BLOCKCHAIN

Blockchain Airdrops
Our Guiding Principles

October 2018

ABSTRACT

In an “airdrop”, the creators of a token-based network distribute tokens directly to individuals for free or nominal consideration. The rationale behind most airdrops is to drive decentralization and popularity, or use, of the network. Advances in technology and growing legal clarity around their advantages in recent years have seen the popularity of airdrops soar. In this document, we discuss their economic and legal rationales, together with a set of guiding principles for airdrop planning and execution. Finally, we set forth the foundation for the Blockchain Airdrops Program, together with the criteria that will guide Blockchain in selecting which tokens we will airdrop to our users.

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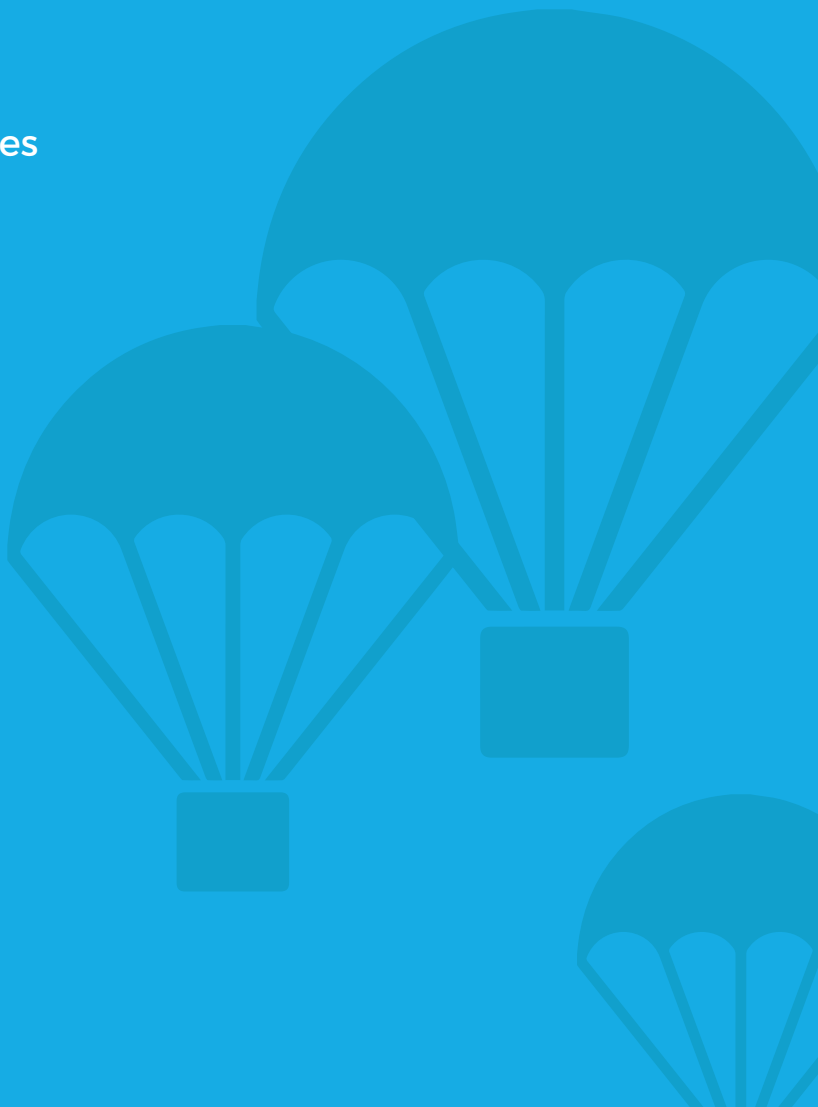


1 INTRODUCTION

At Blockchain, we're passionate about connecting the world to crypto and helping our users interact with cryptoassets in an easy and safe way. The first step to becoming an active participant in the crypto ecosystem is to get cryptoassets. This has become much easier than it used to be, but significant barriers remain.

