally native solutions for meeting these requirements for asset types whose current features have raised concerns from policy makers from an AML/KYC perspective. For example, financial institutions may apply their experiences with AML/KYC requirements to develop enhanced due diligence practices or develop use of emerging technologies and blockchain native tools for compliance. However, in addition to this, new market participants in the crypto-asset markets should also be subject to robust and adequate AML and KYC controls to ensure a holistic control framework in this ecosystem.

Risk Management Related to Wallets and Custody Service Already in Place

Regulated financial institutions have a long history of providing custody and safekeeping services for different types of financial assets. Regulated financial institutions are subject to continuous monitoring and supervision by multiple regulators, which includes regular engagement about activities and risks related to safety and soundness, consumer protection, and financial stability. They can leverage their expertise from compliance with existing laws, prudential and market-based regulations, and cyber security controls to the custody of crypto-assets. If regulated financial institutions are subject to a different regulatory standard than other entities when offering crypto-asset custody solutions, clients may seek unregulated solutions or self-custody, which ultimately puts them at greater risk of loss and reduces authorities' ability to monitor and mitigate financial crimes.

Regulated financial institutions' long history of providing safekeeping services for their clients is subject to a clearly defined body of law. A regulated institution's role as a trusted intermediary is well understood by the market as essential in safely supporting client assets. Further, assets held in custody are neither exposures nor assets of the bank custodian and therefore do not create risks that require capitalisation outside of the existing framework for operational risk.

Additionally, as noted in our response to the Second Consultation on the Prudential Treatment of Cryptoasset Exposures¹⁰, because assets under custody only give rise to operational risk, only the operational risk requirements of the crypto-asset exposure framework should be applicable to assets under custody both in fiduciary and non-fiduciary arrangements, similar to the treatment of traditional assets under custody.

Ultimately, disadvantaging regulated bank custodians from engaging in custody of crypto-assets will move such core financial activities outside the regulatory perimeter, where under-regulated entities operate without (or with limited) regulation and supervision, to the detriment of investors, consumer protection, safety and soundness, and financial stability.

⁸ The Cyber Risk Institute (CRI) is a not-for-profit association of financial institutions representing the broad diversity of the financial sector— from global institutions to community banks to cryptocurrency exchanges. CRI's mission is to provide a flexible framework based on leading practices to help the financial sector better manage cyber risk. This framework, the CRI Profile, is based on the NIST Cybersecurity Framework, used widely across the sector, and increasingly accepted by financial sector regulators. The CRI Profile is the successor to the Financial Services Sector Coordinating Council (FSSCC) Cybersecurity Profile, a NIST and IOSCO based approach to assessing cybersecurity in the financial services industry.

⁹ <https://www.sifma.org/wp-content/uploads/2022/07/SIFMA-Response-to-RFC-Developing-a-Framework-on-Competitiveness-of-Digital-Asset-Technologies.pdf> ; Barthere A, et al, On-Chain Forensics: Demystifying TerraUSD De-peg, Nansen.ai, <https://www.nansen.ai/research/on-chain-forensics-demystifying-terrausd-de-peg>

¹⁰ <https://www.gfma.org/wp-content/uploads/2022/10/joint-trades-comment-letter-second-consultation-on-prudential-treatment-of-cryptoasset-exposures.pdf>

Q5. Are there any financial stability issues that remain unaddressed that should be covered in the recommendations?

Throughout the report, there is a recurring theme that the interconnections between the crypto ecosystem and the traditional financial system are a channel for the introduction of systemic risk. This theme is further addressed under CA Recommendation 8. We would first note that it is not only the co-existence of regulated financial institutions and the unregulated crypto-asset ecosystem that generates risk, but that there are also risks due to interconnections between unregulated entities and public infrastructures. While we are supportive of the broader goal of promoting financial stability, we would challenge the assumption that greater regulated financial institution participation will necessarily lead to interconnections with the unregulated crypto-asset ecosystem and increase systemic risk, given the regulatory benefits of regulated participation as delineated above. Furthermore, the GFMA would stress that regulated financial institutions have a long history of integrating new technologies into their product offerings and activities and working with supervisors to ensure the regulatory framework remains fit for purpose to support safety and soundness and financial stability.

In Appendix 1¹¹ to our response to the Second Consultation on the Prudential Treatment of Cryptoasset Exposures, we provide relevant case studies that illustrate how the regulated financial services industry is effectively collaborating with supervisors while integrating cryptography and distributed ledger or similar technology (e.g., blockchain) into products and services to meet client demand and to deliver market efficiencies.

