One Project, One ICO, Two Tokens

Best Features of Two Blockchains

WHITEPAPER

www.alchemybyte.org

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AlchemyByte™: An Asset Backed Digital Currency on Waves

SL#Byte™: A Partnership Program on Ethereum

Abstract: AlchemyByte is a new digital token backed both by other cryptoassets whose value is determinable and auditable, and by the development work of its laboratory – AlchemySmartLab (www.alchemysmartlab.com) which is already in operation. It is not backed by any fiat currency nor by blind faith or simple confidence: its value is substantially determinable at frequent valuation points by reference to the AlchemyByte Master Trust balance sheet – a segregated portfolio in trust established by the Token Issuer, AlchemyByte Inc.

The Token Issuer undertakes to asset back the token issue by maintaining the Master Trust's balance sheet at between 70% and 75% of the total value of the Master Trust in other cryptocurrencies and between 25% and 30% in other cryptocurrency related assets, for example shares in or loans to miners, platforms, exchanges, app developers, crypto developers et cetera. 80% of ALL money raised during the two stages of the crowdsale will be applied to the Master Trust.

It meets all of the current benefits of cryptocurrency in terms of transferability BUT in addition is fully asset backed giving token holders peace of mind that it is a real store of value and economic users peace of mind that it is a suitable medium of payment for goods and services in the ever expanding digital smart economy.

The AlchemyByte crowdsale also offers Pre-ICO token buyers an additional token (called SLHashByte™ or SL#Byte™) for every 100 AlchemyBytes subscribed for (up to a set limit). SL#Bytes entitle the holders to participate in a managed membership-based network project called AlchemySmartLab.

AlchemyBytes will be launched on the Waves blockchain whereas the SL#Bytes will use the Ethereum blockchain as they involve a greater degree of complexity.

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Introduction

It is now nearly a decade since the publication of the world's first cryptocurrency whitepaper (Bitcoin Whitepaper published by Satoshi Nakamoto[i] on 31st October 2008) and the subsequent release of Bitcoin (BTC) in 2009. During the intervening period hundreds of new cryptocurrencies have appeared (and disappeared) on the scene. Some are great (in terms of their market capitalization) and are potential challengers to Bitcoin, others are not so great and will no doubt ultimately disappear (there already exist threads on dead altcoins and why they died).

Considering that https://coinmarketcap.com/ now lists over a thousand cryptocurrencies, one of the main focuses of any new whitepaper (including this one) must be to address the perfectly legitimate question: why does the world need yet another new cryptocurrency? We shall address that very point in the pages below.

As AlchemyByte is being launched on an existing blockchain (www.wavesplatform.com) this whitepaper will focus most of its attention on the concept of AlchemyByte rather than on the technicalities of cryptocurrency per se and on the use of Waves, as that information is available directly from the Waves Platform and in the Waves whitepaper which can be found at the following link (https://wavesplatform.com/files/whitepaper_v0.pdf).

Concept

As users and holders of cryptocurrencies, we have seen over the last few years both increasing assimilation into the "real" economy in terms of being able to pay for "things" and at the same time we have seen huge (i.e. thousands of percent) increases in the price of cryptocurrency units (be they BTC, ETH, LTC etc.) versus fiat currency. To a large extent this is not unexpected as one of the founding principles of, for example, BTC was that it would have a finite (and predetermined) supply which could not be exceeded. Fiat on the other hand can be printed to a theoretical infinity until it finally collapses as worthless. To some extent the recent fork (1st August 2017) in the BTC blockchain has given some pause for thought as to the adherence to the concept of its finiteness (more below) but the fundamental principle remains abstractly sound. Of course, the price of anything is purely a reference to the price of something else in the sense that nothing can have a price unless it is compared to something else. If one asks what is a BTC worth, the answer must contain a reference to something else, for example at the time of writing 1 BTC = US$ 4776, 1 ETH = US$ 301 & 1 ETH = 0.06348390 BTC, et cetera.

Over the same period of time that we have seen such a substantial increase in the price of cryptocurrencies versus fiat we have also witnessed extreme volatility, not to mention some pump and dump action by certain cryptowolves[ii]. This volatility has been both specific and systemic at different times and when specific, i.e. only affecting one particular cryptocurrency, rather painful to holders of that coin or token, especially when the broader market has continued to advance when theirs has fallen.

The other consideration cryptocurrency holders have had to deal with in relation to specific volatility in certain mid to lower cap altcoins (we will come onto exposure later) is when to buy and when to sell and in the case of selling, what to sell to, and typically this has been BTC and more latterly ETH, therefore ticking the box of selling out gains to a perceivably more stable (in any case certainly more tested) cryptocurrency, but at the same time losing exposure to the highly

volatile (but still potentially very lucrative) altcoin that made their super gain in the first place. The price movement of Stratis (STRAT) (https://stratisplatform.com//) has been particularly interesting in this regard.

As the chart below shows, the historical trading range was left behind when STRAT shot up from around 0.000118 BTC (US$ 0.19) at the end of March 2017 to an astonishing 0.0038 BTC (US$ 10.85) just over two months later.

Subsequent price movement has been extremely volatile and anyone holding cryptocurrency for speculative purposes or trading cryptocurrencies on technical analysis may well have been

interested in finding somewhere to “park” gains while looking for the next opportunity. This brings us on to a question that we have frequently asked ourselves – where *do* we park value while we are not trading, on vacation or not able to track the cryptocurrency markets for extended periods of time?

The historical answer has been BTC and ETH, latterly Tether has also been very useful, particularly when we perceived that negative volatility was systemic rather than coin or token specific. Tether, though wonderful in a systemic downturn, is not really suitable for someone wanting to continue to participate in the cryptocurrency phenomenon but not wishing, or able, to actively trade their portfolio.

