21 June 2023

Alex Bosinceanu
HM Revenue and Customs (**HMRC**)

By email only: financialproductsbai@hmrc.gov.uk

Dear Alex,

**Consultation Paper: the taxation of decentralised finance involving the lending and staking of crypto-assets**

Thank you for the opportunity to provide a submission on the Consultation Paper, which is a welcome initiative to establish the clear tax treatment of 'crypto-assets' whilst reducing the administrative burden on users. This exercise involves clarifying the application of existing tax laws, identifying the areas for statutory tax reform, and seeking feedback on proposals for such reform.

Responses to each of the consultation questions are provided at Annexure A and build on the submission provided by BADAS*L on 6 September 2022 to the HMRC's Call for Evidence on this matter. The BADAS*L submission had provisionally supported Option 2 (Separate rules) and Option 3 (No gain no loss). Option 2 as now expressed in the Consultation Paper introduces the terms 'defi transaction' and 'non-defi transaction', where there is no disposal of beneficial ownership of 'crypto-assets' lent or staked but there is a chargeable disposal when 'crypto-assets' are subsequently transacted in a 'non-defi transaction'. In addition, there will be a capital gain (or loss) when the 'crypto-asset' is economically disposed of such as an outright sale or when the 'crypto-assets' are exchanged for goods and services. Option 3 is preferred because it is more capable of achieving a simpler and principles-based approach of recognising crypto-token activities that give rise to a real economic gain or loss for a taxpayer, and at what time. Option 3 could more simply allow for principles of identification of crypto-token activities that represent a mere ancillary step or self-dealing assisted by open-source technology versus those activities that give rise to a real economic gain or loss for a taxpayer.

In summary, the new rules should:

1. Expressly state that providing crypto-tokens as liquidity for the exchange by third parties of those crypto-tokens is captured within 'lending and staking' even where the same number of tokens may not be withdrawable (i.e. turning off "limb (d)" of the proposed new rules). In our view, such arrangements should be included in a "DeFi transaction tax exemption" with further specifics as set out in our response to Question 7(a) regarding Example 6.

2. Tax realised economic gains, coupled with the following limiting principle: A taxpayer should not be assessed on the receipt of loan proceeds or 'receipt tokens' where there is a genuine obligation to repay the loan or a genuine incentive to withdraw staked crypto-tokens referable to a 'receipt token' (which may require the return of the receipt token), respectively, nor incur deductions or losses where there is no genuine economic loss. As discussed below, 'DeFi transaction' (and 'non-DeFi transaction') are not principles-based terms and the interpretation of each term as DeFi and activities possible with blockchain technologies evolve will become both more confusing and more open to abuse.


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3. Consider the full circumstances of the arrangement, at least to ensure existing tax rules are expressly switched off by the new rules.

4. Consider the different relationships that may arise where a person accesses a DeFi protocol (such as Maker Protocol) using an interface (such as Oasis: https://oasis.app/vaults/open/ETH-C) versus using the services of a centralised entity. The Consultation Paper assumes all access to DeFi occurs where a corresponding party (the centralised entity or the DAO or the validators of the underlying blockchain network where an autonomous protocol is not governed by a DAO) is acting as an agent or bare trustee. The centralised entity may not be acting as agent and instead may be the operator of a scheme, where a person disposes of their crypto-tokens and acquires an interest in a scheme.

5. Adopt definitions which reflect the factual and legal nature of an arrangement. For example, the term 'platform' is used incorrectly and precision of language is important to understand the legal nature of an arrangement. For this reason, and in striving for such provision, the language we have adopted in our submission and our responses at Question 7(a) has been carefully constructed.

6. Use the neutral term 'crypto-token', not crypto-asset, for the reasons set out at paragraph [3].

7. For simplicity, expressly deem the resultant profits or losses from crypto-token activities as being on revenue account, but allow taxpayers the choice of capital account treatment where the facts and circumstances that support capital account treatment are documented by the taxpayer in real time, as we have articulated in our response to Question 7(a).

8. Since the UK tax regime includes a tax allowance for interest income, consider extending existing allowances such as the interest income allowance to capture returns from crypto-token activities without having to characterise such returns as revenue or capital, or in the nature of, interest, dividends, royalty or rent. There is desire in the market to characterise crypto-token returns as in the nature of interest to benefit from the interest allowance and this is neither helpful nor accurate.

9. Insert integrity provisions that deal with the approach to interpreting the new rules. For example, an integrity provision could state that the new rules are to be interpreted to apply broadly to uphold the principle stated above at item 2. A further integrity provision could provide the HMRC with the discretion or a regulation making power to narrow the instances where the new rules are considered not appropriate to apply with a broad interpretation.

10. The proposed new rules should apply retrospectively or if retrospectivity is too politically difficult to achieve, then transitional measures should be granted - in the least, the proposed new rules should apply from the date the DeFi staking and lending consultation was announced as that is when UK taxpayers have had notice that the application of existing tax rules is confusing, in doubt, and subject to policy consultation. Losses already claimed could be grandfathered along with corresponding grandfathering treatment that may bring subsequent gains to account.

