Association for Financial Markets in Europe

Consultation Response

HM Treasury Future Financial Services Regulatory Regime for Cryptoassets: Consultation and Call for Evidence

28th April 2023

With Clifford Chance

Executive Summary

The Association for Financial Markets in Europe (AFME) welcomes the opportunity to respond to His Majesty's Treasury's ("**HMT**") consultation and calls for evidence on a '**Future Financial Services Regulatory Regime for Cryptoassets.'** We support the UK's continued efforts to develop clear, effective, and timely regulation for cryptoassets.

Our consultation response encompasses the following 5 key principles: (Of unique but of equal importance)

1. The need for a global taxonomy

- A globally agreed taxonomy for the definition of what are referred to as cryptoassets, digital assets, virtual assets, bank-issued tokenised deposits, non-bank crypto issued tokens, or stablecoins, to name but a few, would be highly beneficial. This is further discussed under Q1 of our response.

2. The importance of building on existing frameworks

- AFME is supportive of the development of a robust digital market with a clear regulatory perimeter. AFME agrees with the proposal to leverage the existing framework (the UK's Financial Services and Markets Act 2000 (FSMA)), as it provides a solid basis to build on, ensures a level playing field, and is in line with the 'same activity, same risk, same regulatory outcome' principle. This principle is reiterated throughout our response, and it should be noted that it underpins our support for HMT's broad approach to the future financial services regulatory regime.

3. The application of the principle of 'same activity, same risk, same regulatory outcome' and technology neutrality

- We are concerned that the government's Consultation seems to envisage that in future, cryptoassets that qualify as existing specified investments, such as tokenised deposits, security tokens and others, should be subject to different rules merely because they rely on cryptographic technology. This is a clear deviation of the principle of "same activity, same risk, same regulatory outcome" that the Consultation claims to uphold. Fundamentally, a deposit, share, bond, unit in a collective investment scheme or any other specified investment should be treated under the existing rules and there should not be any differences regardless of the technological means in which it is created or held. To the extent that DLT carries different operational risks to the risks of existing systems relied on by financial institutions, the way of addressing these risks is through general systems and controls requirements that apply to firms proportionally taking into account the specific use of technology. This principle is reiterated throughout our response.

4. The need for alignment of definitions of cryptoassets in UK regimes and clear exclusions given their broad scope

- We believe that given the broad definition of cryptoassets contained in the Financial Services and Markets Bill it is critical that when specifying cryptoassets as specified investments, HMT includes

relevant exclusions principally to (i) avoid any existing specified investment also qualifying as a cryptoasset and (ii) exclude the infinite number of many representations of value that rely on cryptographically secured systems without creating separate assets (for example, the use of DLT for commercial loyalty programmes, air miles and internal bookkeeping by financial institutions). This is further discussed under Q1, Q2, and Q3 of our response among others.

5. The territorial scope of the regime should be similar to other regulated activities in the UK

- We disagree with the blanket approach of imposing authorisation requirements on a non-UK cryptoasset service provider merely because it deals with a person located in the UK. Such an approach would be inconsistent with the territorial scope in respect of other regulated activities in the UK and it is unclear why such a territorial scope would be required to provide an appropriate level of protection to UK investors/market participants and the UK market more generally. Moreover, we are concerned that, if the test that determines the territorial scope for the UK regulation of cryptoasset activities is extended beyond the test set out in FSMA for regulating traditional financial services activities, this could both limit the ability of UK wholesale market participants to engage and deal with non-UK cryptoasset services providers and damage one of the key strengths of the UK financial services more generally, namely its relative open approach to market access. This principle is further expanded upon under Q7 of our response.

AFME hopes that our response will encourage further analysis and consideration of these foundational principles as the UK continues its work on a future regulatory regime for cryptoassets and digital finance more broadly.

Consultation Questions

Chapter 2 – Definition of Cryptoassets and Legislative Approach

Box 2.B: Questions for respondents

1. Do you agree with HM Treasury's proposal to expand the list of "specified investments" to include cryptoassets? If not, then please specify why.

Yes, AFME members agree in principle that including cryptoassets in the list of 'specified investments' in Part III of the Financial Services and Markets Act ("**FSMA")** 2000's (Regulated Activities) Order 2001 ("**RAO**") is the correct approach as it will also enable to define what are the regulated activities, in turn allowing the FCA to exercise its rulemaking, supervisory and enforcement powers in respect of authorised firms carrying on cryptoasset-related regulated activities. It would also enable the FCA to take action in respect of unauthorised businesses carrying on cryptoasset-related activities in breach of the general prohibition in section 21 of FSMA. However, AFME members have concerns on the scope of the future framework, given the breadth of the definition of 'cryptoasset.' It is critical that HMT is mindful of the differences between different types of assets that could fall within the broad definition of cryptoassets proposed in the Financial Services and Markets Bill ("**FSMB**") and how they are used, establishing clear categories that do not overgeneralise but take account of specific characteristics and risk profiles of different asset classes. We further expand on our concerns about the nuances that should be considered when dealing with 'cryptoassets,' and how the UK's definition is situated in the global context below.

First, we would note our concern that the consultation is not entirely clear as to whether the intention is to create a single additional specified investment called "Cryptoassets" which would be defined in accordance with the definition of cryptoassets stipulated in the FSMB or whether HMT's intention is to create several specified investments encompassing the different types of assets that may qualify within the wider definition of cryptoassets in the FSMB.

In either case, as a breach of the general prohibition[1] can amount to a criminal offence, it is imperative that the scope of which digital assets qualify as cryptoassets within specified investments ("**Regulated Cryptoassets**") is clearly established and defined. The definition of "cryptoassets" in the FSMB and in the consultation is very similar to the definition used in the Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 ("**MLRs**") and it is noted that in that context, relevant guidance from the Joint Money Laundering Steering Group (JMLSG) states that "cryptoassets may be specified investments for the purposes of the [RAO]"[2].

This creates a risk that a Regulated Cryptoasset could also qualify as another specified investment in the RAO, thereby creating unhelpful overlaps that would increase legal uncertainty as to the applicable regulatory framework. More importantly, if other specified investments such as deposits, shares, bonds, units in collective investment schemes and others could qualify as Regulated Cryptoassets this would be contrary to the principle of same risk, same regulatory outcomes and regulation would no longer be technology neutral – in effect, a deposit, share or bond etc would be treated differently merely because it relies on DLT technology during its lifecycle.

Fundamentally, it should not be assumed that something which already qualifies as a specified investment (a "**Traditional Asset**") should be treated differently merely because it has been issued on, represented by, transferred, or held through DLT-based technology. The starting point for any policy development in respect of Traditional Assets that rely on DLT during their lifecycle should be to avoid creating bifurcations in the regulatory framework leading to adverse outcomes where Traditional Assets are subject to different rules as a result of relying on DLT technology during their lifecycle.

By way of illustration, the use of DLT to record a deposit should be considered as a deposit, and as such is in itself already an existing specified investment, subject to relevant existing rules and regulations. The rules that apply to it should be consistent with all other deposits because the fundamental legal rights and obligations that arise for deposits are not affected merely because the firm holding such deposit relies on DLT to maintain its account structure.

Similarly, there are instances where the use of DLT may create register entries (which generally may be regarded as a type of value), but which do not constitute separate investable assets and should therefore not qualify as Regulated Cryptoassets. Examples of this may include ledger entries to record all sorts of things, including electronic signatures, coffee shop gift cards or airline airmiles programmes. In all these cases, the packets of information would involve a type of value that can be transferred via the DLT technology but should not be regulated in itself.

Based on the above, AFME members would highlight the importance that the category of Regulated Cryptoassets is created by excluding certain assets that may otherwise fall within the very broad definition of cryptoassets in the FSMB allowing for a clear perimeter demarcation and avoiding the risk of overlapping rules which trigger the potential classification of assets into multiple categories of specified investments. We believe that at least the following instruments should be excluded from the scope of "Regulated Cryptoassets":

- any cryptoasset that already qualifies as any other specified investment, for example natively issued or tokenised shares or bonds, units in collective investment schemes as well as

[1] https://www.lexisnexis.co.uk/legal/guidance/the-general-prohibition-implications-of-its-breach

[2] See JMLSG guidance at paragraph 22.3 available at: https://www.jmlsg.org.uk/wp-content/uploads/2022/09/JMLSG-Part-II_July-2022.pdf

blockchain-based commercial bank deposits[3], whether account or token based[4], and which can be natively issued or non-native to the blockchain[5];

- any cryptoasset that qualifies as a securitisation position under the securitisation regulation to the extent not already a specified investment;
- any cryptoasset that acts as a register entry and that has no value outside the system of a single or network of providers such as airline miles programmes, rewards points, in game tokens; including tokens that are used solely for the internal bookkeeping records of a financial institution ("**Book Entry Tokens**");
- any cryptoasset that is objectively unique and not fungible with other cryptoassets of its kind, i.e., non fungible tokens ("**NFTs**") that are not used in financial services activities;
- central bank digital currencies; and
- any settlement token used exclusively between participants of a payment system (including blockchain deposits issued by regulated FIs, as mentioned above).

Without prejudice to the above comments, if HMT's intention is to specify several specified investments encompassing the different types of assets that may qualify within the wider definition of cryptoassets in the FSMB, in addition to the exclusions mentioned above, it is critical that HMT is mindful of the differences between different types of assets that could fall within the broad definition of cryptoassets proposed in the FSMB and how they are used, establishing clear categories that do not overgeneralise but take account of specific characteristics and risk profiles of different asset classes (e.g., stablecoins, utility tokens, exchange tokens, etc). Key distinctions to draw include differentiating between public chain 'cryptoassets' with no central administrator or location, and other types of digital assets, as well as where the use of DLT and blockchain is merely for infrastructure/register purposes as outlined above, i.e., where no separate investable digital asset is created. These distinctions are foundational and must come before a general rulemaking process for the functions and activities that could be undertaken using 'cryptoassets' or any underlying DLT infrastructure. As UK regulators implement their general rulemaking powers under FSMA they should keep these distinctions forefront and be cautious to avoid extrapolating risks or technology issues found in certain cryptoassets to broader uses of DLT-based infrastructure.

In keeping with the core design principle of "same risk, same regulatory outcome," the adoption by a financial institution of a blockchain or DLT based internal books and records system should not be subject to additional regulation. The adoption and operation of such system would have been subject to existing regulations governing internal books and records, while the existing supervision and oversight of the financial institution will ensure that such system does not pose additional risks when compared to a traditional books and records system. Book Entry Tokens are not cryptoassets; rather, Book Entry Tokens are the book entries of the financial institution, representing a record of, in the case of cash, the deposit liability of the financial institution has to its customers, and in the case of securities and non-cash assets, such assets the financial institution holds in custody for the benefit of its customers. Book Entry Tokens cannot leave the internal systems of the financial institution, posing no additional risk than book entries in existing, (non DLT) electronic books and records systems in use today.

In addition, banks who may be considering providing cryptoasset-related services are also considering the implications under the future prudential framework, including the standard proposed by the BCBS on the

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[3] See https://www.jpmorgan.com/onyx/content-hub/deposit-tokens.htm

[4] Account based: Traditional deposits held at a depository institution, represented as an account balance on a blockchain-based ledger system. Depository institution at which the account is held is liable to the holder of that account for the account balance.
Token based: Transferable tokens issued by a depository institution on a blockchain that evidence deposit claims for stated amounts against the issuing institution. Depository institution that issued the token is liable to the holder of the token for the fiat amount of the claim evidenced by the token.

[5] Native: Blockchain serves as the primary recordkeeping ledger. Blockchain record keeping treated as the prevailing source of truth over any other ledger in the event of a discrepancy.
Non-native: Blockchain represents the mirroring of an off-chain record keeping ledger. Off-chain record keeping treated as the prevailing source of truth over any other ledger in the event of a discrepancy.

prudential treatment of cryptoassets. We would note that the consultation states that the government's intention is that activities will be regulated, rather than the asset itself, however in that context, it would be a welcome clarification if the scope of regulated activities of cryptoassets subject to this Consultation is confirmed to qualify exclusively as Group 2 cryptoassets.

As regulators consider other issues such as prudential treatment, it is also important to look at the technology and its benefits to reduce the single point of failure risk of settlement times. Regulation has historically been and should remain technologically neutral and should not penalise the use of cryptographically secured systems over existing technology through additional requirements such as an arbitrary infrastructure capital surcharge. The specific risks arising through the use of DLT, or any other technology relied on by financial institutions, should be adequately addressed through general systems and controls requirements that apply to firms proportionally taking into account the specific use of technology – this should not be attached to specific assets.

Further, we would reiterate that a globally agreed taxonomy for the definition of what are referred to as cryptoassets, digital assets, virtual assets, bank-issued tokenised deposits, non-bank crypto issued tokens, or stablecoins, to name but a few, would be highly beneficial. In addition to this, we would reiterate one of our core principles that it will be crucial for HMT to align the UK framework with global taxonomies as they develop. For example, the FCA could expand and align existing guidance on cryptoassets to provide more information regarding which of the UK specified investments each of the type of token would fall into or if not regulated, state that they fall outside the perimeter. We have proposed an initial taxonomy[6] as part of our work with the Global Financial Markets Association (GFMA), including the exclusion of Book Entry Tokens from the scope of the general rule making process, and our views on a potential approach to the classification and understanding of cryptoassets can be found in **Annex 1** of this response.

In addition to the remarks above, AFME members note that as the UK's regulatory framework for cryptoassets evolves, HMT is proposing multiple different definitions for cryptoassets depending on the specific regulatory regime. This creates complexity, challenges and increases the costs of compliance which ultimately would be carried by consumers or users. By way of illustration, the definitions for cryptoassets under the MLRs, the new proposed financial promotions regime, the new proposed stablecoin regime and this regime will broadly cover a similar class of assets but have slightly different scopes. Building workable compliance frameworks for diverging scopes is challenging, costly, and inefficient. More importantly, a breach of any of these frameworks may amount to a criminal offence in the UK. As such, it is imperative that the definitions and scope of these regimes are simplified and ideally aligned.

