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TO: Senate Select Committee on Australia as a Technology and Financial Centre

TO: Markets Regulation
Australian Securities and Investments Commission

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Dear Committee and ASIC Markets Regulation team,

Joint Submission to ASIC Consultation Paper 343: Crypto-assets as underlying assets for ETPs and other investment products and to Senate Select Committee on Australia as a Technology and Financial Centre

Thank you for the opportunity to provide a joint submission to ASIC in relation to Consultation Paper 343: Crypto-assets as underlying assets for ETPs and other investment products (**CP343**) and to the Third Issues Paper of the Senate Select Committee on Australia as a Technology and Financial Centre (**Committee**).

Our submission is set out as a Briefing Note at Annexure A and responses to CP343 at Annexure B. Our submission responds to most of the questions raised in CP343 as well as issues raised in the Committee's Third Issues Paper and Senate hearings on 6 August 2021. We use the term 'digital assets' rather than 'crypto-assets' to contextualise the broader issues at hand relating to markets, and consumer and investor protections that the Committee is seeking to assess as part of developing a minimum regulatory framework for digital assets.

We are grateful for the peer review and feedback on our submission that we have received and incorporated from the peak blockchain industry body Blockchain Australia, specialist lawyers at the Digital Law Association (Natasha Blycha and Susannah Wilkinson), Piper Alderman (Michael Bacina), and Holley Nethercote Lawyers (Paul Derham), specialist blockchain development agency Mycelium (Jack Deeb), Australian digital currency exchange BTC Markets (Caroline Bowler) and Australian digital asset prime broker Zerocap (Ryan McCall).

If you have any questions or require further information, please do not hesitate to contact Joni Pirovich on +61 450 958 749 or jpirovich@millsoakley.com.au.

Yours sincerely,

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Annexure A Briefing Note

1 Safe Harbour

1.1 What it could look like

(a) Time period and applicants

The Safe Harbour should include threshold conditions to access and further conditions to be met over a defined go-forward period of 2 to 3 years, and apply to digital asset 'issuers', digital asset 'market operators' and digital asset 'scheme operators'. A review of the Safe Harbour should be conducted prior to it expiring to inform whether an extension and/or law reform is warranted at that time.

The persons that may make an application to enter the Safe Harbour are set out more fully below and assumes that retail consumers and investors would (at least initially) rely on access through a website 'front-end' or social media groups and channels rather than directly accessing the technology, which can be problematic and difficult for an inexperienced technologist without considerable education. Once responsible entities of registered schemes and licensed financial advisors can clearly deal in and advise about digital assets (which does not mean that all digital assets are or will have to be financial products), retail investors would have good and safer entry point to the digital asset market.

Safe Harbour applicants should be responsible for collating information necessary for the assessment of threshold conditions and being available to provide further information.

(b) Entity type and expression of DAO status

All entity types should be able to apply and provide information about any nuances of their structure.

Applicants should be able to specify their entity type or make a clear statement that they are applying on behalf of a DAO (decentralised autonomous organisation), even if the legal characterisation of a DAO is an uncertain and emerging concept at the time of the application. Applicants should not necessarily be equated with the original 'issuers' and 'operators' of digital assets, schemes and markets. If and when a DAO Limited entity type is legislated in Australia, it could more clearly be included as an applicant category.

(c) Verifiable 'Smart Mark' that applicant displays on website and list of applicants

Safe Harbour applicant/s should be responsible for displaying a verifiable 'Smart Mark' (leveraging the IP Australia technology) issued by a newly created Digital Asset Taskforce to signify to retail investors and consumers that they have made a Safe Harbour application.[1] A different 'Smart Mark' could be issued by the Digital Asset Taskforce once the applicant has successfully entered the Safe Harbour. The Digital Asset Taskforce website should also display a list of applicants including the application, the status of the application, the associated website 'front-end', and a link to the application outcome.

(d) Publication of application and outcomes

The application and outcomes of each application should be published on the Digital Asset Taskforce website to share salient points with the Australian and global community of innovators, investors and consumers about positive and negative factors to look out for when assessing a project. A common complaint of those new to digital assets is the oft cited statement, "Do your own research" but the trouble is that people new to digital assets don't know where to start or what to look for when doing their own research, and guidance from regulators has not kept up with the latest innovations and their risks.

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[1] Award-winning 'Smart Trade Mark' technology built by IP Australia could be leveraged. See further: Australian Government: IP Australia, 'Smart Trade Mark' available at https://smarttrademark.search.ipaustralia.gov.au/; and Australian Government: IP Australia, 'IP Australia's Smart Trade Mark sweeps the Canberra iAwards' (23 May 2019) available at https://www.ipaustralia.gov.au/about-us/news-and-community/news/ip-australias-smart-trade-mark-sweeps-canberra-iawards.

(e) Moratorium on enforcement actions

To deter a flood of fraudulent and scam fundraisings using digital assets as soon as the Safe Harbour is announced, only those projects that apply for the Safe Harbour and meet the threshold conditions should be able to fall within the moratorium.

A moratorium would apply to Australian enforcement action only but would prevent enforcement action from ASIC for past fundraisings, schemes and markets for which disclosure obligations may have applied, and where registration and licensing (and obligations associated) may have been required. The moratorium should extend to laws enforced by other agencies also, with careful consideration given to the laws enforced by AUSTRAC.

Since a moratorium would apply to Australian enforcement action only, a project may be disincentivised to apply for fear of adverse action that may be commenced overseas. As such, the Digital Asset Taskforce should have dedicated resources committed to developing harmonious overseas and international minimum standards which include cross-border recognition of Safe Harbours and moratorium arrangements until an international licensing framework is established by an international body such as the OECD. Further detail is set out below in the Digital Asset Taskforce section.

(f) Information for application

Information required for the application to assess threshold conditions could include:

1. Australian dollar value of funds raised (at the time raised) or to be raised in an initial coin offering (**ICO**) and/or token distribution events (**TDEs**). Two triaging tiers could be projects that have raised or intend to raise in excess of, or less than, AU$5 million in any 12-month period (the same caps in value and time as the crowd-sourced equity funding regime). Alternatively, the small-scale offer exemption cap of AU$2 million could be used to split triaging tiers.
2. A financial report that summarises how the ICO/TDE funds raised have been or will be spent, including the Australian dollar value of the pre-mined but undistributed digital assets held in the 'Treasury' wallet/s at the time of the application and any plans or proposals in relation to the distribution of undistributed digital assets and spending of other digital assets held in the Treasury wallet/s. The Treasury wallet is a well-known and well-used mechanism where digital assets in the Treasury wallet signify the ability to fund further development and growth for the blockchain or decentralised application (**dApp**).
3. Disclosures and representations made about the digital asset at the ICO or TDEs, including the Whitepaper (if available), the website and social media channels (including Discord, Medium, Twitter).
4. Any existing licenses or registrations, such as a digital currency exchange registration with AUSTRAC (if relevant).
5. Extent of 'know your customer' (**KYC**) or other 'customer due diligence' (**CDD**) enquiries or work undertaken at the ICO or TDEs, including level of research undertaken to identify any or all of privacy enhancing technologies (**PETs**) and blockchain analytics to understand geographic location of those participating in the ICO or TDEs, whether the participant is a retail or sophisticated investor, whether the participant is known to be associated with criminal, suspicious or market manipulative behaviour ('pump and dumping').
6. Statistics about the project's community, including number of wallet addresses that hold the digital asset at the time of the application, number of followers on each social media forum (to assess how many potential retail investors are involved), number of core contributors and the country of residence for each.
7. Summary of any correspondence received from regulators, any complaints received to date and how each have been dealt with or are being dealt with.

8. Whether the blockchain or dApp has been copied from an existing blockchain or dApp and if so, a summary of that similar blockchain or dApp and how the digital asset is differentiated, benefits investors and/or consumers, and/or reduces risk.

9. Self-assessment of digital asset features applicable – the Department of Treasury should establish more formal categories and risks for retail investors and consumers for each category as part of a mapping exercise and taxonomy that also sets out legal and tax general information for each category.

   The below features (and once finalised, categories in a taxonomy) could be used by digital asset exchanges to clearly label the digital asset listed to better inform consumers and investors and form part of their obligations under updated AUSTRAC digital currency exchange requirements. The initial features could include:

   a) Speculative (value can increase or decrease), and if so: how long the digital asset has been in circulation and the average percentage of swings in price (so that very early stage as well as historically quite volatile digital assets are more easily identified)

   b) Payments (can or will be accepted as a form of payment with bricks and mortar and ecommerce merchants)

   c) Utility (like a voucher or credit for access to goods, services or something else)

   d) Stable to fiat currencies (where the fiat currencies are held dollar for digital dollar as collateral, and could include the Australian dollar, US dollar, Euro) or intended to be stable (crypto-collateralised, algorithmically-collateralised, or hybrid-collateralised)

   e) Collectible (like non-fungible token artworks)

   f) Governance (right to express sentiment or a vote)

   g) Investable (able to be used in the dApp as collateral or to earn a return and/or other dApps to earn a return) – and if this feature is selected, there should be specific information required about the entity/ies operating as the digital asset custodian (whether a legal person or a smart contract)

   h) Rights to assets (a right to digital assets – such as that a Liquidity Provider token represents a right to withdraw digital assets and trading fees from a liquidity pool – or some other asset that the digital asset represents such as real property)

   For example, if the Ethereum Foundation (an entity registered in Zug, Switzerland) or a member of the Ethereum community sought to make an application on behalf of the Ethereum blockchain with native digital asset ether (ticker: ETH), each of (a), (b), (c), and (g) would be applicable for ETH.

   If Uniswap Labs (an entity registered in the USA) or a member of the Uniswap community sought to make an application on behalf of Uniswap with protocol governance token (ticker: UNI) and liquidity provider tokens (where upon providing digital asset liquidity to a smart contract the liquidity provider receives a token representing its right to return of those digital assets plus trading fees, e.g. ETH-DAI UNI-LPv2), each of (a), (f) and (g) would be applicable for UNI and each of (h), (g), (f) and (a) would be applicable for the LP tokens.

10. Summary of compensation and risk-mitigation arrangements explored or offered throughout the project including smart contract audits, ‘bug-bounties’, arrangements with data providers (i.e. oracles), enquiries of traditional insurers, appropriateness of decentralised insurance providers such as Nexus Mutual, any reserves held or to be held in the ‘Treasury’ or other wallets, community education initiatives (such as educational videos, ‘ask me anything’ sessions’, cyber security and awareness tips).

