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Via electronic submission to : cryptoasset.consultation@hmtreasury.gov.uk

Future Regulatory Regime for Cryptoassets – Consultation
Payments and Fintech
HM Treasury
1 Horse Guards Road
SW1A 2HQ

**Re: Future Financial Services Regulatory Regime for Cryptoassets:
Consultation and Call for Evidence**

To whom it may concern,

We appreciate the chance to share our perspectives on topics that we consider significant in the HM Treasury's consultation. KYAX is dedicated to fostering confidence and openness in the crypto industry by leveraging cutting-edge data and information. As the foremost supplier of institutional-grade business & regulatory reporting for institutions, we empower governments, policymakers, tax authorities, and investors to make well-informed choices within their respective domains.

About KYAX

KYAX is a B2B plug-in tool that provides Crypto Asset Reporting. Founded upon decades of Trad-Fi, Regulatory and Crypto experience, KYAX helps system and data constrained Crypto leaders get the right data, into the right hands, with the right reports.

By consolidating Google Sheets, Excels, Blockchains and other systems, KYAX provides repeatable clean data and reports for Finance teams, Auditors, Clients, Investors and Regulatory Bodies.

HM Treasury's consultation

We appreciate the HM Treasury's consultation aimed at developing regulatory responses and frameworks regarding the incorporation of cryptoassets in the financial services industry. KYAX commends the UK's aspiration to become a worldwide hub for crypto investments. We also strongly advocate for rigorous reporting standards and regulations that foster innovation rather than hinder it unintentionally. Considering these factors, we are fully supportive of your consultation and ongoing endeavors, and we are willing to engage in further discussions or provide additional evidence as required.

Please find our responses below, addressing **all the** questions within the consultation paper.

Yours Sincerely,
Rohit Sabhlok, COO KYAX

Chapter 2 Definition of cryptoassets and legislative approach

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, consolidating investments in FSMA makes sense.

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 - given the pace of innovation in the digital assets space, not all tokens will be deemed financial in nature. For example a children's game passing football player tokens on mobile phones (much the same as the old practice of collecting for player stickers).

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 particular issues using this legislation.

Chapter 3: Overview of the current regulatory landscape for cryptoassets

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?

This could benefit from a transparent process including:

1. A single organisation within Government/FSA/BoE as the owner
2. An online application, renewal, update process for each organisation
3. A clear dictionary of definitions and terms
4. A concrete expected timeline to process applications and updates
5. Defined workflow process steps with clear gateways of providing the right information in order to pass the application process

Examples of further clarity are:

- Definition of what constitutes a "cryptoasset" and which types of cryptoassets will be subject to regulation.
- The regulatory perimeter for cryptoassets and which activities will require authorization under the Financial Services and Markets Act (FSMA).
- The specific regulatory requirements that firms will need to meet to obtain authorization, including capital and liquidity requirements, investor protection measures, and anti-money laundering (AML) and counter-terrorist financing (CTF) measures.
- The role of the FCA in overseeing and enforcing the regulatory framework for cryptoassets, including the types of enforcement actions that may be taken against non-compliant firms.
- The potential impact of the regulatory framework on innovation and competition within the cryptoassets market, and how the FCA plans to balance the need for regulation with the need

to foster innovation and growth.

- The international regulatory landscape for cryptoassets, including how the UK framework will interact with global standards and best practices.

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

The delineation and interaction between the regime for fiat-backed stablecoins (Phase 1) and the broader cryptoassets regime (Phase 2) appears to be relatively clear. However, the implementation of other regulations, such as MiFID II, AIFMD, and SFTR, has shown that regulatory regimes can be complex, and there may be challenges in ensuring consistency and coherence across different regulatory frameworks.

For example, some market participants may be involved in both fiat-backed stablecoins and other types of cryptoassets, as well as other financial activities that are subject to multiple regulatory requirements. In such cases, it may be challenging to ensure a clear and consistent regulatory approach across different regulatory regimes.

To address these challenges, it will be important for regulatory authorities to provide clear guidance and support to market participants throughout the implementation process. This may include developing comprehensive regulatory frameworks that take into account the broader ecosystem of financial activities and ensuring that there is coordination and coherence between different regulatory regimes.

