

## **Tax Working Group Public Submissions Information Release**

### **Release Document**

**September 2018**

**[taxworkinggroup.govt.nz/key-documents](http://taxworkinggroup.govt.nz/key-documents)**

Key to sections of the Official Information Act 1982 under which information has been withheld.

Certain information in this document has been withheld under one or more of the following sections of the Official Information Act, as applicable:

- [1] 9(2)(a) - to protect the privacy of natural persons, including deceased people;
- [2] 9(2)(k) - to prevent the disclosure of official information for improper gain or improper advantage.

Where information has been withheld, a numbered reference to the applicable section of the Official Information Act has been made, as listed above. For example, a [1] appearing where information has been withheld in a release document refers to section 9(2)(a).

In preparing this Information Release, the Treasury has considered the public interest considerations in section 9(1) of the Official Information Act.

**Voice for Crypto**

---

**Submission to the  
Tax Working Group**

---

# Contents

<b>1: Key Messages</b>	<b>3</b>
1a Who we are	3
1b Key points and recommendations	4
<b>2: Overview of blockchain and distributed ledger concepts</b>	<b>6</b>
2a Summary	6
2b Blockchain and other distributed ledgers	7
2c Crypto-tokens	8
2d Why blockchain is important	9
<b>3: How blockchain works</b>	<b>10</b>
3a Independent Blockchains	10
3b Blockchain as a service	11
3c Considerations for tax treatment	11
3d Recommendation	12
<b>4: GST</b>	<b>13</b>
4a Current tax treatment	13
4b Issues with this approach	13
4c International approaches	14
4d Recommendation	14
<b>5: Income tax</b>	<b>15</b>
5a Current tax treatment	15
5b Issues with this approach	16
5c International approaches	19
5d Recommendation	20
<b>6: Capital raising</b>	<b>23</b>
6a Current tax treatment	23
6b Recommendation	23
<b>Appendix One:</b>	
<b>Potential Token Categories</b>	<b>25</b>

---

# 1: Key Messages

---

## 1a Who we are

- i. Voice for Crypto is a group of blockchain and cryptocurrency professionals and enthusiasts. We represent local and global blockchain businesses, exchanges, brokers, miners, traders, lawyers, accountants, and other individuals who are passionate about blockchain.
- ii. This document has been compiled as a group and all views expressed are the authors' personal views.
- iii. Our purpose is to provide guidance and education in order to influence the way that blockchains, distributed ledgers and their tokens are governed and regulated in New Zealand.
- iv. We believe that New Zealand needs sensible taxation for blockchain products, acceptance by banks, and support for innovation.
- v. We are concerned that regulators view blockchain technology as a barrier or impediment. This is underlined by the Submissions Background Paper, which states that "*Blockchain technologies and the use of cryptocurrencies ... could undermine third-party reporting and withholding of tax.*"<sup>1</sup>
- vi. However, blockchain technologies can provide low-cost and efficient ways of complying with tax obligations. Reviewing their tax treatment and governance represents a significant commercial and social opportunity for New Zealand.<sup>2</sup>
- vii. Voice for Crypto is committed to working with regulators: together we can make New Zealand an innovative hub for the emerging blockchain and crypto-economy, which we believe will form the backbone of the future digital economy.
- viii. We are willing to meet with the Tax Working Group (the Group) to further discuss this submission. Please contact Fin Mountfort at [1]

---

1 <https://taxworkinggroup.govt.nz/resources/future-tax-submissions-background-paper-html#section-3>

2 For example, see the recent formation of the European Blockchain Partnership. The Commissioner for Digital Economy and Society states that "In the future, all public services will use blockchain technology." <https://ec.europa.eu/digital-single-market/en/news/european-countries-join-blockchain-partnership>

---

## 1b Key points and recommendations

- i. We believe that blockchain and distributed ledger technology represent a change to the economy and society that will have an impact on a scale similar to the invention of the internet.
- ii. Our submission is relevant to many of the Group's focus areas,<sup>3</sup> including technological change and the different business models that will bring, the changing nature of work, and the impacts of globalisation.
- iii. We agree with the Group's view that the New Zealand's tax system has many strengths, but it cannot stand still. The current system is not set up to handle the new digital economy. New Zealand should align with international best practice regarding classifying blockchain products.
- iv. In particular, we recommend as a matter of urgency that Inland Revenue (IR) remove GST from all crypto-tokens, with the exception of some utility tokens. This is discussed further in section 4.
- v. In terms of individual income tax, we understand that the tax system must be flexible enough to keep collecting revenue, whatever changes come. Voice for Crypto is not opposed to taxing some blockchain transactions.
- vi. However, it must be understood by regulators that while, until now, crypto-tokens have primarily been used for speculation and acquired for the purposes of disposal, this will not always be the case. Innovative new decentralised applications (dApps) on the horizon will 'tokenise' concepts as diverse as attention to advertising (Basic Attention Token), gold (Digix), file storage (Storj), truly private personal data on social media platforms (Akasha), or voting rights (in decentralised autonomous organisations (DAO)). The United Nations is exploring how blockchain can help us meet the Sustainable Development Goals<sup>4</sup>, while communities in Brooklyn New York are using blockchain to exchange peer-to-peer solar energy (Brooklyn Microgrid Project).
- vii. In short, crypto-tokens can perform many functions and their value is not always monetary. It will not always make sense to classify a crypto-token as property like IR currently suggests.
- viii. We recommend that IR makes the changes required to the tax system to ensure fair taxation of the different kinds of functions that crypto-tokens can have. Crypto-tokens are discussed further in section 2c.
- ix. To cope with the rapidly evolving system for now, we recommend two alternative approaches for income tax: "presumed return" taxation on a portfolio basis and like-kind exchange. These approaches are discussed further in section 5.
- x. Classification of crypto-tokens as property also creates issues for companies wishing to use these tokens to raise capital. In light of the potential for blockchain technology to drive innovation and economic growth, we believe this is an important issue for the Group to consider.
- xi. In section 6 we recommend that the tax treatment of tokens used to raise capital be based on the tokens' underlying nature, and that fundraising entities be allowed to allocate these funds over a multi-year period, if appropriate for the project being funded.
- xii. New Zealand must be prepared for the future of the digital economy and act in a way that fosters innovation. In its current form, our tax system is impacting the human capital (skills and knowledge) available to New Zealand in the emerging digital economy, as described in the Living Standards Framework.<sup>5</sup>

