Safex (Blue Paper)

A peer-to-peer marketplace and fungible digital cash system

A GUIDING DOCUMENT TO SAFEX DEVELOPERS, ADVISORS, AND EARLY ADOPTERS

=======

Daniel Dabek, Ivana Todorovic January 3, 2018 (Revised November 5, 2020)

DISCLAIMER: This Blue Paper and the website at https://safex.org/ (the Website) are intended for general informational purposes only and do not constitute a prospectus, an offer document, an offer of securities, a solicitation for investment, or any offer to sell any product, item or asset (whether digital or otherwise). The information herein may not be exhaustive and does not imply any element of a contractual relationship. There is no assurance as to the accuracy or completeness of such information and no representation, warranty or undertaking is or purported to be provided as to the accuracy or completeness of such information. Where this Blue Paper or the Website includes information that has been obtained from third party sources, the Foundation, the Distributor, their respective affiliates and/or the Safex Development team have not independently verified the accuracy or completion of such information. Further, you acknowledge that circumstances may change and that this Blue Paper or the Website may become outdated as a result; and neither the Foundation nor the Distributor is under any obligation to update or correct this document in connection therewith.

Abstract

A purely peer-to-peer marketplace with an embedded cryptocurrency that is anonymous, has an emission rate based on merit, and is easy to obtain and used by a wide group of people would allow mass adoption of decentralized

cryptocurrency. Safex establishes a network where digital currencies are fairly distributed through Proof of Work mining. The emission rate is such that the currency is desirable to earn through productivity and trade. Every action: transfer of currency and trade of goods and services that take place in the ecosystem is via a series of linked transactions that are recorded at regular intervals of blocks. The chaining of transactions of balances forms a blockchain. Security is brought by technologies that enable privacy which allows all participants to enjoy embedded trust and transparency.

Introduction

While the Safex Blockchain could be a "vanilla" cryptocurrency and blockchain, the further progression of Safex is to establish a decentralized marketplace. Therefore, this document outlines the beta phase of the development cycle. This blue paper outlines the foundation on which the Safex Development team will build upon.

The conversion of Safex Tokens from the Bitcoin Blockchain into the Safex Blockchain will delineate the conclusion of beta, and the start of Safex Cash mining. Future documentation will summarize the innovations that have taken place during the beta development phase and will be published prior to launch. This document is the initial one and there will be more to follow, as development progresses, which will describe in depth each process as it

reaches finalization in code.

Token

Safex Tokens provide a means for people to license themselves with the blockchain network. Any activity by users that intends to be lasting, and attached with a form of digital pseudonym, must be established through usage of Safex Tokens. There are 2,147,483,647 Safex Tokens that will ever exist and they serve a number of important utilities for Safex.

At this moment (January 2018) Safex Tokens exist on the Bitcoin Blockchain, but they will be moved to their own native blockchain during the launch phase of the Safex Blockchain.

About the Safex Tokens that exist currently on the Bitcoin Blockchain. The origins of the Safex project begin with the token being instantiated and traded on the Bitcoin Blockchain. It adheres to the Omni Protocol, and it is identified by the #56 in the series of assets and its name is Safe Exchange Coin. The initialization of the Safex Blockchain also enables the holders of Safe Exchange Coin, found on the Bitcoin Blockchain as #56 in the series of Omni Protocol tokens, to convert their Bitcoin based tokens into Safex Blockchain based Safex Tokens. Only the Safex Tokens that have been redeemed on the Safex Blockchain are eligible for the properties for earning incentives and for establishing accounts.

Migration of Safex from Bitcoin Blockchain. The migration of Safex from the Bitcoin Blockchain into the Safex Blockchain marks the start of the Safex Blockchain. All Safex Tokens that are on the Bitcoin Blockchain will be passed through a one way burn function and credited on the Safex Blockchain and will forever only exist on the newly established Safex Blockchain.

Safex Tokens are used to establish Accounts on the Safex Network. Safex To-

kens are required to establish a profile on the network that establishes a pseudonym which could be used to create brand recognition and also to maintain a consistent identity. This identity would be valuable for establishing reputation and for making it easy to find a specific user on the network for interaction. A further description of Safex Accounts is found in the subsequent section.

Two types of ways to get incentives. The Safex Blockchain pays incentives to two different forms of Safex Tokens encumbrance. In the first, Safex Tokens are used to make an alias (account) on the network. Payment of incentives are still made to those tokens spent in forming the account. In the second place, someone with Safex Tokens can "lock in" their tokens and begin receiving fees from the marketplace. The second is not permanent, the tokens can be unlocked from the blockchain.