Additionally, there may be a need for international cooperation and coordination to develop harmonized regulatory frameworks for cryptoassets and other financial activities. This could help to reduce the potential for regulatory arbitrage and ensure a consistent level of investor protection and market integrity across different jurisdictions.

Overall, while the delineation and interaction between the two phases of the UK's proposed cryptoasset regime appear to be relatively clear, there may be challenges in ensuring consistency and coherence across different regulatory frameworks, especially given the complexity of the broader ecosystem of financial activities.

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

The phased approach proposed by the UK regulatory authorities for the regulation of cryptoassets may create potential challenges for market participants.

Firstly, the phased approach means that market participants may need to comply with different regulatory requirements at different stages of the regulatory implementation process. This could create uncertainty and confusion for firms, particularly those that operate across different jurisdictions with varying regulatory frameworks.

Secondly, the phased approach may result in regulatory gaps or inconsistencies between the different phases, which could lead to market distortions and a lack of a level playing field for market participants. For example, if the regulatory requirements for Phase 1 (fiat-backed stablecoins) are less strict than those for Phase 2 (broader cryptoassets), it could incentivize market participants to focus on issuing stablecoins rather than other types of cryptoassets, potentially distorting market competition.

Thirdly, the phased approach may result in delays or uncertainty in the regulatory implementation process, as different phases may require different levels of consultation, legislative approval, and implementation timelines. This could create additional challenges for market participants in terms of business planning and investment decisions.

Overall, while the phased approach may be necessary to ensure a proportionate and effective regulatory framework for cryptoassets, it could create potential challenges for market participants. It will be important for regulatory authorities to provide clear guidance and support to market participants throughout the implementation process to mitigate these challenges.

Chapter 4 Cryptoasset Activities

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

One potential challenge is the potential for regulatory arbitrage, where companies may seek to relocate to jurisdictions with less stringent regulatory requirements to avoid compliance costs. This could lead to an uneven playing field and undermine the effectiveness of the UK's regulatory regime.

Another challenge is the potential for conflicts of jurisdiction, where different regulatory regimes may have different requirements or interpretations of the same activity. This could create regulatory uncertainty and increase compliance costs for companies that operate across multiple jurisdictions.

Therefore, it may be necessary to consider alternative approaches to the territorial scope of the regime. For example, a more principles-based approach that focuses on the nature of the activity and its potential risks, rather than the location of the activity or the customer, could help to reduce the potential for regulatory arbitrage and conflicts of jurisdiction.

Alternatively, there may be a need for greater international cooperation and coordination to develop harmonized regulatory frameworks for cryptoassets and other financial activities. This could help to reduce the potential for regulatory arbitrage and ensure a consistent level of investor protection and market integrity across different jurisdictions.

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

The proposed list includes activities such as issuing, selling, and transferring cryptoassets, operating a trading platform or exchange, and providing custody or wallet services for cryptoassets.

It may be challenging to capture all potential economic activities within the regulatory perimeter. Therefore, it may be necessary to continue to monitor the market and make adjustments to the regulatory perimeter regularly as needed to ensure that it remains effective in addressing potential risks.

We believe overly burdensome regulation may stifle innovation and limit the potential benefits of digital assets and cryptoassets for consumers and the wider economy. Size limit thresholds and customer type distinctions may help to strike a balance between regulation and innovation to ensure that the regulatory regime is effective while also allowing for innovation and growth within the market.

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

These risks are not unique to the digital asset and cryptoasset market and have been observed in

other financial markets. For example, the MiFID II regulatory framework introduced requirements to address conflicts of interest associated with vertically integrated business models in the investment banking sector. Information barriers and separately capitalised subsidiary entities have been used to deal with these risks in traditional finance

These models may create challenges for regulators in determining which activities should be subject to regulation and which should be exempt. These models may also create challenges for smaller firms that are unable to compete with vertically integrated firms, potentially reducing innovation and diversity in the market. An exemption for size or type of customer may be something to review whilst keeping consumer confidence front and centre.