---

3 <https://taxworkinggroup.govt.nz/resources/future-tax-submissions-background-paper-html#section-3>

4 <https://www.coindesk.com/crypto-startup-blockchain-partners-un-sustainability-goals/>

5 <https://treasury.govt.nz/information-and-services/nz-economy/living-standards/our-living-standards-framework>

- xiii. The current situation is providing uncertainty to taxpayers, which is increasing the costs of compliance and administration as well as discouraging investment and participation.
- xiv. We recommend that IR accept cryptocurrency as a form of payment for taxes.
- xv. We recommend that the Government reevaluates its approach to blockchain technology in a way that allows for innovation, and attracts and retains the talent required to make New Zealand prosperous in the future digital economy.
- xvi. Voice for Crypto supports the points and recommendations made in the paper produced by the Edmund Hillary Fellowship in December 2017, "New Zealand: Unlocking Blockchain's Potential."<sup>6</sup>

---

<sup>6</sup> <https://static1.squarespace.com/static/57cd3bd059cc6804d1884b86/t/5a39dbbd419202030eebdc18/1513741249608/NZ+Unlocking+Blockchains+Potential+-+Dec+2017.pdf>

---

## 2: Overview of blockchain and distributed ledger concepts

---

### 2a Summary

- i. Blockchain is a revolutionary new development that allows information, for example transaction data, to be shared among many parties, without requiring an intermediary to store or verify that information. At its core, a blockchain is a ledger (or record book) that is open for everyone to read, can only be added to by consensus, and ensures that records are unable to be altered.
- ii. Bitcoin was the first distributed blockchain token and has shown its strength as a store of wealth, a method of transferring value, and also as a way for users to permanently store data on the decentralised database we know as the Bitcoin blockchain.
- iii. Blockchain tokens today number over 1700, with new tokens released daily. Some are used simply for transferring money cross-border; others are used to perform complex scientific calculation for the likes of SpaceX rocket launches on a distributed scale. The possibilities for blockchain are endless and many have not been imagined yet.

---

## 2b Blockchain and other distributed ledgers

- i. The term “blockchain” refers to a type of database structure, namely a ledger with transactions grouped into “blocks”, which are then linked together in a “chain”.
- ii. In almost all cases, blockchain ledgers are distributed, meaning that there are multiple copies of the ledger stored across different computers, or “nodes”.
- iii. This ensures that no single party can modify the contents of the ledger without agreement from the rest of the group of nodes.
- iv. To reach agreement on new additions to the ledger, nodes run a “consensus mechanism”, which ensures that there is a single canonical state of the ledger at all times.
- v. Decentralising consensus (i.e. splitting it between many parties) ensures that no single party has to be trusted in order to trust the contents of the ledger. Because of this, blockchain applications are said to be trustless.
- vi. Blockchains can be permissionless (i.e. anyone can run a node and participate in the consensus mechanism), or permissioned (i.e. only specific identified parties can participate in the consensus mechanism). An example of a permissionless blockchain is Bitcoin, the first ever blockchain.
- vii. Permissioned blockchains, on the other hand, are generally preferred by enterprise. These iterations of distributed ledger technology provide many of the benefits of permissionless blockchains (such as a degree of decentralisation and trustlessness), but allow participants in the network to control which parties can run nodes and participate in the consensus mechanism, providing more certainty in terms of security parameters and ongoing operating costs.
- viii. There are different types of distributed ledger technologies (DLTs) that can be used for implementing tokens. Blockchain is only one example of a DLT, however it is by far the most common. It’s hard to say if tokens utilising other DLTs could have different tax implications to blockchain tokens in the future. Currently the applications of other DLTs are similar to how blockchain has been used, and can fit under the token classifications in the next section. Some examples of tokens utilising alternative DLTs include Ripple, IOTA and Nano.
- ix. In this submission we use the phrase “crypto-tokens” as a generic term to encompass all cryptographic assets, including those on blockchains, other DLTs, and similar technologies that may arise in the future.



---

## 2c Crypto-tokens

- i. Crypto-tokens, otherwise referred to as “blockchain tokens”, “cryptocurrencies”, “cryptoassets”, or simply “tokens”, are digital representations of value that are commonly stored and transacted on a blockchain or DLT.
- ii. There are many different types of tokens, and classification of these can be complex.<sup>7</sup>
- iii. At the most basic level however, tokens can be classified in to two broad groups: those that act solely as a currency, and those that provide the token holder with rights.
- iv. Rights tokens can then be further classified based on the nature of those rights. The token rights may be ownership in financial products, ownership in non-financial products, or access rights.
- v. This gives us four primary classifications for crypto-tokens:
  - Currency tokens - intended to perform the functions of money, i.e. store of value, medium of exchange, and unit of account. Usually fungible.
  - Security tokens - digital representations of financial products, e.g. debt securities, equity stakes, options, or derivatives.
  - Asset-backed tokens - provide token holders with ownership rights in an underlying asset that is not a security, e.g. gold, land titles, or commodities.
  - Utility tokens - create utility for token owners, e.g. access to a network, voting rights, or a provision of a service such as file storage. Using electricity as an analogy, utility tokens can be the fuel used to power a blockchain network, as well as being used by applications on that network. This is similar to how electricity powers a network and is used by applications on the network, e.g. a microwave.
- vi. Tokens can also be hybrids of the above, adding complexity to how these should be treated for tax purposes. In general, most rights tokens will be able to be used as a currency token, however, this is not their primary purpose. We recommend that careful consideration be given to how hybrid tokens are classified and taxed.
- vii. We have attached potential ways to categorise tokens in Appendix One.