Airdrops are good for crypto users

For those who want to use crypto, three acquisition methods remain the most common:

- purchasing it on a platform (i.e. exchange) or directly peer-to-peer
- mining it or otherwise earning it through direct efforts (e.g., selling goods or services); or
- receiving it for free or nominal consideration in an airdrop.

Purchasing cryptoassets through an initial coin offering ("ICO") or exchange is popular, but doing so requires financial resources, can come with regulatory complexities that vary across geogra-

phies, and can be risky. Mining crypto can be difficult, often requiring sophisticated and expensive equipment, making it inaccessible to the general public. Airdrops, on the other hand, provide a free and transparent way for anyone with an internet connection and a computing device to obtain cryptoassets at no cost.

Airdrops are good for crypto creators

Airdrops are good for people who want their token-based networks to flourish. Airdrops can decentralize these networks quickly and effectively, increasing their use through network effects. In many cases, they can lower the risks posed by the securities laws. They can even lower the risks posed by the money services laws. Decentralization is a powerful thing.

The relative ease and zero-expense nature of airdrops makes them an important vehicle for millions of people to gain access to the digital asset ecosystem, and we believe that airdrops will help pave the road to mass market adoption of cryptoassets. However, it is of paramount importance that airdrops are conducted in a responsible manner. It is for these reasons that we have developed Principles outlining the Blockchain Airdrops Program.

2 AIRDROPS DEFINED

In an "airdrop", the creators of a cryptoasset token-based network distribute tokens directly to individuals for free or nominal consideration.

From the perspective of the token creator, an airdrop can enable the project to bootstrap and grow the utility of the network by acquiring and incentivizing unique users. As CoinCenter's Peter van Valkenburgh put it:

> *"token based projects need network effects. There needs to be a mechanism for fairly and widely distributing tokens in order for the project to function well upon launch."*

In other words, decentralization of token ownership is of paramount importance for this new token-based financial system to work effectively.

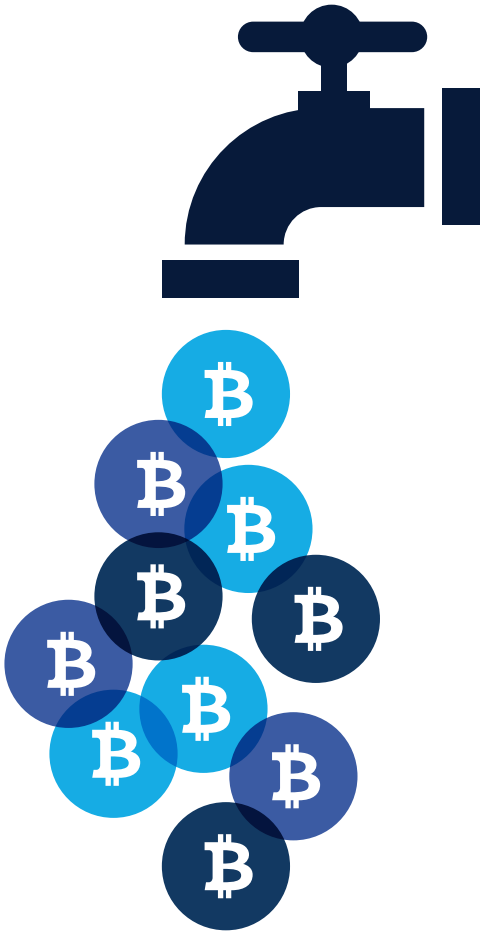
From the perspective of a user, some airdropped tokens can simply 'appear' in the users' wallet. Other times, to receive airdropped tokens, some action may be necessary by the user, such as visiting a website.

While some similarities exist, airdrops should not be confused with new tokens created by a 'hard fork' of a network. In the case of the July 2017 Bitcoin Cash hard fork, some wallet service providers made available the new BCH tokens in users' wallets without requiring any payment from the user (much like an airdrop). However, hard forks create new tokens through a bifurcation of a network, whereas airdrops simply represent a distribution mechanism of tokens on a single network.