AlchemyByte answers this need.

What is AlchemyByte?

AlchemyByte is a token issued by AlchemyByte Inc., an International Business Company incorporated in the British Virgin Islands. AlchemyByte is essentially an alloy or mixture of other coins, tokens and crypto related assets (hence the name “Alchemy”) in exactly the same sense that historical coins were alloys of predominantly gold, silver, tin, nickel and copper. The value of such coins being determined by reference to the constituent metals in the alloy and their relative proportions. We add the “Byte” to the end of Alchemy to indicate the presence of a plurality of underlying coins/tokens, although in reality we will have a good more than just eight. (i.e. 8 bits = 1 byte).

By combining many of the extant cryptocurrencies into a single cryptocurrency, holders and users gain exposure to the price increases of the cryptocurrencies being held and in a far more diversified way than by holding just several of the many available cryptocurrencies directly in their own wallets. A coin or token specific price collapse (or worse) will only impact AlchemyByte to the extent that the Master Trust has exposure to the particular asset declining in price. Where value is shifting from one of the majors, for example BTC, to another, say XRP, because of some news flow or sentiment change that would largely result in zero sum game to the AlchemyByte Master Trust as it will be holding both.

AlchemyByte seeks then to act in the cryptocurrency space in essentially the same way that a Managed Mutual Fund acts in the stocks space, combining many cryptocurrencies under one token and reducing both absolute risk and volatility risk to the holder and economic user. We should emphasize the word “Managed” in the previous sentence as the Master Trust will be managed by an Investment Advisory Committee (“IAC”) – what we are offering is not just a static or algorithmically controlled basket of other cryptocurrencies and assets, the IAC will be making active decisions in regard to buying and selling and the Token Issuer has retained ex hedge fund people to this end.

The introduction of AlchemyByte will also strengthen the entire cryptoasset space in two key ways: 1) Adoption, as we expect people who have never before owned cryptoassets to feel sufficiently comfortable with the way that AlchemyByte has been structured (see below) to setup a wallet and buy tokens, and 2) the existence of transparently priceable cryptocurrency with a fair value linked to a published balance sheet will do much to enhance the credibility of the token space. AlchemyByte may not be the first “coin of coins” and certainly will not be the last but that

is no bad thing: the existence of competing product offerings in the same generic space (think for example of motor cars, mobile phones, coffee shops – Starbucks and Costa often seem to operate in close proximity on many high streets) keeps all players honest as competition is good not only for consumers (token holders/users) but also for cryptoasset innovators and maintainers. When there is a monopoly in anything it inevitably leads to poorer products, poorer service and less innovation. The more digital currencies there are competing for users, the better the successful ones will need to be.

How is AlchemyByte structured?

The value to be allocated to "asset-back" the currency will be dealt with as follows. At the conclusion of the whole ICO period, the Token Issuer will create a Purpose Trust and appoint an independent Trustee and an independent Enforcer of the Trust. Both of these positions will be held by corporations having at least 3 directors each. No director of the Trustee will be able to serve as director of the Enforcer of the Trust or vice versa, additionally no director, officer, employee or shareholder of the Token Issuer will be allowed to serve as director of either the Trustee or the Trust Enforcer. This arrangement guarantees a high level of independence and protection of the interests of token holders. Although issuance of cryptocurrency is not regulated, acting as a Trustee is and this arrangement therefore gives additional peace of mind to both long term holders and economic users of AlchemyByte that no maladministration or fraud can take place.

Additionally, at least one of the directors of the Trustee will be a major Caribbean law firm (a corporate director) adding an even further layer of protection. Because tokens are issued by an issuer, and to have any value must be backed by "something", it is essential that the "something" (in the case of AlchemyByte other cryptocurrencies and cryptoassets) must be beyond the reach of the issuer to pay out to its own shareholders, directors or other connected persons. Although with some issuers this is being achieved (purportedly) by means of an escrow account, which is a form of trust arrangement wherein the Escrow Agent acts as the trustee, the typical Escrow Agent however owes a fiduciary duty to both parties whereas in a trust the Trustee owes no duty to the Settlor (the Token Issuer) at all but only to the Trust itself. Additionally, there is the added function of a Trust Enforcer who must ensure that the Trustees act in the interests of the Trust. This becomes important in the event that the AlchemyByte project fails or needs to be terminated at some point in the future (more below).

Once the value to be allocated to "asset-back" the currency has been "settled" (a legal term) the trust (AlchemyByte Master Trust) will come into existence. The value will constitute the crypto (and any fiat) currencies sent to the Token Issuer's wallets to buy the AlchemyByte token as per the schedule below (Terms of the ICO & ICO Pre-Sale). Once the value has been settled to the Master Trust it CANNOT be returned to the Token Issuer (other than the regular payments of the designated management fees as stipulated in the Trust Deed – these are capped at a maximum of 1% per annum) so effectively the value of all the cryptocurrencies and other assets are now held in trust for the express purpose of asset-backing the AlchemyByte Tokens. The Token Issuer and the trustees of the AlchemyByte Master Trust will jointly appoint an Investment Advisory Committee to manage the assets of the Master Trust in the best long-term interests of the currency BUT the assets of the Master Trust cannot ever be taken back into the wallets of the Token Issuer. When cryptocurrencies are converted one to another or even into a fiat currency,

all such assets or money must remain within the Master Trust. Both the Trustee and Trust Enforcer must ensure this under their fiduciary duty.