---

<sup>7</sup> For a comprehensive, albeit complex, classification framework see: <http://www.untitled-inc.com/the-token-classification-framework-a-multi-dimensional-tool-for-understanding-and-classifying-crypto-tokens/>  
For an alternative framework, based on technical characteristics see <https://bravenewcoin.com/assets/General-Taxonomy/Downloads/General-Taxonomy-for-Cryptographic-Assets.pdf>

---

## 2d Why blockchain is important

- i. We believe that blockchain technology represents a change to the economy and society that will have an impact on a scale similar to the invention of the internet.
- ii. In terms of the value of cryptocurrency, in the first week of January 2018 the combined global cryptocurrency market cap reached its peak “all time high” of around USD\$850 billion (as of April 2018, due to a downturn in the market, the total market cap for all cryptocurrencies is an estimated USD\$350 billion). By comparison, even at the peak, the combined market cap of all cryptocurrency was less than that of Apple Inc (USD\$900 billion). This indicates there is plenty of room for cryptocurrency to grow and become a “global currency”, as many blockchains aspire to. Many speculators are estimating that the growth of Bitcoin alone could reach a market cap of USD\$20 trillion by the turn of the decade.
- iii. Cryptocurrency is just one way to use blockchains and DLTs. Crypto-tokens have potential use cases as wide-ranging as:
  - reward for participation in a distributed internet/cloud storage array, using everyday computers to store fractions of data for millions or billions of users;
  - Oyster Protocol's Shell creates a distributed mesh-net, allowing for anonymous internet access at a fraction of the cost, as well as peer to peer communication ;
  - tax payments, welfare payments, and other government functions;
  - digital identities that are owned by you, rather than a centralised entity;
  - titles to non-fungible digital assets that can be traded or loaned;
  - Internet of Things (IOT) micropayments; and
  - community-based electricity generation and sharing.
- iv. Nurturing the emerging blockchain economy provides New Zealand access to top entrepreneurs, exceptional technology talent, and sustainable capital for internationally scalable blockchain solutions that:
  - support a wide range of cultural, social and commercial applications;
  - provide spillover benefits for NZ's key economic sectors, including agriculture, tourism, science, and technology;
  - provides opportunity for Kiwis to develop expertise in blockchain technology and related fields, resulting in high-value employment opportunities and more highly skilled workers; and
  - gives affirmation to New Zealand's role as a leading innovation hub, while preserving the reputation and integrity of NZ's financial markets.
- v. Novel and powerful token-driven applications can promote aspects of sustainability, fairness, democracy, inclusion, and privacy. This is in contrast to many emergent technologies that exclude segments of the community or further concentrate wealth.

---

## 3: How blockchain works

- i. There are many different types of crypto-tokens that all have different uses and properties. The largest technological division is between tokens that run their own independent blockchain and those that operate as a sub-token on another blockchain—effectively using blockchain as a service.

---

### 3a Independent Blockchains

- i. If a token runs its own blockchain that means the blockchain and its transactions are verified by a group of peers known as miners or validators, who also receive a reward for their work.
- ii. There are different methods for verifying transactions and earning this reward, the main two being Proof of Work (mining) and Proof of Stake (validating). In most cases, the people performing the mining or validating are rewarded in the native token of the blockchain—Bitcoin miners are rewarded in bitcoin, Ethereum miners in ether and so on.
- iii. Proof of Work uses computing power to secure the network, validate transactions, and earn rewards for doing so. Miners are incentivised to act honestly by the threat of wasting expensive computing power. The more computing power a miner produces, the more chance they have of claiming the next block reward.
- iv. Proof of Stake uses the native token itself to secure the network, validate transactions, and earn rewards for doing so. Validators are incentivised to act honestly by the threat of losing all or some of their staked tokens. The more native tokens a validator stakes, the more chance they have of claiming the next block reward.
- v. Masternodes are a system that requires a node to hold a collateral transaction to take part in important network security and stability tasks. The masternode is rewarded for performing these tasks by the miners and is paid in the native token of the network. The purpose of the collateral transaction is to create a barrier to entry for malicious actors wanting to compromise the network's security or stability, making it too expensive for most attackers to gain a large enough portion of the network to be successful in an attack.

---

## 3b Blockchain as a service

- i. Ethereum is the primary example of a blockchain service provider for sub-tokens.
- ii. Ethereum is an independent blockchain in its own right and mines its own blocks, but it also validates transactions for tokens that have been generated on its platform. Tokens don't require mining themselves and do not take part in securing the Ethereum blockchain.
- iii. Token types and examples are provided in Appendix One.

---

## 3c Considerations for tax treatment

- i. Most tokens, whether they are from an independent blockchain or not, already serve a range of auxiliary functions beyond simple value transfer, and their usefulness is growing every day.
- ii. Tokens used in Proof of Stake and Masternodes have the clearest and easiest-to-define secondary purpose of securing the network. However, they are not the only tokens that have a clear secondary function. Even independent blockchain tokens that are not used for network security can be used for secondary purposes, for example, lending.. Many cryptocurrency exchanges enable depositors to lend their BTC to traders and gain a percentage return for providing the BTC loan.
- iii. Even if the independent blockchain token's only current purpose is to purchase for disposal, the added complexity is that the function of these tokens is not set in stone. As an example, developers can transition a blockchain from using Proof of Work to Proof of Stake as long as the network agrees, thus changing how the token is utilised on the network. Alternatively, a website service similar to BTC lending could spring up for another token and give that token a legitimate secondary function. Another example is Bitcoin cash, which has recently been changed to allow smart contracts. Previously the sole purpose of Bitcoin Cash was as a method of exchange.
- iv. Blockchain as a service tokens are even harder to apply blanket rules to. The types of tokens that can operate on these platforms are flexible and their utility is as malleable as updating a website. Deciding whether the token has a secondary use case would need to be done on a case by case basis and be re-evaluated if changed. Most tokens have auxiliary uses beyond being a simple store of value and their use cases are generally evolving.
- v. In accordance with New Zealand's property taxation laws, tokens that have a secondary purpose should have their earnings taxed as income but not their capital gains. Tokens that have no secondary purpose or were purchased for the sole purpose of disposal should have the capital gain taxed as income.
- vi. How and when to tax either type of earnings can be a difficult thing to manage. The volatility of cryptocurrency markets, combined with the onerous and lengthy process of turning cryptocurrency into New Zealand dollars (NZD) to pay the tax, make it difficult to fairly tax individuals for the NZD value at the time the earning was generated.
- vii. For example, participating in Proof of Stake or running a masternode is largely an autonomous process once your computer is setup, and rewards are earned sporadically. If tax is calculated at the point of earning, price fluctuation can mean even the entire reward may not be able to cover the tax owed after converting first to BTC, through USD, and finally to NZD.