11. Consider legislating a flat rate of tax for crypto-token activities or begin with DeFi arrangements, where in theory liquidity pool contracts could be designed or upgraded to collect and remit the tax component of in-pool transactions to the UK HMRC in real-time – this approach would best alleviate the high administrative burden upon taxpayers involved in DeFi

arrangements, and other complex blockchain protocol and smart contract arrangements that may arise, and improves the efficiency and reliability of tax collection by the HMRC.

The examples in the Consultation Paper do not well enough convey the nuances that give rise to tax complexity. In the least, the HMRC could produce template tax records that need to be kept in compliance with the new rules to demonstrate how a taxpayer can be satisfied that an activity is a DeFi transaction, or similar enough to a DeFi transaction, based on the examples or a plain reading of the proposed new rules.

This submission is drafted from an Australian tax law perspective, noting that there are similarities but also some differences between the UK tax law and the Australian tax law. This submission also uses the following phrases interchangeably, 'proposed new rules' and 'DeFi transaction tax exemption'.

We welcome the opportunity to discuss the responses and look forward to seeing the consultation progress.

Finally, we share our sincere thanks to all reviewers and contributors to this submission:

| ***Reviewers*** | ***Contributors*** |
| --- | --- |
| Tristan Shugg | Dion Seymour, Andersen in the UK<br>Varun Jajoo, DeFi Tax Calculator<br>Danny Talwar, Koinly<br>Damian Lloyd, Cadena Legal |

Yours sincerely,

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## Annexure A Responses

**Question 1: Do you consider that the rules above are sufficiently wide to cover most DeFi lending and staking models available in the market? If not, please provide details of the models that would not be covered.**

[1] The proposed scope of the new rules are not sufficiently wide or principles-based and should clarify or expressly include:

a. What component of the crypto-token represents the 'crypto-asset'. For example, in a crypto-token lending arrangement the value of loan proceeds denominated in DAI represent no value since the digital representation of the DAI as an asset (right to exchange for value) would be equal to the digital representation of the DAI as a liability (obligation to repay). This is considered further in our response to Question 2.

b. That wrapping (e.g. ETH to WETH) for software compatibility, often incorporated in DeFi protocols, does not give rise to a CGT event or taxing event on revenue account, or if it does a gain or loss that is not a real economic gain or loss is disregarded.

c. That providing crypto-tokens as liquidity for the exchange by third parties of those crypto-tokens is captured within 'lending and staking' even where the same number of tokens may not be withdrawable (i.e. turning off "limb (d)" of the proposed new rules). In our view, such arrangements should be included (noting it is not neatly either 'staking or lending') with further specifics as set out in our response to Question 7(a) regarding Example 6.

d. Whether a DAO can be deemed for income tax purposes to be a separate and distinct legal person, as well as a borrower, lender, trustee or party to an arrangement (where appropriate), under the new rules. The UK government has not yet introduced legislation to recognise the separate and distinct legal personality of a DAO (from its members) as other jurisdictions have already done so. If the new rules were to recognise DAOs as a separate and distinct legal person, what criteria does the DAO need to meet for income tax purposes to be deemed a 'borrower', 'lender', 'trustee', or 'party to the arrangement', noting this is an exercise necessary for tax purposes and is required for tax certainty despite how long it may take to achieve legal recognition or certainty. Absent this exercise, the application of tax rules that relate back to an 'entity' or 'legal person', including any proposed new rules, will continue to be unclear. A further consideration is whether any intellectual property including copyright of code making up an autonomous protocol must be owned by a DAO, or the DAO or entity hosting the interface have the licence to provide access to the protocol, in order for the DAO, or hosting entity, or the protocol itself, to be deemed for income tax purposes as a 'borrower', 'lender', 'trustee', or 'party to the arrangement'.

e. How to determine the value of crypto-tokens received (for cost base purposes, assuming under the new rules that the receipt of receipt tokens is not a taxing event) where those tokens received represent the right to crypto-token collateral that exceeds the value of crypto-tokens received (i.e. over collateralised borrowing where the borrower must stake £100 worth of tokens to receive £30 in loan proceeds.

f. Staking or lending arrangements that involve burning or destroying crypto-tokens staked or lent but instead record the rights and obligations of the arrangement in other ways as

an approach to best practice cyber security of the protocol (i.e. eliminating protocol 'honeypot' risk).

g. Whether 'bridging' crypto-tokens from one blockchain to another for the purpose of entering into a 'DeFi transaction' would (and should) fall within the reach of the 'DeFi transaction tax exemption', which could otherwise crystalise a CGT event and taxable gain or loss. The reverse scenario is also applicable, for crypto-tokens being 'bridged' back to the originating blockchain after completion of the 'DeFi transaction'.

h. Whether an NFT fractionalisation arrangement that does not use the terms 'staking or lending' or 'DeFi staking or lending' would be captured, despite same or similar technology methods as staking or lending being used.

i. Whether staking crypto-tokens to receive 'vote escrowed' tokens (e.g. veCRV) for the primary purpose of increasing voting weight and higher token rewards is included as a 'DeFi transaction'.