After many discussions with interested parties and potential AlchemyByte users we have come to the conclusion that this arrangement represents the right combination of decentralisation and protection for token holders. Of course, all of the assets, BTC, ETH, XRP etc. remain in the decentralised space while we have chosen to add a layer of control over the wallets and private keys which although adding a certain amount of centralisation ensure that no-one at the issuer can act against the interest of the AlchemyByte users.

Why use a Purpose Trust for the Asset-Backing?

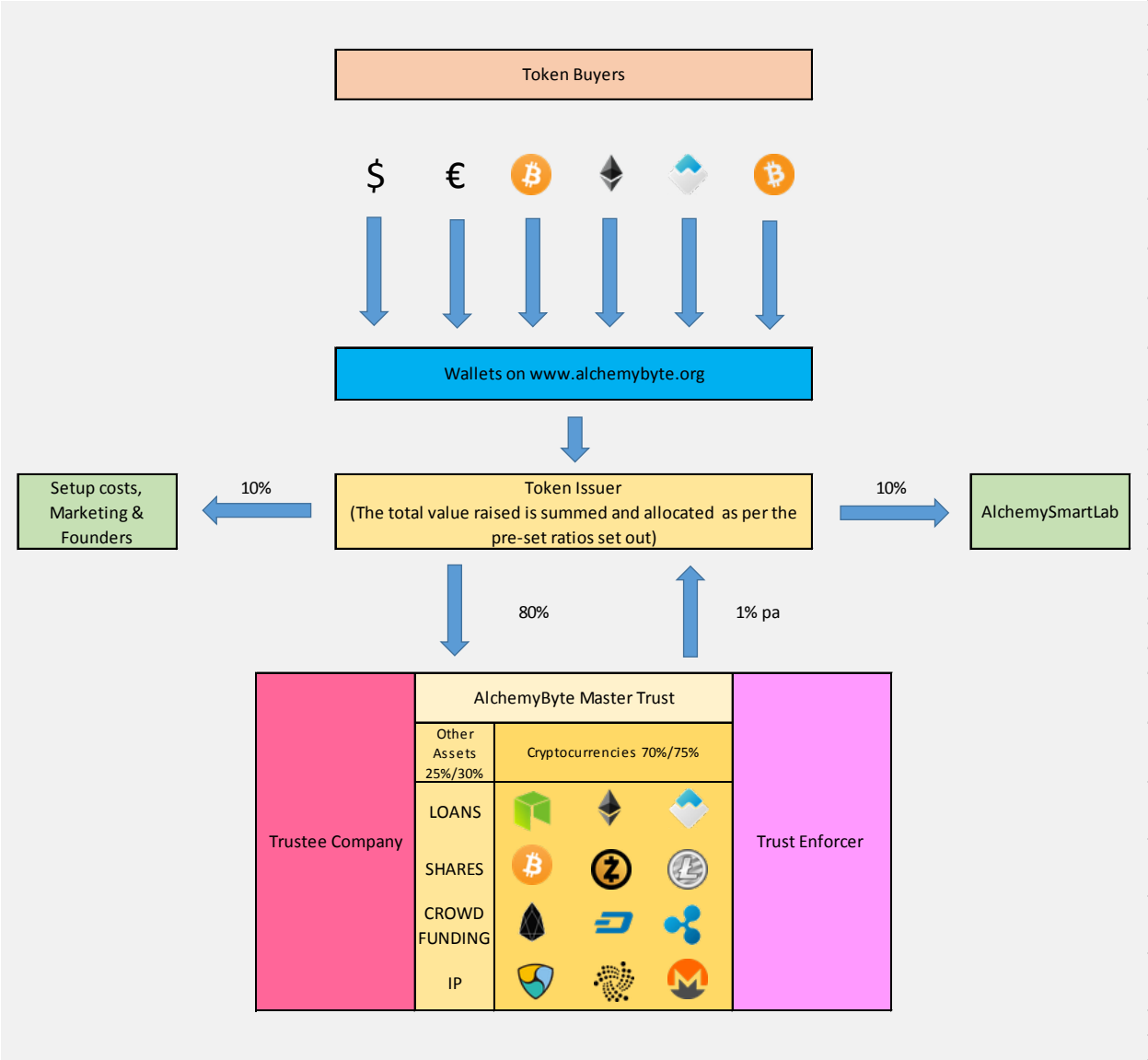
As stated above, in a normal escrow arrangement the escrow agent holds assets that two parties have an interest in (in the case of a token those two parties are the token issuer and the token holder). The escrow agent has a fiduciary duty towards both those parties.

Now consider the possibility that AlchemyByte is not successful and its price in the market is consistently below the price that the Master Trust's balance sheet divided by the total number of tokens in circulation indicates is a fair price (remember unlike most cryptocurrencies AlchemyByte is asset-backed by priceable assets so its fair value is easily determinable): in such circumstances, even though AlchemyByte is asset-backed, token holders must realistically ask themselves how they would get their money back? Sale into the secondary market at a price much below the fair value price is not a very attractive proposition. It is for this reason we have decided on a Purpose Trust rather than the typical (but less robust) escrow arrangement.

As the issuer of the token is being paid a fee by the Master Trust for its Investment Advisory Committee to manage the underlying cryptoasset portfolio, even if the market price of AlchemyByte were to be persistently below its fair price (even for several years) it would never be in the interests of the Token Issuer to close down the currency as it would lose its 1% annual fee. As an escrow agent owes a fiduciary duty to both parties, even though it would probably be in the interests of the token holders to have their share of the various underlying cryptoassets sent to their own wallets in exchange for their tokens and the project to close, the escrow agent would not be able to do so as the Token Issuer would not be in breach of the agreement or have done anything wrong. In other words, the escrow agent would be conflicted between the best interests of the token holders and the best interests of the issuer.