Overall, while vertically integrated business models can create challenges and risks, it may be necessary to strike a balance between regulation and innovation to ensure that the regulatory regime is effective while also allowing for competition and innovation in the market.

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

if a commodity-linked token is not considered a security or derivative under existing regulatory frameworks, such as the Markets in Financial Instruments Directive (MiFID II) or the European Market Infrastructure Regulation (EMIR), it may not be subject to regulation. The attributes which make commodity-linked tokens regulated should be atomic and binary.

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

It may not be the job of a regulator to confirm this distinction. The market should be allowed to price in additional derivative risks e.g operational, credit and market risks to enable consumer choice. Each coin project should provide mandatory information to enable these risks to be understood. There should also be a separation between requirements for professional and market counterparties to enable innovation whilst limiting bad consumer outcomes.

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

As these tokens continue to gain popularity and new use cases emerge, it is likely that regulators will need to provide more specific guidance on their regulatory treatment in the future. Further guidance from regulatory authorities would be helpful to digital asset and crypto companies, particularly on the classification and regulatory treatment of NFTs and utility tokens.

Chapter 5: Regulatory Outcomes for Cryptoasset Issuance and Disclosures

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?

While trading venues have a significant role in the crypto market, they may not have the necessary expertise or regulatory authority to perform all these tasks effectively without clear guidelines. An alternative approach could be to create an electronic checklist and templates for the required documentation which can be passed on to regulators and trading venues. This would ensure that the requirements are standardised and checked to meet regulatory standards. Additionally, regulators could perform due diligence on the entity admitting the cryptoasset to ensure that they meet the necessary regulatory requirements.

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

Yes. Third party law firms and specialists will have to be brought in to act as preparers and adding their liability will make the process extremely stringent. The price of this activity will have to ultimately be borne by the industry but it is useful to provide consumer confidence.

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?

Yes a dedicated update for crypto related assets should be sufficient, but this should be reviewed and updated regularly considering the pace of innovation.

Chapter 6: Regulatory Outcomes for Operating a Cryptoasset Trading Venue

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?

The reporting requirements for MTFs are onerous for small firms, and pay limit innovation in the space. However, providing simplified transaction reporting guidelines in a ready built schema with clear rulesets to allow firms to self report their data from APIs would help lower costs and complexity

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

Establishing clear and robust conduct rules for market participants, including measures to prevent market manipulation and insider trading.
Ensuring operational resilience of trading venues and custodians through regular testing, monitoring, and contingency planning.
Implementing comprehensive reporting requirements for market participants, including timely and accurate disclosure of material information, transaction reporting, and other reporting obligations.

Chapter 7: Regulatory Outcomes for Cryptoasset Intermediation Activities

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?

It may be necessary to tailor the existing RAO activities to the specific needs and risks of the cryptoasset trading venue regime. Consider updating existing regulatory frameworks to enable specific crypto related mechanisms including language based on validator nodes, liquidity on DEXs and liquidity requirements.

Chapter 8: Regulatory outcomes for cryptoasset custody

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?

This approach recognizes the similarities between custody of traditional financial assets and custody of cryptoassets and can help provide a level of regulatory certainty and protection for consumers. However, it is important to ensure that the regulatory framework is appropriately tailored to the unique characteristics of cryptoassets and cryptoasset custodians, and that it does not stifle innovation or impose excessive regulatory burdens. Further consultation and engagement with industry participants may be necessary to achieve this balance.

Chapter 9: General Market Abuse Requirements

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

The key challenges of applying a market abuse regime to cryptoassets would include:

- **Lack of transparency:** Cryptoassets are traded on decentralized platforms, which lack transparency and can make it difficult to detect market abuse.
- **Cross-border transactions:** Cryptoassets can be traded across borders, which can make it challenging to apply a consistent market abuse regime.
- **Lack of standardization:** There are currently no standardized definitions or classifications for cryptoassets, making it difficult to apply a uniform market abuse regime.
- **Lack of regulatory oversight:** Many cryptoasset trading platforms operate outside the scope of traditional financial regulation, making it difficult to apply a market abuse regime.
- **Rapidly changing market:** The cryptoasset market is rapidly evolving, with new tokens and platforms emerging all the time. This makes it challenging to keep up with the market and apply a consistent market abuse regime.