2. Do you agree with HM Treasury's proposal to leave cryptoassets outside of the definition of a "financial instrument"? If not, then please specify why.

Yes, AFME members are supportive of this approach. The principal effect of not extending the definition of financial instruments to include cryptoassets is that separate rules will apply to cryptoassets under the regulatory framework than those which apply to MiFID financial instruments. AFME members are of the view that this allows flexibility, enabling the FCA to create bespoke rules applicable to Regulated Cryptoassets or categories of Regulated Cryptoassets which differ from existing analogous rules where, and to the extent, appropriate.

However, as set out in our response to Q1 above, due to the breadth of the definition of cryptoassets in the FSMB, without adequate exclusions being in place, the category of Regulated Cryptoassets would factually include certain other specified investments when they are issued or held using DLT (including shares, bonds, etc.). AFME members note that such specified investments do qualify as financial instruments. This further emphasises the need for the exclusions we have suggested set out in our response to Q1.

If there is a lack of legal and regulatory certainty of how the FCA's future bespoke rules apply to cryptoassets, this could negatively impact the development of a robust and clear framework in the UK and, there is a risk of the development of a bifurcated financial system. In this scenario, regulated financial institutions may be

[6] https://www.gfma.org/wp-content/uploads/2022/12/gfma-response-to-fsb-crypto-asset-consult-15-december-2022.pdf

prevented from meaningful participation in the emerging cryptoasset ecosystem, which continues to grow and develop but is dominated by newer entrants and institutions historically operating outside of the regulatory perimeter. This would have a range of negative consequences for all cryptoasset market participants and for the overall stability and development of global capital markets. This makes the development of a level playing field in the UK, supported by the development of clear and robust rules, critical to enable both new entrants as well as existing capital market participants to participate in a robust cryptoasset ecosystem, within an appropriate and clearly defined regulatory perimeter.

AFME members note that as a result of the Edinburgh reforms, HMT, the PRA and FCA will cumulatively retain powers to amend legislation applicable to financial instruments and that at that stage it would be open to these authorities to amend rules applicable to financial instruments, including by creating different regimes in respect of Traditional Assets that qualify as cryptoassets. AFME members would like to re-iterate that such powers should be exercised with caution and that, it should not be assumed that Traditional Assets should be treated differently merely because they have been issued on, represented by, transferred, or held through DLT-based technology. Any policy development in respect of Traditional Assets that rely on DLT during their lifecycle should commence by trying to make minimal changes in an effort to avoid bifurcations in the regulatory framework leading to adverse outcomes because Traditional Assets are subject to different rules as a result of relying on DLT technology during their lifecycle.

3. Do you see any potential challenges or issues with HM Treasury's intention to use the DAR to legislate for certain cryptoasset activities?

No, in principle AFME members are supportive of an activities-based approach that would bring the financial services performed in respect of Regulated Cryptoassets within an appropriate regulatory perimeter. The potential challenges, as noted above, are to create legislation that truly supports the principle of 'same activity, same risk, same regulatory outcome' and creates a level playing field for all market participants.

However, it is crucial when using the DAR for designated activities that parallel legislation which is applicable to other financial instruments is taken into consideration, where relevant, and that similar approaches are adopted where appropriate. For example, when regulating the issuance and offering of cryptoassets, the DAR framework should take into account the position for the offering of financial instruments and, to the extent possible, achieve consistent outcomes in key respects such as trigger points, while drawing appropriate distinctions to reflect the different nature of Regulated Cryptoassets. AFME members support building upon existing regulatory frameworks when using the DAR. We believe this will support the development of a UK framework that is competitive and enables the adoption and scaling-up of innovations in digital finance while also supporting the development of 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.

We understand that the implication of the use of the DAR is that, in respect of relevant designated activities, a person carrying on a designated activity will be obliged to comply with certain requirements specified by HMT and/or the FCA, unless they benefit from an exemption. However, they will not be required to obtain authorisation as a condition to carrying on the activity.

It is not possible to specifically comment on the potential challenges related to the use of DAR to legislate for certain cryptoasset activities without specifically understanding the relevant activities that would be regulated using this framework. The consultation suggests (but is not clear) that HMT is considering the use of the DAR in respect of (i) the offering of cryptoassets which do not meet the definition of a security token offering and (ii) in the call for evidence in the context of DeFi regulation. AFME members are supportive of the use of the DAR in respect of non-authorised token issuers who have to comply with a particular framework. However, issuers should be exempt from the DAR requirements if they engage the services of authorised service providers who can structure their token issuance in accordance with applicable FCA rules. More generally, AFME members note

that to the extent that the DAR framework is used to regulate certain activities, the FCA should have strict enforcement objectives in respect of such framework. With the creation of a regulatory framework, it will be particularly important that the regime is suitable to prevent overseas issuers and offerors who are not complying with the applicable rules from carrying on their activities.

Chapter 3 – Overview of the Current Regulatory Landscape for Cryptoassets

Box 3.A: Questions for Respondents

4. How can the administrative burdens of FSMA authorisation be mitigated for firms which are already MLR-registered and seeking to undertake regulated activities? Where is further clarity required, and what support should be available from UK authorities?

We understand that the question is focused on reducing the administrative burden for any MLR-registered firm seeking authorisation to carry on Regulated Cryptoasset-related regulated activities (rather than other regulated activities). In order to mitigate the administrative burden AFME proposes that the UK regulatory framework creates a transitional regime based on achieving the following principles:

1. The authorisation process should not materially disrupt the ability of firms to continue carrying on existing business.
2. Any additional application or considerations should be proportionate and should not entail a complete review of a firm's activities on the basis that under the MLRs, the threshold for registration was that the firm including officers must be fit and proper to operate their crypto activities. We note the Consultation outlines that the FCA will endeavour to avoid duplicative information requests to businesses which is welcome.
3. To the extent that there are any deficiencies identified, firms should be allowed to remediate within given timeframes.
4. Additional specific rules, e.g., SMCR and other rules that will have a high compliance burden, should be introduced through a phased-in timeline.

Additionally, members are of the view that with the creation of a regulatory framework under FSMA in respect of cryptoasset activities, the registration requirement under the MLRs should be reconsidered and ideally removed so that compliance with anti-money laundering rules for cryptoasset services providers is similar to the position of credit institutions, investment firms and other "relevant persons" defined in the MLRs.

5. Is the delineation and interaction between the regime for fiat backed stablecoins (phase 1) and the broader cryptoassets regime (phase 2) clear? If not, then please explain why.

AFME believes that the focus of both phases is broadly clear, however we believe more clarity is needed on (i) what specific assets and functions are within the scope of the first phase and the second phase and (ii) how the second phase would interact with the first phase.

In its stablecoin legislation response, HMT stated that the stablecoin framework (Phase I) would be achieved through amendments to, among others, the Electronic Money Regulations 2011 and the Payment Services Regulations 2017, which is reiterated in this Consultation. HMT further suggested that the provision of payment activities and issuance of in-scope stablecoins would be subject to these regimes.

From this, it would seem that phase 1 will create a regime for the issuance, payment, and custody of certain fiat backed stablecoins and their use for payments while the trading and exchange of such stablecoins would be subject to the regime being created under phase 2.

It is important to clearly delineate what constitutes an in-scope ‘stablecoin’ for the purposes of phase 1 in respect of two aspects:

- It will be crucial that in instances where DLT is merely a means for recording ledger entries, ownership and transfers of a Traditional Asset are not treated as a separate stablecoin. For example, blockchain based deposits or deposit tokens, tokenised bonds, tokenised shares, and tokenised units in collective investment schemes (which should continue to be subject to the applicable regulatory framework) are not treated as stablecoins.
- It will also be imperative that the category of stablecoins is clearly delineated taking into account the scope of existing specified investments. By way of illustration, there should be clarity that a fiat backed stablecoin does not qualify as a collective investment scheme or as an instrument creating or acknowledging indebtedness. In that context, AFME members would highlight that specific criteria are required which enable stablecoins to be distinguished from Traditional Assets. HMT should avoid soft factual criteria that might change over time (for example, that the stablecoin is "used as a means of payment") unless there are prescribed circumstances stating when this test is met. This is particularly important in respect of stablecoins which at the time of issuance may not be widely adopted and so initially are not used as a means of payment, but this might change relatively quickly.

More generally, as neither the payment services framework nor the electronic money framework requires FSMA authorisation, but trigger separate authorisation requirements, it is currently unclear how HMT sees both regimes interacting[7]. By way of example, assuming that stablecoins are deemed to be a means of payment (and PSPs are allowed to facilitate payments in such stablecoins), how would that activity be categorised under the phase 2 framework?

As currently set out, and assuming that stablecoins would also qualify as Regulated Cryptoassets, there is a significant risk that a Payment Services Provider (PSP) would be subject to two incompatible regimes when facilitating payments in stablecoins - the payment services framework and the regime in phase 2 in respect of Regulated Cryptoassets. That is because once stablecoins qualify as Regulated Cryptoassets, facilitating a payment would arguably fall within the scope of one of dealing as agent or principal or arranging transactions in such stablecoins (similar to articles 14, 21 or 25 RAO) and holding stablecoins for a client could qualify as safeguarding and administering (similar to the activity in article 40 RAO).

6. Does the phased approach that the UK is proposing create any potential challenges for market participants? If so, then please explain why.

Yes, this could create potential challenges. While the proposed phased approach may enable staggered implementation, it is important to recognise that other regulatory frameworks for cryptoassets are currently already developing across many jurisdictions. A phased implementation of the regime for cryptoassets is unhelpful for the industry and creates market uncertainty. Particular challenges for market participants include:

- global fragmentation as other jurisdictions develop their frameworks;
- potential unintended gaps;
- legal and regulatory uncertainty as the phases for stablecoins and cryptoassets are not working to the same timelines;
- ability for arbitrage; and
- unaligned definitions of cryptoassets.

For the UK to retain its competitive position and to achieve the status of a crypto hub it is important to have clarity on the regulatory framework as soon as possible. Clarity on the regulatory framework would enable industry to plan and develop products that are compatible with that framework.

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[7] AFME members note that the result of Edinburgh reforms may include amending the Electronic Money and Payment Services regimes.

Chapter 4 – Crypto Activities

Box 4.A: Questions for Respondents

7. Do you agree with the proposed territorial scope of the regime? If not, then please explain why and what alternative you would suggest.

No. AFME disagrees with the proposed territorial scope for regulated activities relevant to Regulated Cryptoassets. HMT's general proposal to require FSMA-authorisation where relevant cryptoasset activities are carried out "*in or to*" the UK represents a significant departure from the way the territorial scope for regulated activities involving Traditional Assets is determined. More importantly, the policy justification for such a significant change to the UK regulatory regime is unclear.

For example, as UK persons can (and frequently do) easily access Traditional Assets though, and related services provided by, overseas companies without such overseas companies in all cases being subject to the general prohibition in Section 19 of FSMA, we do not see any justification for such overseas companies becoming subject to the general prohibition (and thus be FSMA authorised or exempt) for similar activities and services conducted with UK persons solely because they involve Regulated Cryptoassets. Moreover, overseas providers of financial services and other non-UK market participants regularly engage in activities with, and provide services to, UK persons in connection with Traditional Assets without, as is suggested in the consultation, the current regulatory perimeter for those products allowing those overseas providers and non-UK market participants to "*evade UK regulations but still service UK customers*".

AFME would propose that general territorial scope of the regime for regulated activities involving Regulated Cryptoassets remains the same as is currently set out in FSMA for similarly regulated activities involving Regulated Cryptoassets – i.e. that such activities will be regulated, and thus subject to the general prohibition in Section 19 of FSMA (unless the relevant person is authorised or exempt), where the activities are carried out by way of business "*in*" the UK" (and not "*in or to*" the UK). This principle allows for an assessment of the characteristic performance of the relevant activity combined with relevant exclusions to determine the specific territorial scope of each individual regulated activity.

We note that this would not mean, as is referenced in the consultation, that when an overseas person provides products and services to, or otherwise transacts with, UK persons, the involvement of the UK person (i.e. as client/counterparty to the overseas person) would be irrelevant for determining the location in which a relevant activity is carried out in all circumstances (i.e. there would still be circumstances in which overseas persons will be subject to the general prohibition in Section 19 of FSMA (and thus will need be FSMA-authorised or exempt) when conducting activities with UK persons). For example, when an overseas person deals in Traditional Assets for a client located in the UK, the view commonly taken is that such an activity would be within the territorial scope of the UK regulatory perimeter unless an exclusion is available or there are other factors, such as the method of communication used, which would suggest the location of the acceptance of the order to deal or the location of execution of the relevant transaction was otherwise entirely outside of the UK.

Moreover, even where an overseas person is not subject to the general prohibition in Section 19 of FSMA (and thus be required to be FSMA-authorised or exempt), it will still need to comply with the financial promotion restriction in Section 21 of FSMA, when it communicates a financial promotion to the UK person, such that this should afford UK consumers appropriate protections to ensure they are equipped with the information they need to make informed investment decisions.

Additionally, to the extent HMT is concerned that there is a specific cryptoassets activity that should require an overseas person to be subject to the general prohibition in Section 19 of FSMA (and thus FSMA-authorised or exempt) to conduct such activity with or for UK consumers, this could be clarified in the specific wording in of the relevant regulated activity or it could be reflected in section 418.

Overseas persons exclusion

We note that the overseas persons exclusion ("**OPE**") in Article 72 of the RAO remains an important feature of the UK regulatory regime, in particular for wholesale markets, and the exclusion should be retained for regulated activities in respect of Regulated Cryptoassets. However, if HMT determines to expand the territorial scope of FSMA-authorisation requirements in Section 19 of FSMA to apply to relevant activities carried out both "*in or to*" the UK, the OPE should similarly be expanded to cover additional activities in their entirety, where they involve Regulated Cryptoassets, such as safeguarding and/or administration (for which the OPE is not currently relevant) and arranging (for the OPE generally is only relevant for activities with/through affiliates of the overseas persons who are authorised and, not for example, activities conducted with or for unaffiliated wholesale market participants) see additional clarification in the Table provided below in response to Question 8.