In a Purpose Trust, once the settlor of the trust (which is the Token Issuer) has handed over the assets to the Master Trust, neither the Trustee nor the Enforcer of the Trust owes any fiduciary duty to the Token Issuer at all. So, in the circumstances outlined above, the Trustee would not be conflicted and could terminate the Purpose Trust by transferring all of the cryptoassets to the holders of the tokens pro rata to the percentage of the total each held. This provides a worst-case scenario exit route: readers will please note that no such worst-case exit route exists for the vast majority of crypto assets. Please be guided accordingly.

AlchemyByte Structural Organogram



*The Cryptocurrencies shown are purely for illustrative purposes. The Master Trust will hold in excess of 50.

AlchemyByte Smart Economy Laboratory (AlchemySmartLab)

10% of token sale proceeds will be allocated to the AlchemyByte Smart Economy Laboratory ("AlchemySmartLab"). www.alchemysmartlab.com

AlchemySmartLab will work as an interactive cloud based networking hub, bringing together talent (young and old) from around the globe to work towards the achievement of a borderless smart economy with services provided digitally and payment for services also made digitally.

We believe that the new future Smart Economy must be "smart" in both senses of the term: digitally and intellectually. The AlchemySmartLab will work towards the end of the historical "stupid" economy of tariffs, barriers, political meddling and other reactionary disjointed thought models. The invention of the internet, now enhanced with blockchain technology enables businesses and consumers, businesses and businesses and even consumers and consumers to connect globally, speak and meet online for no cost and transact business while paying for goods and services instantly, easily and without high bank charges by simple transfer of cryptocurrency between wallets. As transactors also now have a huge choice as to what currency they settle transactions in, costs of transactions will inevitably fall as competing cryptocurrency issuers and existing democratised networks will reduce transaction fees to attract use.

AlchemySmartLab has already, Pre-ICO, started work on a number of interesting projects. Of course, as all of these projects will lead to proprietary intellectual property value which must be reserved for the benefit of initial token holders and therefore it would be inappropriate in a public whitepaper to go into any level of detail, a "flavour" of just three of these projects, however, is set out below. Some of the projects are improvements on existing technologies while others are genuinely "disruptive".

1. AlchemySmartLab will work to integrate smartness into the "real" economy by assisting would-be users with the necessary technical advice to start implementing cryptocurrency and smart contract solutions in terms of payment models and invoicing. For sure, there is as much (if not more) business to be had in this area as there has been over the last 25 years in getting companies online. The difference this time around though is that it will happen more quickly and players entering this space now will take a good chunk of market share. Players who have already entered the space are experiencing increasing uptake even now but the task is still huge compared to the relatively low number of existing advisers.

2. One of the major obstacles to the adoption of cryptocurrency in high value international trade transactions is in fact one of cryptocurrency's key perceived benefits: non-reversibility. In the original Bitcoin Whitepaper Satoshi Nakamoto wrote in the Introduction:

"Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust based model. Completely non-reversible transactions are not really possible, since financial institutions cannot avoid mediating disputes. The cost of mediation increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility for small casual transactions, and there is a broader cost in the loss of ability to make non-reversible payments for non-reversible services. With the possibility of reversal, the need for trust spreads. Merchants must be wary of their customers, hassling them for more information than they would otherwise need. A certain percentage of fraud is accepted as unavoidable. These costs and payment uncertainties can be

avoided in person by using physical currency, but no mechanism exists to make payments over a communications channel without a trusted party."

The blockchain has obviously now solved the non-reversibility issue through the peer to peer decentralised ledger. The Bitcoin whitepaper goes on to say:

"What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers. In this paper, we propose a solution to the double-spending problem using a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions. The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes."

Again, the blockchain has also solved the double-spending problem but there is no widely adopted decentralised solution to the buyer escrow issue. The Ethereum solution – the Smart Contract - is indeed a very good solution in some (many) cases, the example of the options contract (https://blockgeeks.com/guides/smart-contracts/) is one such application of Smart Contracts that needs little if any refinement, however the apartment keycode example which Vitalik Buterin used in the conference referred to in the link above is somewhat less perfect. What if the apartment is deficient in some way? For example, a leak or a damp wall. How can this potential "breach" of contract be catered for by a Smart Contract? How bad is the problem? Is it so bad that the apartment is not usable? Who decides? – most readers will agree that this cannot be determined by a Smart Contract without human intervention, so again we return to Nakamoto's "trusted third party".

To give another example, let us take the delivery of goods across long distances. The goods are dispatched – the goods are received; all is well. But what if the goods arrive damaged? How damaged is "damaged"? AlchemySmartLab already started work on a model for a solution to this issue using the same concept as the "peer-to-peer distributed timestamp server" to quote the Bitcoin whitepaper. This will be based around the concept of decentralised "trustee" nodes and will ensure that escrowed cryptocurrency is able to be claimed by sellers when goods are delivered (in acceptable condition) to buyers but not before. Similarly, we are also working to address the issues of non-functionality of delivered goods, damage in transit and even include a tokenized form of insurance all within a smart contract suite that is both independently auditable and at the same time decentralised. This in turn is linked to the escrow arrangement and will release funds as per the smart contract … or even for the time being what we may term a semi-smart contract.