A key concern for regulators with regard to regulated financial institutions' involvement in crypto-assets and cryptocurrencies is the volatility of the asset or underlying assets themselves; however, regulated financial institutions are well positioned to both manage those risks and potentially reduce the overall volatility of this market. Expanding on this view, we believe that the participation of regulated financial institutions could over time help to reduce volatility in crypto-asset markets by increasing compliance standards, introducing additional liquidity and transparency, and bringing the industry's risk management experience to bear. As crypto-asset markets continue to grow, regulated financial institutions can play a pivotal role in ensuring liquidity, transparency and operational resilience of these markets. This would be accomplished, in part, by providing clients (including institutional clients) with access to risk management tools including hedging products (e.g., futures contracts linked to certain cryptocurrencies). Empirical analysis shows that the ability to hedge is central to reducing the volatility within a given asset class.¹²

While the risks associated with crypto in many ways differ from those seen in natively digital securities or tokenised assets, crypto-asset risks can be understood and managed, and allowing regulated financial institutions to participate in crypto markets may help foster mature risk management, support regulatory oversight, and improve investor protection.

The GFMA believes that in order to holistically address risks, as well as to consistently apply the principle of 'same activity, same risk, same regulatory outcome', market abuse provisions should also be explicitly covered in any FSB final recommendations.

A further issue that the recommendations could address is crypto-asset marketing and communications directed towards clients in third countries. This could also be reviewed for interoperability with emerging regulatory frameworks such as MiCA (e.g. a reverse solicitation regime). In particular, the recommendations should notably invite the jurisdictions to prohibit issuers and service providers under their remit from soliciting clients or potential clients established in other jurisdictions, whatever the means of communication used to market, promote and advertise the asset or the service, except if specifically authorised, for example via a regime of 'equivalence', or when it can be established that the issuer or the service provider does comply with the regulation of the foreign jurisdiction concerned. In conjunction with that, the recommendations should establish criteria to identify precisely and in a consistent manner across jurisdictions cases where solicitations occur at the exclusive initiative of the client (reverse solicitation). Additionally, it is also important to create limitations

¹¹ <https://www.gfma.org/wp-content/uploads/2022/10/joint-trades-comment-letter-second-consultation-on-prudential-treatment-of-cryptoasset-exposures.pdf> (September 2022)

¹² Global Financial Markets Association (GFMA), Financial Services Forum, Futures Industry Association (FIA), Institute of International Finance (IIF), International Swaps and Derivatives Association (ISDA), and Chamber of Digital Commerce Joint Letter in response to the Basel Committee on Banking Supervision's Consultative Document on the Prudential Treatment of Cryptoasset Exposures (September 2021). Available at: <https://www.gfma.org/wp-content/uploads/2021/09/joint-trades-bcbs-prudential-treatment-of-cryptoasset-exposures-response.pdf>

or guardrails on how tokens issued by crypto native companies, not backed by any asset, can be used as collateral and for lending – especially to entities with common ownership or under the same corporate umbrella. These limitations exist in the regulated financial space, and in order to mitigate financial stability risks it is also important for these safeguards to exist across the crypto-asset ecosystem. One may also consider integrating an obligation to have independent audited accounts (as well as for reserve assets and technology used). This is further discussed in our responses in the next section. Without a comprehensive regulatory framework and the meaningful involvement of regulated financial institutions in the crypto-asset space, consumers and institutional clients will seek crypto-asset-related products and services, which have considerable potential for economies of scale relative to traditional banking and investment products and services, from potentially unregulated financial intermediaries. This result would have the effect of concentrating risk in unregulated sectors of financial services, while fragmenting existing customer relationships among banking service providers. As a result of that fragmentation, customers would not have the full opportunity to benefit from the robust consumer and client protections that regulated financial institutions provide.

The public and the regulatory community would benefit from regulated financial institutional involvement in the crypto-asset space because regulated financial institutions identify, monitor and manage risks from both a prudential and conduct perspective on an ongoing basis. Furthermore, the existing regulatory and oversight frameworks have safeguards in place which are critical to mitigate contagion as well as other associated financial stability risks such as market integrity.

Risks of Creating a Bifurcated Market in Absence of a Robust Regulatory Framework

The GFMA believes that, without the development of a robust regulatory framework that encourages innovation and regulated financial institution involvement while maintaining regulatory conservatism, there is a risk of the development of a bifurcated financial system. In this scenario, regulated financial institutions are prevented from meaningful participation in the emerging crypto-assets ecosystem, which continues to grow and develop but is dominated by institutions outside an appropriate regulatory perimeter. This would have a range of negative consequences for investors and for the overall stability and development of global capital markets.

Bifurcation of the financial markets would ultimately result in weaker regulatory oversight of the crypto-asset markets and hinder the development of mature risk management and customer protection processes.

Similarly, exclusion of regulated financial institutions in a bifurcated market would prevent them from applying their existing technology risk management and client protection frameworks to the challenges presented by certain new types of crypto-assets.

