

## Article Information

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## Unlocking cryptocurrency token sales

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If it walks like a financial product, looks like a financial product and quacks like a financial product...

- Token sales (also known as Initial Coin Offerings) offer a new form of fundraising which involve an exchange of fiat currency (US or Australian dollars for example) for a digital token. The sales are proving immensely popular with high risk investors.
- Digital tokens generally fall within the category of either protocol tokens (such as Bitcoin) where the token itself has intrinsic value, asset-backed tokens (such as The DAO tokens) where a token holder is entitled to a real underlying asset, or access tokens (such as Golem) where tokens are used to access a network, often which has not yet been built.
- There is a risk of token sales falling under securities law regulations, in addition to potential GST issues under the 'Netflix tax', which create uncertainty for businesses looking to harness this new source of potential funding.

### Introduction

Token sales have made headlines this year as part of huge price increases in the cryptocurrency space. They bring a decentralised form of crowdfunding to the blockchain which is not managed by a third party (such as Kickstarter). During early 2017, the prices of popular cryptocurrencies such as Bitcoin and Ether have skyrocketed. Huge amounts of money have flowed into the sector, far exceeding the funds made available under traditional forms of fundraising for tech start-ups. This shift in the funding landscape has occurred just as the Australian government has [finally regulated and permitted crowdfunding for public companies](#) with a [potential extension to proprietary companies expected later this year](#).

### What is a digital token?

Digital tokens are not new and have been in use since the early days of the internet. A simple example of a digital token many people have come across is when a user has lost their password and requests a password reset. The user receives an email with a link back to the website to set a new password. That link almost always has a fairly long list of characters after the website address - that string of characters is actually a token. In this example, the website recognizes the token as a single use authorisation to permit the user to reset their password. The token is a single use digital key.

Since Bitcoin was invented, tokens have taken on a whole new role. Tokens utilising blockchain technology are not single use and have unique properties. When a user buys a token (such as a Bitcoin, Ether or other token), what is really purchased is a private key which gives control of a ledger entry on the relevant blockchain relating to the token purchased.

The private key is a long string of numbers and letters. It is functionally similar to a password, and can be used to transfer the token(s) it controls to other persons (usually sending the token(s) to someone's digital wallet). But there is a critical difference: if the holder of a password loses that password, they can usually rely on a central authority (like the operators of a website) to provide a password recovery system. A private key using blockchain technology, however, can never be reset. If the private key is lost, then the (former) holder of that private key can never transfer the tokens which the private key controlled. In other words, the tokens are like cash in that they can be lost (or stolen if the private key is copied or disclosed).

### How are tokens used to raise money?

The public profile of tokens has risen in 2017 as the prices of cryptocurrencies (Bitcoin and Ether in particular) have soared. A key feature of the Ethereum blockchain is that it permits anyone to create tokens (called ERC20 Tokens) on the Ethereum blockchain itself. This has dramatically lowered the barriers to entry to anyone who wants to issue their own digital token. This ease of access, coupled with a smart contract, enables anyone to issue and sell their own tokens and as a result a huge number of ventures are issuing new tokens.

This is analogous to almost anyone being able to issue digital shares, without the need for a disclosure document, a securities exchange (such as the ASX) for future trading, an underwriter, or indeed any regulation at all. It is common for token sales to be accompanied by little more than a brief whitepaper setting out a grand plan for a blockchain based network and decentralized application (called a Dapp) to be developed, together with a list of the individuals who plan to be involved in the project.

Despite the obvious risks, token sales have raised significant amounts of money in extremely short periods of time. As at the time of writing, the largest token sales of 2017 include:-

- [Tezos](#), which raised US\$232M;
- [Bancor](#), which raised US\$153M in 3 hours;
- [Status](#), which raised US\$102M and has risen 85% in price;
- [Basic Attention Token](#), which raised US\$36M and has risen 470% in price; and
- [Civic](#), which raised US\$33M and has risen 450% in price.

Even small ICOs have raised millions in extremely short periods of time by conventional fundraising standards, including:

- [Aragon](#), which raised US\$25M in 20 minutes.
- [Gnosis](#), which raised US\$12M in 12 minutes; and
- [Basic Attention Token](#), which raised US\$30M in 30 seconds,

(see [CryptoCompare.com Completed ICOs \(online\) 13 August 2017](#))

While there is a huge variety of tokens being sold at present, with over 900 currently in the market, they generally fall into three main categories: protocol tokens, asset-backed tokens and access tokens.

### **Protocol tokens**

These tokens are intended to operate as a cash equivalent on a blockchain without reference to any real underlying assets. They exist only digitally and their value is driven by online exchanges – examples include Bitcoin and Ether. These tokens are required to interface with their respective blockchains, which keep a record of every transaction which has ever occurred using those tokens. Protocol tokens are tokens of value in the same way a \$20 note is a token of monetary value.