3. The third project is perhaps the most interesting but also the most challenging. Globally many billions (trillions?) of dollars are controlled by fiduciary arrangements: predominantly trusts and foundations. Each of these arrangements currently requires domiciliation, as does the one that the Token Issuer will arrange for the Master Trust to hold the assets which back AlchemyByte (at least initially). It is the domiciliation of the arrangement which determines its proper law and its regulation and via its regulation the comfort that any beneficiary of such an arrangement might desire that the arrangement will be administered fairly and in accordance with both the settlor's wishes and the beneficiary's needs. The very need for domiciliation however renders the

arrangement subject to the whim of the domiciling jurisdiction's legislature or indeed the cowardice of the domiciling jurisdiction in failing to resist the demands of foreign governments' latest "information exchange" initiatives which inevitably render what should be a private matter between settlor(s), trustees and beneficiaries a very public matter indeed. Is there a solution? Of course, there is: it's a supranational trust arrangement by smart contract based on consent between sovereign human beings without regard to the laws of any particular jurisdiction. In cyberspace, any group of humans can make their own laws as appropriate between themselves, including laws on trusts. We already have players discussing what happens to wallets on the death of the wallet holder, this is just a logical next step. We have within the AlchemySmartLab team several highly experienced trust/foundation practitioners. The conceptual work is already done. Once we have the proceeds of the token sale we shall be able to start putting this into action for a launch in early 2019.

Initial (Pre-ICO) token holders will be offered roles to act as partners and functionaries in the various initiatives undertaken by AlchemySmartLab. Most of the projects will require trusted nodes, other functionaries and co-developers in order to be completed and operate. This element of the project is discussed in more detail below in the Pre-ICO section.

What is AlchemyByte's target market?

AlchemyByte as a fully-fledged decentralised token can obviously be used, as are most tokens, in a wide variety of ways. We would consider, however, that AlchemyByte, at least initially, will appeal to three main groups of holders:

1) those looking to "park" crypto value in a transparently priceable asset-backed and fully diversified token either as a long-term countermeasure to coin/token specific shocks or as a safe holding in-between trading opportunities (as outlined above),

2) those coming into the cryptoassets space for the first time who do not want, do not have time or maybe do not have the expertise to trade their own cryptoassets portfolio but who nevertheless recognise that they must have exposure to this new asset class. We would envisage that as word gets around, this group would make up a substantial number of token holders, and

3) those people who believe in the fundamental and inalienable sovereignty of the human person and each human person's right to trade with, and buy goods and services from, whomsoever he or she chooses without interference from some purported authority or other busy body. Through the work of the AlchemySmartLab these ideals can be realised in so many new ways.

Pricing for AlchemyByte in the Secondary Market: Fair Value, Discounts and Premiums.

At the conclusion of the ICO, the AlchemyBytes will trade freely on various exchanges (as accepted) but will obviously trade immediately on Waves DEX. At this point the price of AlchemyBytes will be set by the free market according to the conventional operation of supply and demand, bids and asks. Due to the nature of AlchemyByte's unique DNA the two endogenous components of price determination by the market should be the fair value of the assets of the AlchemyByte Master Trust plus the value of the AlchemySmartLab premium – the market will

value the premium but readers should be aware with most tokens there is only the issuer's business model protecting the price and no Master Trust of other assets.

Once trading freely, we would envisage that the price should be reasonably proportionate to the Fair Value calculation which will be published by Noon UTC on every Monday based on prices of 23:59:59 UTC on the preceding Friday. As AlchemyByte is asset-backed by the Master Trust there is no conceivable reason why it should trade at anything more than the normal intraday discounts that may arise due to lack of market depth and liquidity (initially) as buyers at a discount are essentially receiving "free" value as they immediately become entitled to the par net asset value per token of the Master Trust: in other words, if AlchemyByte were to sink to say a 10% discount to Fair Value a wave of buyers should rush in to buy as they are getting per coin a 100% of asset-backed value for only 90% of the price. Tether's trading range versus the US Dollar has been a good example of the markets working efficiently in this regard.

In terms of trading at a premium to fiat, we would consider this far more likely as our own back testing has revealed that if AlchemyByte had been launched one year ago it's fair value would by now have increased by almost 500%. With the expectation of the community that cryptoassets in general are only at the beginning of their price curves we would envisage that fiat buyers (direct or indirect) would be willing to pay quite a premium to participate in the expectation that they would recover such premium against fair value in only a matter of months.

In summary, we would suggest that in total there will be three material components to price determination, two endogenous (fair value per token PLUS AlchemySmartLab premium) and one exogenous (buyer's expectation of rapid gains).

The following table overleaf illustrates the very simple pricing methodology of fair value. This table will be published on www.alchemybyte.org every Monday at Noon UTC.

Please bear in mind that the table is for demonstrative purposes only: it is intended only to show how fair value can be calculated quite simply. The actual values, assets and number of AlchemyBytes used in the table are purely illustrative.

AlchemyByte™ Master Trust
Fair Value Balance Sheet

Asset	Number	Value (USD)	
Cryptocurrency Assets			
Bitcoin	425.653	$ 1,500,000.00	
Ethereum	3973.510	$ 1,200,000.00	
Ripple	4740605.236	$ 850,000.00	
Bitcoin Cash	2039.275	$ 675,000.00	
NEM	17265869.470	$ 485,000.00	
Litecoin	10869.565	$ 500,000.00	
IOTA	6180116.402	$ 400,000.00	
NEO	35893.939	$ 1,184,500.00	
Dash	1915.423	$ 385,000.00	
Ethereum Classic	6533.333	$ 98,000.00	
Qtum	3500.000	$ 49,000.00	
Stratis	11285.714	$ 79,000.00	
Monero	250.000	$ 12,500.00	
OmiseGo	8142.857	$ 57,000.00	
BitConnect	263.158	$ 25,000.00	
		Subtotal	$ 7,500,000.00
Fiat Currency Assets			
USD	85000	$ 85,000.00	
EUR	35000	$ 41,433.00	
CHF	12000	$ 12,489.00	
		Subtotal	$ 138,922.00
Loan Assets			
Miners	1	$ 555,000.00	
Developers	2	$ 400,000.00	
Marketing Firms	6	$ 175,000.00	
		Subtotal	$ 1,130,000.00
Ownership Assets			
Developers	3	$ 120,000.00	
Marketing Firms	4	$ 200,000.00	
Crypto Education	2	$ 150,000.00	
		Subtotal	$ 470,000.00
Crowd Funding Assets			
ABC Inc.	1	$ 85,000.00	
XYZ Inc.	1	$ 50,000.00	
		Subtotal	$ 135,000.00
Intellectual Properties			
ABC Patent	1	$ 15,000.00	
PQR Copyrights	1	$ 750,000.00	
		Subtotal	$ 765,000.00
		GRAND TOTAL	**$ 10,138,922.00**
	Total number of AlchemyBytes in existence		**2,000,000**
	Fair Value per AlchemyByte on an asset-backed basis		**$ 5.07**