(g) Threshold conditions (which inform further conditions)

A sample of threshold conditions could include:

1. Provision of a completed application with supporting information. Specific further conditions may be informed by the nature of information provided in the application.
2. Statement of intention. The applicant/s should make a statement and show evidence that they have been 'well-intentioned' in their innovation, which means that they have not been intentionally or deliberately dishonest in the design of technology and operation of the project in such a way that harm is knowingly done to investors and consumers.
3. Where funds have or may have been raised from retail investors around the world, an immediate notice is posted on all forums (e.g. website, social media) with a short disclosure statement of no more than 2 pages and a link to the Safe Harbour application. The Digital Asset Taskforce should design and publish a pro forma notice statement.
4. Where there have been or are scams known to be associated with the digital asset project but by people unrelated to the project, information about those scams should be displayed clearly with warnings on the 'front-end' and social media with steps taken to report and take action to shut down the scam.
5. If cyber security audits of smart contracts have not been completed, that they are completed as soon as possible by a reputable auditor.
6. Where no or insufficient KYC or CDD has been undertaken, the applicant states they are willing to:
    a) implement blockchain analytics and regular reporting back to their communities including the Digital Asset Taskforce (and other regulators such as AUSTRAC and ASIC) to identify and report digital asset activity that is associated with wallet addresses known to be bad (money laundering, terrorism financing, funding crime, market manipulation) and determine appropriate actions to be taken in conjunction with regulators; and
    b) actively explore PET solutions in development and commercially available to conduct privacy preserving KYC processes such as digital identity (including self-sovereign identity and 'zero knowledge KYC'), 'DeFi passports', and as soon as appropriate implement a suitable solution. For example, a migration process that involves digital asset holders depositing their original 'un-KYC'd' digital asset, being KYC'd in a privacy preserving manner, and then being issued the 'KYC'd' digital asset.
7. Currently unregistered and unlicensed scheme operators or market operators (or the developers of a self-executing applications that operate as a market or managed investment scheme) should implement standards and automated processes in the best interests of retail consumers and investors that are appropriate, adapted and can be flexibly applied in this still nascent and emerging industry. Standards and automated processes may include clear warnings, value limits on financial transactions, threshold questions about skills and experience, alternative compensation arrangements and a decentralised dispute resolution process. Pre-deployment of smart contract standards could involve mandatory auditing of smart contract code, and proposals to update variable parameters of code.

8. Disclosure of dApps that the digital asset can be used in to earn a return (such as rewards, yields, trading fees) separate to the dApp that the digital asset attaches to. For example, UNI is the protocol governance token of Ethereum-based dApp Uniswap, a decentralised exchange application, and UNI can be 'deposited' into another Ethereum-based dApp such as SushiSwap, another decentralised exchange application, to earn 'trading fee' returns. SushiSwap is a separate dApp to Uniswap. This condition will have to be drafted carefully as more blockchains are launched and used (such as Polkadot, Solana, Cosmos, Binance Smart Chain) and cross-chain swaps of digital assets are enabled.

1.2 What it could achieve

A Safe Harbour would better achieve the objectives of protecting consumers and financial stability and reducing systemic risks in the short term, as well as informing 'fit for purpose' appropriate and adapted laws for markets and financial services for decentralised, open and global technology infrastructure.

Bad actors would either not meet the Safe Harbour threshold conditions or not even apply. As such, a key new protection for retail consumers and investors will be the requirement of Safe Harbour applicants to display an application 'Smart Mark' and that a list of applicants be maintained on a to-be created Digital Asset Taskforce website.

Projects that may be technically 'registrable' with ASIC and/or 'licensable' by ASIC that have well-intentioned actors and that may already be 'self-regulating' and accountable to their communities should be afforded an opportunity to 'regularise' without fear of significant time and funds required and no guarantee of a registration or licence. The process of 'regularising' is not to fit exactly within the current law and regulations but to provide regulators and the industry an opportunity to learn how investor and consumer protections are best upheld when the technology is already open and transparent but has other risks like 'smart contract risk'.

1.3 Why it is necessary

The appropriate licensing and supervision of DAO-based digital assets, and digital asset schemes and markets that facilitate the listing and trading of digital assets that could be securities or other financial products (including digital asset ETPs), or benefit from similar regulation as financial products, is a topic begging for urgent public guidance from Treasury, ASIC and/or the Reserve Bank of Australia, with input from experienced financial market operators like the ASX. A Safe Harbour would help to delineate the boundary between the extent of guidance that can be given by regulators versus the policy that needs to be developed in an agile way as policy gaps are identified.

Up to date guidance as to how the existing legislation applies to the nuances of emerging technology is crucial. Up to date and specific guidance preserves the ability for legislation to be technology neutral and to identify where the legislation is not technology neutral and requires policy development. Timely guidance also allows for managing and reducing risks that could be systemic such as those that may increasingly be presented by emerging technologies used in financial innovation.

At the date of this submission, more than US$65 billion of ETH and ERC-20 tokens is locked up in decentralised finance (**DeFi**) applications,[2] and the value of stablecoins in the market (which are mostly USD-pegged) is just over US$117 billion with a 24-hour trading volume of US$61 billion. Trillions of dollars' worth of digital assets are now traded regularly.

Currently, there is no publicly available resource or proprietary resource that informs how much of this value is attributable to Australians and that may have a consequential impact in the Australian financial system if aggressive regulatory action is announced or commences.

[2] See, DeFi Pulse at https://defipulse.com/.

(a) Lack of guidance and enforcement actions has created a legitimate expectation in the community that DeFi is acceptable

The lack of guidance from regulators (both ASIC and AUSTRAC) and lack of enforcement action in relation to digital asset 'issuers', digital asset 'market operators' and digital asset 'scheme operators' has created either or both of uncertainty and a 'legitimate expectation' in the industry that the issue of digital assets and operation of and interaction with digital asset schemes and markets is effectively unregulated. Some of the key issues for guidance are set out below.

Both innovators and retail investors have relied on this apparent acceptance to such an extent that the total value invested in digital assets and digital asset schemes and traded through digital asset markets is significant enough to be systemic. The Safe Harbour conditions and period should be designed with industry and introduced as soon as possible to prevent the risk of systemic collapse of the digital asset market (and consequential defaults in the traditional financial system) almost overnight. Aggressive enforcement action now by ASIC and other international regulators could have severe and systemic impacts.

(b) Lack of clarity of what is in the ASIC 'regulatory perimeter'

The ASIC consultation paper refers to the 'regulatory perimeter' and that ASIC regulates crypto-assets and related products and services to the extent they fall within the regulatory perimeter of financial products and services. The consultation paper refers to *Information Sheet 225: Initial coin offerings and crypto-assets* (**Info Sheet 225**) in a way that suggests Info Sheet 225 appropriately defines the regulatory perimeter in relation to ASIC's responsibilities for markets.

Info Sheet 225 was released in September 2017 (just before bitcoin hit its all-time high in December 2017 and after a period of significant volatility) and updated in May 2019 but has not been updated since 'DeFi Summer' began in May 2020. Before the Committee can properly assess options for the development of a minimum regulatory framework for digital assets in Australia, the Committee should be properly informed of the shortcomings of the *Corporations Act 2001* (Cth) (**Corporations Act**) through either or both of updated ASIC guidance in Info Sheet 225 (and other regulatory guides referred to below), the website, and/or a more detailed submission from ASIC to the Committee in response to the Committee's Third Issues Paper.

Holley Nethercote has called for ASIC to provide clarity to the market now by applying its interpretation of the current Chapter 7 definitions of financial product to a top-trending list of digital assets and DeFi offerings, stating whether ASIC does or does not think that they are financial products. This exercise could be commenced as soon as a Safe Harbour is announced so that 'well-intentioned projects' (defined above) that meet the entry conditions of a Safe Harbour but which have been 'licensable' and 'registrable' with ASIC can have the benefit of a moratorium on enforcement action. Even if this exercise provides a point in time only piece of guidance, noting the emerging nature of the technology, it is a necessary foundation to identify the extent to which ASIC can apply the existing law to the projects as we see them to this point and delineate the matters for policy. ASIC has provided some commentary of this nature in its 2014 submission to the Senate and to a limited extent in some regulatory guides (see, for example, Section C of ASIC Regulatory Guide 236).

The catalyst for DeFi Summer is attributed to the launch of Compound's protocol (i.e. dApp) governance token, COMP, and COMP liquidity mining program in May 2020. The mechanisms to incentivise people to a protocol and to stay with a protocol, to involve them in governance and future of the protocol from even before launch of the protocol and any token distribution event/s, and to grow network effects was accelerated through protocol governance tokens and yield farming (of which liquidity mining is a subset). The design of digital assets, the means for their distribution and the models of governance overseeing particular protocols have moved significantly past the initial coin offerings seen in 2017-2018. Composability that is a feature of Ethereum-based protocols has enabled the acceleration and attractiveness of protocol governance tokens, liquidity mining and yield farming more broadly and also means that the initial developers / founders of a protocol do not have control over the way the protocol tokens are used in other protocols that may give token holders rights to earn or mine tokens.

Info Sheet 225 does refer to *Regulatory Guide 172 Financial markets: Domestic and overseas operators* (**RG 172**) in the context of noting that an Australian Market Licence is required if a platform deals in crypto-assets that are financial products and provides limited information or application of the Corporations Act about when a crypto-asset trading platform could become a licensable financial market. Info Sheet 225 states:

> *Where a crypto-asset is a financial product (whether it is an interest in a managed investment scheme, security, derivative or NCP facility), then any platform that enables consumers to buy (or be issued) or sell these crypto-assets may involve the operation of a financial market.*
>
> *To operate in Australia, the platform operator will need to hold an Australian market licence unless covered by an exemption. There are currently no licensed or exempt platform operators in Australia that enable consumers to buy (or be issued) or sell crypto-assets that are financial products. Platform operators must not allow financial products to be traded on their platform without having the appropriate licence as this may amount to a significant breach of the law.*

Since early 2020, Enzyme.finance (formerly Melon) has offered a platform to create digital asset funds that anyone can invest in. Enzyme.finance is clearly a platform that enables consumers to buy (or be issued) digital assets and involves the operation of a global financial digital asset fund market. Australians are using Enzyme.finance and financial planners wish to make use of Enzyme.finance to offer digital asset funds to their clients. Enzyme.finance does not hold an Australian Market Licence and is not clearly covered by an exemption.

If Australian consumers become aware of Enzyme.finance, they cannot clearly ask their financial planners for advice because financial planners will not clearly be licensed to give advice with respect to financial products and financial markets that deal in digital assets unless they are listed on the existing licensed market operators (including ASX, SSX or Chi-X). Licensees will not allow financial planners to give advice on digital assets because as a non-financial product (or not clearly a financial product at all times) they will likely not be covered by the licensee's professional indemnity insurance. This could significantly inhibit the competitiveness of Australian financial planners, but also create incentive for Australians to create their own digital asset fund and manage it themselves and on behalf of family and friends.

Critically, ASIC's repetitive statements that the industry is 'largely unregulated' with 'minimal to no regulatory oversight', confuses the industry as well as the financial services sector more broadly. In addition, ASIC's lack of guidance or alerts in relation to platforms such as Enzyme.finance which may be 'licensable' market operators that list digital asset ETPs has left the market confused.

2 Digital Asset Taskforce

2.1 Key responsibility 1: Design and administration of Safe Harbour

A Digital Asset Taskforce within the Department of Treasury should be created and responsible for designing and administering the Safe Harbour, but there will need to be a working relationship with (at least) ASIC and AUSTRAC in the assessment of threshold conditions for projects to access the Safe Harbour. Enough resources should be allocated to the Digital Asset Taskforce (and other agencies like ASIC and AUSTRAC) so that assessments of applications are completed within a reasonable period.

Assuming there would be an influx of applications, the timing of assessment of applicants should be triaged. One way to triage could be to prioritise those projects with significant value locked in smart contracts and/or transacted with the smart contracts; another way might be in terms of value of funds raised from an ICO/TDEs. Triaged and prioritised projects would represent well-developed and operational digital asset schemes and markets and allow the 'long tail' of similar projects to learn from the published applications and outcomes.

2.2 Key responsibility 2: Transnational and international cooperation

The Digital Asset Taskforce should work with overseas equivalents (as they are created) and international standard setting bodies to harmonise an international set of minimum best practice licensing standards, informed by learnings from a Safe Harbour.