Additional challenges that could be considered include the potential for insider trading in decentralized platforms, the difficulty in identifying and monitoring market manipulation in real-time,

and the risks associated with the use of social media to influence the market. Furthermore, services such as tumblers are specifically set up to obfuscate transactions.

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)?

Yes, this seems reasonable.

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. There is no reason that principles based rules in MAR do not apply to cryptoassets.

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

Yes. Trading venues should have more responsibilities in this regard as they carry a special position in general capital market and trading activity.

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

There are several steps that can be taken to encourage the development of RegTech to prevent, detect and disrupt market abuse in the crypto industry:

1. **Collaboration between industry and regulators:** Regulators can work with the crypto industry to develop innovative technological solutions to address market abuse risks. Collaboration could involve developing a sandbox environment for RegTech startups to test and refine their solutions.
2. **Investment in RegTech:** Governments and industry associations could provide funding for RegTech startups that are developing innovative solutions to address market abuse risks. This could include providing grants or low-interest loans.
3. **Regulatory guidance and standards:** Regulators can provide guidance on the types of RegTech solutions that are suitable for addressing market abuse risks in the crypto industry. They can also establish standards for RegTech solutions to ensure that they are effective and meet regulatory requirements.
4. **Data sharing and analytics:** RegTech solutions can be improved through the use of data analytics. Regulators and industry associations can work together to establish data sharing agreements that enable RegTech startups to access relevant data to develop more effective solutions.
5. **Education and awareness:** There is a need for greater education and awareness of market abuse risks in the crypto industry, and the role that RegTech solutions can play in addressing these risks. Industry associations and regulators can work together to raise awareness of these issues and the importance of adopting RegTech solutions.

30. Do you agree with the proposal to require all regulated firms undertaking cryptoasset

activities to have obligations to manage inside information?

Yes. This is required to maintain trust. Increased reporting of asset transactions would also enable some enforcement.

Chapter 10: Regulatory outcomes for operating a cryptoasset lending platform

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?

HM Treasury's assessment of the regulatory challenges posed by cryptoasset lending and borrowing activities is reasonable. However, there are some additional challenges that should be considered.

One key challenge is the potential for systemic risks to emerge if there is a significant amount of cryptoasset lending and borrowing activity that is not properly regulated. This could result in a destabilization of the cryptoasset markets, which could have broader implications for the financial system as a whole.

Another challenge is ensuring that cryptoasset lending and borrowing activities are conducted in a manner that is consistent with investor protection principles. This includes ensuring that investors have adequate information about the risks associated with these activities and that appropriate safeguards are in place to protect investors from losses.

Finally, there is a need to ensure that cryptoasset lending and borrowing activities are conducted in a way that is consistent with the broader regulatory framework for financial services. This includes ensuring that activities are subject to appropriate prudential, conduct, operational resilience, and reporting requirements.

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?

Celsius' demise was mainly due to autocratic founder decisions without adequate corporate governance, systems and knowledge. Limits should be placed on the size of such new enterprises when it comes to funds allowed and customer types. Limits should vary when evidence of proper governance is shown through process and technology.

An analogy to Celsius in traditional finance would be to allow all retail customers to participate in the repo market. Clearly a specialised product with risks and knowledge that need to be properly disclosed. Innovation can be stifled through licensing sometimes, but by placing licensing gateways in terms of fund size and customers we can continue to innovate and build procedures as expansion continues.

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?

Some of the traditional lending regimes that may be relevant to consider include the Capital Requirements Regulation (CRR) and the Mortgage Credit Directive (MCD) in the EU, and the Consumer Credit Act (CCA) and the Prudential Regulation Authority (PRA) rules in the UK.

However, it is important to note that the crypto industry operates differently from traditional lending in several ways, including the lack of established credit histories, the highly volatile nature of cryptoassets, and the use of decentralized platforms. As a result, it may be necessary to tailor the regulatory requirements to the specific features of the crypto industry.