*The Cryptocurrencies shown are purely for illustrative purposes. The Master Trust will hold in excess of 50.

*Other Assets shown are purely for example purposes.

Economic Adoption and Circulation

The Token Issuer has a strategy in place to maximize the likelihood of economic adoption over a widespread range of platforms. 25% of the AlchemyByte master trust portfolio will be made up of loans, bonds and crowdfunding equity. If the ICO and Pre-Sale go as well as we expect, this 25% portion of the master trust portfolio will amount to several millions of dollars in value. As the master trust allocates out this money, the Trustees will only do so: 1) in AlchemyBytes, 2) on condition that interest on such loans is payable back to the master trust in AlchemyBytes, and 3) on further condition that whatever project of the borrower the loan is being made for (to develop an app or game, for example) once live, must include AlchemyByte (Proposed Ticker "ALB") as a payment option.

For example, if a borrower requests a loan of $50,000 they would be paid the equivalent amount in AlchemyBytes. As a caveat and to protect the borrower from going bust, however, due to the evident potential AlchemyByte has to increase in value by double or more very quickly, i.e. before the loan interest or principal fall due, both the principal and interest payments, though payable in AlchemyBytes to encourage adoption, could be specified in the smart contact in Tether values.

Using the example of the $50,000 (ALB 10,000) above, if Company ABC Inc. borrows this amount at ALB = $5 and it is repayable at an interest rate of say 5% per annum (i.e. $2,500 initially), and then by the time the first interest payment is due ALB = $10, then the cost of obtaining ALB to pay the interest will be $5,000 – the interest cost in fiat will have doubled! By the time the principal is due for payment the price of AlchemyByte could quite easily be $50 or even $100 so the fiat cost to repay ALB 10,000 would then be $500,000 or even $1,000,000, so the fact that we have specified in the smart contract that the repayments will be linked to the value of Tether (although payable in AlchemyBytes/ALB) protects the borrower from certain ruin. The advantage of Tether for this purpose being that it is linked to USD and so does not have the potential for such hugely volatile fluxes in price, thus providing the borrower with significantly more certainty.

The Crowdsale

The crowdsale is split into two periods: the ICO Pre-sale and the ICO.

AlchemyByte will be released to subscribers during the pre-ICO period at the advertised Pre-ICO fixed price. During the pre-ICO period AlchemyByte will be available for subscription on the AlchemyByte website (www.alchemybyte.org). It will not be listed on any exchange at this time. Following the conclusion of the Pre-ICO period the ICO will commence and AlchemyBytes will be offered at the advertised ICO fixed price. At the closure of the ICO period, 80% of the proceeds of BOTH the Pre-ICO and ICO crowdsale will be, at this point, ring-fenced for allocation to the AlchemyByte Master Trust and the process of setting up the Trust and related infrastructure will commence.

The ICO fixed price will be at least 20% higher than the Pre-ICO fixed price and may be higher than that depending on take up during the Pre-ICO. Clearly the intention of the issuer is to raise as much value as possible in order to fund the operations of the AlchemySmartLab, the more money that is raised the bigger the number of developers who can be contracted. The total raise will also determine whether projects can be run in parallel or will have to be done in series: ideally,

we would want to run them in parallel so that the teams can feed from each other's experiences as the projects move to completion.

ICO Pre-sale

The ICO Pre-sale is designed for:

1) people who want to partner with AlchemySmartLab, and;

2) people who are convinced of the project and want to enjoy the lower price of entry.

The benefit of partnering with AlchemySmartLab is the undoubted attraction of buying tokens during the pre-sale as those who wait to buy during the ICO will still make considerable gains even though they will pay a slightly higher price at entry. The ICO buyers however will not be offered partnership opportunities with the AlchemySmartLab projects; this is reserved for the early (i.e. Pre-ICO) adopters only.

Additional Token during ICO Pre-sale.

Anyone who buys 100 AlchemyBytes during the Pre-ICO will automatically be issued not only with the Waves Platform AlchemyByte tokens but also with a second Ethereum based token which we have called SLHashByte (or SL#Byte). The "SL" stands for "Smart" "Lab". There is no additional cost for the SL#Byte and this token is offered as an incentive during the Pre-ICO for those who want to be involved in the AlchemyByte and AlchemySmartLab community. If anyone subscribing during the pre-ICO does not want to be involved they may sell on their SL#Bytes at a later date to someone else. Because all of the project work of the AlchemySmartLab will be offered within the community (and only outsourced if no-one in the community takes it) the SL#Byte Tokens are of value in their own right (and remember they are free with the AlchemyBytes) and can be traded on exchange once the ICO period is concluded, in their own right and independently of the AlchemyBytes.

The SL#Bytes will entitle holders to enter the project workshop area of the AlchemySmartLab and partner with us in various different ways. This may be by: placing a tender for project work, suggesting a project of their own which can be part or wholly funded from the AlchemySmartLab budget (see section above on proceeds of crowdsale) or by acting as a control node in one of the projects that requires human input, for example acting as a trustee in the suprajurisdictional trust project.