Localised financial services and markets laws and regulation (and the enforcement of such) have been a source of confusion amidst the exponential growth of digital assets around the world. Localised approaches are under strain and will continue to suffer against the globalisation of finance and financial markets which has been accelerated by blockchain technology and digital assets that have global reach from the outset. Localised approaches without harmonisation or consensus internationally also naturally create opportunities for regulatory arbitrage.

Markets and financial services laws were crafted based on the existing financial system that comprises of centralised parties and intermediaries, and this is the source of the key issues in applying and enforcing the existing laws and ASIC guidance to decentralised, open and global technology and applications.

We are well overdue for a global licensing or standards regime. Digital assets are based on technology that has no natural domestic bounds, and so digital asset schemes and markets also have no natural domestic bounds. We have already seen the benefits of dApps that pool international liquidity in a transparent way which has assisted capital and financial digital asset market efficiency through low or minimal trading fees, real-time trading without counterparty and default risk (but 'blockchain reorganisation risk' explained further below), low or minimal price slippage, price discoverability improved by 24/7 trading and 100% uptime (but subject to manipulation by celebrities and 'fin-fluencers', and significant inflows and outflows from institutional capital and 'whales').

2.3 Key responsibility 3: Advise the Treasurer and Prime Minister on law reform required throughout and at expiry of Safe Harbour

Without clear international consensus on best minimum regulatory framework, changes to or introducing new laws for digital assets would be best informed through a Safe Harbour and newly created Digital Asset Taskforce, with up to date and regular guidance from ASIC and the Digital Asset Taskforce.

Digital asset schemes and markets include DAO-based digital asset products and services that are not listed or intended to be listed on the existing licensed market operators (including ASX, SSX and Chi-X), are not licensed but perhaps 'licensable' (under one or a combination of an Australian Financial Services Licence (**AFSL**), an Australian Markets Licence (**Markets Licence**) and a Clearing and Settlement Facility Licence (**CSFL**)), are not registered but perhaps 'registrable' with ASIC, and which are available to retail investors.

The open and transparent nature of the blockchain ledger and smart contract code, the decentralised network of nodes, and the behaviours that can be influenced through incentives built in the economic design of a digital asset (referred to as the 'tokenomics'), mean that the guidance provided by ASIC (and other regulators) to date is either lacking or out of date in relation to technology and assets with different properties to the traditional financial system and traditional assets.

Guidance on how the current laws apply is a necessary first step to identify the policy gaps that exist, from which the Digital Asset Taskforce can and should advise Treasury, the Treasurer and Prime Minister and the relevant other Minister/s on appropriate policy. It appears that ASIC (and other regulators) have been waiting to be approached by Australian-based teams seeking to be licensed or seeking relief from certain requirements where those requirements are not appropriate and adapted for DAO-based digital assets, schemes and markets. On the one hand it is understandable that the allocation of ASIC resources is justifiably reserved for Australian innovation and Australian financial markets. On the other hand, Australian innovation and Australian financial markets will benefit from the combination of timely guidance and policy development in relation to digital assets and digital assets schemes that are already operational. In so doing, Australians, Australian business and our governments can best capture the economic benefits of this transformational technology.

It appears that recently there has a substantial shift of policy responsibility from ASIC to the Commonwealth Treasury which may explain the lack of recent guidance from ASIC in this area. Accordingly, it is appropriate that the Digital Asset Taskforce advise Treasury, the Treasurer and Prime Minister and other relevant Ministers rather than ASIC.

3 Key issues: Who is the 'issuer' or 'operator' and when does 'sufficient decentralisation' occur?

Identification of the 'operator' of a currently unlicensed (but perhaps 'licensable') market or scheme in DeFi, and the 'issuer' of digital assets that may be financial products, requires immediate and ongoing guidance from Treasury or ASIC. Similar issues arise for lending and banking-like DeFi products, for which the RBA and APRA oversee.

ASIC made a submission to the Senate inquiry into digital currency in December 2014, in which ASIC stated:[3]

> *"Many of the obligations under the legislation ASIC administers apply to the issuers of financial products, who are responsible for the obligations to product holders under the terms of the product. On the other hand, digital currencies do not have an identifiable 'issuer', as there is no centralised authority responsible for their creation or any obligations owed to digital currency holders*."

In 2014, ASIC's view would have been formulated based on the Bitcoin blockchain and bitcoin cryptocurrency (ticker: BTC) and perhaps the Ethereum blockchain and ether cryptocurrency (ticker: ETH). Since 2014, the Ethereum blockchain has launched and the development of dApps on the Ethereum blockchain has been prolific. Despite the name, the decentralised applications vary in their level of decentralisation. Neither ASIC nor Treasury has provided any specific guidance in relation to dApps so we outline a few of the considerations below to assist the preparation of guidance and delineation of areas for policy and law reform.

3.1 Decentralisation of the blockchain network is different to decentralisation of the application

Whilst the Bitcoin and Ethereum blockchain networks of nodes may be 'sufficiently decentralised'[4] in the sense that there is no person or group that carries out essential managerial or entrepreneurial efforts or that can control the network or manipulate transactions recorded on the blockchain ledger, for Ethereum there can still be and often is centralisation at the application layer and/or governance of the dApp.

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[3] Submission by the Australian Securities and Investments Commission to the Senate inquiry into digital currency, (December 2014) available at https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Digital_currency/Submissions.

[4] In reference to the speech given by William Hinman at the Yahoo Finance All Markets Summit: Crypto, titled 'Digital Asset Transactions: When Howey Met Gary (Plastic)' (14 June 2018) available at https://www.sec.gov/news/speech/speech-hinman-061418.

(a) Blockchain level

Concept creator and structure

At the blockchain level, Ethereum had an initial founder that created the technology concept, Vitalik Buterin, but Ethereum is a community-driven, open-source software project that has evolved since its inception with no clear person or authority responsible for the blockchain technology. The Ethereum Foundation is incorporated as a not-for-profit entity based in Zug, Switzerland and the governance processes have evolved over time. Ethereum miners (or nodes) are based all over the world.

Governance

The Ethereum governance process currently involves that an Ethereum Improvement Proposal (**EIP**) be contributed on a public forum to specify a potential new feature or process for the Ethereum blockchain or the Ethereum standard contracts (e.g. the fungible token contract standard, ERC20, and non-fungible token contract standard, ERC721).[5] Anyone within the Ethereum community can create an EIP but given the high technical bar for submitting a well-formed EIP, most EIP authors have been application or protocol developers.

Whilst all proposals are available to the public, retail consumers and investors would not necessarily understand them. Reputable news agencies such as CoinDesk and Cointelegraph are performing a valuable function of explaining in plain language what the proposals mean but consumers and investors wouldn't initially be aware of the reputable news agencies and may fall into the trap of following 'fin-fluencers' some of which are paid to promote certain digital assets to their social media followers.

The EIP author is responsible for building consensus within the community and documenting dissenting opinions. EIPs that relate to the core blockchain are implemented through a soft fork (non-contentious between miners and all miners upgrade the technology) or hard fork (contentious between miners where some continue to support one version of the technology and others support another version of the technology).

Crowd-sale (ICO / TDE) process and documentation

In 2014, ASIC did not provide specific guidance (nor did AUSTRAC) about the treatment of the Ethereum Foundation's crowd sale of ETH in 2014 where the Foundation pre-mined a number of ETH, held it in a digital wallet controlled by the Foundation – a 'Treasury' wallet – and BTC was accepted by the Foundation into another 'Treasury' wallet as payment for the issue (or transfer) of ETH. The BTC was used, and pre-mined ETH gradually distributed, to develop Ethereum.

The purposes of the crowd-sale may have substantively included producing a 'financial benefit' for contributors (e.g. from an increase in the value of their ETH) but the crowd sale documentation specified that participants represented and warranted that they were not acquiring ETH for speculative investment, that the technology was highly experimental with risk of extreme volatility and loss of the full value of consideration provided for ETH. As at April 2020, the Ethereum Foundation ETH 'Treasury' wallet still held about 587,000 pre-mined ETH.[6]

ASIC guidance required and policy gaps

1. ASIC guidance: Classification of a scheme undertaken by a foreign 'issuer' as a managed investment scheme under Australian law, where the digital asset issued is a financial product under Australian law.

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[5] Ethereum, "Ethereum Improvement Proposals" (28 May 2021), available at https://ethereum.org/en/eips/.

[6] Frank Topbottom, 'The State of Ethereum Treasuries' (23 April 2020) available at https://medium.com/@FrankResearcher/the-state-of-ethereum-treasuries-8b9bce758011.

Based on the general guidance in Info Sheet 225 the ETH crowd sale has a high likelihood of being characterised as an unlicensed and registrable retail managed investment scheme and ETH a financial product as representing an 'interest in the scheme' offered to the world including Australians. However, no clear and specific guidance was released at the time to suggest that despite not registering or licensing with Australian authorities, nor seeking an exemption or relief if a licence was obtained in Switzerland, the crowd-sale documentation did or did not satisfy Australian disclosure requirements and obligations. Nor was any enforcement action taken by ASIC or any other foreign regulator against the Ethereum Foundation as the 'issuer'.

An unanswered question is whether ASIC took a position in relation to the ETH crowd sale that it was or was not a licensable and registrable managed investment scheme and that ETH was or was not a financial product.

Another unanswered question is whether Australia's managed investment scheme rules are broader than most (or all) other jurisdictions that they inappropriately apply to more digital assets and digital asset schemes than the regime was designed for such that the rules cannot practically or reliably enforced, leading to consumer confusion.

If the identification of an 'issuer' is not uncertain in this case, then either or both issues of 'nexus with Australia' and the satisfaction of elements of a managed investment scheme such as whether the purpose includes producing a financial benefit come into question.

2. ASIC guidance and policy gap: Nexus with Australia

ASIC should provide guidance on what it means for a blockchain to be 'operating in Australia' and what factors are relevant. For example, several blockchain miners, but not the majority, may be based in Australia and/or have successfully mined a majority of blocks in a period. A number of people acquired ETH in the crowd-sale and a large number hold and transact with ETH (and ERC-standard tokens verified on the Ethereum blockchain) from Australia. In fact, anyone with an internet connection can mine ETH or transact with Ethereum.

As other blockchains and their native digital assets are launched and issued/distributed and become more widely adopted, the relevant factors and key parameters or thresholds will be increasingly important for classification purposes, whether Safe Harbour conditions are met and whether existing laws and regulations can and should be complied with.

3. ASIC guidance: Producing a financial benefit

ASIC's Info Sheet 225 adopts a broad interpretation of financial benefit such that if the digital asset can increase in value then the issue of that digital asset includes a purpose to produce a financial benefit where, for example, funds raised from the issue are pooled and used to develop the blockchain. Even stablecoins designed to remain 'stable' to a reference asset can increase in value.

Accordingly, every ICO and TDE could arguably fit within ASIC's interpretation of the law and yet there have been no enforcement actions or public warnings since the very few in 2018, [7] and the DeFi space has grown much more exponentially than the 'ICO boom' of 2017/2018.

Info Sheet 225 should be updated to refer to each of the respective Regulatory Guides linked throughout it, and each Regulatory Guide updated to include blockchain and dApp specific examples in an Appendix.