Cost of performing an incentive lock in. Performing a lock in transaction will cost 1 Safex Token which is burned but counts towards the incentives in the lock in. Unlocking the Safex Tokens will cost an additional 1 Safex Token.

Safex Accounts earn incentives. Establishing an account with Safex Tokens requires the user to encumber them in such a way that they can never be removed in the future. The network charges a provision for trading on the marketplace and therefore whoever has established an account receives their share of the provisions based on their holdings relative to the Safex Token supply.

Besides establishing an account and encumbering only the minimal amount of Safex Tokens, individuals can also create an incentive transaction, which enables them to receive incentives on their entire holdings. These special transactions can be unencumbered in the future.

Incentives come from marketplace trades. Incentives are established from charg-

ing a 5% marketplace fee, this is a provision on all sales offers of goods and services on the platform. At the conclusion of payment the provision is allocated proportionally to all locked in Safex Tokens.

Dealing with a larger number of incentive distributions. Due to a potentially high volume of incentive distributions, an entire block will be allocated on a regular interval in order to allocate incentives to their respective beneficiaries. The beneficiary will be able to then spend from this block towards other offers in the marketplace or to send to another address.

Cash

The native digital cryptographically-secured utility token of the Safex Marketplace (Safex Cash) is a transferable representation of attributed functions specified in the protocol/code of the Safex Marketplace, which is designed to play a major role in the functioning of the ecosystem on the Safex Marketplace and intended to be used solely as the primary utility token and platform currency on the platform.

Safex Cash is a non-refundable functional utility token which will be used as the medium of exchange between participants on the Safex Marketplace. The goal of introducing Safex Cash is to provide a convenient and secure mode of payment and settlement between participants who interact within the ecosystem on the Safex Marketplace, and it is not, and not intended to be, a medium of exchange accepted by the public (or a section of the public) as payment for goods or services or for the discharge of a debt; nor is it designed or intended to be used by any person as payment for any goods or services whatsoever that are not exclusively provided by the issuer. Safex Cash does not in any way represent any shareholding, participation, right, title, or interest in the Foundation, the Distributor, their respective affiliates, or any other company, enterprise or undertaking, nor will Safex Cash entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. Safex Cash may only be utilised on the Safex Marketplace, and ownership of Safex Cash carries no rights, express or implied, other than the right to use Safex Cash as a means to enable usage of and interaction within the Safex Marketplace.

Safex Cash is necessary to pay all transaction fees to the network, as every action that takes place on the Blockchain network requires the payment of some network fee payable in Safex Cash. As the native platform currency, Safex Cash is also the principal payment method when fulfilling the purchase of products and services between users of the marketplace.

Safex Cash also functions as virtual crypto "fuel" and provides the economic incentives which will be consumed to encourage users to contribute and maintain the ecosystem on the Safex Marketplace, thereby creating a win-win system where every participant is fairly compensated for its efforts. Safex Cash is an integral and indispensable part of the Safex Marketplace, because without Safex Cash, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on the Safex Marketplace. Given that additional Safex Cash will be awarded to a user based only on its actual usage, activity and contribution on the Safex Marketplace, users of the Safex Marketplace and/or holders of Safex Cash which did not actively participate will not receive any Safex Cash incentives.

Safex Cash is obtainable by users who participate in proof of work mining as well as from staking Safex Tokens. Computational resources are required for executing transactions and maintaining the blockchain for the Safex Marketplace, so providers of these services / resources would require payment for the consumption of these resources (i.e. "proof of work mining") to maintain network integrity,

and Safex Cash will be used as the medium of exchange to quantify and pay the costs of the consumed computational resources.

Money Supply of Safex Cash. The main function for Safex Cash is to act as an intermediary instrument between parties, that is, to facilitate the business of the market by acting as a common medium of exchange (Mises, 1953). In order to achieve that goal, it should meet the demand for currency so as to enable all transactions on the marketplace. Taking into consideration that Safex Cash should be generated from the start of the Safex Blockchain, the emission of the money supply must adjust according to demand for money supply. Demand for Safex Cash depends on platform growth - growth of new active users (both buyers and sellers) and the number of transactions. Consequently, the emission curve for Safex Cash is designed to follow the rate of marketplace adoption.

Safex Marketplace is the innovation - it applies new ideas (encryption, cryptocurrency) and new, more effective technology (blockchain) to e commerce. Therefore, the adequate model that represents future growth of the Safex Marketplace is known as "diffusion of innovation". It is a process by which an innovation is communicated internally over time among the members of a social market system (Rogers 1983). The diffusion follows an S-shaped curve which means that the innovation requires a lengthy period from the time it becomes available until mass adoption is achieved. In our case, after the marketplace is released, only a class of innovators are interested in using it (represented with a slow, and deliberate start). As it is communicated in a social system, other groups of consumers begin adopting the marketplace (represented with accelerated growth). In the last phase, growth rate of diffusion decelerates and eventually reaches the saturation level.