II. Crypto-assets and markets (CA Recommendations)

Q6. Does the report accurately characterise the functions and activities within the crypto ecosystem that pose or may pose financial stability risk? What, if any, functions, or activities are missing or should be assessed differently?

We first would reiterate our responses above to questions 1, 3, and 4.

Furthermore, we would recommend making a distinction between the type of asset being used when considering non-custodial wallets. The GFMA presents two examples below of a sub-classification that could be used to make the characterisation of this function more granular:

- a) **Bearer:** If the asset is a bearer asset, a comparison could be made between this type of asset and cash. If you lose your non-custodial wallet, you lose your actual asset too, similar to losing one's cash notes. In this case, the asset would be gone for good, and the next bearer (finder) gets the value.
- b) **Registered:** If the asset is a registered asset, the wallet is merely a ledger or record keeper – not the actual asset. If the user loses the non-custodial wallet with a registered asset, they have lost the ledger or scoresheet only, not the asset. For example, if you lost your house registry certificate the house is still yours. You just need to get a new certificate from the record keeping issuer (e.g., HM Land Registry in UK).

We would also note that when assessing the risk profiles of data, indices, and analytics tools, a distinction should be made between on-chain oracles/reference sources (e.g., used by DeFi such as LINK / GRT) and centralised solutions (e.g., used by people such as etherscan.io). They are very different and produce different risks (e.g., censorship, control over the data seen, market impact and manipulation risk).

Additionally, in considering the assessment of activities and their risks we would set out the below principles on the regulation of custody services which builds on the subsection of our response to question 4, '*Risk Management Related to Wallets and Custody service Already in Place*'. The GFMA believes that for regulated financial institutions the existing practices for custody services that are in place via prudential regulation for regulated financial institutions significantly mitigate the risk to financial stability. Our principles that support this are set out below:

Separation of Custody and Trading Activities

To ensure appropriate oversight and control, the regulated financial institutions' safeguarding function would be functionally separated by internal controls from the regulated financial institutions' trading function (although not necessarily conducted in separate legal entities, e.g., in a trust division). While this is currently the case for regulated institutions, a comprehensive oversight framework for these functions is critical to ensure that all market participants comply with the requirements. Furthermore, we recommend that 'Smart Contract Custody' have its own separate section within the FSB recommendations due to the unique risks posed. For example, if there is no bank or other organisation behind a smart contract-based custody function, it has unique challenges (e.g., no CEO).

Segregation of Client Assets from Regulated Financial Institutional Assets

As with any other financial asset, regulated financial institutions would ensure the segregation of client assets at all times, and would undertake the daily reconciliation of books and records. This segregation can be achieved in a number of ways, which may differ based on the attributes of a particular crypto-asset and the appropriate custody regulations in respective jurisdictions. As noted above, while this is currently the case for regulated institutions, a comprehensive oversight framework for these functions is critical to ensure that all market participants comply with the requirements.

Proper Control

The management of private key technology is a critical and foundational element to exercising control over the asset. This should be accompanied by the existing already established cybersecurity measures and compliance processes within the regulated financial services industry, such as processes to mitigate against risk of human error or misconduct.

A core risk of this technology is the potential of a 'single point of failure' with respect to the private cryptographic key (i.e., where one event could result in the loss, theft or other misuse of the asset associated with the key). The technology supporting private keys has advanced significantly in recent years, and it is now possible to have private keys that are represented by multiple signatures or multiple-encrypted 'shards' where no single party can authorise the transfer or disposition of the asset. If any part of a key or one shard is lost or rendered inoperable, the remaining shards can support retrieval of the asset into a new wallet with a new set of private keys and related shards. Private key shards are never combined into a single key and are managed within the regulated financial institutions' overall control framework for safeguarding financial assets. This framework includes ensuring that critical information is encrypted and properly stored, and client instructions are communicated and verified through secure channels. Private key shards are stored using separate technology systems, providing an additional layer of control and assurance that the asset cannot be inappropriately accessed or compromised.

Management of cryptographic keys lifecycle activities (for example, key ceremony, generation, distribution and destruction, replacement/master seed keys, associated APIs, 'supply chain security' and other linked security features), thought-out technology architecture and wallet structures, informed cybersecurity governance including role-based controls and third-party audits are already in place in most large financial institutions. Augmented with crypto-specific postures, they will continue to be relevant as would multi-layered defences to insider, collusion and/or external threats that ensure that no one employee has access to all of the key shards to control.

In addition to these controls, we would also recommend that the FSB consider 'warm' wallets in its assessment of the different risk profiles of custody models. This recent development refers to delegated approval authority through smart contracts which is used to protect assets and/or generate income by lending digital assets etc.

Q7. Do you agree with the analysis of activity patterns and the associated potential risks?