Airdrops came into use shortly after Bitcoin's introduction a decade ago, hearkening back to The Bitcoin Faucet, which was a website developed by Gavin Andresen in 2010 that both accepted bitcoin donations and gave out up to five bitcoins per person.

Many of the earliest adopters of cryptocurrency received their first bitcoins from such faucets, helping to broaden awareness and contribute to the early ecosystem. More recently, the use of

airdrops to reach the masses and drive activity has significantly increased as the number of token projects has grown.



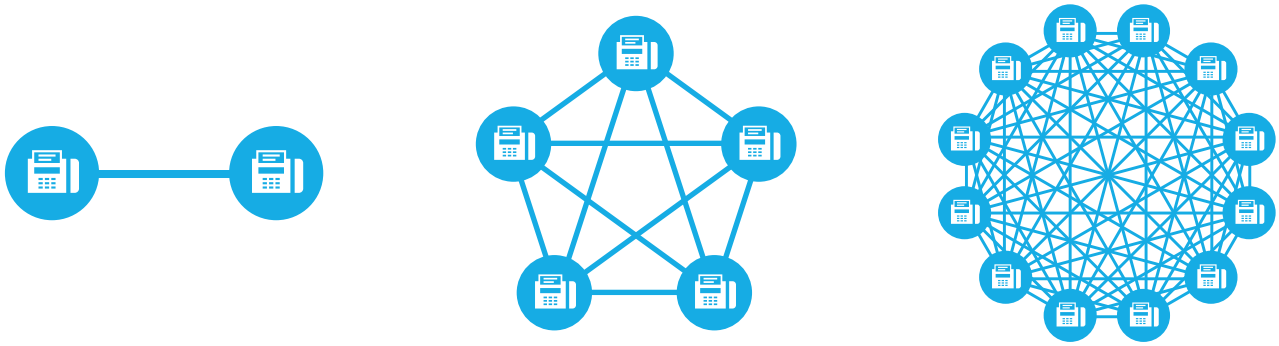
3 ECONOMIC & TECHNICAL ADVANTAGES

From the perspective of the creators of a token-based network, the raison d'être of airdrops is to facilitate network effects, or what economists often refer to as positive network externalities. Before delving into specifics around airdrops it is helpful to briefly summarize the general concept of network effects.

Network effects

The fax machine, an innovation that enabled the speedy electronic transmission of documents across distance, is often used to illustrate the concept of network effects:

A fax machine requires both a sender and a recipient to be useful. In other words, if you are the only person who owns a fax machine then your machine is effectively devoid of utility; at least two fax machines must be in operation for any one machine to be useful. Furthermore, the greater the number of fax machines in operation, the greater the potential usefulness of any single fax machine due to the expansion of the universe of potential senders/recipients. Finally, as the number of fax machines in operation grows, the stronger the incentive to acquire a fax machine and join the network.



The growing use and number of fax machines generated a network effect, a term that Bob Metcalfe, the inventor of Ethernet (another example of a technology that generated a powerful network effect), is credited with originating in the early 1990s. Metcalfe's law was summarized in Varian and Shapiro's 1999 book *Information Rules* as follows:

> *"If there are n people in a network, and the value of the network to each of them is proportional to the number of other users, then the total value of the network (to all the users) is proportional to:*
>
> *n X (n-1) = n2 - n*
>
> *If the value of a network to a single user is $1 for each other user on the network, then a network of size 10 has a total value of roughly $100. In contrast, a network of size 100 has a total value of roughly $10,000. A tenfold increase in the size of the network leads to a hundredfold increase in its value."*[1]

Simply put, larger networks are often more useful and valuable than smaller ones. In cases where two or more network technologies are competing against each other the winner is often decided by which network was able to "grow big fastest". An increasing number of network members leads to:

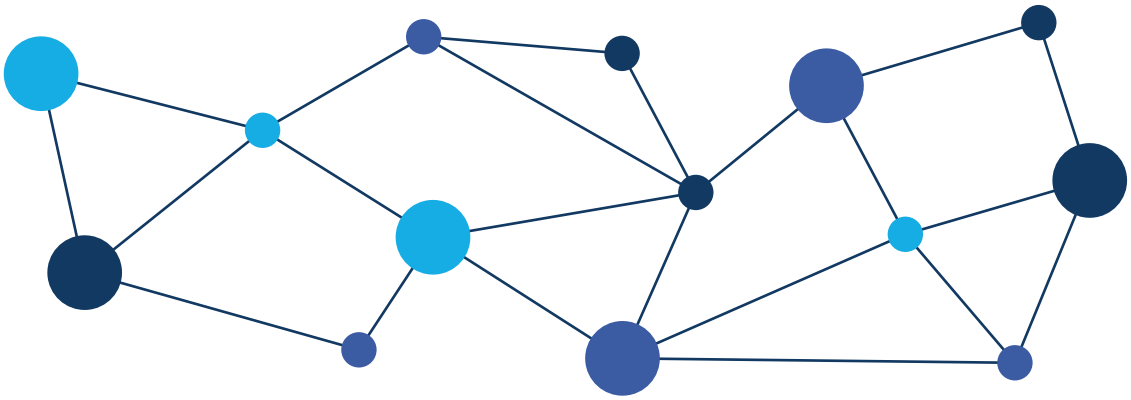
- Greater utility of each individual network node (positive feedback loop)
- Increased incentives for non-members to join the network (bandwagon effect)
- A more valuable overall network (positive externalities)

Airdrops drive token network effects

Like a fax machine, a cryptocurrency is effectively devoid of utility if only one person holds the

[1] Varian and Shapiro, Information Rules (1999), p. 184

currency. In other words, the more people who hold and accept a cryptocurrency (i.e., the more decentralized the ownership of the currency), the more potentially useful that currency becomes.



In recent times, and often as a symptom of legal structuring, new tokens distributed through ICOs have been increasingly concentrated in the hands of smaller and smaller groups of investors. However, as discussed above, if tokens are only held by a small number of individuals, then the utility of those tokens, and the value of the overall network, may be diminished.

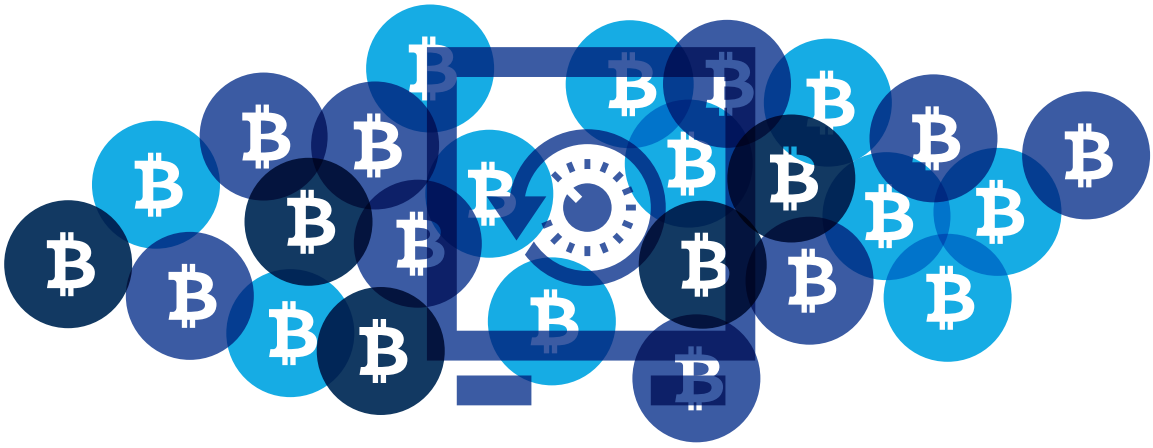
As discussed in the Introduction to these Principles, the option of purchasing or mining tokens (the two other primary ways individuals can acquire tokens) is inaccessible for millions of people. Hence the interest in airdropping new tokens into the wallets of actual users. A potentially important component of airdrops are the new 'demand drivers' (e.g., what new ways the token can be used) that accompany the announcement of an airdrop. This is particularly relevant for tokens with established trading markets and liquidity, where recipients have the option of converting airdropped tokens into another asset. Airdrops can increase the available circulating supply of a token, and demand-supporting mechanisms that are simultaneously introduced alongside an airdrop may help with achieving an orderly post-airdrop market equilibrium.