viii. Until there are more robust cryptocurrency exchanges and banking integrations available in New Zealand—with the capability to automate the consolidation of tax obligations as earnings are accrued—it is unreasonably onerous and costly to

expect realised gain to be calculated at the time of earning. Doing so risks stifling innovation in the emerging and profitable sector of blockchain technology.

---

### 3d Recommendation

- i. Regulators must consider the different tokens types outlined here and in Appendix One and create smart regulation that takes into account technology advancements in blockchain and distributed ledgers.
- ii. IR should accept cryptocurrency as a means of payment for taxes. For those who have tax obligations resulting from their cryptocurrency holdings, it can be difficult to convert cryptocurrencies in to fiat in order to pay those taxes.

- iii. While not directly relevant to the Group, the finance and banking industries need to make an effort to understand this new technology and the opportunities it can provide to the public and private sector.

---

# 4: GST

---

## 4a Current tax treatment

- i. While there has been no formal guidance on the GST treatment of crypto-tokens, the classification of cryptocurrencies as property infers that GST is applicable on domestic exchanges of fiat currency for tokens, and domestic exchanges of tokens for other tokens.
- ii. Where businesses accept cryptocurrencies as payment for goods and services, these are seen as a barter transaction and as such GST would apply.

---

## 4b Issues with this approach

- i. The current application of GST to crypto-tokens causes a number of issues, including double taxation, economic inefficiencies, and distortions. The problems arising from this tax treatment differ depending on the nature of the token (refer to Appendix One for potential token classifications).
- ii. Where tokens have the nature of a currency, the application of GST results in clear double taxation. A consumer will be required to pay GST when they exchange fiat currency for cryptocurrency, and again when that cryptocurrency is used to purchase goods and services subject to GST.
- iii. Where tokens have the nature of a security token, they should be exempt from GST (or zero-rated), as per standard treatment of financial services. The current treatment creates an economic distortion whereby blockchain-issued security tokens will be subject to GST, while equivalent securities issued by traditional means do not have GST applicable.
- iv. Where tokens are asset-backed, they confer equity like usage or ownership rights over underlying assets (such as property), which may be subject to GST in their own right. The application of GST to an asset-backed token will result in economic distortion and may also result in double taxation (if the underlying asset is subject to GST).
- v. Where tokens provide utility rights, GST should apply only where GST would normally be applicable on that utility. For example, purchase of a token that provides the owner with access to file storage would incur GST, whereas a token that provides the owner with voting rights would not.
- vi. Further, if tokens purchased by New Zealanders from international suppliers do not attract GST (i.e. if these are not considered to be “imported” to New Zealand) then New Zealand suppliers will have a competitive disadvantage compared to overseas operators. For a fungible product, a 15% price differential will be likely to price New Zealand businesses out of the market.

---

## 4c International approaches

- i. Other jurisdictions have recognised this issue and made amendments to remove the double taxation of cryptocurrencies. Australia and Japan both removed their equivalents of GST from all digital currencies from 1 July 2017.<sup>8</sup> In March 2014, the

United Kingdom outlined that no VAT would be due when exchanging Bitcoin for fiat currencies, a position that was supported by a European Union ruling in October 2015.<sup>9</sup>

---

## 4d Recommendation

- i. We recommend that all crypto-tokens be classified as not subject to GST, with the exception of those utility tokens where the underlying utility should incur GST.

---

8 Australian Taxation Office [2016] GST – removing the double taxation of digital currency, retrieved 10 April 2018 from <https://www.ato.gov.au/General/New-legislation/In-detail/Indirect-taxes/GST/GST---removing-the-double-taxation-of-digital-currency/>

CCN [2017] Japan Ends 8% Consumption Tax On Bitcoin Today, retrieved 10 April 2018 from <https://www.ccn.com/japan-ends-8-consumption-tax-on-bitcoin-today/>

9 HM Revenue and Customs [2014] Revenue and Customs Brief 9]: Bitcoin and other cryptocurrencies, retrieved 10 April 2018 from <https://www.gov.uk/government/publications/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies> ; European Court of Justice [2017] retrieved 10 April 2018 from <http://curia.europa.eu/juris/document/document.jsf?docid=170305&doclang=EN>

---

## 5: Income tax

---

### 5a Current tax treatment

- i. IR has released some guidance in relation to the taxation of cryptocurrencies. Broadly, IR has concluded that:
  - cryptocurrencies are to be treated for income tax purposes as property, rather than foreign currency;
  - most cryptocurrencies are acquired with an intention to dispose, and any gains made on disposal will be taxable. This is similar to revenue account property treatment;
  - a taxable gain or loss arises when a coin is realised either in cash (NZD or foreign fiat currencies), or sold for another coin; and
  - from a miner's perspective, any proceeds are taxable income, and expenditure incurred in the course of mining will be accordingly deductible.
- ii. IR has explained that the guidance it released is a reflection of how cryptocurrencies would be taxed under current law (which does not cater for cryptocurrencies as a separate asset).