j. Whether staking of one class of tokens in a liquidity mining scheme[1] offered by the DAO is included as a 'DeFi transaction'.

k. The tax treatment for the recipient of staked or lent tokens on receipt, on on-trading and on-lending and accruing gains or incurring losses in that exercise, and upon return of the crypto-tokens to the taxpayer and paying of any returns to the taxpayer. A suggestion is set out at our response to Question 7(a). In this regard, tax simplicity could be achieved if DAOs, or completely autonomous protocols with no human governance, are treated on par to known legal entities (i.e. centralised entities), by, for example, the HMRC setting out criteria for an autonomous protocol or the DAO referable to that protocol to be deemed an 'entity' or 'legal person' for income tax purposes.

l. Whether the transfer of crypto-tokens to a centralised entity offering access to DeFi and DeFi returns is included as a 'DeFi transaction', including where it is not acting as mere agent or bare trustee where the terms published by that centralised entity have the legal effect of a disposal of the taxpayer's crypto-tokens and the acquisition of an interest in a scheme.

**Question 2: Do you consider that the rules above would give rise to any unintended consequences or significantly restrict the development of the DeFi lending and staking market? If so, please provide details.**

[2] In addition to the items stated above at Question 1 and the BADAS*L submission to the Call for Evidence, the UK HMRC's working definition of 'crypto-asset' could give rise to unintended consequences for tax purposes.

[3] Without clarification or a limiting principle on how the proposed new rules' definition of 'crypto-asset' is to be interpreted, the market could act conservatively and adopt a broad rather than a focussed interpretation for income tax purposes. Broad interpretations would perpetuate the unfair administrative burden and require taxpayers to determine whether the crypto-token, or

[1] We narrowly define a scheme as a liquidity mining scheme where the tokens are distributed for the first time via a contract that is 'pre-loaded' with an undistributed supply of a DAO's native tokens and where the scheme is run for the purpose of attracting a broader global audience because of the incentive of liquidity mining rewards so as to distribute transferable tokens that can be used to express sentiment or cast a vote.

which part of it (and at what value), meets the definition of a ‘crypto-asset’.

a. For example, loan proceeds from Maker protocol are denominated in DAI. The DAI tokens represent ‘crypto-assets’ and a ‘crypto-liability’ in the sense that they represent either or all concurrently (in whole or in part):

b. an obligation to repay the DAI plus the stability fee; and / or

c. an obligation to transfer more underlying crypto-token collateral to avoid a liquidation of existing collateral but referable to the taxpayer’s existing obligation to repay the DAI plus the stability fee (not more loan proceeds in DAI);

d. a right to spend the DAI to acquire other crypto-tokens or fiat currency or other property (e.g. a car or home from a merchant that accepts DAI).

[4] In addition, the taxpayer’s intentions to exercise rights or meet obligations in whole or in part demand a more granular scrutiny of what the crypto-token represents for a taxpayer at a particular time. Cost bases can always be recorded to accommodate different intentions, but events or circumstances that give rise to taxation should seek to tax only realised economic gains (or losses).

**Question 3: Do you consider that the rules would be open to abuse?**

[5] Yes, the proposed new rules would be open to abuse in the following respects:

a. Without the proposed new rules clarifying the tax treatment of the crypto-tokens received in a DeFi staking or lending arrangement, such as whether the value of crypto-tokens received should be treated as a chargeable gain or receipt, or at what value the cost base should be recorded, confusion and abuse is likely to result. Silence on this point could leave open the argument that the taxpayer should have recognised the gain or loss that would have corresponded if the crypto-token principal staked or collateral provided, respectively, were traded. The proposed new rules are clear that ‘…any transfer of beneficial ownership of cryptoasset from the lender to the borrower will be disregarded for CGT’ but is silent on the receipt token component. This is important because the receipt tokens can be used to generate crypto-token returns notwithstanding the characterisation or treatment of the ‘first DeFi transaction’.

b. As an integrity measure, the method to determine the revenue cost base or CGT cost base of the crypto-tokens received, for the purpose of working out the appropriate gain or loss on subsequent crypto-token activity with the receipt token, should be based on the value of the principal in a staking arrangement or of the loan proceeds (not the collateral) in an over collateralised lending arrangements.

c. Taxpayers could maintain perpetual loans, by continually ‘depositing’ collateral to reduce the risk of the collateral being liquidated and to increase the loan proceeds available. Taxpayers can then use loan proceeds to trade to earn more gains and be enabled to deposit more collateral. This is why principles and integrity rules focused on taxing when there is no genuine intention to repay loan proceeds becomes relevant.

**Question 4: Are the rights of the lender to receive the lent or staked tokens of a legal nature? Please respond to this question with reference to any specific DeFi models you have an involvement in, highlighting any legal uncertainties.**

[6] Refer to responses to:

a. Question 1 regarding the legal terms published by a centralised provider; and

b. Question 2 regarding the clarifications required around the legal status of a DAO or autonomous protocol with no human governance. If a DeFi protocol is governed by a DAO, there is legal uncertainty regarding whether a trust or trust like relationship can be created that separates legal and beneficial ownership.