The interpretation of 'financial benefit' in the definition of managed investment scheme is a key issue and point of contention, especially for technology like Ethereum that is

[7] See ASIC Media Release, '18-274MR ASIC acts against misleading Initial Coin Offerings and crypto-asset funds targeted at retail investors' (20 September 2018) available at https://asic.gov.au/about-asic/news-centre/find-a-media-release/2018-releases/18-274mr-asic-acts-against-misleading-initial-coin-offerings-and-crypto-asset-funds-targeted-at-retail-investors/; and moneysmart.gov.au, 'Cryptocurrencies and ICO's' available at https://moneysmart.gov.au/investment-warnings/cryptocurrencies-and-icos.

open-source and is proving its capability and potential to serve function and utility as a global financial settlement layer. In addition, and from the outset of the project it was intended that ETH is required to be paid as 'gas' as a necessary cost to fuel the self-execution of a smart contract. However, the functionality of ETH did not exist at the time of issue and other foreign regulators have since released guidance stating that a utility or functional digital asset is a security or other financial product if issued / distributed prior to the functionality being available.

4. Policy gap: Characterisation of digital assets issued from block rewards and miner that receives them

   Notwithstanding that there may have been a clear 'issuer' of ETH originally, newly minted ETH is produced each block (known as 'block rewards') using a Proof of Work consensus algorithm. The digital asset ETH is also brought into existence from the operation of the technology and directly 'issued' to the wallet address of the node that mined the block. It would be a step too far to call each node that receives ETH block rewards an issuer to themselves, or to those it on sells ETH to.

   Perhaps the Ethereum Foundation could be a deemed 'issuer' of ETH block rewards, but the nature of issue no longer reflects the indicia of a management investment scheme. Equally, there is no ongoing tracking or difference of treatment of ETH issued at the crowd sale (say, a financial product because there is an issuer and an operator or responsible person of a scheme) from ETH issued through Proof of Work mining (say, not a financial product because no clear issuer or operator).

   Every centralised and decentralised digital asset exchange in the world that has listed ETH has done so without a market licence. Unlike BTC for which no BTC was pre-mined or issued through a crowd-sale and which has a limited supply of 21 million BTC, there is no cap on the supply of ETH, which should still be the case when the Ethereum blockchain moves to a Proof of Stake consensus algorithm soon. At some point, if not already, the ETH minted as block rewards will outnumber the ETH issued at the crowd-sale and in addition, a proposal has just passed within the Ethereum community that a portion of ETH used as transaction fees will be burnt (i.e. destroyed and no longer in circulation) per block. So at some point the ETH burnt will equal and exceed the ETH that was pre-mined and distributed in the 2014 crowd-sale, and subsequently from the Ethereum Foundation.

   With the above in mind, it will be important for policy to establish the parameters for 'tokenomics' initially and as tokenomics are changed through proposals. Most retail investors and consumers acquire digital assets through centralised or decentralised digital asset exchanges, so obligations to inform retail investors and consumers could be shared between exchanges upon listing the digital asset, those initially launching the ICO/TDE and blockchain, and those subsequent that submit proposals.

5. Policy gap: Blockchain monitoring

   Oversight of the efficiency and effectiveness of the Ethereum blockchain is performed by many, particularly the miners that 'run a node'. It is not true that a centralised authority or person is required or always required for reporting to any regulator to protect retail consumers and investors like traditional or centralised finance and markets.

   Rather, Government and regulators could adapt to learn how to and then actually participate in and observe blockchain technology (such as running a node), how to interact with a block explorer (i.e. a search engine that allows you to 'explore' the blockchain information such as Etherscan for Ethereum), and engage with the blockchain community (such as through social media and discussion forums).

   Some of the proposals in this paper put the onus on the blockchain or dApp founding development team throughout the Safe Harbour period to set up blockchain analytics and monitoring for reports to the community and regulators. However, a newly created Digital Asset Taskforce together with regulators and experienced market and scheme

operators could more actively and cooperatively inform this exercise for appropriate and adapted oversight and protections in digital asset issuances, markets and schemes.

(b) dApp level

What is a dApp?

A dApp comprises one or more smart contracts deployed to the Ethereum blockchain, where each of the smart contract terms can self-execute upon specified events occurring. Parameters in the smart contract/s can be changed and the updated smart contract/s are deployed to the Ethereum blockchain by the person/s with the private keys to the wallet that pays for the gas to deploy the smart contract.

Concept creator and structures

The smart contracts are designed and developed by one or more humans that may have an incorporated structure and/or a structure that is deemed to be a company under Australian corporate law (i.e. an unincorporated association of persons or a partnership).

The founding development team may initially ('DAO-first') or gradually decentralise the managerial and governance functions involved with the dApp.

If a 'DAO-first' approach is adopted, the founding team of people treat themselves as the developers that are separate to and providing services to the DAO from the inception of the project. The separation can be confusing if the members of the DAO comprise an unincorporated association of persons or a partnership, and the founding development team is its own unincorporated association of persons or a partnership. There may be some but not a majority of Australian contributors to or members of the founding development team, as well as members or partners in the DAO. Even 'DAO-first' dApp projects have a founding development team and have varying methods to gradually or quickly decentralise governance.

From 2014 to about 2018 it was common for the founding development team to incorporate a not-for-profit Foundation entity to contribute to and oversee the dApp but since 2018 'governance' tokens have emerged as a tool for initial fundraising and decentralising governance as early as possible in the project. Since about 2018, 'Labs' entities are incorporated to distinctively separate the developers from the smart contract technology. The technology, once deployed, can operate autonomously and with a model of decentralised governance through 'governance' token holders, governance 'councils' of people appointed to assist decision making and implementation, and people with signing authority on a multi-signature wallet as an additional layer of governance and oversight of the dApp.

Governance

Models of decentralised governance vary but generally members of the dApp's DAO community express sentiment or use their dApp 'governance' token to cast a vote once a proposal is submitted on the dApp interface to change one or more parameters of a smart contract/s.

Once the community sentiment or vote is in, there may be a centralised party (e.g. a Foundation) or a number of persons acting as signing parties on a multi-signature wallet (e.g. a DAO council) that actually sign and pay ETH in gas to deploy the updated smart contract/s.

Regulatory guidance required and policy gaps

1. Regulatory guidance and policy gap: Who is and should be the 'issuer' or 'operator' of a digital asset issuance, scheme or market?

ASIC or Treasury should clarify the characterisation of the 'Labs' or 'Foundation' entities, or groups of people, acting on behalf of the DAO. Contrary to the ASIC statement extracted above, there is a clear party or parties responsible for the *creation* of the smart contract terms of digital asset products and services: either or both of the DAO, characterised as an unincorporated association of persons or partnership that comprises of members and partners around the world, or the developers providing services to the DAO, which could also comprise of people around the world whether or not an entity is incorporated in a jurisdiction.

A gas cost must be paid in ETH from the digital wallet or smart contract used to deploy a smart contract to the Ethereum blockchain – smart contracts can be programmed to deploy smart contracts. A human performs this task and may or may not associate their identity with the digital wallet address. Once a smart contract is deployed, it operates as it is coded to operate unless a vulnerability in the code is exploited by an attacker. This is referred to as 'smart contract risk' and goes to the heart of 'code of law' (traditional legal rules apply to protect consumers and parties to a contract) versus 'code is law' (accept any losses or harm done if the code has a vulnerability that is exploited). If a smart contract has been cyber security audited before being deployed, the audit report may be displayed on the smart contract information page on Etherscan (the most popular block explorer for the Ethereum blockchain). Cyber security audits are not compulsory but should be a requirement of the Safe Harbour.

To the extent the digital asset creation and distribution smart contract/s and methods are deployed and implemented by the founding development team but on behalf of the DAO, the founding development team may be 'issuers' (or 'arrangers'). However, due to the self-executing nature of the smart contract and oversight and governance of the smart contract/s by the broader community (i.e. followers on social media accounts and governance token holders if a governance token has been distributed) the parties that deployed the smart contract/s are not necessarily the ongoing 'operators' of a scheme or market if they remove themselves from a position of control or significant influence over the dApp. Note that the 'Labs' or 'Foundation' entity is generally funded or has a 'tap' to the Treasury wallet to continue development of the dApp and its governance for the initial few years of the project which is subject to close and constant oversight by the dApp's governance and community.

Accordingly, there appears to be basis under the Corporations Act to treat the creator/s of smart contract terms of digital assets and schemes as the 'issuer' and 'operator' and a presumption that the original 'issuer' or 'operator' is the ongoing 'issuer' and 'operator' of the digital asset or scheme that is a security or other financial product. However, it is questionable whether this is an appropriate interpretation of the Corporations Act which may require policy amendment for the following reasons:

- Once the smart contracts are deployed, they are programmed to self-execute and allow each person to 'self-serve' and 'self-direct' their interaction with the protocol such that the founding development team is not an 'apples for apples' operator like traditional market and scheme operators. Managerial and governance functions ordinarily performed by a traditional market or scheme operator are instead multi-levelled and decentralised (to various degrees) with blockchain-based applications. Whether the founding development team is or should be the initial and ongoing 'issuer' and 'operator' is a matter for policy including the extent to which 'compliance by design' requirements are imposed on the founding development team before a protocol can be deployed, and/or whether those that actively and regularly contribute to the protocol can be employees or contractors of an unincorporated association of persons or a partnership without inadvertently becoming liable as persons acting on behalf of the DAO without proper authority from members of the DAO.

A smart contract cyber security report (sometimes made available on the block explorer) is often the most 'readable' document that in plain language describes what the smart contract does and the security risks, which of those risks have been addressed and which are still outstanding. Retail consumers and investors would not necessarily know to look for this report on the block explorer to better understand the smart contract code (effectively the terms of the interaction). Submissions to the Committee by Mycelium and the Digital Law Association have argued for mandatory cyber security audits and for those reports to be easily accessible by those interacting with the protocol's front-end or acquiring the digital asset through a digital asset exchange.

- The founding development team can change over time and often does. For example, Persons A, B and C create and deploy version 1 of a protocol and token, then Persons B and C leave and Persons A, D and E vote to upgrade to version 2 of the protocol and token (either by deploying new smart contracts or updating the variable parameters within already deployed smart contracts).
- Some advocacy in the US that argued for assigning criminal and civil liability to founding development teams led to a wave of anonymously deployed technology (such as 'anon publish on github' or 'anon deploy') or pseudonymously deployed technology, which is only just starting to dissipate as jurisdictions like Wyoming explicitly introduce legislation and frameworks (e.g. a limited liability DAO) that both protect consumers but encourage innovation by limited liability of developers.

Indicia of sufficient decentralisation could be an interpretive matter but is more likely a matter for policy. The exercise would draw on factors such as governance model, number of tokens held and voting weight, and the difference between having an influence and strong voice versus a controlling voice. In addition, due to the open-source nature of blockchain technology and dApps, once deployed the smart contract code can be copied, may be slightly modified or not and then deployed by parties unknown and unrelated to the initial founding development team. Matters of ongoing liability of the founding development team, for any harm done to retail investors and consumers from 'copied and slightly modified' code should also be dealt with in policy.

In terms of compensation arrangements, minimum obligations of an 'issuer' or 'operator' should be to communicate how a person can insure themselves against smart contract risk using DeFi products like Nexus Mutual,[8] any any coverage offered by traditional insurers if and when this becomes available. Following The DAO attack in 2016 in which an attacker exploited a vulnerability in a smart contract to take $50 million worth of ETH, the Ethereum – Ethereum Classic Hard Fork took place. DeFi insurance products like Nexus Mutual were not available at the time.