---

## 5b Issues with this approach

- i. While IR is to be commended for issuing its timely guidance, we consider that the above approach has several problems.
- ii. The most immediate challenge is the potential for non-compliance in the blockchain community, simply due to either ignorance of the tax framework due to a lack of detailed guidance (IR's guidance, while commendable, is too generic), or an inability or reluctance to comply due to the onerous nature of the obligations imposed.
- iii. IR and the Government must provide the community with certainty and an achievable pathway towards tax compliance.
- iv. If the aim of the Group is to "future-proof" the tax system, and ensure New Zealand remains internationally competitive in this space, IR and the Group must first acknowledge the difficulty in complying with the current tax framework, and engage the community in devising a practical approach to compliance.
- v. This is crucial to ensure that New Zealand is not left behind as blockchain technology rapidly evolves.
- vi. The second issue is the difficulty in designing a tax framework that is "future-proof" and does not box New Zealand into any particular model of taxation. This is significantly harder as the potential evolution in the technology in this space is virtually limitless. Whatever tax framework that IR comes up with now, will have to be flexible enough to adapt to the unknown possibilities that blockchain technology presents.
- vii. For example, if any country adopts a token as its currency, and the use of cryptocurrency becomes widespread (in loans and derivative instruments), there will be significant problems in the application of the financial arrangement rules.
- viii. From a technical tax perspective, the guidance and current law treats tokens as a homogenous asset class, where tokens are obtained with the likely intention of disposal. Therefore, any gains on the disposal of tokens will be on revenue account, and therefore taxable.
- ix. This is not necessarily accurate in light of the characterisation of the different types of tokens as per Appendix One. Treating all of them to be held on revenue account is likely to be unfair as some tokens may well be acquired with the purpose of deriving a continuous stream of "dividend" like income or acquired with the purpose of gaining access to certain services ("utility tokens").
- x. Putting aside the obvious possible capital/revenue distinction difficulties between different token asset classes, one issue that might arise from the homogenous treatment of tokens is a breakdown of the withholding tax rules, when a holder of a particular token receives "dividend-like" payments of cryptocurrencies by virtue of their holding. While there are some tokens that provide such returns, "forking" and "airdrops" are also a phenomena that produce a similar effect:
  - Crypto-tokens that maintain their own blockchain are able to have their fundamentals altered (e.g. block time, reward, or total supply) if a majority of the network agrees to the change. Because major changes require a network consensus to be applied, it can lead to a stalemate within the development community where one faction wants to make a change but can not get enough of the network onboard to approve it. Sometimes when this happens, the minority faction will perform what is called a coin split and deploy their change despite the fact it will not be accepted by the main network. This creates two parallel transaction ledgers that have a shared history before the coin split occurred but diverge afterwards, resulting in what people refer to as a "blockchain fork".

- This has been seen multiple times in the past, with a notable occurrence being when Bitcoin (BTC) split to Bitcoin Cash (BCH). For example, if you had a balance of 10 BTC before the coin split was deployed, you retained your 10 BTC and also had a balance of 10 BCH at the same address after the coin split on the competing blockchain. These types of splits can happen without the holder being aware they are eligible for coins. In some situations, it can also be difficult or impossible to claim the split coins, for example, when tokens are held on an exchange, the account credited with the new tokens will be that of the exchange, not the owner.
  - Airdrops are used by new start-ups to bootstrap their crypto-token or by services such as exchanges to encourage participation. They are simply deliveries of an amount of a free tokens, typically, but not necessarily, in proportion to the number of coins held in an account. The OMG airdrop, for example, delivered a small number of OMG crypto-tokens in proportion to the amount of ether held in a wallet.
- xi. Forking and airdrops present a number of problems:
- Does such a “fork” produce a “dividend” in the new coin acquired (by virtue of holding the old coin, so in our example, the Bitcoin Cash tokens acquired), or is it more akin to a share split?
  - Does an “airdrop” represent a dividend in the new coin, gained by virtue of holding the old coin?
  - If a “fork” or “airdrop” were classed as a dividend, how would the withholding tax rules work? As there is no single entity that pays out such “dividends” (in the case of a fork), rather it is the “community” that pays it out by voting for the fork. Thus there is no one party that can bear the withholding burden.
- xii. From a practical compliance perspective, the logical conclusion of IR’s claim that cryptocurrencies are often held on revenue account (and therefore the revenue account property rules apply) might also lead to onerous obligations that will disincentivise compliance, or at the very least makes the rules impracticable to comply with. We discuss this below in the context of coin-for-coin trades.
- xiii. Under current law, as IR has suggested, cryptocurrency holders are not only taxed on realisation into fiat currency, but a coin-for-coin trade will also be a disposal event that triggers a taxable gain/loss. While in principle this is a logical application of the current law (as it is applied in the context of share or other property trades), we consider this to be practically difficult to comply with in the context of cryptocurrencies.
- xiv. Traders often buy Bitcoin or Ethereum with the intention of using it to buy other alternative coins. Having to mark-to-market the NZD value of the coins at each trade to get the cost base of the particular coin (and therefore calculate the taxable gain/loss on each trade) would become a compliance nightmare for most traders.
- xv. For example:
- On day 1, A buys 2 Bitcoin at NZ\$ 1 each.
  - On day 3, Bitcoin has risen in value to NZ\$ 2 each, and A sells 1 Bitcoin to buy 3 Ethereum.
  - This means that A has derived a taxable gain on the disposal of 1 Bitcoin (making a profit of \$1).
  - The cost base for the 3 Ethereum is now the NZ\$ value of the Bitcoin on that day, which is NZ\$ 2.
  - On day 4, when the NZ\$ value of A’s remaining Bitcoin is NZ\$4, A sells it for another 3 Ethereum.
  - This means that A has made another taxable gain on her Bitcoin of NZ\$3, and the cost base of the 3 Ethereum is NZ\$4.
  - A now holds 3 Ethereum that she bought for NZ\$2 and 3 Ethereum that she bought for NZ\$4.