We believe a key benefit of the OPE is that it not only allows a wide range of non-UK based participants to engage in the UK markets, but in the long term this open approach often result in international firms establishing a permanent presence in the UK as the volume of their UK business grows.

Additionally, the OPE also provides legal certainty to non-UK based customers that, when they obtain services from UK-authorised cryptoasset services providers, there is no risk that the non-UK market participant's arrangements with the UK provider breach the general prohibition in Section 19 of FSMA. In other words, the OPE, if appropriately adapted, should allow UK cryptoasset services providers to export their cryptoasset services across the world in a manner consistent with the existing regime that applies to Traditional Assets. For example, UK-based cryptoasset services providers should be given certainty that when they deal in cryptoassets with an overseas liquidity provider there is a clear regulatory framework that facilitates this.

Reverse solicitation

AFME members in principle support clarity that overseas firms that do not solicit specific cryptoasset activities/services from UK customers would not be required to be FSMA-authorised to perform such cryptoasset activities. However, we note the concept of reverse solicitation does not currently form part of the existing UK regulatory perimeter and thus the drafting of any definition of reverse solicitation should be subject to robust industry consultation. Additionally, we do not believe that such clarity would be an adequate alternative, at least for wholesale markets, to adopting the approach to territorial scope we have proposed above. In particular, it is unclear how a reverse solicitation framework would operate with the financial promotions regime in the UK which is not limited to the initial communication. Financial promotions can be communicated throughout the lifecycle of the relationship with a client.

Equivalence regime for authorised cryptoasset service providers

While AFME does not believe an equivalence regime would mitigate the risks of not appropriately defining the territorial scope of any cryptoasset regime, we would in principle support the use of an equivalence regime for authorised overseas firms where this would allow mutual recognition of other jurisdictions' frameworks based on outcomes. We would appreciate clarity on how an equivalence regime would work in practice. However, any of these regimes would have to be considered in light of other policy proposals, mainly the extension of the financial promotions restriction to include "qualified cryptoassets".

As global regulatory regimes are developed, it will be crucial for the UK to continue to work with the global regulatory community in order to mitigate fragmentation risks due to variations in jurisdiction-specific regulations and different implementation timelines.

8. Do you agree with the list of economic activities the government is proposing to bring within the regulatory perimeter?

Yes, in principle we agree with the list of activities. However, once these activities are within the perimeter and the FCA utilises its rule making powers to create relevant requirements we would emphasise again the importance of the application of the 'same activity, same risk, same regulatory outcome' principle as the foundation of an activities-based framework.

However, as noted in our response to question 1 above, there is a lack of clarity of what falls within the scope of cryptoassets. Clarity should be provided to indicate the provision of the above activities as relates to digital securities should be governed by existing rules. The activities above should encompass only 'other cryptoassets' not captured by the other categories of specified investments and that are deemed to be included in the regulatory perimeter.

To the extent that the Consultation intends to include specified investments including securities, AFME members propose to wait for the outcome of the UK FMI Sandbox before regulating clearing and settlement activities (we assume related to pure cryptoassets) (outlined in paragraphs 12.4-12.8). Even though it is appreciated that flexibility is maintained in early stages, we would suggest adding those essential post-trade activities to the proposed scope of activities (perhaps in a phase to be confirmed) and provide guidance (in or outside the scope of the UK FMI Sandbox) on how they should be conducted**.**

In relation to the inclusion of specific activities, we have the following comments:

ACTIVITY CATEGORY	**SUB-ACTIVITIES**	**COMMENTS**
Issuance activities	Admitting a cryptoasset to a cryptoasset trading venue	Members note that these issuance activities in respect of securities do not constitute regulated activities under the RAO and are instead governed by a combination of listing rules and requirements under the Prospectus Regulation. Members are aware that as part of the wholesale markets reform and the Edinburgh reforms both the UK listing regime and the Prospectus Regime are being amended. Ultimately, members are of the view that these activities in respect of Regulated Cryptoassets should have an analogous framework to the one that applies to transferable securities with relevant modifications. As such, members suggest that these activities should not be specified as regulated activities under the RAO and could instead be subject to the DAR regime on the assumption that the admission to listing and offer to the public of transferable securities will in due course also be governed under the DAR regime.
	Making a public offer of a cryptoasset	
Exchange activities	Operating a cryptoasset trading venue	Members note that under the current MLRs, cryptoasset exchanges are deemed to be arranging or making arrangements with a view to the exchange of cryptoassets for money or for other cryptoassets. As such, it is unclear what the proposed description and scope of operating a cryptoasset trading venue would entail. If the intention is to bring this activity within the regulatory perimeter by following the approach for MTFs or OTFs (i.e., to introduce a new article 25DB to the RAO) members would note that this would be inconsistent with the approach in respect of Traditional Assets where the venues that admit to listing are investment exchanges (also referred to as Regulated Markets). Therefore, due consideration should be given as to whether or not it would be more appropriate to allow exchanges that will admit cryptoassets to trading to qualify as a new type of regulated market and subject to the recognition regime in Part XVIII of FSMA.
Investment and risk	Dealing in cryptoassets	While the consultation document states that the analogous activity for dealing as principal would be article 14 RAO (Dealing in investments as principal) the

management activities	as principal or agent	consultation does not specify the scope of this activity and, in particular, whether the exclusion in article 15 or the exclusion in article 16 of the RAO is intended to apply. This is important because these exclusions determine the scope of the activity. AFME members are of the view that dealing in cryptoassets should be more analogous to the position in respect of transferable securities and so would propose that the scope of article 14 in respect of cryptoassets is subject to the exclusion in article 15. Additionally, issuers of cryptoassets who are subject to the rules in respect of the issuance activities set out above should benefit from the equivalent to article 18 of the RAO. In respect of the activity of dealing as principal and dealing as agent, it will be imperative to consider what amounts to buying or selling and so the definitions in article 3 of the RAO must be extended to include exchanging cryptoassets for valuable consideration, which may include another cryptoasset. Moreover, as is currently the case for article 14 RAO, the OPE should continue to be available for this activity when it involves Regulated Cryptoassets.
	Arranging (bringing about) deals in cryptoassets Making arrangements with a view to transactions in cryptoassets	Members agree that the activities in article 25(1) and (2) of the RAO could be expanded to include arrangements in respect of the exchange of Regulated Cryptoassets. However, depending on the approach HMT takes to the territorial scope of these activities for the purpose of the general prohibition in Section 19 FSMA, at least where such activities related to Regulated Cryptoassets, the OPE should also be expanded to cover these activities in their entirety (and not just where conducted with or through authorised or exempt persons), at least where such activities relate to Regulated Cryptoassets.
Lending borrowing and leverage activities	Operating a cryptoasset lending platform	Members are of the view that it is not necessary to create a separate regulated activity in respect of this activity. This is on the basis that a title transfer "loan" of a cryptoasset would typically qualify as selling the cryptoasset outright with an obligation from the purchaser to re-sell the asset in due course. This is analogous to the treatment of securities lending transactions. As such, a firm who intermediates cryptoasset loans would be arranging exchanges of cryptoassets or dealing in cryptoassets as agent. To the extent that the FCA considers that the arrangement of cryptoasset lending should be subject to certain additional requirements these could be specified under FCA rules.
Safeguarding and/or administration (custody) activities	Safeguarding or safeguarding and administering (or arranging the same) a cryptoasset other than a fiat backed stablecoin and/or	We note that notwithstanding the purported focus on same activity, same approach, the consultation suggests that there should be consistency with the scope of the custodian wallet provider in the MLRs such that not only safeguarding and administration of cryptoassets, but also just safeguarding, should be copied into new regulation and particularly that this may be extended to cryptoassets that qualify as securities. While AFME members agree that the broader wording may be justified in the context of preventing money laundering risks, we are concerned with the proposal of a new regulated activity which goes beyond the parameters in article 40 of the RAO. It is noted that "the government considers those arrangements [i.e., safeguarding] to pose the same risks of harm as firms that safeguard and administer cryptoassets." While we understand that there are concerns, we believe this may have the unintended result of creating an unwelcome precedent for all securities within article 40, particularly in light of market trends which are heading toward digitalisation of securities. It could also create inconsistency if holders of cryptoassets

	means of access to the cryptoasset (custody)	which are securities would be subject to a different test for custody than holders of other securities. Members also note the statement that "liability standards for custodians are also under consideration … The government is exploring taking a proportionate approach which may not impose full, uncapped liability on the custodian in the event of a malfunction or hack that was not within the custodian's control." This suggests that the UK government is minded to follow an approach that could inadvertently create inconsistency with the current approach for custody of Traditional Assets. AFME members would strongly question the rationale for this and whether custodians should be required to carry the additional risks if the concern that HMT is attempting to address is the perceived riskier nature of cryptoassets. More importantly, it should be noted that custodians provide services also to sophisticated market participants. Where such liability is imposed, there is no ability to agree on liability standards through contractual negotiation stifling the potential for market expansion. Moreover, depending on the approach HMT takes to the territorial scope of these activities for the purpose of the general prohibition in Section 19 of FSMA, the OPE should also be expanded to cover these activities, at least where such activities related to Regulated Cryptoassets.
Portfolio Management	Managing a cryptoasset as part of a portfolio	Members are of the view that portfolio management of cryptoassets should be included as a regulated activity by expanding the scope of article 37 of the RAO. This is on the basis that other regimes (e.g., MiCA) include this activity and its inclusion would enable the industry to provide this service on a level playing field and with harmonised rules.

9. Do you agree with the prioritisation of cryptoasset activities for regulation in phase 2 and future phases?

AFME members have a few key concerns with the prioritisation – namely as set out under Q6 that a staggered implementation is not ideal as it may make it difficult for market participants to plan and start building the necessary ecosystems. Our specific concerns on prioritisation including potential global fragmentation, differing approaches to fiat-backed stablecoins and electronic money, lack of guidance on how market participants should apply existing regulation in the interim, as well as the later phasing for 'pure cryptoassets.'

From the consultation it appears that, with exception of custody of fiat-backed stablecoins, phase 2 would create the regulatory framework for the main exchange and investment activities. In principle, AFME members support this approach. However, it is important to note that due to fragmentation of regulatory frameworks across jurisdictions and the status of MiCA, many cryptoasset exchanges may decide not to establish their operations in the UK. In order to ensure continued access to liquidity for the UK market, the regime for dealing in cryptoassets as a principal or agent or facilitating access to underlying customers onto internationally active exchanges will become very important. As such, within phase 2 HMT (and in particular the FCA) may wish to prioritise the position in respect of Cryptoasset services providers that execute orders for clients on non-UK trading venues.

It is noted that for fiat-backed stablecoins HMT is proposing to make amendments to the RAO so as to include the custody of fiat-backed stablecoins. AFME members would note that this approach would not be consistent with the position of safeguarding electronic money (e-money) where providers can hold electronic money for others without triggering any licensing requirement.

There is already a significant amount of work being undertaken by market participants in relation to security tokens, with new business models being developed. A clearly defined regulatory framework is critical for this exercise to give market participants certainty so it would be advisable to prioritise work on this regime for digital

securities. It would also be helpful if guidance could be provided to give clarity on how the existing regulation apply in the meantime (e.g., through the process of guidance in the FCA's Perimeter Guidance Manuel (PERG) or similar). This would support new market entrants in achieving compliance with all related regulatory regimes (e.g., corporate governance, data protection, operational resilience etc), which in turn will strengthen market security and support the UK's ambition to further develop the digital sector. For this purpose, it will be critical to have clear definitions to ensure there is clear demarcation between security tokens and other cryptoassets as set out in our response to question 1.

Lastly, it is noted that validation and governance activities, which we assume refer to pure cryptoassets, are scheduled for future phases. Given that those activities are core to the effective operation and risk management of a network, it is proposed to define a timeframe for this and potentially move this higher in the priority list to avoid undue delay in the implementation of a UK cryptoasset regime.

10. Do you agree with the assessment of the challenges and risks associated with vertically integrated business models? Should any additional challenges be considered?

Yes, AFME agrees that there are important challenges and risk associated with vertically integrated business models. This includes the inappropriate comingling of activities that may exacerbate and amplify risks. We agree with the principle that a regulated entity that carries on multiple regulated activities should be subject to the rules that apply in respect of each such activity. The risks that arise in this respect could be managed by organisational information barriers and systems and controls mechanisms that so far have not applied to cryptoasset service providers. We note that in paragraph 4.10, the Consultation mentions that further consideration will be given to risks of combined activities and controls thereon but does not state any timing or direction. Given that it will be very difficult to change or unwind integrated business models once they are put in place, we would suggest that the FCA provide initial guidance for the appropriate, functional, separation of activities, notably the separation of the custody function from trading and other similar market activities. Here again, the adage of 'same activity, same risk, same regulatory outcome' should also prevail. In any case, it should be clearly prescribed that there needs to be functional and operational segregation between the distinct functions performed by a vertically integrated business model, and adequate disclosures should be made to avoid conflicts of interest and misuse.

We note that at paragraph 4.12 the Consultation refers to traditional finance market participants. If cryptoassets are deemed to include Traditional Assets, we disagree with the assessment in paragraph 4.12 that a solution to these risks would be to minimise reporting requirements. Lack of compliance with existing reporting requirements for regulated financial services is not in line with the principle of, 'same activity, same risk, same regulatory outcome' and may further decrease transparency into cryptoasset markets. It should also be considered whether it is appropriate to allow supervisory authorities direct access to activities on such platforms (e.g., through supervisory nodes).

We would also stress the importance of strong supervision. It is crucial for there to be comprehensive education amongst supervisory agencies in order to ensure appropriate oversight and accountability. This will, as set out under Q9 support new market entrants in achieving compliance with all related regulatory regimes (e.g., corporate governance, data protection, operational resilience etc.), which in turn will strengthen market security and support the UK's ambition to further develop the digital sector.