**Question 5: Other than (1) the sale of rights during staking or lending and (2) the borrower not being able to return staked or lent tokens, are there any other situations in which the lender may cease to hold the right to receive back the lent/staked tokens?**

[7] Yes, one situation is where the taxpayer borrower does not intend or attains an intention not to return receipt tokens such as, for example, where the value earned from the after-tax profits from subsequent activities possible from the receipt token of loan proceeds exceed the value of principal or collateral staked or lent, respectively.

[8] Another situation is where algorithmic rebalancing occurs which changes the proportion of liquidity that a taxpayer's LP token represents, such as where another taxpayer contributes liquidity to a liquidity pool. Taxpayers do not necessarily receive alerts when this occurs, or may not know how to set up such alerts or information feeds.

**Question 6: Do you favour a change in the rules to always treat the DeFi return as being of a revenue nature? What are the pros and cons?**

[9] Yes, for simplicity the DeFi return should be assessable but on claiming the DeFi return so the taxpayer can exchange some of the crypto-tokens for fiat currency to pay the corresponding amount of tax.

[10] We understand that there are many calls from industry to preserve capital treatment however the complexity of analysis would perpetuate a high compliance burden upon individuals. Revenue treatment for crypto-token returns should be the default option for simplicity and certainty, perhaps with room left for advice or evidence to be obtained if capital account treatment is appropriate and sought by a taxpayer.

[11] We strongly recommend the HMRC consider extending existing allowances such as those that relate to interest income to capture returns from crypto-token activities without having to characterise such returns as revenue or capital, or in the nature of, interest, dividends, royalty or rent – there is desire in the market to characterise crypto-tokens as in the nature of interest to benefit from the allowance and this is neither helpful nor accurate;

**Question 7:**

**a) Do you agree that the proposed treatment of DeFi transactions has been applied correctly in each of Examples 1 to 5?**

[12] No, each require modification.

***Example 1: Transfer of a token to another party for a fixed return***

[13] The legal structure, and regulatory treatment of the structure, requires clarification. Otherwise, the use of DeFi staking and lending for the benefit of the 'DeFi transaction tax exemption' could increase and without the users having the backdrop of regulatory protections.

[14] For example, if the promise of a fixed return is being made, then:

a. the tokens transferred are likely being put at risk to generate a return and financial services regulation is typically triggered; and/or

b. undistributed tokens are being distributed to achieve the aims of decentralisation, where the increase in circulating supply dilutes the value of tokens and where the promise of 30% return may be true by reference to number of crypto-token units distributed but not by reference to the value of principal staked and value of crypto-token returns.
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[15] Instead, the broader tax policy question is: if a 'DeFi transaction tax exemption' is introduced, should taxpayers also be able to disregard a gain (or loss) on the deemed disposal of property (such as shares) on the use of those shares to acquire an interest in a scheme (such as an investment fund). Currently, taxpayers are incentivised to realise a gain (i.e. sell the shares) to realise any gain and have the fiat currency available to pay the tax, where the after-tax proceeds are used to acquire an interest in a scheme. The effect of a 'DeFi transaction tax exemption' would distort and disincentivise traditional market behaviour which is not necessarily efficient but brings forward the realisation of genuine economic gains in order to make the currency is available to pay the tax.

[16] In securities lending arrangements, the status of each of the counterparties is clear as it what each counterparty promises they will do. Lacking a regulatory framework that holds the relevant parties accountable, a securities-lending like tax concessionary treatment could fuel market activity that harms consumers. The securities lending tax exemption was introduced only once it was recognised that the activity genuinely assisted price discovery and the tax exemption was necessary to enable securities lenders to operate on par with lenders in low or no tax jurisdictions. As the Consultation Paper acknowledges, the regulatory backdrop for DeFi continues to evolve and by reference to history the tax concessionary treatment should be aligned with a regulatory framework and come in as the framework is introduced with a transition or grandfathering approach for existing DeFi arrangements. This is why Option 3 with bespoke no gain and no loss rules may be more appropriate than Option 2.

***Example 2: Transfer of a token to another party for a fixed DeFi return and receipt of a liquidity token***

[17] Use of the term 'platform' is undefined and unclear. The example would suggest that 'platform' is being used in the context of calling the interfaces for the Aave application or Compound application as 'platforms' when this does not align with industry usage. Industry calls these decentralised applications or dApps. It is also unclear whether the term 'platform' is supposed to refer to centralised providers such as Celsius, BlockFi and Nexo, rather than an interface to a DeFi application.

[18] If the term 'platform' is intended to refer to centralised providers, there will be providers that don't have a 'liquidity pool' as that term is used to refer to a smart contract (or suite of smart contracts) that take, manage, and return liquidity. Instead, they have their own proprietary

database to record customer ‘deposits’ and ‘withdrawals’, investments made, and returns to customers. The institutional version of Aave (Aave Arc) however, does allow a centralised provider to deploy its own liquidity pool or attain access to private pools predominantly for compliance with money laundering and terrorism financing laws.