The GFMA is supportive of CA Recommendation 3 and believes that cross-border cooperation, coordination, and information sharing is key to develop a stable, balanced, and sustainable crypto-asset ecosystem. We believe that regulation should continue to support efficient cross-border capital flows to end-users by efficiently connecting savers and borrowers, benefiting broader global economic growth. It is crucial for global regulators to cooperate in the regulation, supervision, and oversight of crypto-asset activities and markets and for them to develop standards to improve the coherence and interaction of cross-border financial regulation. We believe that this will support the functioning of global capital markets and global economic growth.

Furthermore, we believe that a key risk for the crypto-asset ecosystem is regulatory fragmentation. We are supportive of the FSB's recommendation that would promote consistency and a common understanding of key elements of regulatory, supervisory and oversight frameworks for crypto-asset activities and markets. As part of the efforts to address this risk we would encourage global standard setters to prioritise the establishment of a joint taskforce between industry and regulators in Q1 and Q2 of 2023 to develop such a global taxonomy as a foundation for the broader framework.

In Annex 1 of the FSB's report the operational risks of DLT infrastructure are discussed. First, we would note that 'validators' and 'miners' are used interchangeably. The GFMA believes that these terms should be kept separate. For example, on the Ethereum network, which uses proof of stake (POS), validation is based on stake-size incentives, while on the Bitcoin network, mining/solving cryptographic puzzles is used to achieve validation. We recommend keeping the terms separate due to their technical differences. The report then notes the concern of miners 'frontrunning'. It is important to note that regarding this risk, timestamping does not work in a truly decentralised and anonymous network (e.g., Bitcoin) as there is no agreed concept of time (no coordination). If this is a key concern for the FSB, the GFMA recommends considering regulated activity being carried out in a sub-set of a network like this which is permissioned (i.e., public and permissioned). In such a sub-set of the network there could then be agreed rules (e.g., timestamps, rules on ordering and transparency and demonstrable best execution practices).

We also would reiterate our above responses above to questions 4 and 5.

Q8. Have the regulatory, supervisory and oversight issues and challenges as relate to financial stability been identified accurately? Are there other issues that warrant consideration at the international level?

We would first express our support for CA Recommendation 1 that authorities have the appropriate powers and tools and adequate resources to regulate, supervise, and oversee crypto-asset activities and markets, including crypto-asset issuers and service providers. As set out in the executive summary the GFMA very much supports global regulators and standard setters in their mission to bring order and financial stability to crypto-asset markets and financial services more broadly. For this to occur it is of course necessary for them to have the appropriate powers and tools.

We would also reiterate our responses above to questions 4 and 5, noting that the regulated financial services industry can support financial stability and contribute to mitigating some of the challenges posed by the crypto-asset ecosystem. Based on the underlying principles 'same activity, same risk, same regulatory outcome', sustained, iterative dialogue between supervisors and regulated financial institutions is crucial to help in the design and implementation of a regulatory framework that supports enhancing financial stability while avoiding overly restrictive limits to innovation.

The GFMA also supports a principles-based approach and the application of 'same activity, same risk, same regulatory outcome' regardless of the new form that actors conducting financially regulated activities or new products might take (e.g., Decentralised Autonomous Organisations (DAOs) or Non-fungible tokens (NFTs)). The GFMA also believes that where there is a financial product or service, financial regulation and supervision should apply.

Q9. Do you agree with the differentiated requirements on crypto-asset issuers and service providers in the proposed recommendations on risk management, data management and disclosure?

In general, the GFMA believes that the FSB's report has comprehensively identified the risks associated with the combination of functions. We also agree with the warning of the risks implied by the combination of multiple functions within a single service provider but believe that the key to mitigating these risks is the application of robust governance frameworks and segregation of activities where appropriate. Responsible innovation in business models should still be encouraged where the appropriate risk and operational management can be demonstrated, in line with the necessary regulatory requirements.

As several other global standard setters such as BCBS¹³ and the Financial Action Task Force (FATF) are also defining crypto-asset service providers as part of their guidance,¹⁴ it is important for global standard setting recommendations to align on definitions. In this respect we would again urgently encourage the development of a taxonomy taskforce to avoid unintended fragmentation.

Additionally, we believe that the FSB recommendations could be more granular and specific in their use of the term 'crypto-asset issuer' and 'crypto-asset service provider'. For example, CA Recommendation 5 is addressed in part to issuers then the last sentence addresses providers. Further clarity in this regard would be most welcome.

With regards to risk management, data management and disclosure, the principles underlying CA Recommendation 5 promote adequacy, proportionality and appropriateness to ensure that issuers and service providers have relevant controls, management, policies and tools in place. This approach appears to be appropriate.