As mentioned above, but just to expand on what was said, many of the projects already underway in the AlchemySmartLab will necessarily require trusted nodes to confirm certain operational actions – even of the smart contracts because at this time no AI has been developed of sufficient complexity to cater for the uses which we envisage. We mentioned as an example suprajurisdictional trustee arrangements – the operation of these would require an active (i.e. human input) confirmation from the nodes or at least sufficient of the nodes to validate for example a trust being dissolved and payment made to a beneficiary. This would be anonymous in terms of "who" and "what" but designated in terms of "why" and "when". There are several other examples of circumstances in which human input (in the form of "yes" or "no", or "I agree" or "I don't agree") will be needed. The fees that will be earned by charging users of the AlchemySmartLab applications will be shared between the AlchemySmartLab development fund and the SL#Bytes involved in particular confirmation work.

Another interesting and useful feature of SL#Bytes is the ability they give to holders to suggest and/or co-sponsor crypto projects of their own. We have designed the operation of AlchemySmartLab on the basis that we don't know everything and won't think of every new idea ourselves. Without doubt, there are thousands of people out there with fantastic and innovative ideas who lack the necessary resources (maybe both in terms of money and access to networks of web designers, coders and developers etc.) to move those ideas from a dream into a reality. We know from experience in producing this whitepaper (the associated websites, marketing and coding development) how much running an ICO can cost. This cost is prohibitive to many individuals and even small groups. With the successful ICO of AlchemyByte we will have access to a pool of value which can be used to finance ventures suggested by SL#Byte holders on a partnership basis.

Pre-ICO Crowdsale

The Pre-ICO fixed price is set at: 1 AlchemyByte (Symbol ALB) = $5.00 US

During the pre-sale, for each complete block of 100 AlchemyBytes bought, buyers will be issued with BOTH the 100 AlchemyByte Tokens PLUS one SL#Byte Token up to a maximum of 30 SL#Byte Tokens. So, to give a few examples for the sake of clarity:

If someone buys 99 AlchemyBytes they will not receive any SL#Bytes. Why? We have set the price of AlchemyBytes at $5.00 so to obtain a SL#Byte the minimum spend is $500. While we appreciate this may be a lot of money to some people, we have to limit the number of SL#Bytes holders to a reasonable and manageable number without wanting to exclude people with less resources available. For those who cannot afford this level of subscription it may be worth considering grouping together with friends to share a wallet. Of course, even if you are buying less than 100 AlchemyBytes in the pre-sale you still benefitting from a lower entry price.

If someone buys 3000 AlchemyBytes they will receive 30 SL#Bytes.

If someone buys 4000 AlchemyBytes they will still only receive 30 SL#Bytes. Why? It is essential that for the democratisation of the AlchemySmartLab projects that the pre-sale does not result in someone (e.g. some rich person or corporation) having too many SL#Bytes. Although additional countermeasures (see below) are in place to prevent one person or group having the majority of the SL#Bytes (i.e. as they will be tradable on exchanges someone who already has 30 could theoretically buy a lot more) the management committee have decided to encourage maximum representation (yet still within a manageable number) of SL#Byte holders by limiting initial take up to 30.

As part of AlchemySmartLab's "future modelling", the team has conceived of various scenarios in which the SL#Bytes could be used for voting on "constitutional" matters in relation to the community. Currently as it impossible to predict exactly how the AlchemySmartLab and AlchemyByte project might evolve, it would not be desirable that someone or some corporation external to the project founders, workers and partners had more than 50% of the SL#Bytes available. Accordingly, 85,000 SL#Bytes will be created and 43,000 placed directly into a Purpose Trust such that they are not under the control of the Token Issuer and cannot ever be sold; 2000 will be retained by the Token Issuer. Only the Trustees of the Purpose Trust, under the supervision of the Trust Enforcer, will be able to use any voting rights that might become attached to the

SL#Bytes as the project evolves. This prevents the ecosystem being taken over by some person or some entity by taking overall control. The fact that the Master Trust and not the issuer owns the 43,000 undistributed SL#Bytes protects the pre-ICO SL#Byte holders from any dilution risk as they cannot ever be sold and are held in a perpetual trust. 43,000 from the total of 85,000 represents 50.5882% so the Trustees control the majority share of the SL#Bytes for the benefit of the community.

If someone were to buy, for example, 50 AlchemyBytes and then in another transaction buy 50 more, it is essential that they use the same wallet in both cases, otherwise our software will not issue such a buyer with the corresponding SL#Byte. The reason for this is simply that if two wallet addresses are used it will treat the transactions as being from two different persons.

Initial Coin Offering (ICO)

Once the pre-sale is over, the ICO date will be announced. This is for the AlchemyByte Token only. After the pre-sale NO MORE SL#Bytes will be distributed.

The ICO fixed price is not yet set, but will be at least 20% higher than the pre-Sale price.

At the conclusion of the ICO period any unsold AlchemyBytes will be burnt and all numbers quoted herein will be scaled accordingly.

Distribution of total value (€, $ and all other fiat and cryptocurrency) collected.

As per the Organogram above the value raised by the pre-sale and ICO will be split as follows:

80% to the Master Trust (this asset backs the currency)

10% to the AlchemySmartLab (this finances the projects and adds premium value to the tokens)

10% to marketing costs, development costs, distribution, advisers and some to the founders.