[19] For completeness, the example should specify that the receipt of the aT2 token is a non-assessable receipt, but the cost base should be recorded whether or not the aT2 token (‘receipt token’) is fungible or non-fungible. The public nature of the blockchain data record means that the data record of the taxpayer receiving the aT2 token could enable the taxpayer to enter subsequent activity based on the aT2 token remaining in the taxpayers’ wallet.

[20] Regardless of the new rules treating the return of the aT2 token as having no CGT consequences (and presumably also no revenue consequences), recording cost base is important for any subsequent activity with the aT2 token.

[21] In our view, subsequent activity with the aT2 token should be deemed to be on revenue account unless real-time evidence is recorded to demonstrate why subsequent activity should be treated on capital account. One example where capital account treatment could be appropriate is where crypto-tokens are received from airdrops or hard forks, where a tax authority takes the interpretation that a taxpayer should be assessed to the market value of the crypto-token (Australian Taxation Office) (which we disagree with but acknowledge that at least one tax authority has taken this position) or that the cost base of a token received as a result of a hard fork should be some portion of value of the original token based on a reasonable method of apportionment (UK).

[22] Due to the typically short-term nature of the subsequent activity with a ‘receipt token’, typically the long term tax concessions available for assets held on capital account are not available which effectively renders the distinction between revenue and capital account redundant. However, it appears the UK tax rules do not include a concession for long-term gains so UK tax professionals likely have more to contribute to the ‘capital v revenue’ approach.

[23] In addition, the CGT or revenue account consequences for the counterparty to the staking or lending transaction, including a DAO, should be covered in the example.

[24] Since the wording of the tax legislation (s104 TCGA92) requires that similar assets be “pooled”, it would be helpful for the proposed new rules to be more precise with language when referring to a liquidity pool versus a pool defined for the purpose of determining taxation of chargeable gains. It is confusing that the example suggests the DeFi return amount will be added to the cost base of their ‘T2 pool’. This new term, not identified as a tax term or a crypto-industry term, suggests that a separate asset has arisen, the ‘T2 pool’ asset, when the earlier paragraphs of the example were silent on the issue of whether the T2 tokens are treated as disposed on transfer of the ‘T2 token to the platform’ and an interest in the ‘T2 pool’ asset was acquired at that time, despite that a gain may be exempt or disregarded under the proposed new rules. As a result, a cost base of the ‘T2 pool’ asset was not set in the earlier paragraphs of the example. Rather, the example states that there is no CGT event on transfer of the ‘T2 token to the platform’. So, the example leaves taxpayers confused as to whether the cost base of the ‘T2 pool’ is the DeFi return amount at the end of the staking period plus either the original cost base of the T2 token transferred or the value of the T2 token when transferred. We assume it is intended to mean that the T2 pool existing for the purpose of determining taxation of chargeable gains comprises of the parcel of T2 tokens recorded at a cost base on date of

original acquisition of the T2 tokens (not on contribution to the smart contract and despite the contribution to the smart contract) and the parcel of T2 tokens recorded at a cost base on date the T2 tokens rewards were claimed. This should be explicitly clarified in the example,

[25] It is also unclear why the example suggests the DeFi return amount is added to the cost base of their T2 pool when the T2 'liquidity pool' does not exist once the T2 token is returned to the taxpayer. It would be more correct to say that a cost base should be recorded for the parcel of crypto-tokens representing the DeFi return at the time those crypto-tokens are claimed by the taxpayer, and that those crypto-token returns are added to the 'T2 token pool for the purposes of determining taxation of chargeable gains'. We acknowledge that it may be common vernacular in the UK to refer to a parcel of assets as a pool of assets, where fractional parts of the parcel or pool can be sold and the cost base of the parcel or pool is apportioned reasonably between the fraction sold and the fraction retained. Despite the difference in vernacular, the use of the term 'pool' for tax purposes is confusing when the term 'liquidity pool' is used in DeFi.

***Example 3: Sale of rights related to the lent or staked tokens***

[26] The same considerations apply to this example as set out for Example 2.

[27] In addition, it would be helpful for the example to state that User C has 'claimed' all the returns that had accrued to the 6-month mark, rather than 'received'. The importance of the taxpayer being subject to tax on the value of DeFi returns paid in crypto-tokens only when claimed is to ensure the taxpayer can sell some of the crypto-tokens for fiat currency to pay the tax. If the taxpayer is assessed based on the value of the DeFi return received (which can be as it accrues) the administrative record keeping burden is high and the value may decrease by the time the taxpayer is able to claim and sell the tokens or a sufficient portion to pay the tax. In addition, the taxpayer may need to pay gas fees to claim tokens, which in some instances of high volumes of transactions in the market can be high enough to deter the taxpayer from claiming the returns instantly or at all. Since under existing tax law DeFi returns could be taxable when those returns are claimable (rather than when claimed), this is an important point worthy of explicit clarification.

[28] For completeness, the example should also state that under the proposed new rules:

a. the taxpayer would calculate the gain or loss on disposal of the one aT3 token as the £1,000 proceeds less the cost base of the one T3 when that token was purchased, and not the value of the T3 token when staked; and

b. the buyer records a cost base in the aT3 token of £1,000 (plus any applicable transaction costs), where on transferring the aT3 token to receive the T3 token at the end of the staking term the cost base of the T3 token received inherits both the cost base of the aT3 token.