In terms of additional risks, it should be considered what the impacts are of such entities issuing their own digital settlement assets, and whether this creates contagion risks, or even "wrong way risk" (if the future exposure to a specific counterparty is expected to be high when the counterparty's probability of a default is also high). 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 cryptoasset 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.

We would also support regulatory consideration of the additional following principles relating to vertically integrated business models.

Operational and legal separation

AFME believes that the ruleset for cryptoassets should be outcomes-based in order to remain future proof. We note, in this respect, that operational and technical separation of distinct functions is desirable in line with today's requirements for regulated financial institutions. Legally mandated segregation may not be needed depending on how the market develops provided that appropriate functional and operational segregation exist in line with current rules for financial intermediaries.

Mandated disclosure of significant conflicts of interests to regulators

AFME believes that mandated disclosure of significant conflicts of interests to regulators is crucial to mitigate risk and protect consumers. We support the design of a cryptoasset 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.

Functions being performed (or not performed) in the same legal entity as other functions relating to cryptoassets

We support the approach set out by HMT in paragraph 4.10 of the Consultation. We believe this is a balanced approach to the complex risks and structures and the varying levels of legal segregation that may be required. AFME members believe that the "same activity, same risk, same regulatory outcome" principle should apply and that the same principle as for traditional activities should also apply to cryptoasset-related activities.

11. Are there any commodity-linked tokens which you consider would not be in scope of existing regulatory frameworks?

Due to inexistent regulatory frameworks across jurisdictions, a commodity-linked token may be structured using different legal methods and may overlap with the concept of fiat backed stablecoins (which the government intends to regulate in Phase 1).

Additionally, there are good arguments supporting a view that not all commodity-linked tokens and fiat-backed stablecoins should qualify as collective investment schemes ("**CISs**") or as alternative investment funds ("**AIFs**"). However, this is currently unclear, particularly where the reserve/reference assets are administered as a whole and (i) the token grants token holders any form of right in respect of the reserve or reference assets or (ii) where the token's value is determined by reference to the performance of the reserve assets. This is due to the broad definition of CISs and AIFs in the UK. In order to develop the use of commodity-linked tokens and fiat-backed stablecoins, it is of utmost importance to create a clear regulatory framework which enables market participants to identify when an commodity-linked token is subject to the Regulated Cryptoasset regime and when it is subject to the regulatory regime for collective investments.

That said, fundamentally, the regulatory regime for collective investment is not adequate to regulate commodity-linked tokens, particularly when other jurisdictions are developing their own asset-referenced token frameworks. By way of illustration, the EU's Markets in Cryptoassets Regulation envisages the category of Asset

Referenced Tokens (ARTs) which could qualify as commodity-linked tokens under HMT's definition. If in the UK, ARTs are treated as CISs or AIFs, UK cryptoasset service providers would not be allowed to carry on their activities in respect of these assets. More importantly, the marketing of these assets would have to comply (to the extent possible) with fund marketing regimes. Which would factually not be possible if the issuer is not in the UK and takes the view that they are already regulated under MiCA.

Additionally, AFME members would note that treating commodity-linked tokens as CISs or AIFs is not a satisfactory outcome even within the UK. This is primarily because the regimes for collective investment (CIS and AIF) have strict requirements in respect of (i) marketing of these tokens and (ii) for CIS/AIFs that can be marketed to individuals there are strict requirements that investments must be diversified. As such these regimes would render it impossible to create commodity-linked tokens.

For illustration we set out some of the restrictions applicable to CISs/ AIFs in **Annex 2**. As can be seen there, while some collective investment structures may allow the investment of part of the fund property in real estate or precious metals, there are also several restrictions.

12. Do you agree that so-called algorithmic stablecoins and crypto backed tokens should be regulated in the same way as unbacked cryptoassets?

Yes, we agree with the HMT approach and in our GFMA taxonomy[8], (see **Annex 1**) our working understanding of algorithmic asset also notes that there is no link to an underlying asset. Given that, we support HMT's approach.

13. Is the proposed treatment of NFTs and utility tokens clear? If not, please explain where further guidance would be helpful.

No, the proposed treatment of NFTs is unclear. The consultation states: (emphasis added)

"*NFTs would have the potential to be in included in the future regulatory perimeter if they were used in one of the activities in Table 4A. It then states that if an NFT or utility token is not used in such a way, it would not fall into scope of financial services regulation unless – as a result of the particular structure and characteristics of the NFT or utility token –* ***it constitutes a specified investment and the activities carried on in relation to the token constitute regulated activities*** *that fall within the existing perimeter.*"

It remains unclear in this context when an NFT is deemed to qualify as a specified investment. For example, would an exchange trading NFTs be in scope or out of scope of the perimeter? As trading is an activity in Table 4a, so the question is whether NFTs are in scope or not.

AFME members would propose a clear test as to when NFTs should not be treated as 'Regulated Cryptoassets' under the UK framework. In this context it is important to note that an NFT is merely non fungible within the relevant blockchain in which it was created. Technologically, the NFT is unique. However, there is nothing preventing issuers from creating a series of unique NFTs which have between them fungible rights.[9] As such, a technology-agnostic test would be to consider whether an NFT is truly and objectively unique (and thus excluded as set out in our response under Q1) or whether it is fungible with other NFTs issued in its series. Indicators of a unique NFT would include (but may not be limited to) individual pricing for the particular NFT (as opposed to the series); whether the NFT is used in a closed loop or in the open market, etc. For completeness, AFME members would note that NFTs can be fractionalised. For example, by splitting entitlements of the NFT into particular pixels within an artwork or by creating a fractional entitlement to the whole. The test proposed would apply also in this context. To the extent that fractional entitlements of a unique artwork are fungible with each other, they

[8] https://www.gfma.org/wp-content/uploads/2022/12/gfma-response-to-fsb-crypto-asset-consult-15-december-2022.pdf

[9] A real-world analogy to this would be cash or bearer bonds with individual serial numbers. While each bill/ bond has a unique identifier, they are still fungible.

may qualify as individual cryptoassets (if used for a financial services activity) whereas if the fractional NFT is linked to specific pixels within the artwork, this may still qualify as a non-fungible asset.

Chapter 5 – Regulatory Outcomes for Cryptoasset Issuance and Disclosures

Box 5.A: Questions for Respondents

14. Do you agree with the proposed regulatory trigger points – admission (or seeking admission) of a cryptoasset to a UK cryptoasset trading venue or making a public offer of cryptoassets?

Yes, AFME is supportive of the proposed regulatory trigger points and their aim to achieve the high-level regulatory outcomes set out in paragraph 5.5 of the Consultation. We believe that a clear delineation of the regulatory perimeter is important to ensure a level playing field and support the principle of, 'same activity, same risk, same regulatory outcome.'

In this context, AFME members would highlight the importance of creating consistency between the admission and seeking admission and making a public offer in respect of transferable securities and Regulated Cryptoassets. In particular, relevant exemptions that apply to the definition of making a public offer should also be available in respect of the issuance of cryptoassets.

Additionally, it is important to recognise that several thousands of tokens are currently being traded on cryptoasset exchanges in the UK. It would be very disruptive if crypto exchanges were required to comply with the admission requirements retrospectively. As such, any requirements in respect of admission of a cryptoasset should be forward looking and should not apply in respect of cryptoassets that are already being traded when the regime comes into force.

15. Do you agree with the proposal for trading venues to be responsible for defining the detailed content requirements for admission and disclosure documents, as well as performing due diligence on the entity admitting the cryptoasset? If not, then what alternative would you suggest?

AFME primarily represents a broad array of pan-EU global and regional banks. As the above would largely impact trading venues it is out of scope for AFME members, however, we would note that by allowing different trading venues to determine their own content requirement this will create market inconsistencies and may result in fragmentation.

Separately, it should be noted that by creating burdensome requirements such as imposing liability on the trading venue in respect of the content requirements or requiring the trading venue to take on the responsibilities of the issuer, this would disincentivise the establishment of venues in the UK and instead operate via intermediating brokers.

16. Do you agree with the options HM Treasury is considering for liability of admission disclosure documents?

Yes, AFME is supportive of the proposed approach, but would also encourage, as noted in Table 5.a of the Consultation that it will be important to align liability requirements with prudential treatment. This point is further discussed in our response to Q1.

17. Do you agree with the proposed necessary information test for cryptoasset admission disclosure documents?

AFME is supportive of the proposal and the outcome sought by the necessary information test for cryptoasset admission disclosure documents. However, AFME members note the statement in paragraph 5.12 of the Consultation that "public offers of cryptoassets which are deemed to be security token offerings which were less than the de minimis monetary threshold in the reformed regime would be exempt. Those that were larger would need to go through a public offer platform (or a Regulated Market or a primary MTF) and would not require a prospectus; instead, due diligence would be done via the platform according to the platform's rules." AFME members strongly oppose this approach as it is creating a different regulatory treatment for security token

offerings than that which applies for securities. This approach is not consistent with the principle of 'same risk, same regulatory outcome'. Fundamentally, security tokens are securities and should therefore be treated consistently with securities. The creation of alternative regimes merely because a security uses DLT instead of a centralised electronic system leads to flawed regulatory outcomes. More importantly, in the current legislative framework this would not be permissible.

18. Do you consider that the intended reform of the prospectus regime in the Public Offers and Admission to Trading Regime would be sufficient and capable of accommodating public offers of cryptoassets?

We believe the intended reform may present challenges for trading venues and may result in an unlevel playing field. In AFME members' view it is important to create consistent frameworks for similar activities. As such, we are of the view that, to the extent possible, the framework for admitting and offering securities should be aligned with the framework for admitting and offering cryptoassets. Imposing additional liabilities on the trading venue may create an unlevel playing field and make the UK less competitive compared to overseas venues.

Chapter 6 – Regulatory Outcomes for Operating a Cryptoasset Trading Venue

Box 6.A: Questions for Respondents

19. Do you agree with the proposal to use existing RAO activities covering the operation of trading venues (including the operation of an MTF) as a basis for the cryptoasset trading venue regime?

Yes, AFME agrees with the proposal to use existing RAO activities covering the operation of trading venues as a basis for the cryptoasset trading venue regime. However, kindly refer to our response in question 8 where we set out that if it is intended to impose liability on trading venues and make them responsible for admission to listing of cryptoassets it should be considered whether the regime in Part XVIII of FSMA would be more appropriate.

20. Do you have views on the key elements of the proposed cryptoassets trading regime including prudential, conduct, operational resilience and reporting requirements?

We are supportive of cryptoassets markets being subject to prudential rules and other requirements, including, but not limited to, consumer protection, operational resilience, and data reporting. Our key view is that in the principle of “same activity, same risk, same regulatory outcome,” the cryptoassets trading regime should have the same standards and requirements as analogous traditional activity.

Chapter 7 – Regulatory Outcomes for Cryptoasset Intermediation Activities
Box 7.A: Questions for Respondents

21. Do you agree with HM Treasury's proposed approach to use the MiFID derived rules applying to existing regulated activities as the basis of a regime for cryptoasset intermediation activities?

Yes, AFME is supportive of the high-level regulatory outcomes set out by HMT in paragraph 7.4 of the Consultation. We also support the proposed approach to use the MiFID-derived rules as a basis of a regime for cryptoasset intermediation activities.

22. Do you have views on the key elements of the proposed cryptoassets market intermediation regime, including prudential, conduct, operational resilience and reporting requirements?

Further to our response to Q20 in the principle of “same activity, same risk, same regulatory outcome,” the cryptoassets market intermediation regime should have the same standards and requirements as analogous traditional activity. However, regulation should consider the fractured nature of the cryptoassets marketplace, which may pose unique challenges to intermediation that is not present in traditional finance.

Chapter 8 – Regulatory Outcomes for Cryptoasset Custody

Box 8.A: Questions for Respondents

23. Do you agree with HM Treasury's proposal to apply and adapt existing frameworks for traditional finance custodians under Article 40 of the RAO for cryptoasset custody activities?

AFME agrees with the proposal to leverage the existing framework for custodians, as it provides a solid basis to build on, ensures a level playing field, and is in line with the 'same activity, same risk, same regulatory outcome' principle. However, AFME members are fundamentally opposed to the creation of a different custodial framework in respect of cryptoassets that qualify as securities merely because the security happens to have been created using DLT. Security tokens should remain within the existing regime. This can easily be achieved by clarifying that the scope of Regulated Cryptoassets excludes other types of specified investments (see our response to Q1).

More generally, and in respect of other types of tokens, members are of the view that the starting principle should be to try and apply the existing rules (in CASS) with no modifications where possible. In particular, it seems disproportionate that custodians of cryptoassets have additional liability for events outside of their control, (e.g., where losses are caused by network hacks, errors in the protocol underlying the cryptoassets, or other similar events.) In this respect, we welcome the proportionate approach suggested in paragraph 8.5 of the Consultation but need more detail to properly analyse the consequences thereof, also in light of the stated outcome in paragraph 8.7 for custodians to have clear processes for redress in the event that cryptoassets held in custody are lost. It is important to recognise that overly broad liability for custodians may risk driving consumers towards unregulated solutions or self-custody, ultimately putting them at greater risk of loss, and reducing the ability for authorities to monitor and mitigate financial crime.

24. Do you have views on the key elements of the proposed cryptoassets custody regime, including prudential, conduct and operational resilience requirements?

As set out in Q23 above, AFME is supportive of HMT's approach to base the applicable framework for custodians of cryptoassets on the existing regime that applies to the custody of 'safe custody assets'.

With respect to cryptoasset custody, investor protection requires a solution that meets the standards of the securities and other asset markets while addressing the identified risks of this novel asset class. The following principles and accompanying implementation examples, many of which are noted in HMT's proposal, should serve as the foundation of a cryptoasset custodial regime:

Asset Segregation & Bankruptcy Remoteness: Client assets should be segregated from firm/principal assets.