In addition to drawing on requirements from traditional lending regimes, it may also be helpful to consider the guidance and best practices developed by industry associations and working groups such as FinregX, as well as engaging with stakeholders in the crypto industry to better understand their needs and concerns. Overall, a collaborative and adaptive approach that balances regulatory objectives with industry innovation and growth is likely to be the most effective.

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

Yes, the options for providing more transparency on risk in collateralized lending transactions are important to create a more robust industry. Collateralized lending is a complex activity, and it is crucial to have transparency on the risks involved. The proposed options, such as disclosing the collateralization ratio, requiring regular valuations of the collateral, and mandating stress tests to evaluate the impact of adverse market events, can help increase transparency and provide more information to investors and regulators.

These measures can help reduce systemic risks, increase market efficiency, and improve investor confidence in the cryptoasset lending market. Furthermore, they can ensure that participants have a better understanding of the risks involved in the lending and borrowing of cryptoassets and help prevent potential market failures.

Moreover, requesting and reviewing this type of data forces cryptolenders to invest in adequate risk management departments.

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, regulatory treatment should differentiate between lending and staking/supplying liquidity activities as they involve different risk profiles and characteristics. In lending, the borrower takes temporary ownership of the asset, while in staking or supplying liquidity, the asset remains in the possession of the owner. Therefore, the regulatory requirements for custody, ownership, and control of the assets may differ between these two activities.

Furthermore, lending may involve more complex risk management and compliance requirements due to the transfer of ownership of the asset, while staking or supplying liquidity may involve more market risk and liquidity risk considerations. Therefore, it may be necessary to apply different regulatory regimes for these activities.

Currently, lending activities involving traditional assets such as fiat currencies or securities are subject to specific regulations such as the banking regulations, while staking or supplying liquidity activities are not subject to specific regulations. As such, regulators may need to consider developing new regulatory frameworks to address the unique risks and challenges posed by lending and staking/supplying liquidity activities involving cryptoassets.

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

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

The assessment of the challenges of regulating DeFi in the HM Treasury document appears to be thorough and covers several key issues, such as the difficulty of identifying and regulating decentralized entities, the potential for smart contracts to be vulnerable to security flaws or bugs, and the possibility of increased risks for retail investors.

However, there are additional challenges that HM Treasury could consider when regulating DeFi. For example, DeFi projects often involve cross-border transactions, which can make it difficult for regulators to enforce regulations across multiple jurisdictions. Additionally, as DeFi becomes more popular, it may attract bad actors and fraudsters, which could lead to increased instances of financial crime.

Furthermore, DeFi projects often involve complex financial products and protocols that may be difficult for retail investors to understand. This could lead to increased risks of financial loss, as retail investors may not fully understand the risks and implications of their investments.

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?

It is possible to obtain estimates by conducting surveys, analyzing blockchain data, or consulting industry reports. It's important to note that the DeFi space is still relatively new and rapidly evolving, and thus the figures may vary significantly depending on the timeframe and methodology used. Proxies such as use of IP addresses, KYC information, wallet activity can be used to provide estimates.

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.

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)?

- **Node distribution:** The number of nodes in a network and how they are distributed can be a good indicator of decentralization. A more decentralized network will have a larger number of nodes that are evenly distributed across multiple geographic locations.
- **Token distribution:** The distribution of tokens in a network can also be a useful metric. If a small number of entities or individuals hold a majority of the tokens, it could indicate that the network is more centralized.
- **Governance structure:** The governance structure of a DeFi protocol can provide insight into its decentralization. If the protocol is governed by a small group of individuals or entities, it could indicate that the protocol is less decentralized.
- **Interoperability:** The ability for different protocols to interoperate with each other can also be an indicator of decentralization. If a protocol is able to integrate with other protocols and

platforms, it could indicate a more decentralized ecosystem.

- **Openness:** The level of openness and accessibility of a protocol can also be an indicator of decentralization. If a protocol is open-source and available for anyone to access and contribute to, it could indicate a more decentralized ecosystem.

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)?