[29] As stated above, the UK tax rules do not appear to include a CGT discount or tax concession for 'long-held assets' (i.e. assets held for at least 12 months). In regimes that do, such as Germany and Australia, the date of acquisition of the aT3 token is important, as well as whether the T3 token -- once withdrawn from the staking arrangement -- inherits the acquisition date of the aT3 token. The acquisition date and inheritance of the earlier acquisition date is important for clarity of application of the CGT discount or tax concession for 'long-held assets'. We note

that Example 4 clarifies that a taxpayer will be treated as having acquired the parcel of T4 tokens when they purchased the aT4 token.

***Example 4: Sale of rights related to the lent or staked tokens and accrued return***

[30] The same considerations apply to this example as set out for Examples 2 and 3.

[31] In addition, we agree that the deconstruction of a capital component and revenue component at the time of sale of the aT4 token for User D is useful and appropriate.

[32] For completeness, the example should also state that the buyer should record a cost base in the 0.3 T4 DeFi return at the value when claimed (in addition to reporting the value as taxable under miscellaneous income), and this results in it being a separate T4 parcel to the earlier T4 parcel acquired through the buyer's purchase of the aT4 token.

[33] Finally, the use of the term 'liquidity pool' in this example is confusing since it relates to a single token. Industry would typically use the term 'single-sided pool' where there is only one token transferred to a contract and that token is 'held' in that contract (i.e. not on-traded, on-lent or otherwise rehypothecated).

***Example 5: Staking a token in exchange for a non-fungible token (NFT) – the NFT is fractionalised and part of the fractionalised NFT is sold***

[34] The same considerations apply to this example as set out for Examples 2, 3 and 4.

[35] For completeness, the example should also state the nature of the DeFi return – in the earlier examples facts were provided that the taxpayer expected a 30% fixed return from the staking or lending arrangement, but this example is silent. It is unclear whether a DeFi return is promised for both the first liquidity pool and the subsequent NFT fractionalisation.

[36] In addition, as stated earlier, the interpretation of 'DeFi transaction' would not appear on first glance to include NFT fractionalisation so this should be explicitly included or a broader principle based on genuine economic realisation adopted in relation to fractionalisation arrangements.

***Example 6: Transfer of a pair of tokens to a platform. The same tokens will be returned but in different amounts and/or proportions***

[37] We disagree with the expression that there has been an economic conversion of 0.5 T7 into 6 T6. This is an oversimplification that produces an incorrect expression of the arrangement. We further disagree that the arrangement should not fall within the scope of a 'DeFi transaction tax exemption'.

[38] It is our view that:

a. User F does retain beneficial ownership of the ten T6 tokens and one T7 token and each parcel retains its original cost base upon being transferred into the liquidity pool – i.e. there is no CGT or revenue event on transfer of each parcel of tokens into the liquidity pool because User F can query the smart contract and see in real time that upon transfer to the liquidity pool contract the same number of tokens remain available and withdrawable by only User F.

b. Subsequently, User F:
   i. suffers the loss of beneficial ownership of T6 crypto-token units when, say, one T6 token is sold to a third party,
   ii. enjoys the gain of beneficial ownership of T7 crypto-token units when the corresponding 0.1 T7 token is transferred to the liquidity pool by the third party as consideration for purchase of the one T6 token, and
   iii. enjoys the gain of beneficial ownership of 0.001 T7 crypto-token units as 'DeFi returns',

   however, none of the increases or decreases in beneficial ownership of crypto-token units result in a genuine economic gain for User F until User F withdraws or claims all or a portion of the crypto-token units from the liquidity pool. As such, under the proposed new rules User F should be subject to taxation as follows on withdrawal or claim of all or a portion of the crypto-tokens in accordance with Example 4 with modifications as suggested by us. That is, insofar as the exit from the liquidity pool arrangement represents a return of capital, a taxing event and a revenue return there is:

   i. no CGT (or revenue account) consequences for User F in relation to the nine T6 tokens returned to them;
   ii. a CGT (or revenue account) consequence for User F in relation to the one T6 token disposed of during the liquidity pool arrangement but for which the genuine economic loss is suffered at the time the trading fee referable to the disposal is withdrawn – where the gain or loss is calculated as the value of the one T6 token at the time of disposal from the liquidity pool (not the average value for the day and not the time of withdrawal from the liquidity pool) less the cost base of the T6 token; and
   iii. no CGT consequences for User F in relation to the one T7 token return to them, and miscellaneous income calculated as the fiat currency value of the 0.001 T7 crypto-token units at the date withdrawn, and cost base recorded for the 0.001 T7 parcel at the value reported as miscellaneous income.

c. There should be an integrity rule to prevent User F (or their associates) from purchasing tokens from the liquidity pool to obtain a tax benefit from the difference that arises between the buyer recording a cost base based on the value of the token at the acquisition time and User F calculating the tax gain or loss on withdrawal of the trading fee referable to the token disposed of during the liquidity pool arrangement. This could be achieved by a declaration on the annual tax filing that the taxpayer has not undertaken such activity. If the taxpayer is found to have breached the law, then the taxpayer would be subject to tax on the shortfall plus a penalty amount of tax that eliminates any economic gain received.