- Clients should be given the option of comingling client assets within a wallet structure but it should not be possible to comingle client and firm assets within the same wallet.
- Custody services should be distinct from other services.
- Rehypothecation should not be permitted Rehypothecation should not be permitted (unless explicitly agreed with the client in advance – e.g. in prime brokerage contractual agreements with hedge funds).
- Client cryptoassets should not form part of the bankruptcy estate of the custodian.

Recordkeeping: The custodian should adhere to regulatory requirements and best practices for client asset safety and recordkeeping.

- Cryptoassets should be clearly accounted for separately on books and records as belonging to the client, segregated from proprietary assets and assets of other clients.

Security & Technology Standards: Security should be central to the design architecture and operations of technical infrastructure.

- Custodians should not share the control of the private key material with clients or at least exclusively maintain sufficient key material to ensure that no transactions can be processed without the custodian's consent.
- Private keys should be protected through their lifecycle from key generation through storage.
- Technology architecture should be designed for resiliency and security with monitoring and controls against failures and compromise.

Risk Management Framework: Identification and mitigation of risk across end-to end lifecycle.

- End-to-end risk management process should be built on existing frameworks, enhanced for cryptoassets.
- Policies and controls should be designed to mitigate identified risk and ensure adherence to risk appetite.
- The custodian should employ and develop expertise across the three lines of defence.
- The custodian should implement or enhance business continuity and disaster recovery plans.
- The custodian should implement or enhance strong internal governance practices, including enhanced third-party governance for service providers.
- If engaging with retail clients the custodian should provide clear disclosures to investors and retail clients of the risks associated with cryptoassets.
    - Further to this point, if the client is a professional client, then the risk of dealing in an asset class is their decision. They (or the investment managers they hire) are responsible for that decision. Custodians cannot counsel professional clients on investment risks unless we are acting in a capacity other than as a custodian.

Supervisory and Regulatory Oversight: Cryptoasset custody offerings should be subject to regulatory approval and supervisory oversight.

- Regulatory approval should be required for custody products.
- There should be monitoring/supervision of the entity offering custody services.
- The regulator should possess the authority to act as a bankruptcy trustee to protect client assets.

Expanding on these principles, we would also set out the below considerations relating to prudential and operational resilience requirements.

Definition / regulatory trigger point

We would welcome confirmation that providing wallet technology whereby an entity would not hold client keys would not trigger CASS. If it did, this would be a broader application than MiCA as it could capture certain self-custody and non-custody wallet scenarios (where the provider of the wallet does not also provide additional custody/admin support)

Location requirements

The development of associated location requirements should be based on similar outcomes for third country firms branching in today and providing traditional custody services to clients (whether or not located in the UK).

In that context, from a conduct of business perspective, AFME members are of the view that the rules in CASS 6 are generally adequate to deal with the safeguarding and administration of cryptoasset. However, we believe there is a need for amending the current rules in relation to the following areas:

- The complexity inherent in the variations of cryptoassets and the different applications of DLT (permissioned, permissionless etc.) makes delivery of custody services more complicated than for

traditional assets. This needs to be accommodated through a more principles led approach to help ensure pragmatic outcomes.

- There is a need to clarify when a custodian is required to treat the relevant cryptoassets as being held in custody for its clients. Given the nature of crypto asset blockchains, a custodian will limit its service to certain coins irrespective of whether potentially other coins are associated with a wallet address maintained for a client. Digital assets delivered to a wallet (that the custodian maintains for its client) from an external counterparty cannot be considered to be held in custody yet. The custody relationship begins after the custodian was able to perform screening over the cryptoasset or other verification and consequently accepting the cryptoasset into custody. Thus, custodians should be permitted to take steps to ensure they can accept the relevant cryptoasset into custody for the client without the custodian first reflecting the cryptoasset on the books and record This would also compliment the Law Commission's proposal of emphasising 'control' over this asset class rather that 'possession' as being a key determinative factor.

From an operational resilience perspective, AFME members would propose that custodians of cryptoassets are subject to the same systems and controls requirements as MiFID investment firms. In this context, the rules should acknowledge that custodians of cryptoassets may be exposed to events such as hacks or other external events beyond the reasonable control of crypto custodian, and thus should not be liable in situations beyond the control of the appropriate (and varying) cyber and technology risk mitigants implemented. What is an "adequate measure" may vary depending on the business model of the custodian. Furthermore, from AFME's perspective it would be unhelpful to impose particular storage requirements (e.g., hot/cold storage solutions) on the basis that custodians should be able to develop their custody arrangements on their own. Lastly in relation to operational resilience requirements, we note a reference in Table 8.A in the operational resilience requirements section to custody as outsourcing. We strongly believe that the provision of custody services (e.g. control over private key material by custodian) does not constitute outsourcing and it should not be regulated as such.

We would also draw a distinction between the resilience of public and private ledgers, and responsibility for that resilience. For private, permissioned networks, there should be an operating entity(ies) that are responsible and accountable for having the appropriate controls and governance. For open networks (e.g., Ethereum), there is no entity. In line with a technology neutral approach, which was supported in the HMT consultation, we support regulation that appropriately regulates both, while still encouraging responsible innovation.

Furthermore, public blockchains and protocols should not be misconstrued as a service provider to custodians, as custodians have no control over, or any ability to influence, such blockchains and protocols. Furthermore, with respect to public blockchains there will be portions of the ledger a financial institution cannot control, as the financial institution merely connects to the public protocol and ledger governing the cryptoassets in order to custody such cryptoassets for its customers. For public blockchains and protocols, custodians should not be responsible for losses caused by public blockchains and protocols beyond their reasonable control. In such instance, the choice to connect with such public blockchains and protocols is determined by the act of custodying the relevant cryptoassets on behalf of the customer, and regulations that would prevent the custody of such cryptoassets by financial institutions would drive such cryptoassets from the regulated ecosystem to unregulated custodians. While certain cryptoassets are unsafe and/or serve malicious purposes, regulation should not drive generally accepted cryptoassets outside of the protections offered to consumers by use of regulated financial institution custodians.

Finally, AFME also believes that the principle of 'same activity, same risk, same regulatory outcome,' must apply, as well as technology neutrality.

Chapter 9 – General Market Abuse Requirements
Box 9.A: Questions for Respondents

25. Do you agree with the assessment of the challenges of applying a market abuse regime to cryptoassets? Should any additional challenges be considered?

Yes, we agree with the challenges presented. While not unique to cryptoassets, the multi-jurisdictional nature of cryptoassets exacerbates the challenges presented by the lack of a clear regulatory market abuse framework. As above, we support the 'same activity, same risk, same regulatory outcome' principle, and would welcome consensus amongst regulators on this challenge.

26. Do you agree that the scope of the market abuse regime should be cryptoassets that are requested to be admitted to trading on a cryptoasset trading venue (regardless of where the trading activity takes place)?

AFME primarily represents a broad array of pan-EU global and regional banks. As the above would largely impact trading venues it is out of scope for AFME members however we are supportive of the proposed approach in general and its intended outcomes.

27. Do you agree that the prohibitions against market abuse should be broadly similar to those in MAR? Are there any abusive practices unique to cryptoassets that would not be captured by the offences in MAR?

Yes, AFME is supportive of the approach presented and agrees that the prohibitions should be broadly similar to those in MAR. However, it is noted that the definition of inside information is largely incompatible with the cryptoasset market and may be relevant only to a limited group of cryptoassets – likely stablecoins only. Additionally, while AFME represents wholesale market participants, we would also like to encourage regulators to consider the high retail participation in the cryptoassets market which may require a more nuanced approach. For example, communication channels from regulators on rules and prohibitions may need to be different from those for professional markets. Given the evolving nature of cryptoassets, any regulation should also be outcomes-focused, rather than relying on existing definitions or practices.

28. Does the proposed approach place an appropriate and proportionate level of responsibility on trading venues in addressing abusive behaviour?

AFME primarily represents a broad array of pan-EU global and regional banks. As the above would largely impact trading venues it is out of scope for AFME members however note that these additional requirements may be perceived as particularly onerous disincentivising trading venues to establish in the UK. The obligation of venues to monitor transactions must therefore be applied proportionately.

29. What steps can be taken to encourage the development of RegTech to prevent, detect and disrupt market abuse?

We would appreciate further clarity as to the scope of this question. If it is intended to refer to the sub-category of RegTech often called SupTech used by regulators for regulated firms' supervision, that should be addressed separately. However, on RegTech used by regulated firms/markets, we note the following:

When considering detection, there are already a number of automated surveillance tools based on analysing trading patterns and detecting unusual price movements. There are opportunities to further develop these solutions, using Artificial Intelligence and Machine Learning (AI/ML) techniques to reduce the number of false alerts. Additionally, the use of big data for cross-market surveillance is increasingly important, allowing firms to ingest a large volume of data from multiple sources, for example to improve anti-money laundering (AML) tools.

For prevention, this may require more careful consideration. While AI/ML also offers opportunities here, firms must take into account existing rules and regulations, including their extraterritorial application, before embedding any solution. There is a risk of litigation against firms or their vendors if the scope/application is found to be inaccurate or insufficiently transparent during an enforcement action. Furthermore, the concept of a

safe harbour is complex to integrate into a technology system, as demonstrated by existing attempts to integrate the nuances of the market soundings, buybacks, and stabilisation rules.

30. Do you agree with the proposal to require all regulated firms undertaking cryptoasset activities to have obligations to manage inside information?

While AFME is generally supportive of this approach we would request more clarity on how to apply the definition of inside information for cryptoassets. As with commodities markets, inside information in the context of cryptoassets is likely to be different from inside information related to securities where there is always an issuer. This could create unintended confusion and inconsistency of application amongst market participants. A consistent definition would therefore be welcome. While we support the overall principle of the approach, we believe is necessary for there to be clear guidance as to the instances in which information held by a regulated firm in respect of an asset would constitute inside information and how it should be managed.

Chapter 10 – Regulatory Outcomes for Operating a Cryptoasset Lending Platform
Box 10.A: Questions for Respondents

31. Do you agree with the assessment of the regulatory challenges posed by cryptoasset lending and borrowing activities? Are there any additional challenges HM Treasury should consider?

While members agree with the assessment of the challenges and risks posed by cryptoasset lending activities, in our view, the creation of this standalone activity is inconsistent with the way securities lending transactions are treated and therefore not required. We note that when performed by a regulated firm, this activity would potentially constitute dealing in cryptoassets. Please refer to our response to Q.8 above.

More importantly, as identified in the Consultation the bulk of crypto lending is done through decentralised or semi-decentralised platforms and as such unless DeFi activities are within the scope, members are of the view that including this additional regulated activity would not support the principle of a level playing field. Therefore, we would note the importance of also addressing lending in DeFi structures as well in order to comprehensively address the regulatory challenges posed.

32. What types of regulatory safeguards would have been most effective in preventing the collapse of Celsius and other cryptoasset lending platforms earlier this year?

We would encourage the consideration of the following principles that apply in regulated markets which may have been beneficial if applied to unregulated cryptoasset market participants:

- **Leverage limits** – Banks currently have Basel III mandatory Liquidity Coverage Ratios (LCR) that regulated capital markets firms adhere to.
- **Client money segregation** – Regulated financial services firms are obliged to keep client money separate from bank money. Consider keeping these client funds in a bankruptcy remote entity.
- **Frequent Mark-to-Market Valuations** – It is important to standardise regular marking of holdings to market pricing and standardisation of reporting (e.g., such as that which is used for over the counter [OTC] derivatives reporting).
- **Accounting Standards** – We would encourage ensuring that IFRS/IAS rule are followed for reporting cryptoassets as just that and not USD positions.
- **Corporate Governance Standards** – FTX had over one hundred entities[10] which were badly documented. Furthermore, there was no CFO. Governance standards should be aligned to international agreed corporate governance standards.

33. Do you agree with the idea of drawing on requirements from different traditional lending regimes for regulating cryptoasset lending? If so, then which regimes do you think would be most appropriate and, if not, then which alternative approach would you prefer to see?

[10] https://www.sec.gov/litigation/complaints/2022/comp-pr2022-219.pdf (page 7)

No, as expressed above, we do not agree as the activity of lending cryptoassets should be treated in the same way as securities lending arrangements are treated (two linked own account transactions on a title transfer basis).

34. Do you agree with the option we are considering for providing more transparency on risk present in collateralised lending transactions?

While we are of the view that the creation of this additional regulated activity is unnecessary, we agree with the outcome that there should be rules governing cryptoasset lending transactions which, when carried on with retail investors have enhanced transparency. Fundamentally, it should be possible to identify financial risks (e.g., Mark-to Market Risk, Duration etc) and non-financial risks (operational risks, client due diligence).

35. Should regulatory treatment differentiate between lending (where title of the asset is transferred) vs staking or supplying liquidity (where title of the asset is not transferred)?

Yes, we agree that it is important to differentiate. Title transfer entails a greater degree of risk especially in the event of a DeFi platform defaulting or becoming insolvent. When operations stop on a DeFi platform, the person(s) who have title over the assets is crucial when implementing recovery and resolution provisions.

We emphasise again the importance of the application of the 'same activity, same risk, same regulatory outcome' principle as the foundation of an activities-based framework. Staking, where title is transferred and where the underlying staked cryptoassets are lost in the bankruptcy estate of the custodian or the service provider of the staking activity, should be treated differently than staking where title is not transferred and where the underlying staked cryptoassets are protected for the beneficial owner even in the bankruptcy of the custodian or the staking service provider.

Chapter 11 – Call for Evidence: Decentralised Finance (DeFi)

Box 11.A: Questions for Respondents

36. Do you agree with the assessment of the challenges of regulating DeFi? Are there any additional challenges HM Treasury should consider?

Yes. AFME agrees with the assessment of the risks and believes that this is a crucial moment for the financial services industry and European regulators as any potential exclusion of so-called "decentralised activities" could create a gap in the application of emerging regulatory frameworks. This exclusion could create unintended risks to financial stability and potential knock-on impacts. An appropriate regulatory perimeter across Europe is essential to develop a robust digital economy.