However, the exact expectations and concrete identification of market standards remain to be built and it is crucial that there is effective and strong cooperation between authorities to ensure a harmonised approach and protect stability. This approach would also support CA Recommendation 3 on 'cross-border cooperation, coordination and information sharing'.

A first step in this regard could be to further delineate the key differences between service providers and issuers in order to already shape a *modus operandi* to address risk management, data management and disclosure. There are currently no sufficient references to issuers' issuing documents, such as white papers, offering memos, etc., and their role vis-à-vis investors and importance to contributing to investors' protection. CA Recommendation 7 on disclosures refers to the possibility to use a prospectus or an equivalent document to disclose information related to the product structure and the operation of the activities conducted. The GFMA is of the view that this disclosure regime should be further detailed in the FSB recommendations to ensure that in all jurisdictions there will be appropriate supervision and compliance with all appropriate elements that are disclosed and centralised to guarantee that investors/consumers receive complete information via this channel.

Q10. Should there be a more granular differentiation within the recommendations between different types of intermediaries or service providers in light of the risks they pose? If so, please explain.

We would reiterate our response to question 5, and further emphasise that a distinction should be drawn between regulated financial institutions – whose participation could greatly contribute to the financial stability and soundness of the crypto-asset ecosystem – and unregulated entities.

Furthermore, the logic of appropriateness and the principle of proportionality implies that the nature and contour of the obligations and applicable regime should adapt and adjust depending on the service provider concerned.

There is undoubtedly a necessity to ensure that a clear distinction is made between the various service providers. Proportionality is the recognition of the necessity to adapt rules to the nature of the entity concerned. Indeed, certain service providers are clearly not in a position to support the same set of obligations compared to others.

¹³ <https://www.bis.org/bcbs/publ/d533.pdf>

¹⁴ <https://www.fatf-gafi.org/media/fatf/documents/recommendations/Updated-Guidance-VA-VASP.pdf>

For example, a platform operator is not exposed to similar risks as a service provider providing custody and administration services. Their liability, set of obligations, approval pre-requisites, and supervision may differ.

To the extent differences are already known (or at least identifiable), there is no doubt that clarifying it as early as possible would contribute to building a comprehensive framework.

In this respect, as stated above, we would welcome a more granular differentiation separating platforms providing financial market infrastructure-like (FMI-like) services from other service providers. Regulated financial institutions already implement appropriate segregation of activities when providing regulated financial services as set out above under questions 4, 5 and 6. It is important that as new regulation is developed for new categories of service provider, it does not unintentionally contradict existing regulation, industry best practices, and risk management provisions that are already in place.

III. Global stablecoins (GSC Recommendations)

Q11. Does the report provide an accurate analysis of recent market developments and existing stablecoins? What, if anything, is missing in the analysis or should be assessed differently?

As noted above in response to question 3, stablecoins can rely on different stabilisation mechanisms to maintain their value. These structural differences could be further analysed when considering the existing and emerging stablecoin market.

Furthermore, we believe further analysis could be done for GSC provisions for: conflicts of interest (e.g., risks taken by stablecoin issuer but born by GSC holders), basis price risk, convertibility issues, access to the reserve assets at all times, the need for them to be segregated and unencumbered, appropriate HQLA composition and duration limitations, and other prudential requirements such as buffers/stress testing requirements.

An additional recommendation that the FSB could consider is a requirement that GSC reserves be held for the benefit of GSC owners in a manner that is bankruptcy remote, meaning that an asset or reserves would be excluded from an insolvent entity's estate in receivership, insolvency, liquidation, or a similar proceeding.

Finally, while the FSB's review of stablecoin arrangements rightly notes that there is not a universally agreed legal or regulatory definition of a stablecoin, the GFMA believes that there is a subset of digital tokens that should be explicitly excluded from the definition of 'stablecoin' even though they can have market price or value, in particular:

- Central Bank Digital Currency (CBDC): 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.
- Financial Market Infrastructure (FMI) Tokens: A digital unit of account issued by an FMI to its participants reflecting deposits held at a central or commercial bank in a single fiat currency that may or may not pay interest.
- Settlement tokens: Representations on DLT of underlying traditional securities/financial instruments issued on a different platform (e.g., a traditional Central Securities Depository or registrar) 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).
- Tokenised commercial bank money/deposit tokens: Tokenised deposits, which evidence a deposit claim against an issuing bank subject to capital and fractional reserve requirements applicable to deposits.
- Non-Fungible Tokens (NFTs): Crypto-assets that are unique and not fungible with other crypto-assets, including digital art and collectibles, whose value is attributable to each crypto-asset's unique characteristics and the utility it gives to the token holder.

Q12. Are there other changes or additions to the recommendations that should be considered?