It is a matter for policy whether the 'centralisation' efforts of a Hard Fork are such that the Hard Fork is its own issuance. One of the reasons that ETH has value is because people trust in the decentralised and independent network of nodes that validate transactions on the Ethereum blockchain. Following The DAO attack, enough nodes were able to coordinate (or 'centralise') to agree how to rectify the parties that had invested ETH in The DAO – by copying the blockchain code and deploying a 'rectification' smart contract whose 'state' showed the full balance of ETH invested so that the investors could interact with the smart contract and withdraw their ETH.

[8] See Nexus Mutual website available at https://nexusmutual.io/.

Not all nodes agreed however, which is why some nodes continued to support the blockchain that did not deploy the 'rectification' smart contract (known as the Ethereum Classic blockchain and with cryptocurrency ticker ETC) and the majority of nodes supported the blockchain that did (known as the Ethereum blockchain and cryptocurrency with ticker ETH). Where not all nodes agree and two blockchains result, the point at which one blockchain becomes two blockchains is a Hard Fork. Whilst at this point the Ethereum blockchain may have been 'centralised', the identification of all miners that supported the Ethereum blockchain is not easy.

2. ASIC guidance: Who is at risk?

   If a regulator were to pursue enforcement action in relation to digital asset issuances, markets or schemes, it is currently unclear whether the regulator would pursue any, a combination, or all of the below persons. ASIC guidance is required on this point urgently to protect and inform retail investors and consumers.

   Due to the informal structures and multi-levelled governance, each of the below persons could be exposed to unlimited liability (i.e. through joint and several liability) as members of an unincorporated association of persons or partners in a partnership which retail investors and consumers are unlikely aware of but 'betting' on them anyway. More sophisticated investors (investment and venture capital funds, family offices) and institutions have shied away due to either the lack of legal certainty or reputational risks however in the last 6 months the interest and involvement from these actors to explore and deploy appropriate structures for their involvement has grown exponentially.

   The potential broad reach of persons that could be subject to regulatory action include:

   - all or select persons named in public material (website, social media) as founders, core contributors, developers, strategic partners, or venture capital investors to the dApp project, whether or not a governance token has been held by those persons or used to vote;
   - all or select persons identifiable from wallet addresses that hold governance tokens (including via airdrop) at a particular time or at any time, whether or not that person has used the governance token to vote on a proposal or participated in a vote-escrow or vote-locking scheme to increase voting power and be eligible for rewards;
   - all parties to the multi-signature wallet, or if not all are identifiable then one or few that can be identified;
   - the persons that host the 'front-end' website;
   - the author/s of a proposal to update smart contract variable parameters;
   - smart contract auditors; and
   - oracles (on a spectrum of autonomous oracles to centralised, proprietary oracle data feeds) that provide data to smart contracts and trigger a function to self-execute.

3. Policy gap: Need to recognise a DAO as a limited liability entity

   For the sake of simplicity and legal certainty, a number of organisations have recommended the introduction of a 'DAO Limited' type of entity so that the 'issuer' and 'operator' of schemes and markets is not thousands of people in multiple jurisdictions, or a few prominent people involved in the dApp, which are currently exposed to joint and several liability if and when enforcement action is commenced.

   A DAO Limited should not be a regulatory target and those that choose to 'regularise' by incorporating a DAO Limited should fall within the Safe Harbour that is introduced to best inform the application of financial market, financial services and fundraising laws to a DAO Limited and what policy adjustments or new policy is required.

The COALA DAO Model Law could be a useful reference point for minimum best practice standards.

4. ASIC guidance and policy gap: Regulation of dApp front-ends

Given the educational barrier to interact directly with smart contracts, it may be a better use of resources and timelier to provide guidance to persons that build and host dApp front-ends as this is the most likely place that retail investors and consumers would engage with DeFi products. If the dApp front-end provider is the market or scheme 'operator', then the guidance should specify how the Markets Licence and AFSL requirements can be observed. Any policy gaps identified by ASIC should be communicated to the Digital Asset Taskforce for consideration and recommendation of appropriate policy.

A dApp 'front-end' or interface is often built to simplify the user experience so that users do not have the educational barrier of interacting directly with smart contracts. There is a distinction to be drawn between the control over the design, development and oversight of smart contracts versus control over the front-end, which is best illustrated by Uniswap Lab's recent delisting of digital assets from the front-end but where the digital assets can still be accessed if a person interacts directly with the Uniswap smart contracts – noting that each smart contract has its own public address so is identifiable by its specific public address.[9]

Uniswap Labs is the company that designed and developed the Uniswap dApp and Uniswap dApp front-end (app.uniswap.org) and maintains the front-end. Uniswap Labs also maintains the Uniswap website (uniswap.org). The digital assets removed from the front-end were those that are at risk of being classified as securities or other financial products by a regulator including tokenised stocks, options tokens, insurance-based tokens and synthetic assets.

In the Uniswap case, the founding development team designed, developed and deployed the smart contracts and the dApp front-end from an incorporated entity – Uniswap Labs. Since the technology is open and permissionless, other persons can build their own Uniswap dApp front-end. It is not uncommon for one entity to develop a front-end interface for another entity's dApp (see, for example, 1inch).

[9] Martin Young, Cointelegraph, 'Uniswap delists 100 tokens from interface, including options and indexes' available at https://cointelegraph.com/news/uniswap-delists-100-tokens-from-interface-including-options-and-indexes.

Annexure B Submission

4 Proposal B1 Questions

4.1 Do you consider that crypto-asset ETPs should be available to retail investors through licensed Australian markets? Please provide details, including data on investor demand where available.

Most submissions would answer Yes to this question without reference to the more fulsome context that is relevant.

Digital asset ETPs should be available to retail investors through licensed Australian markets but digital asset ETPs should also continue to be available to retail investors through currently unlicensed (but perhaps 'licensable') digital asset markets that are granted entry into a 'Safe Harbour' and subject to the Safe Harbour conditions to be defined by a newly created Digital Asset Taskforce in consultation with industry.

In an open meeting with ASIC on 15 July 2021, ASIC welcomed well-developed materials that could aid with the performance of their functions. As such, in the Briefing Note at Annexure A we have provided a well-developed expression of what a Safe Harbour could look like, as well as proposed responsibilities for a Digital Asset Taskforce, to best illustrate the fuller context in which ASIC's CP343 consultation questions reside and to delineate the matters that can be dealt with in ASIC guidance and updated Regulatory Guides from matters that do require policy input. To aid ASIC's preparation of guidance, we have also comprehensively set out blockchain level considerations versus application level considerations in the Briefing Note at Annexure A.

To establish the fuller context at the outset, some existing examples that evidence investor demand and appear to be 'well-intentioned' (as that term is defined above in the Safe Harbour proposal) include:

- Enzyme Finance (https://enzyme.finance/), which is not just a 'well developed business proposal', it is a functioning DAO-based digital asset market (not licensed as an Australian market operator) that facilitates the listing of digital asset funds to 'decentralise the world of asset management'. The Enzyme Finance 'front-end' or 'interface' at https://enzyme.finance/ is hosted by a centralised party (Avantegarde Finance Ltd) but enables access to the Melon protocol (a suite of smart contracts deployed on the Ethereum blockchain) which is subject to Melon governance. The distinction between the front-end and the protocol is a key one because end-users can interact directly with the protocol without a front-end but the front-end is designed to improve and simplify the user experience and will likely be the interface that retail investors and consumers use to interact with the protocol.
- Solrise Finance has just completed its digital asset issuance, raising US$3.4 million, and is very similar to Enzyme Finance and the Melon protocol but to be built on the Solana blockchain (a competitor blockchain to Ethereum).[10]
- SolStreet is another similar protocol to be built on the Solana blockchain.[11]
- DeFi ETFs also include Set Protocol, PieDAO, and Synthetix sDeFi, with a number of other examples of DeFi ETPs set out in the Mycelium submission (with over US$1 billion locked in the protocols).

[10] See solrise finance website at https://solrise.finance/.
[11] See SolStreet website at https://solstreet.finance/#/home.

A) Investor demand

Financial planners

Anecdotally, financial planners would prefer the relative simplicity of giving their clients exposure to digital assets via ETPs listed on the existing licensed market operators (including the ASX, SSX and Chi-X) without the educational barrier to entry that involves learning how to safely acquire and manage digital assets, private keys, digital wallets and seed recovery phrases as well as cyber security best practices. This is despite the additional cost of management fees associated with ETFs which exceeds trading fees if the digital assets were acquired directly on a digital currency exchange and other costs of 'storing' the digital assets.

Already, financial planners are actively seeking legal advice about the parameters of their existing AFSL or Corporate Authorised Representative Agreements. Entrepreneurs and digital currency exchanges are seeking clarity on the legal characterisation of digital assets and digital asset schemes as securities or other financial products under the *Corporations Act 2001* (Cth) (**Corporations Act**) to determine whether an AFSL, a Markets Licence and/or a CSFL is required to deal, broker and make markets in digital assets and digital asset schemes.

We have spoken to several financial planners that would be willing to liaise privately with ASIC further upon ASIC's request to demonstrate investor demand. We have also spoken to several individuals that wish there was a trusted and regulated network of advisors, such as financial planners, as a point of first contact to understand digital assets.

Institutions

Institutions are also expressing interest in digital assets and seeking exposure to digital assets. Some institutions are actively exploring CeFi-DeFi bridges (i.e. allowing their customers in centralised finance access to DeFi).

Anecdotally, institutions would prefer the relative simplicity of exposure to digital assets via ETPs listed on the existing licensed market operators (including the ASX, SSX and Chi-X) or to deal with licensed digital asset prime brokers and digital asset custodians with specialist knowledge in digital asset markets, security and management. It is already possible to establish an unlisted digital asset fund that is licensed but not required to be registered (a digital asset fund for wholesale investors) in Australia and other jurisdictions.

> *Example*
>
> The Grayscale Bitcoin Trust (**GBT**) (ticker: GBTC) is an oft cited example of a wholesale digital asset fund. GBT is based in the US and is the largest digital asset fund, known to hold circa 646,000 BTC around March 2021 at a value then of about US$33 billion. GBT is a costly structure and known to trade a large premiums and discounts to the value of its underlying digital assets.[12]
>
> Approximately 81% of the total institutional investment in BTC has come via GBT and when GBTC was trading at a premium to the underlying BTC price.[13] When GBTC trades at a discount, institutions are not incentivised to subscribe for GBTC which means GBT will no longer acquire new BTC and the institutional support for the BTC market halts or reverses. To prevent the discount widening further, curb selling pressure and restore investor confidence, GBT proposed to buy back US$250 million of GBTC shares but this was simply not enough for a ~US$33 billion fund. The GBT legal structure may be to blame for preventing more significant and appropriate action of selling BTC to fund the buyback of US$250 million of GBTC shares per week.[14]

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[12] Charlie Morris, Bytetree, 'The implications of the Grayscale discount' (17 March 2021) available at https://bytetree.com/insights/2021/03/implications-of-the-grayscale-discount/.
[13] Ibid.
[14] Ibid.

In addition, prevailing accounting guidance from the international accounting standards body IFRS[15] is such that institutional investors benefit from holding shares or units in a digital asset ETP rather than directly holding the digital asset because the former can be accounted for as a financial asset and the latter either an intangible asset or inventory. The legal and tax characterisation of shares or units in ETPs is also certain as compared to the legal and tax characterisation of digital assets.