Given the decentralized and permissionless nature of DeFi, it can be challenging to identify specific points in the value chain where regulatory hooks can be established. However, there are a few potential areas that could be considered:

- **Decentralized exchanges (DEXs):** As the primary platform for trading and exchanging cryptoassets in a DeFi ecosystem, DEXs could be subject to regulatory oversight. This could include requirements for AML/KYC procedures, reporting of suspicious activity, and other consumer protection measures.
- **Token issuers:** Projects that issue tokens for use in DeFi protocols could be subject to disclosure and transparency requirements. This could include providing detailed information about the project's goals, the token's intended use, and potential risks to investors.
- **Liquidity providers:** Individuals or firms that provide liquidity to DeFi protocols could be subject to regulatory requirements, such as capital adequacy rules or risk management standards.
- **Smart contract developers:** The creators of smart contracts that power DeFi protocols could potentially be subject to regulation, particularly if they market their services to UK-based users or if their code is used to facilitate illegal activities.

Overall, any regulatory hooks should be designed to balance the need to protect consumers and maintain market integrity with the desire to promote innovation and growth in the DeFi ecosystem. This will require careful consideration of the unique characteristics of DeFi and ongoing engagement with stakeholders in the industry.

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

Overall, regulators have the chance to use technology in the crypto sector to enhance protection automatically e.g smart contracts, API driven data collection, self service AML/KYC providers, automated loss protection settings, 24/7 node uptime.

Information gathering can be immensely simplified and dashboards for regulators easy to create.

There are several other approaches that could be used to establish a regulatory framework for DeFi beyond those referenced in the paper. Here are some examples:

1. **Industry self-regulation:** DeFi industry participants could come together to create voluntary guidelines and best practices for their sector. This could include standards for smart contract audits, disclosure requirements for risks and fees, and other measures to promote transparency and consumer protection.
2. **Global regulatory coordination:** Given the global nature of DeFi, there could be greater coordination and collaboration between regulators from different countries to create a consistent and harmonized regulatory framework. This could help avoid regulatory arbitrage and reduce the risk of regulatory fragmentation.
3. **Technology-based solutions:** Regulators could explore the use of technology-based

solutions to improve monitoring and compliance in the DeFi sector. For example, blockchain analytics tools could be used to track the flow of funds and identify suspicious activity.

4. **Sandbox approach:** Regulators could create regulatory sandboxes to allow DeFi firms to test new products and services in a controlled environment. This could help regulators better understand the risks and benefits of DeFi, and allow DeFi firms to innovate while remaining compliant with regulatory requirements.

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

There are several best practices within DeFi organizations and infrastructures that could be formalized into industry standards or regulatory obligations, including:

- **Smart contract audits:** DeFi organizations should conduct regular smart contract audits to identify and address vulnerabilities that could be exploited by bad actors.
- **Liquidity provision:** DeFi organizations should have clear policies and procedures for providing liquidity to their protocols, including risk management strategies.
- **User protection:** DeFi organizations should implement user protection measures such as anti-money laundering (AML) and know-your-customer (KYC) requirements, as well as robust security measures to protect user funds.
- **Transparency:** DeFi organizations should be transparent about their operations, including disclosing the identities of key team members, providing regular updates on protocol performance and risks, and disclosing any conflicts of interest.
- **Interoperability:** DeFi organizations should work towards interoperability between protocols to enable greater liquidity and efficiency within the ecosystem.

These best practices could be formalized into industry standards or regulatory obligations to help ensure a more stable and secure DeFi ecosystem.

Chapter 12: Call for Evidence: Other Cryptoasset Activities

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

Investment advice and portfolio management activities are already regulated in traditional finance to protect investors and ensure fair and transparent practices. The same principles should apply to cryptoassets to protect investors in this rapidly growing market.

Investors in cryptoassets are often retail investors with limited knowledge and experience of the market, which increases their vulnerability to fraudulent activities, market manipulation, and other risks. By regulating cryptoasset investment advice and portfolio management, investors can have greater confidence in the market and be better protected from these risks.

However, it is also important to consider the potential impact of regulation on innovation and growth in the cryptoasset market. Regulation can create additional costs and administrative burdens for businesses, potentially limiting innovation and competition. Therefore, any regulation must be balanced and proportionate to ensure that it does not stifle innovation and growth in the market.