[1] Varian and Shapiro, Information Rules (1999), p. 184

Airdrop 'by way of private key'

Airdrops can play a critical role in furthering decentralization, particularly when they are distributed directly to private key holders.

Cryptoassets like bitcoin and ethereum 'live' on electronic networks. On these networks there are public addresses where assets can be be sent and received. Everybody on the network can see these addresses - just as anyone can see all the post boxes in the lobby of a block of flats. To send a cryptoasset from one public address to another, a 'private key' must be used. This means that whoever controls the private key paired to an address has the ability to send assets from that address just as the person in possession of the keys to postage box 1 can open the box, retrieve a five dollar bill held inside and post that bill to postage box 2. In this scenario, only the person with the keys to postage box 2 can access the five dollar bill. Similarly, whoever has possession of the private key to an address has control over that address' cryptoassets.



An airdrop ‘by way of private key’ is analogous to ‘posting’ cryptoassets directly into your ‘personal digital bank vault’. Only you, the person with control of the private key to the corresponding address, can access the airdropped asset. Using their private key, an individual can choose to store the asset, transfer or trade it as they see fit.

Imagine if everybody in a country woke up one morning to find a genuinely valuable and useful gift in their postage boxes. Imagine that the more people who had received that gift, the more valuable and useful each gift was. Airdrops have the potential to do this digitally, and on a global scale.

Instant Adoption?

Though we believe airdrops can be a powerful tool to drive adoption for token based networks, we must also understand their limitations. Not everyone who receives an airdropped token will need it or even want it. Some recipients will ignore the tokens they receive. Some will sell them. Some will try to game the airdrop mechanism. Some, after the airdrop, will try to accumulate more tokens than intended by the network creator, re-centralizing the network incrementally. These risks are real, and they should temper the calculus for any prospective airdrop. As such, we have developed certain principles intended to mitigate these risks, which we articulate in the final sections of this whitepaper.

4 LEGAL ADVANTAGES

From the point of view of the token-based network creator, achieving decentralization can solve significant legal complexities and make feasible otherwise impossible products. In recent years, in the United States and other jurisdictions, decentralization has become a legal term of art, used by regulators to define legal burdens. Today, the term "decentralized" is a critical part of both the federal money services laws and the federal securities laws. More-decentralized token-based networks are less likely than their less-decentralized peers to result in unlicensed money transmitter activity for their developers, and less likely to result in an illegal sale of securities for their issuers.

US Federal Securities Laws: Airdrops Can Drive Decentralization[2]

The current thinking within the United States Securities and Exchange Commission (the "SEC") is that an offering of a token might not result in a security if the underlying network is sufficiently "decentralized". This is important because, assuming there is no registration statement in place with the SEC, it is illegal to offer securities to the public in the United States. By increasing the decentralization of the network, airdrops can play a role in turning a token that would have been a security into a non-security. William Hinman, the Director of the Division of Corporation Finance at the SEC, articulated some questions that can help determine whether a network is so decentralized that its tokens might not be deemed securities. An airdrop can lay the groundwork for giving the right answers:

SEC Asks: Are the assets dispersed across a diverse user base or concentrated in the hands of a few that can exert influence? Do persons or entities other than the promoter exercise governance rights or meaningful influence?

Airdrops directly to users who own and control their own private keys can widely disperse tokens to a user base, fighting concentration and minimizing the influence of the few. Furthermore, it can diffuse centralized incentive structures that might derail effective governance. This distribution directly to private keys is the *sine qua non* of an effective airdrop today.