- This means that when she sells any of the Ethereum in future, she will have to apply the “first-in-first-out” approach to determine the cost base of those cryptocurrencies she sold to work out her gain/loss on the sale of the Ethereum. This will be practically difficult for the trader, as tokens are fungible.
- xvi. Because Bitcoin and Ethereum are more easily convertible from fiat currency (e.g. NZD) they are often used as “on-ramps” to alternate coins. Thus, almost all coin-for-coin trades will involve several transactions. Multiply this across the tens/hundreds of trades a trader might make in a year and compliance becomes daunting. Add the difficulty of sourcing a NZD value for each coin, especially in the context of an extremely volatile cryptocurrency market, and it becomes impractical to calculate the gain/loss on each trade. This is further compounded when traders store their cryptocurrencies in multiple “wallets”, use several exchanges (because not all exchanges trade all alternate coins), and transfer their cryptocurrencies between these wallets and exchanges. In these circumstances, the “first-in-first-out” approach becomes very difficult to apply as cryptocurrencies are fungible and the record keeping for such transfers is significantly more onerous than having every trade go through one wallet and one exchange.
  - xvii. From a historical compliance perspective, if a taxpayer was to compile his tax records only after IR has provided the recent guidance, this will likely lead to significant difficulties. This is because the majority of exchanges only express daily historical coin value in USD, potentially leading to wildly inaccurate cost-bases since the value of the coin would have fluctuated significantly within a day and some would have traded to take advantage of the intra-day volatility. The only way to calculate the true gain/loss would have been to record the USD value at the time of transaction. This instantaneous recording is also impractical going forward due to the volatile nature of the crypto-token since token holders often leave buy/sell orders in an exchange that settle when a certain price (expressed in Bitcoin) is hit. It is then impractical and potentially impossible to determine the exact settlement price in USD if the token holder is not there when the order price is hit and the transaction is settled.
  - xviii. While share traders have to undertake the same process as above, there are computer programs that allow for accurate record keeping. In contrast, the cryptocurrency market is more volatile, and the exchange rates between obscure coins and NZD often vary hugely between exchanges. Thus the compliance obligations become significantly more onerous on the cryptocurrency holders. The problem of inter-wallet and inter-exchange transfers of tokens also does not occur with shares.
  - xix. Because coin-for-coin trades are taxable disposal events, a natural consequence of the above is that traders or cryptocurrency holders will potentially be faced with a large cash-flow issue at the end of the financial year if they do not convert their tokens into fiat currency. The cryptocurrency holder may not want to liquidate their cryptocurrency holdings into NZD to satisfy their tax bill, and it will be unfair to force cryptocurrency holders to do so. While again, this is a problem present in share trades, we submit that the larger volatility in the cryptocurrency market (see the appreciation of Bitcoin in 2017) exposes the cryptocurrency holders to much larger cash-flow issues.
  - xx. The current rules will incentivize holders who have tokens in a loss position to sell them on 31 March (or other balance date) and immediately buy them back (through a crypto to crypto transfer), in order to create a tax deduction. The current rules therefore represent a risk to the tax base with no corresponding revenue upside, as holders in a profit position have no incentive to sell. The only additional revenue (over and above a tax on realisation to NZD approach) the current rules may gather is on traders, but due to the practical issues raised around compliance above, traders may not be willing or able to comply. In any event, any revenue gained is likely to be outweighed by the immense compliance costs faced—not to mention administrative auditing costs.

---

## 5c International approaches

- i. Australia has broadly adopted the same approach of treating tokens as property for the purposes of income tax and capital gains tax. The Australian Tax Office has acknowledged the compliance difficulties (especially in the context of coin-for-coin trades) and is actively seeking feedback<sup>10</sup>.
- ii. In the United States, tokens are also treated as property for income tax and capital gains tax purposes.<sup>11</sup> Due to the capital gains tax regime in the United States, there is added complexity in differentiating between short term and long term holdings. While recent tax legislation has limited the “like-kind” exemption to real estate transactions from 1 January 2018, it used to apply to coin-for-coin swaps. This exemption for coin-for-coin swaps effectively deferred the taxing point to the point where the tokens is realised for fiat cash.<sup>12</sup>
- iii. Broadly speaking, both the Australian and the US tax regimes for tokens run into the same compliance and record keeping problems as we have outlined, and in fact are worsened by their respective capital gains tax regime. But if New Zealand does eventually end up with a capital gains tax regime, we will have to consider the same issues. Resolving these compliance issues is an opportunity for New Zealand to positively separate itself from the other major jurisdictions.

---

10 <https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/>

11 <https://www.irs.gov/newsroom/irs-virtual-currency-guidance>

12 <https://www.forbes.com/sites/robertwood/2017/12/28/loophole-allows-tax-free-bitcoin-exchanges-into-2018/#411f816312fa>

---

## 5d Recommendation

- i. As discussed above, the biggest immediate challenge for the Group, IR and the Government is to encourage the blockchain community to engage with tax issues and comply accordingly. This cannot be achieved via a “hard-nosed” approach that demands strict compliance with the onerous obligations under the current tax framework.
- ii. Encouraging compliance should be a major consideration, and failure to deal with this practically might well lead to New Zealand falling behind other jurisdictions in this rapidly-evolving technological arena.
- iii. IR should accepting cryptocurrency as payment for taxes. This will encourage compliance, as it can be difficult for holders of cryptocurrencies to convert these to fiat in order to pay for any tax liabilities incurred by those cryptocurrencies.
- iv. There are broadly two technical issues that needs to be addressed (under current law):
  - the homogenous revenue account treatment of all tokens; and
  - cash flow and compliance issues stemming from the application of the existing law to cryptocurrencies.
- v. We have made two suggestions below that attempt to resolve the above two issues to varying degrees:
  - a “presumed return” approach on a portfolio basis similar to the fair dividend rate (FDR) method for foreign investment funds (FIF) regime (incorporating a “like-kind exchange” exemption for coin-to-coin trades); and/or
  - a “like-kind exchange” exemption for the trading of tokens for other tokens.