B) Controls required for digital asset ETPs

To reduce systemic risk, digital asset ETPs listed on existing licensed market operators (including the ASX, SSX and Chi-X) as well as unlisted Australian digital asset wholesale funds should have plans and appropriate structures that permit buybacks and other sensible measures that curb selling pressure.

Unlisted wholesale digital asset funds that become significant enough alone or collectively could pose more of a systemic risk than listed digital asset ETPs because ETPs are more likely to trade at prices that reflect the net asset value of underlying digital assets whereas the price of shares or units in unlisted wholesale funds is more sensitive to buy and sell pressures as demonstrated by the GBT example above.

Listed digital asset ETPs may themselves be a measure to reduce systemic risk insofar as market participants are incentivised to list digital asset ETPs rather than establish unlisted wholesale digital asset funds. There should be initial limits set on the individual and overall amounts invested in digital asset ETPs listed on the existing licensed market operators (including the ASX, SSX and Chi-X) as demonstrated by the Toronto Stock Exchange (**TSX**) example set out below. There is the propensity for digital asset ETFs to become large enough or dominant enough in the market that any risks posed by illiquidity of the underlying digital asset or futures contracts pose risks to financial stability. In order to promote competition, there should not be a cap on the number of digital asset ETFs listed noting that each digital asset ETF listed should of course meet a high bar in terms of both existing expectations of ETFs and the specialist knowledge required in relation to digital assets.

Example

Upon the TSX listing the first digital asset ETF in February 2021, $400 million worth of shares were traded in two days.[16] There are now 25 digital asset ETFs listed on the TSX,[17] and at least 11 digital asset ETF applications in the US.[18] The digital asset ETFs listed on the TSX comprise one-third of the 25 most actively traded ETFs on the TSX.[19] Suffice to say, as soon as digital asset ETFs are listed on Australian exchanges and as more are listed on 'licensable' global or overseas exchanges used by Australian retail investors there should be preparedness for significant and rapid growth in the allocation of capital and volumes traded.

As we learned in May 2021 from the Horizon bitcoin futures ETFs listed on the Toronto Stock Exchange (**TSX**), alerts to the market and business continuity plans were and will continue to be crucial for these still volatile and speculative asset classes.[20] Due to the turbulence in the BTC price and BTC futures and brief trading halt on the Chicago Mercantile Exchange (where BTC futures are traded), Horizon alerted its market makers that Horizon would not be able to honour the day's buy and sell orders if the futures price remained as its lower limit at the close of trading.

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[15] See IFRS Agenda Decision 'Holdings of Cryptocurrencies – June 2019' (June 2019) available at https://www.ifrs.org/content/dam/ifrs/supporting-implementation/agenda-decisions/holdings-of-cryptocurrencies-june-2019.pdf and IFRS Interpretations Committee meeting Paper 'Holdings of Cryptocurrencies' (June 2019) available at https://www.ifrs.org/content/dam/ifrs/meetings/2019/june/ifric/ap12-holdings-of-cryptocurrencies.pdf.

[16] Claire Ballentine and Sam Potter, Bloomberg, 'Raging Success of First Bitcoin Fund Shows Who Leads ETF Market' (21 February 2021) available at https://www.bloomberg.com/news/articles/2021-02-21/raging-success-of-first-bitcoin-fund-shows-who-leads-etf-market.

[17] See, TMX, 'Bitcoin & Crypto Funds' accessed on 4 August 2021 available at https://money.tmx.com/en/stock-list/CRYPTO_FUNDS_LIST.

[18] Joshua Oliver, Financial Times, 'Canadian Bitcoin ETFs rattled by crypto tumult' (21 May 2021) available at https://www.ft.com/content/dc583136-113b-4161-b846-766f2db6fac7.

[19] Karrie Gordon, ETF Trends, 'Canadian Cryptocurrency ETFs Are Showing Monster Trading Volumes' (21 April 2021) available at https://www.etftrends.com/crypto-channel/canadian-cryptocurrency-etfs-showing-monster-trading-volumes/.

[20] Joshua Oliver (Financial Times), 'Canadian Bitcoin ETFs rattled by crypto tumult' (21 May 2021) available at: https://www.ft.com/content/dc583136-113b-4161-b846-766f2db6fac7.

The first TSX-listed crypto-asset ETF listed in February 2021 and more followed in February and March 2021 when BTC and ETH prices were high. By May 2021, prices had fallen 30-40% so the crypto-asset ETFs' unit price performance was a blow to investors without patience or strong hands.

4.2 Do you consider that crypto-asset ETPs should be cleared and settled through licensed Australian clearing and settlement facilities? Please provide details.

The purposes of regulating clearing and settlement facilities are to:

- maintain financial system stability;
- reduce systemic risk;
- ensure clearing and settlement services are provided in a fair and effective way; and
- protect market users and clearing and settlement facility users.

Clearing and settlement arose as an intermediary function to reduce counterparty and default risk and maintain financial system stability by managing those risks.

It is not clear what the appropriate clearing and settlement policy should be with respect to dApps that operate as decentralised exchange markets or that operate as digital asset fund management platforms. The Digital Asset Taskforce (if created) should consult with experienced clearing and settlement facility providers in conjunction with the blockchain and digital asset industry to determine what appropriate measures could be. The Mycelium submission aptly points out that with respect to self-executing smart contracts in a DAO-based application, the relevant questions for policy are:

- whether a clearing and settlement facility licence is needed?
- who should apply for and hold the licence on behalf of the smart contract?

ASIC's Regulatory Guide 211 (**RG 211**) was issued in December 2012. RG 211 has not been updated since 2012 to give guidance about when and how ASIC will exercise specific powers under the relevant legislation and how ASIC interprets the law about clearing and settlement facilities in relation to decentralised exchanges that facilitate the trades of digital assets between unknown parties as well as the trades of digital assets that are similar to traditional units in a listed ETPs (e.g. Liquidity Provider tokens, 'receipt' tokens).

The premise of decentralised blockchains like the Bitcoin blockchain and the Ethereum blockchain is that unknown parties can interact on a peer to peer basis without an intermediary because of the trust placed in the way the technology works. Clearing and settlement facilities arose as a mechanism to reduce settlement risk from a counterparty defaulting and or failing. Unlike the traditional focus and need for clearing and settlement as the trusted environment, blockchain technology does away with counterparty and default risk but introduces 'smart contract risk' and 'reorganisation risk'. For blockchain-based markets, any clearing and settlement facility may have to identify and attempt to protect retail investors and the financial system where there is a 'reorganisation' or public repudiation of a significant transaction/s but this perhaps falls outside of clearing and settlement licensing and is a matter for policy decision.

The Department of Treasury advises the Minister on clearing and settlement policy. A clearing and settlement facility is one type of clearing and settlement arrangement,[21] and based on the information set out above and below the Department of Treasury (or a newly created Digital Asset Taskforce) may have to advise the Minister on clearing and settlement policy as it relates to licensable (but not yet licensed) clearing and settlement facilities as well as other appropriate clearing and settlement arrangements in relation to digital assets.

[21] RG211.30.

The benefit of digital asset ETPs being cleared and settled through licensed Australian clearing and settlement facilities is that the licensee must comply with the RBA's financial stability standards and do all other things necessary to reduce systemic risk. These obligations are important and should be upheld in relation to digital assets ETPs that are listed on existing licensed market operators (including the ASX, SSX or Chi-X).

However, due to the nascent stage and volatility of some digital assets continuous regard should be had to the appropriate period for clearing of ETP units listed on existing licensed market operators (including the ASX, SSX or Chi-X). Inappropriate clearing periods may pose significant or systemic risks if sufficient value is held in digital asset ETPs relative to other listed assets (refer to the learnings from the TSX's digital asset ETFs below). As such, it might be appropriate that clearing and settlement occurs within the same or similar period that reflects 'transaction finality'[22] for the blockchain that supports the digital asset included in the ETP.

For BTC transactions, the 'accepted' period for a transaction to be confirmed as final is generally about 1 hour after the transaction is included in a block (which is the approximate time taken for 6 subsequent blocks to be validated).[23] Until a BTC transaction is confirmed, it is unconfirmed and subject to 'reorganisation' (where an apparently valid block is replaced by a competing block). In 2019 Coinbase halted all ETC transactions, withdrawals and deposits due to a series of blockchain history reorganisations on the Ethereum Classic blockchain where more than 100 blocks were 'reorganised' leading to 88,500 ETC being double-spent, totalling $460,000.[24] If the double spend amount is high enough, it could pose a significant risk and consequential risks.

The concept of 'transaction finality' could evolve as 'cross-chain swaps'[25] are more widely used and as other means of blockchain interoperability emerge. A licensed Australian clearing and settlement facility provider that provides clearing and settlement facilities for digital asset ETPs should regularly assess 'reorganisation risk' and the latest technology developments against the RBA's financial stability standards, determine what actions are necessary to reduce systemic risk and regularly liaise with the RBA and the Digital Asset Taskforce (if created) to both inform and manage risks.

4.3 If you are a clearing participant, would you be willing to clear crypto-asset ETPs? Please provide your reasons.

Not applicable to Mills Oakley.

4.4 If you are a trading participant, would you be willing to trade crypto-asset ETPs? Please provide your reasons.

Not applicable to Mills Oakley.

4.5 Do you agree with our approach to determining whether certain crypto-assets are appropriate underlying assets for ETPs on Australian markets? If not, why not?

Digital assets and their governance models vary widely as set out in considerable detail above.

BTC and ETH, the examples given by ASIC as those digital assets that may be appropriate, are 'platform' or 'native' tokens, for which there are and will be much fewer than the digital assets connected to dApps. Platform or native tokens could be appropriate for digital asset ETPs because they represent the foundational technology upon which blockchain applications are built but they are not the only digital assets appropriate for digital asset ETPs

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[22] See, Alex Gauba, 'Finality in Blockchain Consensus" (31 August 2018) available at https://medium.com/mechanism-labs/finality-in-blockchain-consensus-d1f83c120a9a.

[23] Joseph Bonneau, 'How long does it take for a Bitcoin transaction to be confirmed?' (3 November 2015) available at: https://www.coincenter.org/education/crypto-regulation-faq/how-long-does-it-take-for-a-bitcoin-transaction-to-be-confirmed/.

[24] See, Richard Brown, 'When 'Final' Isn't Actually Final: Cracking Blockchain's Consensus Conundrum' (22 November 2019) available at https://www.forbes.com/sites/richardgendalbrown/2019/11/22/when-final-isnt-actually-final-cracking-blockchains-consensus-conundrum/?sh=322641416040.

[25] Maurice Herlihy, 'Atomic Cross-Chain Swaps' (23 July 2018) available at: https://www.researchgate.net/publication/329301079_Atomic_Cross-Chain_Swaps/link/5c00a4b892851c63cab055fe/download.

Other blockchain platforms and their platform or native tokens include: Polkadot (ticker: DOT); Cardano (ticker: ADA); Solana (ticker: SOL); Cosmos (ticker: ATOM); Binance Smart Chain (ticker: BCS). However, the factors relevant to the platform to assess if the platform or native token is an appropriate underlying asset for ETPs on Australian and global markets include:

- if a Safe Harbour is introduced, whether it has applied for and been approved entry into the Safe Harbour
- consensus mechanism (e.g. Proof of Work (**PoW**), Proof of Stake (**PoS**)) and tokenomics
- 'transaction finality' – whether probabilistic or deterministic – and if probabilistic, the history of existence of the blockchain and whether any 'blockchain reorganisations' have occurred, any significant transactions repudiated or any Hard Forks
- number of nodes (PoW) or validators (PoS) to assess level of decentralisation and network security
- governance process, proposals submitted and approved, active contributors in the community
- reliable and useful block explorer

The ASIC consultation paper does not provide an approach with respect to the 'long tail' of 8,000+ digital assets that are connected to dApps, including the level of decentralisation and models of governance that signify higher confidence in the integrity, sustainability and success of the dApp.