[2] Many laws in many jurisdictions could apply to tokens and airdrops. We focus here on the United States federal securities and federal money services laws because they have been the most-enforced and are among the most developed.

SEC Asks: Is the application fully functioning or in early stages of development?

Airdrops can disperse tokens widely so that no individual or small group can defeat the consensus protocols that ensure functionality of networks and the applications that use them. This is particularly true for networks relying on proof-of-stake or that otherwise involve tokens (or sub-tokens) which delegate power to control network functionality.

SEC Asks: Is token creation commensurate with meeting the needs of users or, rather, with feeding speculation? Are the tokens available in increments that correlate with a consumptive versus investment intent? Is the asset marketed and distributed to potential users or the general public?

Targeted airdrops in the right amounts can bring proportionality to overall token distribution. Selling thousands of tokens to individuals who would only use fewer than a hundred tokens in their lifetime would yield the wrong answer to this question. Properly calibrated airdrops can be targeted to the right users in the right amounts. These airdrops can achieve a broad distribution of tokens among individuals who will actually use them, and in amounts that they will actually use.

Importantly: Simply arranging or participating in an airdrop will not prevent a token from being a security. The above is only a subset of the questions a token network creator should ask in determining security status according to Mr. Hinman. A well-executed airdrop can, however, help to build the hallmarks of decentralization.

US Federal Securities Laws: An Airdrop Does not Require User Investment

Not all token distributions are illegal securities offerings, but the SEC has taken the position that most ICOs are, and enforced against many. To have an illegal securities offering, the thing being offered must itself be a security. This might seem obvious to the layman but it is an axiom often overlooked by legal commentators. Though conducting an ICO of a token could be an illegal securities

offering, airdropping a token that is not by itself a security cannot be an illegal securities offering.

In fact, for most so-called "utility" or "consumer" tokens, airdropping can count against security status. In the United States, a token is likely to trigger securities laws if it passes the so-called Howey Test for an investment contract (one kind of security). To pass the Howey test, there must have been, among other things, an "investment of money". In a token sale or ICO, this requirement is almost always met because the participants in the sale buy the token from its creator. At minimum, participants make a "donation" to a "foundation" and hope to receive a token in return, putting their capital at risk. In a properly-executed airdrop, this requirement is never met because, in such an airdrop, individual recipients never pay money to receive the token. They never put their capital at risk, which, in the United States, is required to satisfy the Howey Test.

The typical objection to this point is that the standard for an "offering" is very low, and does not even require an investment of money. Indeed, courts have even found free giveaways of stock to be securities offerings in some circumstances. The standard for an offering is simply that the security was offered "for value". So, the objection goes, even a mere giveaway of tokens can be a securities offering because the issuer received goodwill, brand recognition or the like. This objection confuses the standard for an "offering" (a low bar) with the standard for an "investment of money" in an underlying investment contract (a higher bar). Indeed, arguing that an airdrop can create a securities offering of a non-security is like arresting someone for resisting arrest.

United States Federal Securities Laws: Private Plaintiffs

Beyond concerns involving the SEC, a private plaintiff could also target a token creator in a lawsuit. Class action lawsuits, for example, can be disastrous for token issuers, especially when brought subsequent to an ICO. Private plaintiffs will find it difficult, if not impossible, to reach issuers on the basis of an airdrop alone. This is because private plaintiffs must prove damages to succeed in a lawsuit. For well-executed airdrops, where the recipient-plaintiff gave little or no consideration,

monetary damages will be rare. Airdropping can be a powerful tool for the issuer looking to satisfy important United States securities law requirements.

United States Federal Money Services Laws: Avoiding Money Transmitter Status

According to the Financial Crimes Enforcement Network ("FinCEN"), the bureau of the Department of the Treasury charged with administering the Bank Secrecy Act, token networks are divided into two kinds: centralized and decentralized. Centralized networks have "Administrators". This is important because Administrators, according to FinCEN, must register as money transmitters, identify their customers and report suspicious activity (known colloquially as 'AML' and 'KYC'), maintain transaction records and, in many cases, seek licenses from every state. This is expensive, time-consuming, and will be a poor fit for developers who had hoped to operate an ultralight software development company, not an unwieldy financial institution.