The FSB should take into account that crypto-assets are still a developing asset class, and that any regulatory regime will need to be sufficiently accommodative of a variety of novel products and continued innovation while still promoting investor protection, financial stability, and market integrity. Considering stablecoins specifically, they have a range of different attributes, including programmability, whether they pay interest, the mechanisms used to maintain stable value (e.g., whether asset-backed or algorithmically-backed), and how they are offered,

sold, and used within crypto-asset ecosystems. Such attributes should inform how stablecoins ought to be regulated as noted above. This variety of technologies and attributes within a single category of crypto-assets illustrates the need to consider the facts and circumstances of a product, not its label, to determine whether it is a security, or some other instrument, and thereby identify the appropriate agency to regulate it.

The treatment of stablecoins should be informed by the specifics of the relevant business model, including, among other things, the mix of assets that back the stablecoin. Alternatively, a stablecoin that meets the definition of a 'security' should be subject to the relevant securities laws in its respective jurisdiction(s). As a result, the treatment of particular types of stablecoins may, depending on their attributes, be analogous to the way that bank sweep programs operate today, where cash may be swept into either a deposit account at a bank (subject to bank regulation and oversight) or invested in a money market mutual fund (a security) at a financial services firm (subject to securities regulation and oversight).

The GFMA also believes there should be additional consideration of the distinction between GSCs issued by regulated financial institutions and those issued by unregulated entities. For example, the GFMA supports the ongoing Monetary Authority of Singapore Consultation on the Approach for Stablecoin-Related Activities which proposes, 'not to impose additional reserve backing and prudential requirements on regulated financial institutions that issue SCS [Single-currency pegged stablecoins] by tokenising liabilities of the bank, given that regulated financial institutions are already subject to stringent risk-based capital and liquidity, ML/TF, technology risk management and other requirements under the Banking Act.'¹⁵ However, as mentioned previously in the response it is important to clarify that prudential rules should be applicable consistently, on a level basis to all market participants (regardless of regulatory status).

In summary, members believe that stablecoin-related activities should be regulated through a risk-based approach. The FSB should aim to tackle the key risks posed by stablecoins in a proportionate manner, in particular giving priority to areas that pose higher degrees of risk. Given the fast-paced nature of technology development in this area as outlined above, there is a need to continuously assess ongoing risks, as well as how those risks may be mitigated through existing operational risk management frameworks, for stablecoins and GSCs.

Q13. Do you have comments on the key design considerations for cross-border cooperation and information sharing arrangements presented in Annex 1¹⁶? Should Annex 1 be specific to GSCs, or could it be also applicable to crypto-asset activities other than GSCs?

The GFMA generally agrees on the key design considerations for cross-border cooperation and information sharing arrangements presented in Annex 1. However, given the cross-border nature of crypto-assets (in the broadest sense of the term), the GFMA considers it would be necessary to extend the scope of application of Annex 1 to crypto-asset activities other than GSCs, as cooperation and information sharing shall be a crucial aspect of in the crypto-asset ecosystem in order to build regulatory frameworks that are as homogeneous as possible.

Q14. Does the proposed template for common disclosure of reserve assets in Annex 2 identify the relevant information that needs to be disclosed to users and stakeholders?

The GFMA believes that in order to improve transparency in the crypto-asset system the illustrative asset categories presented in Annex 2 to be used by stablecoin issuers/arrangements, should be replaced by the format used today by custodians for collateral reporting. There are four key benefits to the use of such a format:

- First, using existing templates rather than developing a new process would significantly reduce the compliance burden for market participants, while also improving the ability of supervisors to interpret the data based a recognised format.

¹⁵ https://www.mas.gov.sg/-/media/MAS-Media-Library/publications/consultations/PD/2022/Consultation-on-stablecoin-regulatory-approach_FINALISED.pdf (page 8)

¹⁶ Please note we amended the following three question references to annexes 1-3 to align with the annex topics in the corresponding FSB [report](#), 'Review of the FSB High-level Recommendations of the Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements.'

- Second, no additional work would be needed to manipulate the data as it will already be produced in a format used by the industry. This would increase efficiency and also enable market participants to use their existing expertise when assessing the data.
- Third, the data would be produced automatically on a daily basis. This would enable risk to be assessed in a timely manner, generally by the close of each business day, further allowing for the mitigation of risk.
- Finally, outside parties could run risk assessments down to the individual cashflow level, leading to increased trust and transparency in the system.

Should new data elements be identified as of value to the market, these could then be built into the existing template and the need for additional data points could be assessed on a periodic basis.