For this reason, ASIC should attempt to set out key parameters to determine whether digital assets are appropriate underlying assets for ETPs, whether they can be reliably priced and how they should be classified with respect to underlying asset rules. To the extent this guidance is in other Regulatory Guides, those Regulatory Guides should be updated with specific examples that relate to digital assets that are 'platform' tokens and that are connected to dApps.

If a Safe Harbour and its conditions are introduced, the approach and factors should be flexible enough to adapt and incorporate learnings from the Safe Harbour conditions about digital assets, markets and schemes.

The factors listed in ASIC's approach are not sufficiently explained and Australian market licensees should work with industry to determine or make informed judgments about the appropriateness of each factor.

One example for clarification is the factor requiring, 'a high level of institutional support and acceptance of the crypto-asset being used for investment purposes'. This factor is a high bar without established channels to obtain that information. It would be a high compliance cost for an ETP applicant to go to considerable effort and expense to search and compile public information and pay for proprietary information by a blockchain analytics company (such as Chainalysis or Elliptic) or experienced digital asset investors, exchanges and funds (such as Coinbase Prime,[26] Multicoin Capital,[27] or Fidelity Digital Assets)[28] without clear guidance or an expressed willingness to support the ETP if not all factors are met.

Another example for clarification is whether letters of support are required from willing service providers to demonstrate that support, and/or any due diligence materials or testimonials from independent parties that have used the service providers.

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[26] See Coinbase Prime website at https://www.coinbase.com/prime/solutions.
[27] See Multicoin Capital website at https://multicoin.capital/about/.
[28] See, Fidelity Digital Assets, 'Fidelity Digital Assets' 2021 Institutional Investor Digital Assets Study' (20 July 2021) available at https://www.fidelitydigitalassets.com/articles/digital-asset-survey-2021.

4.6 Do you have any suggestions for additions or modifications to the factors in proposal B1? Please provide details.

An additional factor should be an open call for measures that would reduce risk and maintain financial system stability. For example, an ETP with underlying digital assets connected to dApps focussed on gaming could be high risk and likely to experience explosive growth. Specific disclosures, and limits at the individual investment and overall investment level could be appropriate at least initially.

4.7 Do you have any suggestions for alternative mechanisms or principles that could achieve a similar outcome to the approach set out in proposal B1? Please provide details.

If a newly created Digital Asset Taskforce agrees to and implements a Safe Harbour including the application, information requirements and self-assessment of initial features for digital assets, then ASIC and the existing licensed market operators (including the ASX, SSX and Chi-X) could assess digital asset ETP applications with better and more comprehensive information about the digital asset, its features, and any specific risks and conditions being managed in the Safe Harbour period.

5 Proposal B2 Questions

5.1 Do you agree that a new category of permissible underlying asset ought to be established by market operators for crypto-assets? If not, why not?

Further guidance is required from ASIC, and the existing licensed market operators (including the ASX, SSX and Chi-X) on this point.

If 'crypto-assets' is added as a new category of permissible underlying asset, it could either operate as a category of last resort or a stand-alone category. If the former, ull analysis may be required from the applicant to determine why the 'crypto-asset' does not meet any of the existing categories.

To the extent the 'crypto-asset' category is sought to be relied upon in relation to digital assets, the applicant should be subject to limits concerning the nature of subscribers, the initial and overall value of investment to allow the industry, government and regulators to observe the effects without serious risk to financial stability given the highly volatile nature of the asset class to date.

The term 'crypto-asset' should be modified to 'digital asset' where the digital asset definition is developed with industry and the Digital Asset Taskforce. Digital asset could mean anything that can be stored and transmitted electronically, and has associated ownership or use rights, and includes things that are a digital representation of any other type of asset that do not need a blockchain to be created or maintained as well as natively digital assets that are created, maintained and can be used on a blockchain and interact with smart contracts.

For the avoidance of doubt, digital assets may include cryptocurrency, virtual assets, payment tokens, platform tokens, utility tokens, security tokens, tokenised securities, governance tokens, leveraged tokens (such as BTCUP and BTC DOWN tokens), non-fungible tokens, liquidity provider tokens, lending tokens (such as cDAI), stablecoins, central bank digital currency, convertible virtual currency, smart contracts subject to commercial licence, digital twins, data vaults, web-accounts with history.

6 Proposal B3 Questions

6.1 Do you agree with the good practices in proposal B3 with respect to the pricing mechanisms of underlying crypto-assets? If not, why not?

The meaning of 'widely regarded provider' in the context of digital asset indexes should be clarified because the way it is currently used in market operator regulatory frameworks is not comparable to the still early age of digital asset index providers. An initial list of providers developed with industry would assist in establishing reliable and reputable index providers.

CoinMarketCap Index[29] may be 'widely regarded' but falls under the apparent ownership of Binance.com which increasingly suffers regulatory scrutiny. Alternatively, SGX Index Edge announced in late 2020 that it would collaborate with UK-based cryptocurrency market data provider CryptoCompare to launch high quality, trusted data and indices but may not yet be 'widely regarded'.[30]

In addition, substantial proportion of trading in the 'long tail' of digital assets connected to dApps is undertaken on decentralised exchanges. If a Safe Harbour is introduced, then market information from decentralised exchange trading can be interpreted and learned from to inform an understanding of factors that inhibit or support robust and transparent pricing. Once a significant decentralised exchange or a few decentralised exchanges are approved and operate in the Safe Harbour, ASIC and the existing licensed market operators (including ASX, SSX and Chi-X) will be better informed about the assessment of a robust and transparent pricing mechanism.

Already, and as the Mycelium submission highlights, the real time and public nature of 'on-chain' data about digital asset transactions informs pricing mechanisms such that large quantities of accurate and timely data is publicly available and based on international liquidity and 24 hour trading.

6.2 Are there any practical problems associated with this approach? If so, please provide details.

The IOSCO Principles for financial benchmarks and the EU Benchmarks Regulation for index selection principles should not be strictly applied if they have not been or are not regularly updated to reflect the nuances of digital assets.

6.3 Do you think crypto-assets can be priced to a robust and transparent standard? Please explain your views.

Factors will differ depending on whether the digital asset is a platform or native token or if the digital asset is connected to a dApp.

At the dApp level, factors that may impact robust and transparent pricing include: centralisation, concentration of governance token voting power, concentration of token holdings (i.e. a few 'whales' that significantly impact price on a sale). Factors set out at 1.5 above would be relevant for platform or native tokens.

6.4 Do you consider that a more robust and transparent pricing standard is achievable in relation to crypto-assets? For example, by using quoted derivatives on a regulated market. Please explain and provide examples where possible.

There is a lack of regulated digital asset derivatives markets internationally so this should not be a strict requirement but continually observed to assess the prevalence of regulated digital asset derivatives markets.

7 Proposal B4 Questions

7.1 Are there any other good practice expectations in INFO 230 that need to be clarified or modified to accommodate crypto-asset ETPs?

INFO 230 should be reviewed and updated regularly to reflect the feedback above and learnings through a Safe Harbour if introduced.

8 Proposal C1 Questions

8.1 Do you agree with our proposed good practices in relation to the custody of crypto-assets? If not, why not? Please provide any suggestions for good practice in the custody of crypto-assets.

[29] See CoinMarketCap website at https://coinmarketcap.com/indices/.
[30] See SGX News Releases, 'SGX Index Edge to launch crypto indices in collaboration with CryptoCompare' (1 September 2020) available at https://www.sgx.com/media-centre/20200901-sgx-index-edge-launch-crypto-indices-collaboration-cryptocompare.

Mostly yes. We agree and endorse a number of the responses made by Scott Waller at Ernst & Young in relation to digital asset custody.

For the benefit of this crucial and foundational function in the burgeoning digital asset industry there should be a clear category of licence for digital asset custodians.

There is a small number of digital asset custodians based in Australia with specialist expertise. As far as we are aware, each of these digital asset custodians licence foreign developed technology as part of the technology stack to handle the custodian exercise. ASIC should provide further guidance on how 'specialist expertise' is demonstrated.

8.2 Are there any practical problems associated with this approach? If so, please provide details.

There are a number of offshore digital asset custodians with licenses, authority and standards required of them and which attracts institutional custody business. Anchorage Digital Bank is a clear example, being the first US Federally Chartered Digital Asset Bank by the Office of the Comptroller of the Currency to meet the definition of a Qualified Custodian.[31]

It may be beneficial to express a preference in the guidance for Australian-based digital asset custody providers to eliminate the uncertainty and expense introduced by cross-border dispute and litigation in the event that a foreign provider collapses or acts badly. However, Australian-based providers may not be competitive on pricing without the global institutional business that the likes of Anchorage is attracting.

Insurance is extremely hard to obtain, particularly dollar for dollar insurance coverage. Prudential limits could be introduced to allow a portion of digital assets custodied to be invested (or borrowed against for loan proceeds to be invested) in 'low risk' DeFi protocols such as Curve or Compound. Earnings could be used to build reserves as a form of compensation arrangement. The appropriateness of DeFi insurance products such as Nexus Mutual should also be the subject of further guidance from ASIC.

Segregation can also be practically difficult for the reasons outlined in the Zerocap submission, and so further practical guidance is necessary on how strictly or flexibly the segregation requirement will be applied.

8.3 Do you consider there should be any modifications to the set of good practices? Please provide details.

We agree and endorse the response made by Scott Waller at Ernst & Young.

8.4 Do you consider that crypto-assets can be held in custody, safely and securely? Please provide your reasons.

The notion that digital assets can be 'held' in custody is misleading because unlike traditional assets, both tangible and intangible, there is no statute-based legal title associated with the ownership of digital assets. Instead, blockchain-based digital assets are more closely analogised to bearer assets – where the bearer of an asset is treated as holding good, legal title – and are characterised by the public and private keypair.

The service being provided by a digital asset custodian is the safeguarding or safekeeping of private keys or being one authorisation of multiple authorisations required to deal with the digital assets.

The private key is what enables control to deal with the digital asset, or a password if the digital asset is being dealt with through a digital wallet, or a seed recovery phrase if the digital asset is being recovered on a new device.

The general law position that information is not property is difficult to apply in the context of digital assets because with respect to natively digital assets (like BTC and ETH) it is the information (i.e. the private key or other passwords to access the digital asset through a digital wallet) that is supposed to be kept secret that controls the ability to deal with the digital assets.

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[31] See Anchorage Digital, 'Introducing: Anchorage Digital Bank, the First Federally Chartered Digital Asset Bank' (14 January 2021) available at https://medium.com/anchorage/introducing-anchorage-digital-bank-the-first-federally-chartered-digital-asset-bank-7f9b9b4e0fd5.