The more individual owners and controllers that exist in a given token-based network, the less likely the developer is to be deemed an Administrator, and thus a money transmitter. That is to say, less-decentralized networks and less-adopted networks are more likely to have smaller groups of individuals who either hold tokens directly or can unilaterally update the network's ledger - either *because of* the network's consensus protocol (e.g. with 51% control) or *by abusing* the network's consensus protocol (e.g. via 51% attack). Unilateral ability to update the ledger means the power to control the circulation of tokens. Or, as FinCEN categorizes such activity: "issuance" and "redemption". When small groups have this power, FinCEN is likely to consider the network centralized, and the token issuer an Administrator with registration, licensing, recordkeeping, and ongoing reporting obligations. Airdrops can help to avoid this outcome.

5.1 THE BLOCKCHAIN AIRDROPS PROGRAM: DISTRIBUTION PRINCIPLES

We have developed a set of principles to guide our facilitation of the Blockchain Airdrops Program. In this section we discuss these principles and their importance in how we will help token creators conduct airdrops.

Fundamentally, airdrops should be:

Direct

Tokens should be airdropped directly to individual recipients who possess private keys that permit them to access and use the tokens. Contrast this with a distribution of tokens to users of a custodial platform, like an exchange where users do not control their own private keys, cannot interact directly with the network, and cannot use and dispose of the tokens directly without permission from the platform owner. Attempting to increase decentralization by airdropping to a custodial platform is an oxymoron. It would be no airdrop at all.

Targeted

Airdrops should aim for broad distribution to as many individual users as possible within a properly targeted community. Failure to ensure broad distribution would defeat the purpose of the airdrop. At the same time, airdrops can also be targeted at network influencers and connectors, individuals or institutions that can help facilitate broader token adoption and use. This aim can be addressed through the manner of distribution, choice of distribution partners, geographical focus, or through a number of other distribution parameters. In any event, targeting should be calibrated to the nature of the intended user base, while at the same time prioritizing utility. For example: tokens intended to be used for a limited purpose should be airdropped to as many individuals as possible within the group who are likely to use them for that purpose. Tokens intended for a broader purpose, such as tokens meant to act as fungible money, would be most effective if airdropped to as many individuals as possible, without such qualification.

Accessible

Airdrops should be free, meaning no consideration need be paid for the tokens. Requiring consideration is not always fatal to the offering, but it does act to exclude those unable or unwilling to pay. This limits the reach of the airdrop and more closely resembles a sale than a giveaway. Likewise, identifying the recipients limits the reach of an airdrop, since some recipients will be unable or unwilling to provide identification, and, after all, identification is not legally required for all airdrops. Still, requiring some form of identification process can prevent 'sock puppeting'[3], which if permitted would limit the effectiveness of any airdrop.

Deterministic

Chance should not determine the recipients of the airdrop. Relying on chance to determine recipients is more akin to a sweepstakes than a giveaway. Setting aside the potentially troublesome legal consequences, relying on chance misses an important opportunity to calibrate for functionality, use and adoption. A successful airdrop should be conducted in a transparent and deterministic manner. Once set in motion, the airdrop process should be free from alteration or hidden manipulation.

Functional

The ultimate purpose of an airdrop is to increase the decentralization of the token network and the utility of the token. Any effect on price is independent of the airdrop itself. Though the secondary market price of a token might increase after an airdrop due to increased utility and therefore demand, the price might also decrease due to increased supply. In either case, the motivation for conducting an airdrop should be unrelated to speculation and price appreciation; it should be focused on driving decentralization and network effects. Further, the airdrop needs to be calibrated so as to not lead to negative externalities (e.g., network congestion).