For reference, please see the below example of a bond position in an existing industry standard custody report:

Fund Name	Manager Name	CUSIP Number	ISIN Number	Bloomberg Ticker	Security Long Name	Investment Type Name	Shares/Par Value	Local Average Cost
Test 1	Test 2	'91282CEN7	US91282CEN74	T	US TREASURY N/B 04/27 2.75	GOVERNMENT ISSUES	10,000,000.00	9,865,813.18

Base Average Cost	Local Price Amount	Base Price Amount	Local Market Value	Base Market Value	Base Unrealized Security Gain/Loss	Date Last Priced
9,865,813.18	69.55	69.55	9,528,125.00	9,528,125.00	-337,688.18	11/30/2022

We would note that this is just one example. Most regulated financial institutions will have business model specificities built into their reporting. The content will be similar to the above example but the lay-out and some of the fields used might be different, depending on the asset class. Still, we would encourage utilising existing market formats and templates, rather than using the illustrative format proposed by the FSB. We would also recommend that the name of the account and disclosure of any additional interests in the account (other than standard bank lines) should be disclosed as well.

In addition to this, the GFMA would also support expanding the scope of application of Annex 2 to other non-global stablecoins which are also reserve-backed assets. In our response to question 15 we set out further considerations for systemically important stablecoins which are not GSCs.

Finally, the GFMA would also emphasise the importance of evaluating how a conflict of interests disclosure could be included as part of the proposed template as well as a way to evidence where reserves are being held to ensure they are bankruptcy remote.

Q15. Do you have comments on the elements that could be used to determine whether a stablecoin qualifies as a GSC presented in Annex 3?

In general terms, elements identified in Annex 3 are sufficient to determine whether a stablecoin qualifies as a GSC. However, the GFMA considers that all elements of the list should be somehow measurable or otherwise eliminated from the list (e.g., it is unclear what is meant by “Business, structural and operational complexity” », which is an undefined concept which can hardly be quantified or measured). We would also welcome greater clarity on how the categories will be evaluated as well as more granularity on how each category will be evaluated and weighted as an individual determinant but also how they will be totalled and combined in order to make the ultimate determination on GSC status.

Additionally, the GFMA believes that it may be beneficial to consider referring to ‘systemically important stablecoins’ instead of referring to global stablecoins. Criteria contained in Annex 3 which rely on the cross-border characteristics should not be the only determinant of importance, especially considering that systemically important stablecoins could have a purely domestic dimension. In order to harmonise criteria used, it may be useful for global standard setters in coordination with industry and national competent authorities to develop a detailed list to avoid inconsistency in the adoption of criteria which would generate uncertainty.

Conclusion

The GFMA supports the FSB's continued efforts to develop and promote the implementation of effective regulatory, supervisory, and other financial sector policies for digital assets, coordinating a balanced approach across national financial authorities and international standard setters.

We recognise the increasing importance of developing a global framework for the regulation of digital assets for financial services and the wider economy, as well as common horizontal approaches by national financial authorities and international standard setters to ensure that digital assets are subject to appropriate regulation. The GFMA remains supportive of a global regulatory framework that enables the adoption and scaling-up of innovations in digital finance while also developing provisions for appropriate supervisory, market integrity, investor, and consumer protection mandates, including transparency, accountability and anti-money laundering/counter-terrorist financing (AML/CFT) defences, as well as safety and soundness and financial stability mandates, as crypto-assets become part of the broader financial services ecosystem, as discussed throughout our response.

Overall, the GFMA welcomes ongoing engagement for the development of a robust financial services ecosystem as digital assets and their related infrastructure grows to support financial stability, safety, soundness, innovation, and competition for all market participants. As stated within, GFMA principles support:

1. Routine collaborative public and private sector engagement to identify risks and opportunities from financial innovation.
2. Tenets of good risk management for the safety and soundness of regulated financial institutions.
3. The safety and soundness of the financial system through responsible innovation by regulated financial institutions.
4. Technology neutrality and the application of the 'same activity, same risk, same regulatory outcome' principle should be the foundations of a future global crypto-assets regulatory framework.
5. Interoperability and leveraging the role of existing processes and frameworks for regulated financial institutions to manage risks

We look forward to continuing to engage with the FSB, and other global standards setters, as authorities continue to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies for digital assets.

* * *

The GFMA appreciates your consideration of our comments and proposals and remain at your disposal to discuss any of these views in greater detail.

Respectfully submitted,



Allison Parent
Executive Director
GFMA

cc:

Pablo Hernandez De Cos, Chair, Basel Committee on Banking Supervision
Sir Jon Cunliffe, Chair, Committee on Payments and Market Infrastructures
Jean-Paul Servais, Chair, International Organization of Securities Commissions

Annex 1: Initial Proposed Approach for the Classification and Understanding of Digital-Assets¹⁷

The Global Financial Markets Association¹⁸ (GFMA) developed the following approach to classification of digital-assets to support our response to the Basel Committee on Banking Supervision (BCBS) discussion paper on 'Designing a Prudential Treatment for Crypto-Assets' (2020).¹⁹ The approach reflects the principle that the treatment of digital-assets should be underpinned by clear methodology for identifying different types of digital-assets' risk which will allow for tailored regulatory treatment, as appropriate.