However, AFME members note that FSMA envisages the granting of an authorisation to unincorporated associations, general partnerships and other undertakings that resemble decentralised organisations that operate or govern the smart contracts that facilitate DeFi services. As such, it is at least theoretically possible that instances where centralised actors, such as founding members or large governance token holders, could be subject to authorisation. As such, it unclear why the Consultation is proposing the creation of a separate regulated activity. The principle should be that where a decentralised organisation is concerned with providing regulated activity, FSMA should apply either to grant an authorisation or to bring relevant enforcement action. AFME members note that this would require certain clarificatory changes in FSMA such as how the threshold conditions can be met with a decentralised organisation.

Another challenge we wish to mention in particular is that of decentralised lending (expanding on some of our views under chapter 10 above). While lending has been added as a proposed regulated activity, a large bulk of crypto lending is done through decentralised or semi-decentralised platforms and as such adding 'lending' to regulated activities without also appropriately regulating DeFi would achieve a limited outcome in terms of regulating lending and would not support the principle of a level playing field.

We also believe that HMT should also consider the challenges that NFTs could pose when used in a decentralised context. As noted in the Bank for International Settlements (BiS) paper[11] "Non-fungible tokens (NFTs) are typically used to represent and uniquely identify some specific virtual asset, such as digital art or a collectible. More recently, NFTs are also issued for guaranteeing ownership of physical items such as sports collectibles, antiques, or even consumer goods. Most DeFi applications do not yet rely on NFTs; however, recent developments indicate that NFTs could, for instance, be used for loan collateralisation or controlling fractional ownership. Protocols like Centrifuge with its token CFG promise to bridge even real-world physical assets to DeFi, by representing them on the blockchain (on-chain) as NFTs." As noted by the BiS, there have been some recent developments where NFTs are used for DeFi, and we would encourage HMT to consider the two below categories where this occurs in particular:

1. **Custom Financial Products** - Initial DeFi primitives were fungible (I.e., standard products which were identical for all users). As the smart contracts got more complex and customised to the individual risk requirements, they became NFTs (E.g., custom balancer private pools where the user chooses the ratio of assets in in a pool or Uniswap V3 where they provide liquidity between two currency pairs over a specific custom price range).
2. **Financial Products Around Non-Financial NFTs** – Non-Financial NFTs can have lending against them individually or in pools (E.g. like in BendDAO), they can be used to generate fractional ownerships though the creation of new participations in a single high value NFT (E.g. like fractional art) or they can be used to create custom Sushiswap pools (E.g. like NFTX.io) where holders of a certain floor type of NFT can contribute it and take the risk that they get a different one back in return for a percentage of fees generated by the smart contract acting as a market maker.

We would also set out the below additional unique issues related to the regulation of DeFi on a decentralised public blockchain:

1. The 'Counterparty' is a smart contract that is executed on all decentralised nodes with no 'home' jurisdiction or 'home' regulator

- When executing a DeFi trade the trade is executed by the trader's wallet against a smart contract (and not against another trader). In a decentralised public chain with nodes distributed globally this means that the counterparty (a smart contract not a natural person or regulated entity) does not have a single physical 'home' location so the only participant in the transaction with a physical location is the end user. The 'middleman' or exchange based smart contract is not regulated.
- One can consider the precedent set by a 'tumbler' used for money laundering purposes (Tornado Cash). This was a smart contract with no 'home' jurisdiction. The US authorities could not close it down, so they put the onus on users. It was placed on the OFAC (Office of Foreign Asset Control[12]) sanctions banned list. Usually, this list is reserved for nation states (N Korea, Russa, Iran etc) or private individuals. This was used on code (smart contract) for the first time. There are further implications to this lack of 'home' jurisdiction for the smart contract.

2. A smart contract will continue to exist even if initial uploading organisation disbands

- When executing a DeFi trade the contract is normally accessed through a front-end web page. This is just a visual interface used for interacting directly with the blockchain in a convenient way. Technically adept individuals can instead interact directly with the smart contract on the blockchain without going through the 'official' web page or indeed other 'non-official' web pages built by third parties to interact with the same smart contract for the same effect.

[11] https://www.bis.org/publ/work1066.pdf
[12] https://ofac.treasury.gov/

- Given that smart contracts uploaded to the blockchain are permanent this means that even if the contract is uploaded by an organisation (either a DAO or centralised team) it will continue to exist in use even if the initial team disbands for any reason.

3. Smart contract code is publicly viewable and easy to duplicate

- As all code on a public chain is publicly viewable any existing complex code created by a large team can be copied by anonymous individuals and re-uploaded as is with a lower spread taken out of the contract as a fee (Indeed it can be changed to remove any restrictions added by the initial team that built it). The benefit of this is that any end user can check exactly what the code does before using it however as was seen with Sushiswap's 'vampire' attack on Uniswap (where Sushiswap offered the possibility of free airdropped tokens to liquidity providers that switched) there is a race to zero in terms of fees.

- The solution to the ease of copying code is likely to be similar in analogy to that seen with the early DRM (Digital Rights Management) efforts in the CD industry where ease of use has resulted in most people moving to streaming service. In the early days of MP3s being easily swapped for free online (Napster, BitTorrent etc) it looked like there was no way or protecting IP. However, with streaming services that were genuinely valuable to users (e.g., iTunes, Spotify and value adding AI playlists and extensive catalogues) users would be willing to pay a subscription AND put up with DRM.

4. Smart contracts can be used by other smart contracts in ways the original creator did not intend

- Unless restrictions are hardcoded (which as per point three above these can be removed by copying then editing) it is possible that software built for one purpose on chain can be reused for another purpose different to the original intent when originally uploaded.

- Although not specifically DeFi related, a good example of this is the case where NFT trading platform OpenSea banned smart contracts that used allowed trading of their tokens on its competitor platform Blur from receiving full functionality on their exchange (done through a banning of Blur contract addresses). Blur then split its settlement contract for trades on its exchange where the tokens were part of the banned list. The new settlement flow used the settlement contract of OpenSea itself for its back-end infrastructure (Same front end Blur website) meaning OpenSea was not able to enforce the block as it would involve blocking its own contract from being able to settle the tokens too. In addition, aggregator platforms like 1inch use multiple underlying decentralised exchanges like Uniswap and Sushiswap without needing to ask for permission to use them.

- The current state analogy would be someone copying access to the NYSE or LSE and having it run in a different country X without needing the permission of LSE. This is what happens when the exchange is code (i.e., a decentralised smart contract).
- Given the fact that (a) the node operators are decentralised and have no single location, (b) the team that deployed the contract may no longer exist or be known, (c) the effect of the contract is visible to any user and (d) that the contract deployer has no control over other parties choosing to use it this leads to the following outcome: the most centralised point in the chain is the end user and the business offering the web based interface to them in order to generate profit from a service. This may be an avenue for regulators to apply regulations in an otherwise decentralised space.

Overall, AFME is supportive of HMT's objectives for DeFi regulation, but we would raise these above examples as other areas where further research and global cooperation should be encouraged to determine the appropriate, proportionate, and comprehensive regulatory solutions that may be needed.

37. How can the size of the "UK market" for DeFi be evaluated? How many UK-based individuals engage in DeFi protocols? What is the approximate total value locked from UK-based individuals?

As noted in response to previous questions, AFME primarily represents a broad array of pan-EU global and regional banks and as such are not using decentralised structures we would highlight the following research on the size of the DeFi market which is an extract from the AFME CMU Key Performance indicators 2022. The extracted section on "Crypto and DeFi in numbers" can be found in **Annex 3** of our response.

38. Do you agree with HM Treasury's overall approach in seeking the same regulatory outcomes across comparable "DeFi" and "CeFi" activities, but likely through a different set of regulatory tools, and different timelines?

Yes, AFME is supportive of this approach, though as noted in our response to Q36 we believe further analysis and global cooperation is needed from regulators and standard setters in order to develop a proportionate and comprehensive approach.

39. What indicators should be used to measure and verify "decentralisation" (e.g., the degree of decentralisation of the underlying technology or governance of a DeFi protocol)?

AFME would suggest that there are three generally accepted classifications of decentralisation each of which leads to different risks and controls being required:

Type 1 – Smart contracts which are DINO (Decentralised in Name Only). These contracts can be fully upgraded by individuals, multi sigs or multi-party computation (MPC) smart wallet approvals. The person or people who control the private keys are responsible for the actions of the code and can change the beneficial owner used as the output of the contract.

Type 2a - Smart contracts with either a Decentralised Autonomous Organisations (DAO) where voting occurs off chain and the instructions are passed to a Type 1 individual or group who then upgrade the contract or where there is a DAO with majority voting power in the hands of a small number of key individuals. This is essentially a Type 1 level of decentralisation with an additional layer of abstraction as off chain instructions could be ignored by the key holder (No direct effect) and DAO's where the majority of voting rights are held by a small subset of individuals are also similar to Type 1.

Type 2b - Smart contracts with on chain voting by a large number of truly decentralised and anonymous DAO participants. As no upgrades can be made effective without the upgrade being publicly known first through the voting proposal this is similar to a Type 3 in terms of level of decentralisation.

Type 3 - Smart contracts where the contract is not upgradable in any way and/or there is no longer a central organisation running it (The number of these will increase as the space matures given the immutability of the blockchain) and/or the private keys for upgrading a contract have been lost.

So, in practice and depending on the classification set out above one could measure "decentralisation" for a DAO by looking at the percentage of ownership of the governance tokens by a wallet or a set of wallets owned by a single party. Or, if that is not possible, one could also look at the liquidity concentration (e.g., measured by density of unique wallets providing liquidity).

However, these are initial categorisations and would need to be accompanied by the appropriate governance and internal controls depending on which type of decentralisation was being employed.

40.Which parts of the DeFi value chain are most suitable for establishing "regulatory hooks" (in addition to those already surfaced through the FCA-hosted cryptoasset sprint in May 2022)?
Authorisation to conduct financially regulated activities.
We have provided the below recommendations of potential 'regulatory hooks' that are relevant for regulated financial services firms who are interacting with DeFi structures. However, one could argue that the DeFi 'purists may aim to evade any form of centralisation to the largest extent possible and regulatory intervention and may

need to rely on a self-governing model. If this occurs, there may be additional considerations for how a true DeFi structure would interact with the regulated financial services industry.

Potential Regulatory Hooks

1. Identification of activities being conducted (e.g., lending etc.)
    a. Determining the nature of operations and taking into account the complexity of the firm's regulated activities, products and how the business is organised.
    b. Once identified it will also be important to identify key risks and the risk management processes that have been implemented for each activity.

2. Location and jurisdiction
    a. Financial institutions are required to have an identified place of business. Despite being decentralised, it is critical to know *where* financial products are being offered from and where financial activities are being conducted so that they can meet the regulatory requirements in that jurisdiction.
    b. Regulators are advised to provide clarity on cross-jurisdictional competences, covering in particular cases where investors, DeFi institutions and issuers are not located in the same country in a view to provide clarity on the applicable regime and hence avoid regulatory arbitrage stemming from the cross-jurisdictional nature of the structure[13].

3. Personnel and decision-making processes
    a. Despite DeFi having varying levels of centralisation it is important for regulators to have oversight of the governance processes for financial activities being conducted. Existing governance regulations could be leveraged.

    b. Furthermore, it is important to have a point of contact. DeFi organisations will need to consider who is accountable for activities conducted and decisions made.

4. Final decision on authorisation made by the supervisory authority who regulates those specific activities.
    a. Taking into consideration the decentralised nature of DeFi activities, maybe different regulatory approaches should be considered too. For example, by offering voluntary compliance for those entities that cannot be recognised under the standard legal identity system (i.e., DAOs), or by introducing a role for regulators in that so-called "self-regulation" by way of validating industry codes or enhancing supervision intensity when necessary.

Finally, we would also encourage that the analysis of decentralisation/regulatory hooks to consider if there is a direct beneficial owner of the smart contract (I.e. it acts as a business in Type 1 and 2a as discussed under Q39 above) or if it is instead a piece of software which is used by another organisation to provide a service (Where the business providing the service into a specific country, probably via a centralised website accessible in a country, is the beneficial owner as per Types 2b and 3).

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[13] Reference to the FSB Regulation, Supervision and Oversight of Crypto-Asset Activities and Market document can be made here - Recommendation 3: Cross-border cooperation, coordination, and information sharing.
Authorities should cooperate and coordinate with each other, both domestically and internationally, to foster efficient and effective communication, information sharing and consultation in order to support each other as appropriate in fulfilling their respective mandates and to encourage consistency of regulatory and supervisory outcomes." https://www.fsb.org/wp-content/uploads/P111022-3.pdf

In Type 1 and 2a classifications above it is the beneficial owner individual or groups controlling the private keys who may be subject to conflicts in terms of incentives.

In Type 2b there is no centralised authority and in Type 3 there may be no beneficial owner so where they provide a service it is more akin to the provision of open-source software and the organisations providing the interface for using the smart contract as a service to customers within the UK are acting as the beneficial owner. As most people will not have the technical ability or interest in accessing the blockchain directly the business profiting from offering a service using the smart contract software is best places to be regulated.

Some smart contracts may also rely on bridges, some of those bridges introduce centralised trusted counterparts. For example, bridges can be to a real-world custodian where legal enforcement can be actioned or can be cross chain where a trusted counterpart acts on both chains (Like wBTC[14]). Where bridges occur with centralised counterparties, they are an effective regulatory hook.

41. What other approaches could be used to establish a regulatory framework for DeFi, beyond those referenced in this paper?

Despite varying levels of centralisation of decentralised finance (DeFi) offerings, there is the need for consistent regulation of those offerings. It is important to highlight the potential for individuals with significant control over governance tokens to dominate on-chain voting outcomes and the retention of emergency powers by some DeFi protocols. In this sense, centralised business models that market themselves as Defi to circumvent regulatory obligations should be subject to the same regulations as centralised organisations. Consequently, there is also the need for enforceable rules around DeFi activities parallels with algorithmic trading activities in traditional finance.