d. The third-party buyer would record a gain or loss on disposal of T7 tokens for the purchase of the T6 token and to pay the fee and record a cost base on acquisition of the one T6 token based on the fiat currency value at the time of acquisition plus the fiat currency value of the fee (paid in T7 tokens).

e. Symmetric treatment (of the proposed new rules and as expressed in this submission) would suggest that a DAO or centralised counterparty would be acting as an agent or bare trustee and thus not receive any income or gains nor incur any expenses or losses

in respect of the above arrangements.

f. Where the DAO turns on a 'fee switch' we presume that the DAO would treat this as an assessable 'DeFi return', however the basis of the UK rights to taxation of such a return or a portion of this return are unclear and would require a facts and circumstances analysis of each DAO.

[39] Note: The numbers used in this response for illustrative purposes are hypothetical and will not balance to the end balances used in the example. Only income tax treatment has been considered, and not VAT and whether the DAO or counterparty, or the liquidity provider, are or begin to be carrying on a financial services business.

**b) Do you foresee any practical difficulties applying the proposed treatment to situations similar to those in these examples?**

[40] Yes, as stated above, in two key ways:

a. Absent the backdrop of a regulatory framework that holds parties accountable, the tax concessionary treatment could fuel more harmful outcomes for retail than exist presently particularly if DeFi smart contracts are not subject to a security audit before being deployed.

b. Absent 'on-par' treatment for use of (non-crypto-token) property to acquire an interest in a scheme, more off-chain activity will trend towards DeFi because of the 'DeFi transaction tax exemption'.

[41] The coincidence of a 'DeFi transaction tax exemption' and regulation around 'asset referenced tokens' should be anticipated and may potentially attract individuals and business to move to (or stay) in the UK to reside there for tax purposes. This will likely result in more evolution and innovation in DeFi arrangements and transactions very quickly with potentially large amounts of value involved.

**c) Please provide any further examples of DeFi transactions that you think would be helpful, including an explanation of how the proposed tax treatment would apply.**

[42] For the reasons stated above, we do not believe 'DeFi transaction' should be the term used for a tax exemption or concession or statutory remediation relief related to crypto-token activities that produce tax consequences out of alignment with the economic reality of the circumstances.

[43] We acknowledge that this consultation is confined to 'DeFi staking and lending'. Whilst lending is a commonly understood term, staking is not and has many possible interpretations which result in divergent possible tax outcomes. Stepping back however, we expect the narrow focus of a 'DeFi transaction tax exemption' would create distorted market behaviour in traditional and crypto-token markets that would see traditional finance and traditional businesses seek to incorporate DeFi elements so that they and their users benefit from a DeFi transaction tax exemption for essentially the same or similar activity that occurs off-chain in a traditional context.

**d) Please provide examples of any DeFi transactions where you consider it would be problematic to apply the proposed new rules, with an explanation. If you think a different**

**treatment would be easier to apply, while retaining broadly the same level and timing of tax charges, please set this out.**

[44] Refer to response to Question 7(c).

**Question 8:**

**a) Do you think that the transaction in Example 6 should be within the scope of the proposed tax rules for DeFi? On what principles have you based your response?**

[45] Yes, see response to Question 7(a).

**b) If you think that this transaction should be within the scope of the proposed DeFi rules, how should they treat the economic conversion between the 2 types of token while the tokens are staked as a pair, given that crypto to crypto transactions are taxable?**

[46] Refer to response to Question 7(a). The proposed new rules already assume that the 'crypto to crypto transactions are taxable' rule switches off if one interprets the entry into a DeFi arrangement as a form of 'crypto to crypto transaction'. For example, under Example 2 one could take the (simplistic but plausible) view that the taxpayer has traded one T2 token for one aT2 token.

**c) Noting that this transaction does not meet all the conditions for the proposed rules, how could those rules be modified to provide a fair outcome for this transaction?**

[47] Refer to response to Question 7(a) and 8(c).

**d) Do you foresee any difficulties for users who engage in these and similar transactions to establish the value of the DeFi return? If so, please provide examples where this may be an issue.**

[48] No, based on the method outlined at the response to Question 7(a). The method we have proposed seeks to defer the calculation of gain or loss for User F on disposal of the one T6 token during the liquidity pool arrangement to the point where User F actually withdraws the crypto-token units referable to the fee and consideration received in T7 crypto-token units and User F realises the genuine economic gain or loss and can sell the crypto-tokens received on withdrawal to meet a corresponding tax liability.

**Question 9: Do you have any general comments regarding the proposed tax framework for DeFi that you have not included in the previous questions?**

[49] The proposed new rules should apply retrospectively or if retrospectivity is too politically difficult to achieve, then transitional measures should be granted. In the least, the proposed new rules should apply from the date the DeFi staking and lending consultation was announced as that is when UK taxpayers have had notice that the application of existing tax rules is confusing, in doubt, and subject to policy consultation.