[3] The creation and use of multiple credentials (here, private keys) by a single recipient to create the appearance of multiple recipients to the airdropper.

5.2 THE BLOCKCHAIN AIRDROPS PROGRAM: ASSET SELECTION PRINCIPLES

Selecting which assets to airdrop is critical. Blockchain has developed a reputation for trust, quality and innovation. As such, we have developed a set of principles to determine which tokens fit this reputation, our mission and our values:

User Need

Our users come first. We collect feedback from our users and insist on understanding which assets and functionality is actually useful to them. We're passionate about making the use of tokens easy and safe for the end-user and this principle will always be of paramount importance when evaluating new assets.

Technical Quality

Blockchain leverages its in-house engineering and research talent to evaluate the technical quality of decentralized networks. This includes assessing the soundness of the engineering theory, robustness of the source code and security of the network. It is also important for us to measure the future potential of the asset as well as what it is being used for today to contextualise business cases and adoption potential.

Community and Adoption

The strength and depth of the community that uses and supports a network is a key consideration. We look at the quality and frequency of open source developer contributions along with the nature of partnerships or support from reputable and meaningful entities. Depending on the token type and functionality, actual or potential market liquidity can be an important factor. As such, we may analyse historical volumes, market capitalizations, price volatility and high quality exchange venue listings (planned or existing).

Network Activity and Use

We acknowledge the importance of on-chain data and statistics to uncover traction, adoption and degrees of decentralization. We take into account quantitative measures such as

daily unique addresses, consensus mechanisms, transaction volume and active nodes amongst many other factors.

Regulation and compliance

Blockchain is a global company serving users in over 140 countries. Ensuring we serve our customers in harmony with the appropriate regulatory and compliance considerations will always drive our decision making. Any asset or functionality we add will always be done in accordance with our comprehensive compliance procedures, and any relevant laws or regulations.

Empowering the Radical

Not all Blockchain Airdrops will lead to successful, adopted networks. More importantly, not all Blockchain Airdrops *should* lead to successful, adopted networks. If all Blockchain Airdrops lead to successful networks, then it will have proven that Blockchain's asset selection was too safe - too conservative. The world of decentralized technology is revolutionary because it calls upon us to test radical theories of engineering, finance, and human psychology among others. Many radical theories fail. Similarly, if all of the networks we endeavor to facilitate are ultimately successful, then we shall know we have failed in our endeavor to facilitate the creation of truly revolutionary networks.

6 CONCLUSION: THE BLOCKCHAIN AIRDROPS PROGRAM

Airdrops are coming into increasing use to help ensure that tokens are not concentrated in the hands of a few, but instead are distributed to the hands of many.

Airdrops are good for people who want to use cryptoassets. Unlike ICOs, airdrops require no monetary consideration, allowing individuals the ability to acquire cryptocurrency without an upfront cost. Similarly, where ICOs often drive speculation, airdrops can drive actual use and functionality. Unlike mining, airdrops are easy and accessible to millions of people who lack technical sophistication or have yet to discover cryptoassets. In contrast with exchange purchases, airdrops can be open to everyone no matter their financial means or jurisdictional limitations.

Importantly, airdrops are a useful tool for people who want to create cryptoassets. Airdrops can decentralize token-based networks quickly and effectively, increasing real utility and value through network effects. They can lower securities law risk because they decentralize networks and don't require investment. They can lower money services laws risks because decentralized networks are less likely to have central controllers who can unilaterally affect transaction validation.

Today, airdrops are a nascent mechanism for helping to increase the utility of token-based networks. With appropriate structural components and consistent implementation we believe they can be a key mechanism for kickstarting decentralization and use across innovative networks. We believe that airdrops will increasingly play a vital role in expanding the use and accessibility of cryptoassets globally.

As the world's most popular crypto wallet and leading platform for cryptoassets, we will apply our Guiding Principles, as set forth in this document, to the Blockchain Airdrops program. In so doing, we seek to ensure that decentralized networks can be harnessed as a force for good - to empower our users and foster the growth of revolutionary networks.