Our overarching recommendations for a DeFi regulatory framework are as follows:

1. Regulators should be able to apply rules to individuals who maintain significant control or influence over a DeFi structure regardless of the level of decentralisation:
    a. Develop clear criteria to determine what constitutes significant control or influence.
    b. Provide guidance to DeFi protocol teams on how to comply with regulatory obligations.
2. Regulators should establish enforceable rules around algorithmic trading systems and controls to manage the risks associated with DeFi activities:
    a. Establish clear standards for DeFi to adhere in their algorithmic trading systems and controls.
    b. Require regular audits of DeFi protocols' algorithmic trading system and ensure compliance.
3. Regulators should require DeFi protocols/protocol teams to disclose the distribution of governance tokens and influence powers held by the team and investors:
    a. Develop clear guidelines for DeFi protocols on how to disclose the distribution of governance tokens.
    b. Monitor compliance with disclosure requirements through regular reporting & audits.
4. Regulators should collaborate with DeFi industry stakeholders to develop best practices for managing regulatory risks:
    a. Establish a Defi industry working group to develop and disseminate best practices.
    b. Regularly review and update best practices based on feedback from the industry stakeholders.

42. What other best practices exist today within DeFi organisations and infrastructures that should be formalised into industry standards or regulatory obligations?

AFME primarily represents a broad array of pan-EU global and regional banks. As such, AFME members are not using DeFi structures however we would provide the below views for regulatory consideration based on industry observations of how these now structures function.

[14] https://wbtc.network/

We would recommend that the risks related to businesses which interact with smart contracts should be reviewed for each smart contract interaction in terms of: Smart contract type / Economic / Oracle / Governance / Bridge. The risks are cumulative in nature when working out the total risk. AFME has set out considerations for these risks under the below categories:

1. Smart Contracts:

- Level of audit and quality of smart contract audit firm
- Time stamp record of the snapshot of the codebase reviewed (In case of upgrades which introduce new vulnerabilities).
- Enhanced monitoring shortly after contracts are upgraded (Including potentially reduced usage and liquidity requirements).

2. Governance:

- Type of governance. I.e., is it an External Owned Account (EOA), a multi sig or an on-chain DAO. (Recommend against single EOA as too vulnerable).
- Level of distribution of multi sigs (I.e., across different organisations and tech platforms).
- Level of DAO engagement (To avoid malicious proposals passing unexpectedly).
- All smart contract upgrades should have a time lock giving users time to evaluate between submission and execution.
- Monitoring of proposals submitted (To risk model potential impacts).

3. Economic:

- Evaluation of all tokens (Fungible Token and Non-Financial Trust) used in protocol for both liquidity and fees.

4. Oracle:

- Confirmation if it is on chain oracle (Review of details of how the data feeds are aggregated (e.g., for prices does it include a TWAP Time Weighted Average Price)) or if it is an off-chain oracle (Review of risks related to the specific oracle such as chainlink number of nodes etc).

5. Bridge:

- Type of bridge:
    - Natively verified (Most secure) – full nodes on each chain verify the transfer.
    - Locally verified – Only the counterparties verify the transfer.
    - Optimistically verified – Assume at least one honest operator will challenge the transaction due to economic self-interest.
    - Externally verified (Least secure) – relies on external verifiers who need to be trusted.

We would also conclude by suggesting the following three best practices for DeFi structures:
(1) That a smart contract be audited by an authorised smart contract auditor,
(2) That the degree of decentralisation established and verified when material changes in ownership happens, and
(3) That assets on which DeFi protocol is being applied also important to determine the risk (e.g., using a smart contract for a traditional financial services derivative).

Chapter 12 – Call for Evidence: Other Cryptoasset Activities

AFME primarily represents a broad array of pan-EU global and regional banks. The following questions do not discuss activities that AFME members are currently engaging in however, we would provide the below views for regulatory consideration based on industry observations of how other cryptoasset activities are impacting regulated financial services and how the market is evolving.

Box 12.A: Questions for Respondents

43. Is there a case for or against making cryptoasset investment advice and cryptoasset portfolio management regulated activities? Please explain why.

AFME members are of the view that these activities should be made regulated activities on the basis that this would be consistent with the approach taken in other jurisdictions, and more importantly because creating regulatory frameworks in respect of these activities will enable market development and a service industry with harmonised criteria in respect of these activities.

44. Is there merit in regulating mining and validation activities in the UK? What would be the main regulatory outcomes beyond sustainability objectives?

AFME are of the view that miners should be brought within the regulatory perimeter. There are specific risks relating to mining and we would also encourage further discussion of these risks and challenges by international bodies and global standard setters. One specific challenge we would wish to highlight is that mining can be prone to front running. A miner has the possibility to choose which transactions to include in the next block. Seeing the transactions queued is referred to as mempool (queue for transactions to be added to the block) and gives miners visibility of pending trades, including those that reveal the opportunity for price arbitrage and front running. As miners have controls over the sequence of transactions, there is a potential for a miner to add their transactions at the top and execute front running. Additionally, there are issues with mining being used for sanctions evasion.

As mining activity increases, miners begin to perform a systemically significant role in the money creation and supply process. Accordingly, the risk they pose to the system and end investors is commensurate. One solution could be to subject miners to regulatory authorisation and licensing, minimum capital requirements and possibly conduct requirements.

This would also put miners on a 'level playing field' with other financial intermediaries who play a part in the money creation and supply process, such as banks, and ensure against create regulatory arbitrage or a 'rush to the bottom' to be the least regulated type of institution.

Finally, we would encourage both industry and standard setters to investigate further the scale of the challenges and potential solutions. However, any solution should ideally be global in nature, (e.g., driven by the FSB or other global standard setters through cooperation with national authorities), as most miners will likely be located outside of the UK.

45. Should staking (excluding "layer 1 staking") be considered alongside cryptoasset lending as an activity to be regulated in phase 2?

We emphasise again the importance of the application of the 'same activity, same risk, same regulatory outcome' principle as the foundation of an activities-based framework. Staking, where title is transferred and where the underlying staked cryptoassets are lost in the bankruptcy estate of the custodian or the service provider of the staking activity, should be treated differently than staking where title is not transferred and where the underlying staked cryptoassets are protected for the beneficial owner even in the bankruptcy of the custodian or the staking service provider.

46.What do you think the most appropriate regulatory hooks for layer 1 staking activity would be (e.g., the staking pools or the validators themselves)?

We emphasise again the importance of the application of the 'same activity, same risk, same regulatory outcome' principle as the foundation of an activities-based framework. Staking, where title is transferred and where the underlying staked cryptoassets are lost in the bankruptcy estate of the custodian or the service provider of the staking activity, should be treated differently than staking where title is not transferred and where the underlying

staked cryptoassets are protected for the beneficial owner even in the bankruptcy of the custodian or the staking service provider.

We would raise a separate regulatory consideration for staking – location of nodes and how this factors into security. AFME believes that the number of nodes running in a country is a key factor for regulators to consider despite the received wisdom that that the public chain is decentralised and completely global. This may not in fact be the case and we have set out our considerations around security below.

Nodes are the way to directly access the blockchain to (1) see what is happening on it, (2) enter a new transaction or (3) build blocks containing a transaction. All three of these steps have increasing requirements of technical sophistication to execute but are needed in order to monitor and use a public chain in a more confident manner.

1. Viewing Transactions: To have real time data on transactions one could use a centralised intermediary but then would be reliant on them and the legal jurisdiction they operate in (e.g., if they are based outside the UK and then banned from providing a service to the UK the one wouldn't be able to see the trades). Furthermore, there would be a reliance on the centralised intermediary being honest and timely. Running a node allows a direct view of transactions within a UK legal framework without intermediation (i.e., filtering or latency) risks.

2. Entering New Transactions: To avoid middlemen nodes like Infura (a node infrastructure operator/intermediary), which are located in US East region and are used by Metamask as default to access the chain to do a new trade, having nodes run within a country is important. Infura follows US legal jurisdictions which they have to enforce for use of their software, (i.e., the US could tell them to ban people in certain countries from entering new transactions if they wanted and they already do for some such as OFAC)).

3. Building Blocks: Similar to entering new transactions. If the block builders are based in a certain location, they follow the law of that location when adding transactions to a block so even if you can enter a new transaction you want to ensure nodes following UK law enter lawful UK transactions to the chain. For example, if there were a market stress event a non-UK jurisdiction could theoretically prioritise economic activity in favour of its own companies using block builders based in its own country (think about COVID lockdown and nationally reorientation of supply chains).

In conclusion, we believe that each institution and each government department working in finance may eventually want its own node per blockchain for security reasons. The government will want them to ensure sovereignty of UK law for a subset of validators (for example to prevent a scenario in which someone could perform the equivalent analogy of kicking the UK off SWIFT because of access the chain through another country). That does not mean regulators would know all the UK nodes for all public networks as that would not be logistically feasible, but instead it would be the certainty that there would be some UK nodes that can be used to access a chain to read it and add new transactions to blocks.

Chapter 13 – Call for Evidence: Sustainability

Box 13.A: Questions for Respondents

47.When making investment decisions in cryptoassets, what information regarding environmental impact and / or energy intensity would investors find most useful for their decisions?

AFME primarily represents a broad array of pan-EU global and regional banks. While this question is not discussing a topic AFME members are currently engaging in, there is a broad programme of work on other sustainability issues being undertaken by the AFME Sustainable Finance Division.

48.What reliable indicators are useful and / or available to estimate the environmental impact of cryptoassets or the consensus mechanism which they rely on (e.g., energy usage and / or associated emission metrics, or other disclosures)?

AFME's members are committed to supporting the transition to a sustainable economy and strongly support the further development of sustainable finance. The financial sector plays a crucial role in underpinning the

transition to net zero greenhouse gas emissions, notably by helping to allocate capital and providing long-term investment in ways that are consistent with achieving key climate objectives. We therefore understand the concerns raised by HMT on the energy consumption of cryptoassets. However, we believe there are currently challenges with identifying reliable indicators for the environmental impact of cryptoasset – and as such do not believe that restrictions should be placed on various methods of consensus mechanism.

It is true that certain cryptoassets are based on a technology that entails a high energy consumption and, therefore, deserves dedicated attention to assess how these processes can be designed to move towards carbon-neutrality in support of the "E" in the Environmental, Social, Governance ("ESG"). This is largely caused as pointed out rightly in the consultation, by the energy-intense consensus mechanism (Proof of work – PoW) used to validate transactions, as highlighted in certain amendments tabled by your colleagues. As also noted in the consultation, more energy-efficient technologies or processes exist and are being adopted (e.g., consensus mechanism called Proof of Stake (PoS)).

However, we do not feel that putting in restrictions on specific consensus mechanisms (e.g., proof-of-work) is an effective way of achieving sustainable goals. Proposals to entirely restrict certain types of technology are not future-proof and limit important opportunities for innovation, while potentially creating new points of transition risk as we move towards more sustainable financial services more generally. If anything, we believe such proposals may effectively impair the intended outcome from the UK's future framework for cryptoassets. In particular, we would like to highlight the potential risk that such an approach would raise with regard to AML/ CFT controls.

By prohibiting services for these types of cryptoassets, the UK may cause harm and negatively impact the "G" in the ESG. A good governance includes strong and robust control frameworks. Banning or disincentivising service providers from participating in certain cryptoasset networks and forcing investors to use non-UK based service providers (or to move their cryptoasset portfolio to self-managed / unhosted wallets) will impede the UK from sufficiently supervising these activities under UK law. Indeed, if UK based entities are prohibited to deal with PoW-reliant cryptoassets, clients and consumers are likely to look towards non-UK providers (outside the reach of the UK's framework, and thus potentially largely unregulated). This not only ultimately put consumers and clients at greater risk of loss, and more exposed to cybersecurity risks, but it also limits the UK's ability to adequately fight money laundering and terrorism financing, by displacing the activity instead of regulating it.

We would thus encourage HMT to look at treating cryptoassets as they treat other asset classes and assess their sustainability, instead of creating an ad-hoc treatment for a specific asset class. This will also ensure the UK follows a balanced and technology neutral approach to achieving its goal of developing a more sustainable financial ecosystem. Ultimately, AFME's members welcome clear guidelines in identifying green assets, setting targets, and aligning their long-term business strategies and models with the transition to sustainability. To make net-zero happen, firms will need accurate numbers and metrics, and we are supportive if objective, science-based tools to achieve those targets.

49.What methodologies could be used to calculate these indicators (on a unit-by-unit or holdings basis)? Are any reliable proxies available?

AFME primarily represents a broad array of pan-EU global and regional banks. While this question is not discussing a topic AFME members are currently engaging in, there is a broad programme of work on other sustainability issues being undertaken by the AFME Sustainable Finance Division.

50. How interoperable would such indicators be with other recognised sustainability disclosure standards?

AFME primarily represents a broad array of pan-EU global and regional banks. While this question is not discussing a topic AFME members are currently engaging in, there is a broad programme of work on other sustainability issues being undertaken by the AFME Sustainable Finance Division.

51. At what point in the investor journey and in what form, would environmental impact and / or energy intensity disclosures be most useful for investors?

AFME primarily represents a broad array of pan-EU global and regional banks. While this question is not discussing a topic AFME members are currently engaging in, there is a broad programme of work on other sustainability issues being undertaken by the AFME Sustainable Finance Division.

52. Will the proposals for a financial services regulatory regime for cryptoassets have a differential impact on those groups with a protected characteristic under the Equality Act 2010?

AFME primarily represents a broad array of pan-EU global and regional banks. While this question is not discussing a topic AFME members are currently engaging in, there is a broad programme of work on other sustainability issues being undertaken by the AFME Sustainable Finance Division.

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

The Global Financial Markets Association[15] (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'.**[16] 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 believe this 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 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 assets 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.

Approach to classification and understanding of digital-assets

Broadly, digital-assets may serve a variety of economic functions, such as an agent for payments[17], a vehicle for investment or trading[18], or a utility to access other goods or services[19]. 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). For this initial proposal[20] 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

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[15] 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.

[16] GFMA Response to BCBS Discussion Paper on the Prudential Treatment for Crypto-Assets

[17] 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.