As only 10% of the subscribed value is being taken out of the mix, the would-be initial price drop after ICO should be theoretically more than covered by the premium that those who missed the pre-sale and ICO will be willing to pay once word gets around and the media starts reporting on the increasing valuation of the token. We do not expect the post ICO price drop therefore to materialise, rather we expect the opposite. As that valuation is linked to the assets of the Master Trust, if cryptocurrencies continue to go up versus fiat as they have done all year to date (and we expect this trend to continue) then the AlchemyBytes should move to a premium price very quickly.

Maximum number and Allocation of AlchemyBytes.

As the majority of the value of each AlchemyByte is derived from its share of the value of the Master Trust, it could be argued that there is theoretically no maximum number as the market capitalisation of cryptocurrencies in general and in total continues to rise, then more AlchemyBytes could in theory be created. There is however a practical problem with an unlimited number of AlchemyBytes, that being the nature of some of the underlying assets. If the AlchemyByte Master Trust were to invest only in the top cryptocurrencies based on their market capitalisations (i.e. Bitcoin, Ethereum, Ripple, Bitcoin Cash, Litecoin, Dash, NEM, NEO, IOTA, Monero, Ethereum Classic, OmiseGO, etc) then it would lose its attractiveness to many potential

subscribers as they already have all these currencies in their own wallets. In order for AlchemyByte to appeal to the maximum number of subscribers it must have exposure to the smaller coins and tokens – it must also have exposure to the new coins/tokens as they come to ICO.

Obviously, the Investment Advisory Committee ("IAC"), as mentioned above, will allocate a significant percentage of the total to the larger coins as that is AlchemyByte's appeal to those coming into crypto for the first time – we would envisage about two thirds of the total value will be allocated to the top 20 cryptocurrencies - but the appeal of AlchemyByte to the wider audience is its commitment to monitor (and thus invest into when appropriate) the smaller cryptos. On any given day, it is in the smaller coins/tokens that have the biggest percentage gains and this is undoubtedly set to continue. Consider for example Waves and Bitcoin as trading plays: let's suppose that Bitcoin is trading at around $4,500 and Waves around $5. Now if Bitcoin were to increase to $9,000 (we expect this will happen by the way) then that is only a 100% gain (considering interest rates in the "old" financial world are so low you may think the word "only" in front of 100% is somewhat odd – but remember we are talking about cryptocurrencies now) but if Waves increased from $5 to $15 (we also expect this to happen) then that represents a 200% gain. So, you can see that the smaller the coin, the higher the percentage gain for a smaller dollar movement. With this in mind, the real attraction of AlchemyByte is its exposure to the smaller coins/tokens – it is here that maximum gain will be made over time. But here lies the problem: low market volume and poor order matching. The smaller the coin, the less stake the IAC can play with, so to actually benefit from these super percentage gains AlchemyByte's total market cap cannot possibly be in the 100 millions – it would never gain enough exposure to the smaller coins at this level to make a difference to its own price.

So, this practical consideration arises out of the need for both diversification and what we will term "sufficient exposure". The IAC has, through careful modelling and back testing, calculated that the maximum practical issue size of AlchemyByte to gain sufficient benefit from the increases in the smaller coins is around $20 million: the exposure to the smaller altcoins will not have sufficient effect on AlchemyByte's price otherwise. Given the Pre-ICO fixed price is $5.00 this gives us a maximum of 4 million AlchemyBytes. Accordingly, only 4 million AlchemyBytes will be created as a finite amount on Waves: they will not be re-issuable. Obviously, there is also a minimum number of AlchemyBytes that can be issued to make the project viable: the IAC has calculated that the project can proceed with 200,000 AlchemyBytes or $1million.

<u>Distribution of the 4,000,000 AlchemyBytes & 85,000 SL#Bytes.</u>

2% of AlchemyBytes = 80,000 Retained by AlchemyByte Inc.

98% of AlchemyBytes = 3,920,000 Distributed in Pre-ICO & ICO

2.35% of SL#Bytes = 2,000 Retained by AlchemyByte Inc.

47.06% of SL#Bytes = 40,000 Distributed in Pre-ICO

50.59% of SL#Bytes = 43,000 Transferred to Purpose Trust (Permanently)

In the event that not all of 4 million AlchemyBytes are sold then all figures above will be reduced accordingly by the appropriate ratio.

Summary

We hope that you have enjoyed reading this whitepaper; that it is clear and explains the benefits that have been built into the project. To briefly recap by way of a summary, we believe we have designed an offering that provides palpable, measurable and verifiable value in AlchemyByte, linked as it is to the assets of a Master Trust, together with an opportunity to participate in the future activities of the AlchemySmartLab by means of the SL#Bytes which are available Pre-ICO at no additional cost to the AlchemyBytes.

As cryptocurrencies continue to enjoy ever wider acceptance by the general public, increasing adoption in the economy as a payment method and ever greater take up by the traditional financial services and funds industry, we are absolutely convinced that we will see further price rises in the cryptocurrencies. All assets which are limited in number, AlchemyByte being one, should increase in price proportionately to the levels of demand by the world to hold such currencies. AlchemyByte, we believe, offers token holders one of the best routes to benefit from the cryptocurrency phenomenon and to gain a diversified exposure to all of the major, and many of the minor, cryptocurrencies in just one token.

Thanks for reading.

AlchemySmartLab™ Team

[i] Satoshi Nakamoto: Satoshi Nakamoto is the name used by the unknown person or persons who designed bitcoin and created its original reference implementation. As part of the implementation, they also devised the first blockchain database. https://en.wikipedia.org/wiki/Satoshi_Nakamoto

[ii] Cryptowolves: See << "Wolves of Bitcoin" Figured Out a Nice Little Pump-And-Dump Scheme >> http://valleywag.gawker.com/wolves-of-bitcoin-figured-out-a-nice-little-pump-and-1513537598