We continue to believe this approach provides an initial basis for a taxonomy and it is key that there is close engagement between the industry and the regulatory community on this topic. We therefore recommend a joint industry-regulatory task force is formed to urgently develop a global taxonomy as a priority in Q1 and Q2 of 2023.

This proposal below is a starting point for a classification of digital-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 assets are created, this classification may need to be updated over time. We would still encourage that a global taxonomy be developed to support global alignment of regulations and supervisory oversight. This global taxonomy should be comprehensive, but also have the ability to be reviewed and adapt with time and new innovations.

Approach to classification and understanding of digital-assets

Broadly, digital-assets may serve a variety of economic functions, such as an agent for payments²⁰, a vehicle for investment or trading²¹, or a utility to access other goods or services²². Within those functions, when those assets have the characteristics of existing regulated instruments, a specific regulatory framework may apply.

However, given the features of digital-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).

¹⁷ As discussed in our Note to the Reader, we believe that 'digital-assets' is a much more appropriate term when discussing DLT based assets in the general sense. However, we would reiterate our initial point that a global taxonomy is urgently needed. We would note that when we discuss digital assets that this does also include fiat deposit accounts where the transfer of ownership is accomplished via blockchain or DLT.

¹⁸ 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 to end users by efficiently connecting savers and borrowers, 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.

¹⁹ [GFMA Response to BCBS Discussion Paper on the Prudential Treatment for Crypto-Assets](#)

²⁰ 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.

²¹ 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

²² Crypto-assets used 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.)

For this initial proposal we focused on defining features of digital-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 digital-asset, there are additional features that should be assessed against each type of digital-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.

Additionally, other features that we would recommend be considered for a future global taxonomy are if the asset exists on a private or public blockchain:

- Private Blockchains – Can contain only permissioned blocks of transactions
- Public Blockchains – Can contain either permissioned blocks (with only whitelisted participants feeding to a node controlled by a KYCd counterparty) or Permissionless blocks (with transactions from any pseudonymous account)

Where a digital asset exists will be an important feature in determining its risk profile.

Further to this distinction, within the blocks on a blockchain transactions can then be either:

- Fungible (e.g., sub divided into base layer / smart contract which require the base layer to be working) or Non-Fungible and;
- Digital Only or Real World (e.g., accessed via a centralised bridge that relies on a service provider)

These distinctions should also be part of the 'type' that digital assets can belong to in a global taxonomy.

Many digital-assets have functions and features spanning more than one of the categories or may not even be contemplated at this time²³. These types of digital 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. The 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 'digital-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 'digital-asset.'

²³ 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

We would reiterate that the proposal below is intended to be an initial starting point for a classification of digital 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. We would still encourage that a global taxonomy be developed. This global taxonomy should be comprehensive, but also have the ability to be reviewed and adapt with time and new innovations.

Types of Digital-Assets^{24, 25}

A. Value-Stable Digital-Assets

1. Central Bank Digital Currencies (CBDC²⁶) (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., Utility Settlement Coin 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. Tokenised Commercial Bank Money²⁷ (e.g., Signet)

- a. A token evidencing a deposit claim for a fixed amount of fiat money denominated in a single currency by the token-holder against the token issuing bank or other similarly highly regulated depository institution. It may or may not pay interest.

4. Stablecoins: Tokens designed to minimise/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 Digital-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)
 - Digital asset linked (e.g., Maker)

²⁴ GFMA also notes that the term ‘coin’ and ‘token’ are synonymously leveraged below and are not intending to insinuate differences between the two terms.

²⁵ 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

²⁶ CBDC can rely on non-DLT/blockchain technology, this taxonomy is intending to capture only those leveraging DLT/blockchain technology

²⁷ Note: Deposits recorded via DLT may not be considered true digital 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 digital 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

- b. Algorithmic Digital-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 exchange²⁸ among assets²⁹ or some other pre-determined mechanism³⁰

B. Security³¹Token

- Token issued solely on DLT or blockchain infrastructure 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 or blockchain infrastructure 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.

C. Cryptocurrencies

- 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.

D. Settlement Token

- Representation on DLT or blockchain infrastructure 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 or blockchain 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 or blockchain 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 or blockchain infrastructure platform (dApp)

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

- Representation on DLT or blockchain infrastructure 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.

²⁸ "Buying, selling, or other exchange" may be facilitated algorithmically (pre-programmed) or through market practices (participant arbitrage)

²⁹ Asset may involve the native stablecoin itself or other digital asset used for exchange or collateralisation

³⁰ 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, recapitalisations and/or use of financial instrument.

³¹ This category encompasses different regulated instruments from a legal perspective, which may attract different regulatory treatment amongst themselves and across jurisdictions

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