Exclusivity and transferability of the digital assets does not attach to the digital assets themselves; the private key is what is necessary to enable these two features commonly attributed to property rights existing. Natively digital assets cannot be physically possessed nor are they represented in any electronic or physical legal title. Unless ownership and the custodial nature of the relationship is established contractually, there is no basis that the customer continues to own the digital assets and any person that obtains access to the private keys, passwords, or recovery phrases could claim ownership. For example, dematerialised shares are electronically issued but the shareholder register is required under law to be maintained and demonstrates who holds legal title to the shares at any one time. For assets likes shares where legal title to the shares is documented, additional layers of brokers and the software that brokers use does not create legal uncertainty of who holds true legal title. In contrast for digital assets, there is no register to record legal title to a person's name so equating legal ownership with control of the private key means that anyone who knows the private key could in theory assert legal ownership.

The supply of safeguarding or safekeeping of private keys in relation to digital assets (and no more) is part of the 'bundle of rights' of digital assets as property and to be treated akin to the supply of a custodial service. But, where connection and control of the client's digital assets is 'lost' and replaced with an interest in a pool where a return is provided a supply of an interest in a scheme is being provided.

As an aside, SMSF auditors are experiencing great difficulty proving that a digital asset is still held and controlled by the SMSF trustee, particularly when the member directors may have knowledge of the private key to deal with the digital asset. This may be a similar issue experienced by unregistered wholesale digital asset funds and ripe for abuse and misreporting.

8.5 Do you have any suggestions for alternative mechanisms or principles that could replace some or all of the good practices set out in proposal C1? Please provide details.

With regard to centralised digital asset custodians, we refer to the technical issues identified by Zerocap in their submission which demonstrate the evolving nature of digital asset custody technology and that an agile approach is required. Fixing an approach to existing digital asset custody technology and methods may not best serve consumers well, if improved technology becomes available.

Specific guidance is required when a smart contract performs a custodial function. It is unclear whether a smart contract is itself able to operate as a custodian and be given legal personality and jurisdiction as a counterparty or if not, whether the smart contract is itself a digital asset owned and controlled by any or all of the persons set out at point 2 on page 15 which may be grouped to form an unincorporated association or partnership.

Justice Beach recently decided that an artificial intelligence system can be an inventor or a legal entity for the purposes of the Patent Act because the law was silent on whether the patent holder had to be human. A leading lawyer's comment was that, "If you want to promote the advancement of human ingenuity, while offering lesser (or no) rewards for automated innovation, then it is perfectly sound policy to deny patents on machine-made inventions."[32]

DeFi applications often use the language that they are 'non-custodial' but by the state of the blockchain ledger showing a digital asset balance attributable to a smart contract address and a reference to the digital wallet address that has interacted with the smart contract, a smart contract is performing a custodial service. If a custodial smart contract vulnerability is exploited and all value is lost without insurance coverage, continuity or recovery plans could include Hard Fork like action undertaken in response to The DAO attack set out above.

8.6 Should similar requirements to proposal C1 also be imposed through a market operator's regulatory framework for ETPs? If so, please provide reasons and how it could work in practice.

[32] Cloud Thin, 'Australian court rules AI can own intellectual property' (2 August 2021) available at https://www.cloudthing.com/news/ai-can-own-intellectual-property.

Perhaps for digital asset ETPs listed with existing licensed market operators (including the ASX, SSX or Chi-X). Given the uncertainties in our response to 5.5 above and earlier in our submission, the learnings from a Safe Harbour should inform decentralised exchanges and markets that list digital asset ETPs and digital asset smart contract custodian requirements.

9 Proposal C2 Questions

9.1 Do you agree with our proposed good practices in relation to risk management systems for REs that hold crypto assets? If not, why not?

If a Safe Harbour is introduced, those applicants permitted entry in the Safe Harbour should be included as permissible digital asset trading platforms. There are key benefits to responsible entities from publicly available price information, robust price discovery, deeply liquid trading pools, and 24 hr trading available through decentralised exchanges.

9.2 Are there any other regulations (other than KYC and AML/CTF) that should form part of an appropriate baseline level of regulation for crypto-asset trading platforms used by REs and connected service providers? Please provide details.

The Financial Action Task Force is currently finalising its guidance on virtual assets and virtual asset service providers, which was originally scheduled to be finalised in July 2021. One of the causes for extending the timeline was the influx of commentary received from industry, especially in relation to privacy enhancing technologies and digital identity.

For the reasons set out above, if a Safe Harbour is introduced it would be the means by which to understand privacy preserving methods being developed and used for KYC and AML/CTF purposes. ASIC and a Digital Asset Taskforce (if introduced) should keep abreast of FATF's work, digital identity and privacy enhancing technologies.

9.3 Are there any practical problems associated with this approach? If so, please provide details.

Decentralised blockchains and dApps that operate globally attract international liquidity pools and have deep liquidity. Practically, this could be more positive for price discovery and robust pricing mechanisms than existing financial markets so should be considered carefully and observed through a Safe Harbour if introduced.

9.4 Are there any other matters related to holding crypto-assets that ought to be recognised in the risk management systems of REs and highlighted through ASIC good practice information? Please provide details and any specific proposals.

See above for need for contractual specificity of ownership at the time of entering into digital asset custody arrangements.

9.5 Should similar requirements to proposal C2 also be imposed through a market operator's regulatory framework for ETPs? If so, please provide reasons and outline how it could work in practice.

To be informed by learnings from a Safe Harbour if introduced.

10 Proposal C3 Questions

10.1 Do you agree with our proposed expectations regarding disclosure obligations for registered managed investment schemes that hold crypto-assets? If not, please explain why not.

Refer above with respect to our comments about 'registrable' schemes which retail investors are already engaging with.

Allowing responsible entities (licensees of registered schemes) to deal in and hold digital assets is a good and safe entry point for retail investors that are seeking exposure to digital assets. Retail investors want exposure to digital assets and digital asset schemes and without clear

ability for responsible entities and financial advisors to deal in and advise about digital assets, retail investors have been forced to directly engage with digital assets.

10.2 Are there any practical problems associated with this approach? If so, please provide details.

The Safe Harbour and Digital Asset Taskforce is necessary to learn and inform how to deal with practical problems, including the moratorium on enforcement actions during the 'regularising' period.

10.3 Are there any additional categories of risks that ought to be specified by ASIC as good practice for disclosure in relation to registered managed investment schemes that hold crypto-assets?

Yes, and these categories of risks can be developed in consultation with industry legal experts who have been involved in drafting risk disclosures in token purchase agreements. The Zerocap submission outlines a number of key risks.

11 Proposal C4 Questions

11.1 Are there any aspects of the DDO regime that need to be clarified for investment products that invest in, or provide exposure to, crypto-assets?

We note that our submission to the Product Regulation team at ASIC in March 2020 regarding the ASIC Consultation Paper 325: Product design and distribution obligations,[33] set out some DeFi examples to illustrate additional matters specific to the design and distribution of DeFi products that would benefit from ASIC guidance. Unfortunately, the Product Regulation team did not engage with us or the blockchain and digital assets industry as far as we are aware and the finalised Regulatory Guide does not provide any specific guidance or examples as is customary at the end of the Guide.

12 Proposal D1 Questions

12.1 Do you agree that crypto-assets are capable of being appropriate assets for listed investment entities on Australian markets? If not, why not?

Yes, subject to disclosure to members. For the sake of clarity and completeness, listed companies should also be able to hold and deal with digital assets and disclose this to members.

12.2 Do you agree with our proposed expectations for LICs and LITs that invest in crypto-assets to ensure equivalent standards are applied by market operators? If not, why not?

Yes.

12.3 Are there any practical problems associated with this approach? If so, please provide details.

From a tax perspective, it is unlikely that the tax concessions afforded to LICs would be available to LICs that invest in digital assets because digital assets do not clearly meet the definition of eligible investment. The tax law should be amended to ensure LICs continue to be on a level-playing field to LITs.

12.4 Are there additional standards which ought to apply via market operators to LICs or LITs that invest in crypto-assets? If so, what are these expectations and why should they apply?

LICs were a listed investment vehicle introduced for foreign persons to invest through a more familiar corporate vehicle but to retain the tax flow through benefits of a trust. Specific consideration may need to be given to the nature of digital assets in the LIC and geographic

[33] See, Mills Oakley Submission to ASIC Consultation Paper 325: Product design and distribution obligations (17 March 2020) available at https://www.millsoakley.com.au/wp-content/uploads/2020/03/LET-Submission-to-ASIC-Consultation-Paper-325-Product-design-and-distr... .pdf.

origins of the project (blockchain or dApp) and key people to ensure there is no manipulation of Australian markets or Australian DeFi projects by foreign persons and projects.

12.5 Should LICs and LITs only be able to invest significant funds in crypto-assets if this is either set out in their investment mandate or with member approval? If not, why not?

Yes.

12.6 For the purposes of this proposal, we consider a material investment is where an entity invests or plans to invest more than 5% of its funds in crypto-assets. Should another materiality threshold apply?

The basis for choosing 5% is not explained and appears arbitrary. We welcome further explanation or the case by case assessment of what is material.

13 Proposal E1 Questions

13.1 Do you agree with our proposal to establish a new asset kind that will cover crypto-assets?

For the sake of clarity, a new asset kind 'Digital assets' should be included to cover crypto-assets but further consideration is required about whether it should apply as an asset kind of last resort or a stand-alone asset kind (similar to the approaches taken by Bermuda and Liechtenstein). Including a new asset kind 'Digital assets' where the definition of digital assets is not limited to blockchain-based assets as we have suggested in this submission would preserve the legislative foundations of technology neutrality.

13.2 Do you consider that crypto-assets may be captured by the existing asset kinds? If so, please explain.

Yes, a number of Ethereum-based dApps have issued one or more digital assets and are not 'sufficiently decentralised' so could arguably have an initial 'issuer' and 'operator' but perhaps not an ongoing 'issuer' or 'operator'. A number of the issues are set out earlier in our submission.

14 Proposal E2 Questions

14.1 Do you agree with our approach to restrict the crypto-assets a registered managed investment scheme is authorised to hold (e.g. to bitcoin or ether)?

No, for the reasons set out above and lack of clarity in the consultation about 'registered' versus potentially 'registrable' managed investment schemes, this restriction could be far-reaching and have adverse impacts on the digital asset market more broadly. The adverse impacts could be particular to Australians and Australian-based innovators and contributors to these projects if Australia's managed investment scheme rules are too broad so as to be inappropriately capturing more digital assets and digital asset schemes than other jurisdictions.

14.2 Do you consider there are any other aspects of the AFS licensing regime that need to be clarified or modified to accommodate investment products that invest in, or provide exposure to, crypto-assets?

Further clarification from ASIC is required as to why the 'Other' category is not and has not been appropriate for AFS licensing. However, as per comments above, for the sake of clarity and market certainty, a new asset kind 'Digital assets' should be included to cover digital assets.

15 Additional matters for ASIC guidance – specific for crypto-assets and ETPs

The costs to industry and Australian economic growth more generally, of the lack of guidance and resources allocated to providing market certainty about digital assets, is already apparent.

There will be high compliance costs for digital asset custodians based on the approach set out in the Consultation Paper and further recommendations made in our submission. As such, practical guidance and parameters should be established by ASIC in consultation with industry at the outset to avoid delays in processing applications and avoid bars being set too high that can never practically be met.

No other further matters at this stage, noting that a number of other digital asset policy issues are dealt with in our submission to the Committee's Second Issues Paper in December 2020.[34]

[34] Mills Oakley submission to Second Issues Paper (14 December 2020) available at https://www.millsoakley.com.au/wp-content/uploads/2020/12/Mills-Oakley-submission-to-2nd-Issues-Paper-SSC-on-FinTech-RegTech-14-Dec-2020-.pdf.