## Presumed return

- vi. We recommend that IR consider a “presumed return” approach, analogous to the fair dividend rate method for foreign investment funds, for crypto-token holders, regardless of the nature of the crypto-token. We have set out the details below.
- vii. Crypto-token holders are taxed on a portfolio basis, where they are assessed on a “presumed return” percent of their opening portfolio value. If IR was to adapt the FDR method under the FIF regime, then the quick sale adjustment (adapted across for cryptocurrencies) should only apply if the crypto-tokens are being realised in NZD or foreign currency. Coin-for-coin trades ought not to be taken into account to minimise compliance costs. This has the added benefit of providing cryptocurrency holders the certainty over their tax liability from the start of the tax-year, as such a method effectively caps the tax liability (subject to quick sale adjustment) and cash commitment required at the end of the year.
- viii. As there are already existing rules that set out how the FDR method works in the FIF context, we consider that adapting this regime to crypto-token portfolios will not be particularly onerous. There are already existing anti-avoidance rules and quick-sale adjustment rules under the FDR method and FIF regime that can be adapted to prevent the erosion of the tax base via crypto-tokens.
- ix. We recommend implementing an “opt-in” process for the above regime, backstopped by consistency requirements. The rationale for an opt-in is that disposal/realisation basis may be more appropriate for some holder/traders, for example:
  - small-time investors who are holding low-value crypto-token portfolios and not trading their assets. For these individuals an FDR approach would add unnecessarily onerous reporting and compliance obligations; and
  - businesses that receive payment in cryptocurrency or hold these as inventory. In a future state where currency tokens are truly operating as a medium of exchange and not expected to appreciate in value, a portfolio basis tax approach would effectively erode the value of an asset that has no income associated with it. This would be analogous to a business with USD holdings and taxing the value of these holdings irrespective of any realised or unrealised gains.

## Like-kind exchange

- x. We also recommend a “like-kind exchange” exemption (explained further below) to complement this “presumed return” approach. The token portfolio is effectively seen as a “black-box” that is taxed at a fixed and capped rate. A “quick-sale adjustment” (under our proposed approach) should only be made if there is a realisation of any part of the portfolio into NZD or foreign fiat currencies.
- xi. This suggested approach resolves the issues raised with the current approach discussed above:
  - IR will not have to devise a bespoke regime just to fit the different classes of crypto-tokens, and therefore it will avoid the capital/revenue classification problem of the thousands of tokens with differing properties;
  - following from above, this approach “future-proofs” the taxation of tokens, ensuring New Zealand is forward-looking with this innovative and dynamic technology. By disregarding the individual properties of whatever new token might bring (where holders/traders might exploit classifications to evade tax) and just taxing a trader/holder on a portfolio basis, this will significantly reduce the risk of tax-base erosion and encourage compliance;
  - there is no need for withholding by the payer(s) of dividends, since the portfolio is taxed on a fixed rate basis, and there is also no need to classify rapidly emerging new concepts such as forks and airdrops; and
  - crypto-token holders/traders will not have to account for income tax/gain for each coin-for-coin trade (reducing the compliance and record keeping issues), and this method smooths out the cash-flow issue by capping the tax liability at a certain percent. This will go a long way towards encouraging compliance among the cryptocurrency investing community, rather than outright evasion.
- xii. If IR is not ready to go ahead with such a radical proposal as the suggested FIF/FDR approach, we recommend a “like-kind exchange” provision. This provision should exempt trades between tokens from taxation under the current “disposal/realisation” approach (that taxes coin-for-coin trades) and defer the taxing point to when the token is realised into NZD or foreign fiat currency.
- xiii. This has the obvious advantage of minimising compliance costs on traders who make hundreds of trades (between tokens) in a year, as it removes the need to do the onerous mark-to-market exercise for every trade.
- xiv. It also reduces the cash flow problem (so holders are not required to liquidate their holdings at the end of the year at unfavourable rates just to pay tax) because traders/holders are effectively only taxed on a realisation into NZD or equivalent basis.
- xv. While IR may understandably be reluctant to accord special treatment for tokens (as compared to share-trading), this is a quick method of encouraging tax compliance within a community that is ill-equipped or reluctant to comply with the onerous obligations imposed under the current tax rules.
- xvi. This is an understandable problem since the industry is relatively young and there is little official guidance on the multitude of new issues that might arise as the technology continuously evolves at a rapid pace. The current tax framework is simply struggling to cope with such new technology, and this approach will provide the certainty and the “on-ramp” for the community to tax compliance and engagement with IR.

---

## 6: Capital raising

---

### 6a Current tax treatment

- i. Over the last few years, sales of crypto-tokens to raise funds for business ventures have become increasingly commonplace. In 2017, US\$5.6 billion was raised through token sales by blockchain startups.<sup>13</sup> These sales have similar characteristics to Initial Public Offerings and crowdfunding, but in relation to crypto-tokens they are known as Initial Coin Offerings (ICO), Token Generating Events (TGE), and Security Token Offerings (STO).
- ii. Based on current guidance from IR, blockchain tokens are property and treated differently than cash infusions for an equity investment.
- iii. When it comes to taxation, the tokens or coins generated by a company in an ICO will be taxed in accordance with property received at the standard corporate tax rates. In contrast, traditional equity raising is treated as a basis infusion into the business, resides on the balance sheet, and is not treated as revenue raised by the business.
- iv. Given that the purpose of most ICOs, TGEs, and STOs are to raise funds for development of the underlying blockchain business, this treatment is not appropriate and disadvantages blockchain-based business compared to their traditional counterparts.

---

### 6b Recommendation

- i. As discussed in section 2c, there are four distinct crypto-token types. The tax treatment for fundraising using each token type should be specific to the characteristics of that token.
- ii. Currency tokens are issued to encourage the adoption and usage of the crypto currency. Funds raised will be invested into currency development to enable wide scale adoption and ensure that the functionality is attractive to users by enhancing features such as security, operability, and integrations into non-blockchain software applications. Traditionally, the raise has been carried out by a foundation or not for profit trust with a board of advisors overseeing the investment of proceeds raised. As the currency is being utilised as a medium of exchange, no revenue will be generated from the deployment of tokens to a platform.
- iii. Security tokens represent a security, and token holders have rights attached to the underlying asset. In general terms, we believe that the tax treatment should be akin to the underlying

---

13 <https://www.businessinsider.com.au/how-much-raised-icos-2017-token-data-2017-2018-1>



asset and treated as a security. Where an ICO is undertaken, it should be considered as traditional debt or an equity fundraise.