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

Regulating mining and validation activities could help to ensure that these activities are conducted in a way that is safe and reliable. This could include requirements for miners and validators to meet certain technical and operational standards, as well as requirements for them to maintain appropriate levels of cybersecurity and data protection.

Additionally, regulating mining and validation activities could help to promote market stability and consumer protection. By establishing clear rules and standards for these activities, regulators could help to prevent market manipulation and ensure that consumers are not subject to unfair or deceptive practices.

Overall, there may be merit in regulating mining and validation activities in the UK, provided that the regulatory framework is carefully designed to achieve its intended outcomes while minimizing any unintended consequences.

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

Staking generally involves holding and validating transactions on a blockchain network in return for rewards, which can include newly minted tokens or transaction fees. While staking may share some similarities with cryptoasset lending, it is fundamentally a different activity that does not involve the transfer of ownership or control of the underlying cryptoassets.

Given this, it may not be necessary to regulate staking in the same way as cryptoasset lending, particularly if the risks associated with staking are significantly different. However, it may still be beneficial to consider some level of regulatory oversight for staking activities in order to promote transparency and mitigate potential risks.

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)?

One potential approach could be to regulate staking pools as intermediaries, similar to how custodians and trading venues are regulated in the traditional finance industry. Another approach could be to regulate the validators themselves, similar to how financial advisers are regulated in the traditional finance industry. Ultimately, the appropriate regulatory hooks would need to be carefully evaluated and designed to ensure that they effectively address the risks associated with layer 1 staking activity while minimizing unnecessary regulatory burdens. Further consultation would be required especially in a fast paced changing environment.

Chapter 13: Call for evidence: Sustainability

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

Investors may find the following information useful when making investment decisions in cryptoassets with regards to environmental impact and energy intensity: current ESG reporting frameworks could be used to provide:

- **Energy usage:** Information on the amount of energy required to mine or validate the cryptoasset could be helpful. This could include details of the energy source used, such as renewable or non-renewable energy.
- **Carbon emissions:** Investors may also be interested in the carbon footprint of a particular cryptoasset. Information on the carbon emissions associated with mining or validating the cryptoasset could help investors understand its environmental impact.
- **Sustainability policies:** Investors may want to know if the cryptoasset issuer has policies in place to mitigate the environmental impact of their operations. For example, if they have commitments to using renewable energy sources or if they are taking steps to reduce their carbon footprint.
- **Third-party assessments:** Investors may also find it useful to have access to third-party assessments of the environmental impact and energy intensity of a particular cryptoasset. These assessments could provide an objective evaluation of the environmental impact of the cryptoasset and help investors make more informed investment decisions.
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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)?

See above.

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

Consultation with the industry would be required to narrow definitions, but here are plenty of proxy datasets that can be used to provide this type of information.

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

Given that essentially the industry is a proxy of energy used, it should be fairly simple for each part of the industry to provide estimates on this for sustainability purposes. But, its important to note that traditional finance should have the same type of measures to compare like for like energy usage, technology should almost always drop requirements for people, travel, buildings, individual technology requirements and bring down energy usage over time.

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?

At the initial stage, investors may want to know whether a particular cryptoasset or project is environmentally friendly or not. This information can help them make a decision on whether to invest or not based on their personal values and beliefs.

During the investment process, investors may want to know more about the energy intensity of a particular cryptoasset or project. This information can help them evaluate the long-term sustainability and profitability of the investment.

After the investment is made, investors may want to receive regular updates on the environmental impact and energy intensity of the project. This can help them track the progress of the project and make informed decisions about whether to hold or sell the investment.

In terms of the form, environmental impact and energy intensity disclosures could be provided in the form of standardized metrics or ratings, such as carbon footprint or energy consumption per transaction. They could also be included in the whitepapers, prospectuses, or other investor materials, as well as reported on the project's website or through third-party sustainability reporting frameworks.

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?

If the regulatory requirements disproportionately affect individuals or businesses with a protected characteristic, it could potentially create barriers to entry or limit opportunities for those groups. It is therefore important for regulators to consider the potential impact on different groups and take steps to mitigate any negative consequences. This could include conducting impact assessments, engaging with stakeholders, and ensuring that the regulatory framework is proportionate and fair.