[18] 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

[19] 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.)

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

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 time[21]. 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.'

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.

[21] 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

Types of Digital-Assets[22], [23]

A. Value-Stable Digital-Assets

1. Central Bank Digital Currencies (CBDC[24]) (e.g., e-Krona)
    a. Digital form of money that represents a liability of a central bank in a single fiat sovereign currency that may or may not pay interest

2. Financial Market Infrastructure (FMI) Tokens (e.g., USC)
    a. Digital form of money representing claims on an FMI and reflecting deposits held at a central or commercial bank in a single fiat currency that may or may not pay interest

3. Tokenised Commercial Bank Money[25] (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)

    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 exchange[26] among assets[27] or some other pre-determined mechanism[28]

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[22] GFMA also notes that the term 'coin' and 'token' are synonymously leveraged below and are not intending to insinuate differences between the two terms.

[23] 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

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

[25] 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

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

[27] Asset may involve the native stablecoin itself or other digital asset used for exchange or collateralisation

[28] 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.

B. Security[29]Token

- 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 asset

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

Annex 2 : Restrictions Applicable to CISs/ AIFs

Type / marketing restrictions	Allowed to Invest in	Relevant Rule
UCITS Open for retail investment	(1) Certain transferable securities; (2) approved money-market instruments; (3) units in certain liquid collective investment schemes; (4) derivatives and forward transactions; (5) deposits; and (6) (for an ICVC) movable and immovable property that is essential for the direct pursuit of the ICVC's business;	COLL 5.6A R and COLL 5.7A R
Non-UCITS Retail Schemes (NURS) Open for retail investment	These need to either operate as a Fund of Alternative Investment funds (FAIF) or as a standard NURS or a mix. (1) If the NURS is a FAIF, the scheme property may only, except where otherwise provided, consist of any one or more of: (a) transferable securities; (b) money market instruments; (c) units in collective investment schemes permitted under COLL 5.7.7 R (Investment in collective investment schemes); (d) derivatives and forward transactions permitted under COLL 5.6.13 R (Permitted transactions (derivatives and forwards)); (e) deposits permitted under COLL 5.2.26 R (Investment in deposits); (f) immovables permitted under COLL 5.6.18 R (Investment in property) to COLL 5.6.19 R (Investment limits for immovables); and (g) (g) gold up to a limit of 10% in value of the scheme property. (2) If Standard NURS, the scheme property may only, except where otherwise provided in the rules in this section, consist of any one or more of: (a) transferable securities; (b) money-market instruments; (c) units in collective investment schemes permitted under COLL 5.6.10 R (Investment in collective investment schemes); (d) derivatives and forward transactions permitted under COLL 5.6.13 R (Permitted transactions (derivatives and forwards)); (e) deposits permitted under COLL 5.2.26 R (Investment in deposits);	COLL 5.7.4R COLL 5.6.4R

	(f) immovables permitted under COLL 5.6.18 R (Investment in property) to COLL 5.6.19 R (Investment limits for immovables); and (a) (g) gold up to a limit of 10% in value of the scheme property.	
Qualified Investor Schemes (QIS)	(1) any specified investment: (a) within articles 74 to 86 of the Regulated Activities Order; and (b) within article 89 (Rights to or interests in investments) of the Regulated Activities Order where the right or interest relates to a specified investment within (a); (2) an interest in an immovable under COLL 8.4.11 R (Investment in property); (3) precious metals; or (b) (4) a commodity contract traded on an RIE or a recognised overseas investment exchange.	COLL 8.4.3R
Long-term asset funds (LTAFs)	(1) any specified investment: a. within articles 74 to 86 of the Regulated Activities Order; b. within article 89 (Rights to or interests in investments) of the Regulated Activities Order where the right or interest relates to a specified investment within (a); (2) (to the extent not within (a)), an interest in a loan, provided that the loan was not originated to: a. a natural person; b. the authorised fund manager of the long-term asset fund; c. the depositary of the long-term asset fund; d. an affiliated company of the person in (b) or (c); or e. a person who intends to use, or uses, the credit for the purpose of investing in a derivative, cryptoasset derivative, an unregulated transferable cryptoasset, precious metals or a commodity contract within (5); (3) an interest in an immovable under COLL 15.6.18R (Investment in property); (4) precious metals; or (5) (5) a commodity contract traded on an RIE or a recognised overseas investment exchange.	COLL 15.6.8R

Annex 3 : Crypto and DeFi in numbers – extraction from AFME CMU Key Performance indicators 2022

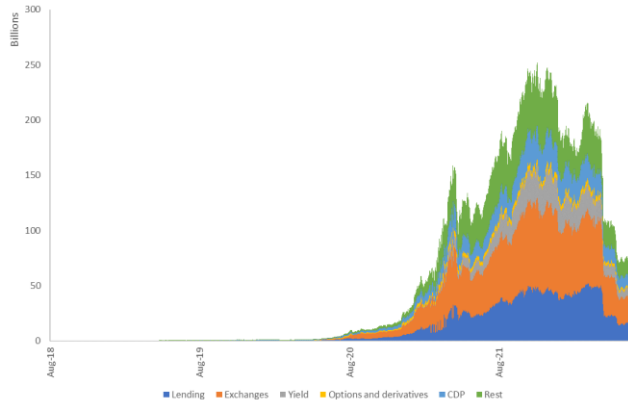
Crypto and DeFi in numbers

Industry surveys indicate that around 2.5% of the EU population holds crypto assets, 3.8%-5% in the UK and 8% in the US (FCA, tripleA). From an asset management perspective, $105bn in crypto assets are managed by hedge funds globally (Autonomous Research), which is a small portion of the c$120tn of the global asset management industry but likely to continue to increase in coming years.

The global size of DeFi volumes have increased over the last years. As shown on chart 7.10, total value locked on DeFi platforms reached c$250bn in November 2021, most recently dropping to $60bn in early September. The significant decline in DeFi volumes was driven by the wider collapse of the crypto market in early 2022, when crypto prices lost roughly 60% in valuation. Of the DeFi global volume, the largest portion is dedicated to trading activities (32%), 21% to lending, 13% to collateralised debt positions, 10% to deposits, and 3% to options and derivatives trading (see chart 7.11).

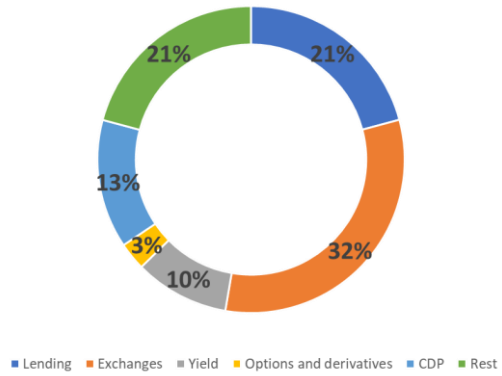
Data from Chainalysis suggests that Western, Northern and Central Europe (WNCE) is the largest region for DeFi as 25% of global DeFi activities are undertaken in the region (H1'21). However, this is likely an overestimate due to methodology reasons[30] as the proportions are constructed based on website traffic by geography, where VPN relocation may inflate Europe's global participation.

Total Value Locked in DeFi protocols by main activities



Source: *DeFi Llama*

Distribution of DeFi activities by Total Value Locked: 2022



Source: *DeFi Llama*

Lending and deposits: Centralised and decentralised

Centralised lending intermediation

Centralised crypto lending activities operate under a custodial framework, where crypto platforms manage deposits on a centralised platform which stores financial records on a wallet in the form of tokens. Depositors earn interest on their resources while the platform intermediates and invests the deposits through lending origination.

Data is scarce on deposits and lending volumes intermediated by CeFi platforms. As CeFi platforms store deposits and supply lending, sound balance sheet asset liability management is crucial to safeguard appropriate management of risks. Most recently, centralised crypto platforms were subject to relevant financial distress

[30] The Chainalysis indicator is based on estimates of 1) on-chain DeFi value received, 2) on-chain number of DeFi deposits, 3) on-chain retail DeFi value received

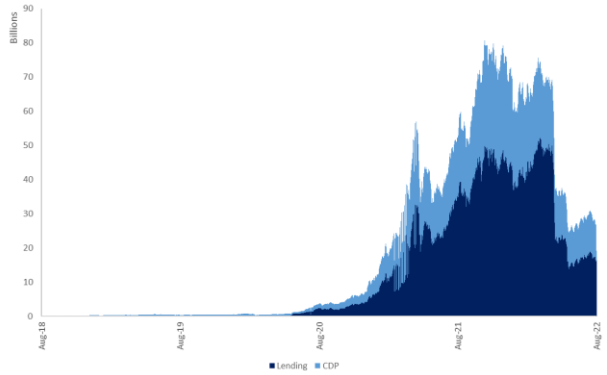
which led them to pause withdrawals, swap, and transfers between accounts, or breaking the pegs of widely used stablecoins.

The decentralised model (DeFi)

Lending via DeFi protocols operates under a peer-to-peer model. Depositors and lenders maintain ownership of their tokens without a custodial centralised intermediation of a platform but structured with the use of governance tokens which are specific to each DeFi protocol. Lenders earn interest and borrowers pay interest with the use of automated smart contracts via a DLT platform.

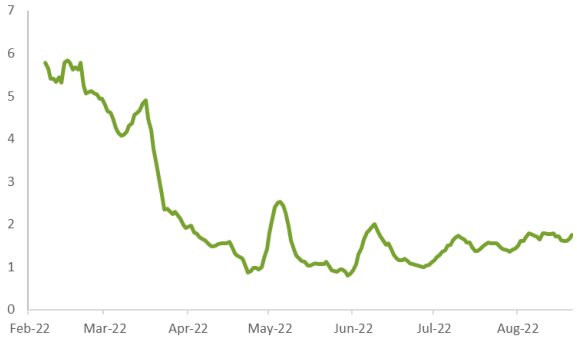
Industry data suggests that total value locked in lending and collateralised debt positions reached $80bn globally in November 2021, followed by a sharp decline to $30bn as of August 2022. Industry data also suggests that yields on DeFi deposits have declined from 6% in February 2022 to 2% in August 2022.

DeFi total value locked in lending and collateralised debt positions ($bn)



Source: *DeFi Lllama*

Evolution of deposit rates in DeFi protocols



Source: *DeFi Lllama*

Trading and derivatives

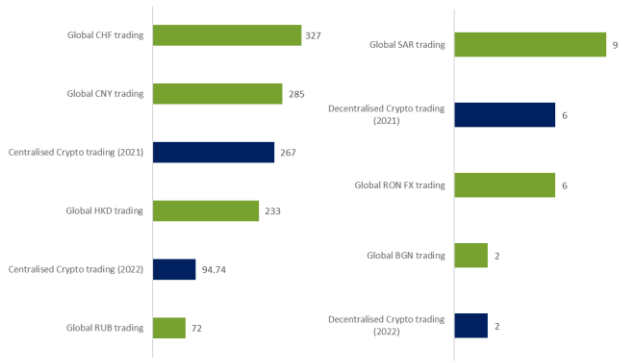
Crypto trading is predominantly traded via centralised platforms. According to industry data, global average daily trading volume on centralised exchanges during the months of July and August 2022 stood at $94.7bn while trading on decentralised exchanges stood at $2bn per day during the same period.

This amount is relatively small compared to global FX average daily turnover of $6.6tn (BIS) but for centralised crypto trading is above other mid-size currencies like the Russian ruble ($72bn per day). Global Bulgarian lev trading is about the same size of DeFi trading of $2bn per day. See chart 7.14. During late 2021, the amount of CeFi trading reached $267bn on average per day, which is above the average daily of major currencies like the HKD ($233bn) while DeFi trading reached $6bn in late 2021 or about the same amount of global RON trading.

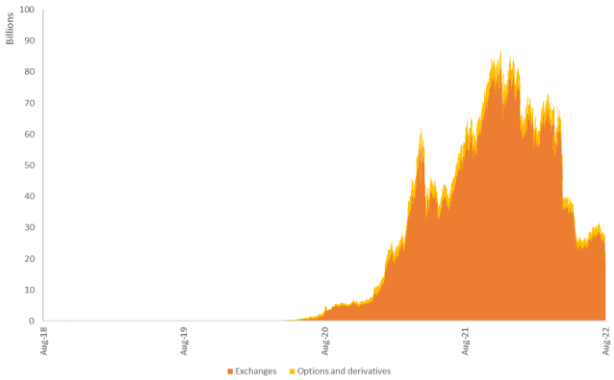
Industry data suggests that total outstanding amount of value locked in decentralised exchanges for trading and derivatives reached $90bn globally in November 2021, followed by a sharp decline to $30bn as of August 2022.

Average daily trading of selected currencies compared to DeFi and CeFi crypto trading ($bn)

DeFi total value locked in trading, options and derivatives



Source: *DeFi prime, BIS*



Source: *DeFi Llama*

The relevance of the appropriate regulatory framework

Decentralised finance and associated activities must be brought within the regulatory perimeter in an appropriate way to manage risks to market integrity, financial stability and end users.

Co-legislators of the Markets in Crypto Assets (MiCA) initiative shall consider important market developments such as the rapid evolution of DeFi activities and the participation in its provision by Decentralised Autonomous Organisations (DAOs). The exclusion of DAOs from the scope could create risks to financial stability that would have knock-on impacts to the regulated market.

This approach is also supported by research from the BIS. A recent article from the December 2021 Quarterly review states that all DeFi platforms have an element of centralisation, typically due to the presence of governance tokens. The article proposes that these governance structures mark a useful starting point for recognising DeFi platforms as legal entities.

Contacts

AFME	Andrew Harvey	+44(0)20 3828 2694	AHarvey@gfma.org
AFME	Elise Soucie	+44 (0)20 3828 2678	Elise.Soucie@afme.eu
Clifford Chance	Diego Ballon Ossio	+44 (0)20 7006 3425	Diego.BallonOssio@CliffordChance.com
Clifford Chance	Laura Nixon	+44 (0)20 7006 8385	Laura.Nixon@CliffordChance.com

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