- iv. Asset-backed tokens represent ownership of an underlying asset that is not a financial product. In general terms, we believe that the tax treatment should be akin to the underlying asset.
- v. Utility tokens give the opportunity for a user to utilise the token it has purchased in the ICO at a later date.
- vi. Generally most traditional companies raise funds in order to invest into a project to enable it to generate revenue. In most cases, an ICO issuer will have no or very little revenue and will be raising capital to build out a platform to enable the platform to generate network value through use of a token in the platform. The issuing entity is effectively crowd funding a community project. In most cases, investors receive tokens in the network, which could be akin to rewards on Kickstarter type crowdfunding project. Tokens typically do not contain any rights outside the platform.
- vii. Due to the uncertainty of the timing of the deployment of the tokens issued and the requirement to invest in the platform to further encourage token holders to deploy the tokens they have purchased, it is recommended that the proceeds from the TGE, ICO or STO be taxed as follows:
  - for utility tokens, treat the funds raised as deferred revenue for tax purposes and only tax the token proceeds when the token holder deploys the token to utilise the services of the platform or purchase a good within the ecosystem; and
  - for other token types, allow the ICO funds raised to be allocated across the number of years it is contemplated to develop the platform to an economically viable state, to enable the company to operate the platform without significant investment.
- viii. Taxing 100% of proceeds generated by an ICO company upfront significantly lowers the attractiveness of New Zealand as an economically feasible jurisdiction to issue a token for an ICO company.
- ix. Allowing the allocation of funds across multiple years of the platform buildout will make New Zealand an attractive destination for companies to base an ICO, increasing the number of international and New Zealand based companies looking to raise significant funds to invest into R&D of blockchain platform technology in New Zealand.

# Appendix One: Potential Token Categories

1. Adapted from Edmund Hillary Fellowship “New Zealand: Unlocking Blockchain’s Potential”:<sup>14</sup>

Token type	Description	Example
<b>Currency tokens</b>		
<b>Currency tokens</b>	<p>A <b>currency token</b> is any token (or coin) that:</p> <ul style="list-style-type: none"> <li>• represents value and that can be digitally traded by agreement within a community of users; and</li> <li>• functions as a medium of exchange, and/or a unit of account and/or a store of value.</li> </ul>	<i>Bitcoin</i>
<b>Rights tokens</b>		
<b>Security tokens</b>	<p>A <b>security token</b> is any token that meets the definition of a “financial product” in the Financial Markets Conduct Act 2013. In summary, this means that the token must give the holder a right or entitlement:</p> <ul style="list-style-type: none"> <li>• to financial payment (of interest, to be repaid, to profits);</li> <li>• to an ownership stake in a central entity;</li> <li>• to receive financial benefits generated by the network or a central entity; or</li> <li>• to an option to acquire the above (or otherwise meet the definition of a ‘derivative’).</li> </ul>	<i>SPiCE VC</i> <i>DigixDAO</i>
<b>Asset-backed tokens</b>	<p>An <b>asset-backed token</b> is a token that confers ownership rights of a non-financial product. These tokens are encrypted digital representations of ownership rights to property, such as a land, gold or other commodities.</p>	<i>Royal Mint</i> <i>Gold</i> <i>Digix</i>
<b>Utility tokens</b>	<p>A <b>utility token</b> is a token that confers types of usage rights, such as:</p> <ul style="list-style-type: none"> <li>• identity tokens (encrypted digital representations of personal identity records); or</li> <li>• access tokens (tokenised representations of rights to access, govern, operate, use and/or control a platform or other property).</li> </ul>	<i>Storj</i> <i>Ether</i>

<sup>14</sup> <https://static1.squarespace.com/static/57cd3bd059cc6804d1884b86/t/5a39dbbd419202030eebdc18/1513741249608/NZ+Unlocking+Blockchains+Potential+-+Dec+2017.pdf>

2. Based on Robert Greer's paper "What is an asset class anyway":<sup>15</sup>

- **Capital assets (CA)** - Provide an ongoing source of value and can be priced on the basis of the net present value of its expected returns; e.g. equities, bonds, and income producing real estate.
- **Consumable/Transformable Assets (C/T)** - Raw material/building blocks that serve as inputs into finished products and have economic value but do not yield an ongoing income stream; e.g. commodities and precious metals.
- **Store of Value assets (SOV)** - Cannot be consumed, nor can it generate income. Nevertheless it has value as a store of value asset; e.g. precious metals, currency, and fine art.

Crypto assets can be classified into two core categories with two sub-categories:

- **Category 1 - General Cryptographic Assets**  
Programmable value that can be used freely by anyone as capital, transformable/consumable or a store of value asset. These also form the foundation where protocol tokens are created, issued and operated.
- **Category 2 - Protocol Tokens**  
Represent a claim to a capital, transformable/consumable or a store of value asset. As they can only capture a specific market segment limited to the application itself, this limits their use as a store of value.

Token type	Description	SOV	C/T	CA	Examples
<b>Category 1 - General Cryptographic Assets</b>					
<b>Payment assets</b>	Intended as a general form of money with potential to capture global M1 and M2 money supply.	✓	✓	✓	<i>Bitcoin, Monero, Litecoin, Doge</i>
<b>Platform assets</b>	Native assets of a distributed protocol that integrates high level programming capabilities and are not limited to use as peer to peer value transfer. While not their main purpose, their integral positions in an ecosystem make them an attractive store of value.	✓	✓	✓	<i>Ethereum, Waves, Stellar, NEM, Counterparty</i>
<b>Category 2 - Protocol Tokens</b>					
<b>Application tokens</b>	Tokens native to decentralised applications that have a cryptographic asset associated with their use not related to locking value in the parent protocol.		✓	✓	<i>Golem, Augur, Binance coin, Aragon</i>
<b>Side chains</b>	Formed by locking value in the parent protocol and sending it to a pegged distributed ledger that creates an appropriate number of tokens once it has confirmed with the parent protocol that the funds have been immobilised.		✓	✓	<i>BitUSD, SynerAMP, MAID, Ardor</i>

<sup>15</sup> <http://jpm.ijournals.com/content/23/2/86>