The primary purpose of protocol tokens is to incentivise participants in the relevant blockchain network to validate transactions on that blockchain. For example, on the bitcoin blockchain, computers called “miners” compete to validate transactions on the blockchain and if they ‘win’ by closing a particular block first (which requires solving increasingly difficult mathematical problems), they receive a reward of brand new Bitcoins (the reward currently is 12 BTC, or ~AUD\$60,000 on prices as at the time of writing). The secondary purpose of protocol tokens is to provide a cost for transactions to enter the blockchain, preventing spam and keeping the network viable in the long term.

### **Asset-backed tokens**

These tokens are more readily comparable to existing financial instruments. Each token gives the holder some right to a real asset – examples include so called Stable Coins which are transferrable on a 1:1 basis with real currencies, such as ERC20 GBP and ERC20 Euro coins. There are also tokens which represent precious metals and others that reflect investments in underlying shares.

In 2016 a digital decentralised autonomous entity, The DAO, was established and issued tokens which were to be connected to underlying investments in start-up companies. Unfortunately The DAO smart contract code was hacked and Ether then worth ~USD\$50M was stolen.

The US State of Delaware has [recently legislated](#) to regulate asset-backed tokens used to trade shares.

In Australia, asset tokens appear highly likely to fall within the definition of a financial product under the *Corporations Act*. As such, it would be very risky to be involved in any token sale of an asset token without ensuring all required financial regulatory compliance burdens have been discharged.

### **Access tokens**

Given the likelihood of regulation applying to the issue of protocol tokens and asset tokens, access tokens have been increasing in popularity. These tokens are analogous to a pre-paid voucher or paid API Keys, with the issuer promising that the tokens will provide access to a future blockchain based product which usually doesn't exist at the time of the token sale. One way of looking at them is like buying a ticket to a concert that will be held in the future. If the concert sells out, the secondary market for the ticket could be profitable.

For example, the [Golem](#) token, GNT, gives holders with the right to participate in the Golem global distributed super computer, with all payments for use of the supercomputer and rewards for those providing idle computing power, made in the form of GNT. Those tokens are also tradeable on secondary markets, but are not connected to any underlying asset. Their value is presumably driven only by the [expected value](#) of the project in the future.

### **Regulation of token sales**

There have been calls at the Federal level for more government co-operation in blockchain technology. The sale and purchase of Bitcoins have been [formally exempted from GST as of 1 July 2017](#). A recent parliamentary report has recommended expanding anti-money laundering laws to include cryptocurrencies and tokens and in August 2017 a bill was introduced to Federal Parliament for that amendment to become law.

A further complication for those issuing tokens is the "[Netflix Tax](#)" which [commenced 1 July 2017](#) and requires vendors selling digital goods into Australia to collect and remit GST on those sales. To the extent that any token purports to be an access token only, there remains a very real prospect that the issuer may be required to collect GST when the sale of the token occurs or when the token is redeemed. However, given the difficulty of determining who owns a token at any given time, there is a significant problem in identifying the relevant holder for the collection of GST when the token is spent.

The landscape for token sales in Australia remains uncertain. ASIC has issued the informatively named "[Information Sheet INFO219](#)" concerning distributed ledger technology and compliance and recent comments by Mr Greg Medcraft, ASIC Chairman, suggest that ASIC [doesn't see a need at this time to regulate token sales](#) which comprise access tokens but where token sales involve asset-backed tokens they will likely fall under existing securities.

Despite this, Australian start-ups seeking to run a token sale are presently heading offshore. For example, at the time of writing, Australian start-up Veredictum, who are seeking to establish a blockchain powered anti-piracy network, are about to issue their token "Ventana" from Singapore. Mr Tim Lea, CEO of [Veredictum](#) stated that "*We would have loved to be the first token sale registered in Australia, but we would have been exposed to enhanced regulatory risk and delays.*"

Following the DAO hack noted above, the US Securities and Exchange Commission has [reported](#) on their recent investigation into The DAO, applying the framework known as the Howey test to The DAO's tokens. Under the Howey test, a token will likely be considered a security where there is (1) an investment of money, (2) in a common enterprise, (3) with an expectation of profits arising (4) predominantly from the efforts of others. Since The DAO specifically sought to invest funds raised from token sales, the DAO tokens themselves were unsurprisingly found by the SEC to pass the Howey test and to be considered securities, subject to US securities law.

While the SEC declined to take any action against the issuers of The DAO tokens, the report makes clear that if the SEC believes a token falls within the bounds of existing financial instrument regulation, those regulations will apply. We consider ASIC would take the view that The DAO's tokens would be part of a Managed Investment Scheme. Given the myriad of ways a token can be designed and the decentralized nature of blockchain, any prudent token sale must carefully consider the applicability of securities regulations in the USA, Australia or any other jurisdiction in which the tokens will be offered.

### **What's next?**

There are a flood of token sales pending in coming months and time will tell whether tokens are in a colossal bubble or poised to increase even further in price and adoption. While prices continue to appreciate rapidly, token sales provide great potential rewards coupled with great potential for financial and regulatory risks.

*Authored by Michal Bacina, partner. This article was written with the kind assistance of Sina Kassra, partner, and Sam Blight, law clerk. It was first published in the September 2017 edition of the Law Society Journal of NSW and is reproduced with permission.*