[50] For example, taxpayers with existing or past involvement in DeFi staking and lending arrangements should be able to avail themselves of the more sensible tax rules if the new rules give rise to equal or better or more certain tax outcomes for the taxpayer than the existing rules.

[51] On what basis is it fair tax policy to tax an individual under existing rules to a gain on 'disposal' of tokens to a liquidity pool in the 2023 income year but another individual that waits until 2024 when the new rules come into effect suffers no taxation because there is no 'disposal' under the new rules? This sort of tax policy would lead to an influx of DeFi activity the moment the new rules come into effect, and would have wider impacts if the broader regulatory protections are not in place by the time the 'DeFi transaction tax exemption' becomes effective.

[52] If the new rules are only to apply after commencement date and without any transitionary provisions, the 'tax tail will wag the dog' and prompt non-genuine unwinding of DeFi arrangements where tax factors distort market activity as well as tax positions adopted under the existing rules. For example, if the HMRC does not clarify the existing treatment of DeFi staking and lending transactions, then taxpayers that will not be captured by the new rules would be incentivised to adopt interpretations of the existing tax law that crystalise tax or capital losses at opportune times in the market.

[53] It is not clear how many UK tax residents and how much crypto-token value would be incentivised to act to prepare their tax positions in the manner suggested in paragraphs [51] and [52] but if this is significant then the HMRC must understand and anticipate the potential negative and significant market impacts from participants that take short positions on various crypto-tokens involved in DeFi arrangements or governance of DeFi protocols. Market impacts, and contagion to traditional finance could be significant, depending on the date of commencement of the proposed new rules and the level of UK tax residents' exposure to asset-referenced tokens (or tokenised real world assets) involved in DeFi arrangements.

**Question 10: What impact do you expect the proposals in this document, if implemented, to have on administrative burdens and costs for users of DeFi?**

[54] If the UK legislated a flat rate of tax for DeFi arrangements, in theory liquidity pool contracts could be designed or upgraded to collect and remit the tax component of in-pool transactions to the UK HMRC in real-time. This would best alleviate the high administrative burden upon taxpayers involved in DeFi arrangements, and other complex smart contract arrangements that may arise, and improves the efficiency and reliability of tax collection by the HMRC. This is not a tax designed to penalise or disincentivise speculation or use of DeFi, rather to simplify the calculation and collection of income tax associated with genuine economic gains from DeFi interactions.

[55] The impacts of the proposed new rules on existing users of DeFi can already be modelled as the data is available on the public blockchain ledgers in which activity has occurred such as Ethereum, Solana and Cardano.

**Question 11: Are there any other impacts, benefits or costs arising from the proposals in this document, if implemented?**

[56] If the tax treatment of DeFi staking and lending protocols governed by DAOs were clarified, the clarity would benefit any corresponding UK tax compliance and payment obligations of DAO-governed DeFi protocols. We note the Law Commission's related work focussed on the current treatment of DAOs under the law of England and Wales but emphasise that an DAO entity deeming rule for tax purposes is necessary and overdue and does not rely on the Law Commission's related but separate work which excludes taxation from its scope.

[57] If more legislation is introduced around tokenisation of real-world assets, then the broad capture of any crypto-asset involved in a DeFi transaction will distort the market, perhaps earlier than it may be ready for, towards tokenised staking and lending arrangements with real-world assets. This would be opportune for enabling the prospect of currently latent markets in non-free flowing non-tokenised non-fractionalised assets but would also shock financial markets. The cyber security risk would correspondingly increase if 'honeypots' continue to form and where there is no framework that at least requires the security audit of smart contracts before they are available to the public for staking and lending.

**Question 12: How common is direct lending of tokens between 2 parties compared to the use of staking?**

[58] We are unclear on how common it is now, however a few years ago there were quite a few requests by individuals for tax advice on the implications of lending tokens to individuals, trusts, their superannuation funds or companies (i.e. from wallet of one traditional legal person to wallet of another traditional legal person). Particularly due to the tax integrity rules that often apply to any sort of financial accommodation provided by a private company or superfund/pension fund to its shareholders, members or associates.

[59] Some arrangements sought to have the crypto-token units returned, some sought to require an amount on account of interest, some sought to be repaid in fiat currency at the value of the crypto-tokens at the time lent (rather than at the time repaid). Without clear documentation or default legal or tax rules, there can arise distinctly different outcomes and thus motivations for the borrower and lender, which become more extreme the greater the price volatility between date of loan and repayment.

[60] The salient point for DeFi arrangements and crypto-token lending arrangements between traditional legal persons is in what denomination are loan amounts owed? If the staked collateral or principal loaned is denominated in crypto-token units, is there ever a 'foreign-exchange' or 'foreign-exchange-like' gain or loss recorded from when the arrangement is entered into to when it is closed out? If not, then taxpayers and the market are incentivised to 'price' or 'denominate' staking and lending arrangements in crypto-token units, and to transition all such activity into DeFi rather than traditional finance so as not to fall within traditional tax rules for foreign exchange gains and losses.