The Safex Cash emission curve is going to follow an S shape. There is a limit of 1 billion (1,000,000,000) Safex Cash that will be emit-

ted in the next 20 years (2 minutes per block). Half of the coins will be mined in first 7 years, while the other half will be emitted in the following 13 years.

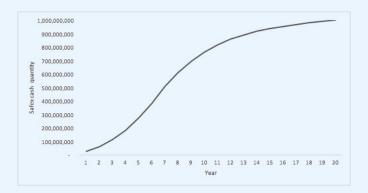


Figure 1: Safex Cash emission curve

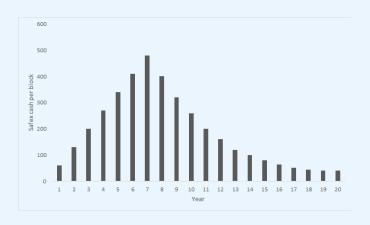


Figure 2: Annual mining reward per block

The purpose of a Safex Cash airdrop. In order to seed the network with activity and be able to cover fees for the initialization of the marketplace, 1 percent of Safex Cash will be airdropped. One half of that amount (0.5% of the money supply or 5 million coins) will be obtainable by the holders of Safex Tokens during the start of the Safex Blockchain. The other 0.5% will be assigned to the Safex Development team.

Airdropped coins have a key role in the marketplace operation in the first months of launch, but they will also highly affect the future growth of the Safex Marketplace platform. An initial condition for using the marketplace

is the existence of a certain amount of currency. Without circulation of the currency, operations wouldn't be possible. So, airdropped Safex Cash are literally enabling usage of the platform.

The best way to put money in circulation is to distribute it to those who want to use it. Consequently, coins will be distributed to Safex Token holders and the Safex Development team. One smaller amount of the team's currency will be used to cover development costs. The main part will be invested in marketing and promotion in order to increase the number of market participants so as to galvanize trading on the platform. Also, Safex Cash will be used to finance future development of the project using the Safex Marketplace mechanisms of service providers. The amount of incentives accrued to holders of Safex Token directly depends on the gross merchandise volume. This creates a strong incentive for Safex holders to promote the marketplace and utilize their Safex Cash from the platform. That is why a significant amount of airdropped Safex Cash will be used for marketing purposes and for the purchase of actual goods and services.

Safex Cash Divisibility. Safex Cash is divisible to 10 decimal places. 1.0000000000

Names of divisible quantities:

0.0001 Safex Cash = 1 Dabek 0.001 Safex Cash = 1 Todor 0.01 Safex Cash = 1 Cortez0.1 Safex Cash = 1 Cabral

Proof of Work Mining. Safex Cash is distributed using an egalitarian proof of work mining algorithm. The algorithm is based on the CryptoNight algorithm (Seigen, 2013). It is unrealistic to think that hardware manufacturers will incorporate more expensive methods to produce application specific machines for mining the coins. Therefore, general purpose computers such as the average home computer and at best graphic card arrays will be

efficient at mining Safex Cash. This means that the ability for ordinary people to participate in the support of the network and acquisition of Safex Cash is more evenly distributed. It is for this reason and the Money Supply Distribution that throughout the entire lifetime of the Safex Marketplace and its Blockchain there will be rewards available to those who are adopting the network.

Emission of new coins follows the marketplace adoption model. For example, in years that are expected to have an exponential growth of users and transactions, money supply growth will also be exponential, and vice versa. This means that when there is higher demand for money, mining rewards will be higher. Total supply of Safex Cash is limited to one billion coins and when it reaches the maximum miners will depend on the transaction fees alone which will be ample with widespread usage of the currency.

Safex Cash are designed to be consumed/utilised, and that is the goal of the Safex Cash distribution. In fact, the project to develop the Safex Marketplace would fail if all Safex Cash holders simply held onto their Safex Cash and did nothing with it. In particular, it is highlighted that Safex Cash: (a) does not have any tangible or physical manifestation, and does not have any intrinsic value (nor does any person make any representation or give any commitment as to its value); (b) is non-refundable and cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Foundation, the Distributor or any of their respective affiliates; (c) does not represent or confer on the token holder any right of any form with respect to the Foundation, the Distributor (or any of their respective affiliates), or its revenues or assets, including without limitation any right to receive future dividends, revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property or licence rights), right to receive ac-

counts, financial statements or other financial data, the right to requisition or participate in shareholder meetings, the right to nominate a director, or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to the Safex Marketplace, the Foundation, the Distributor and/or their service providers; (d) is not intended to represent any rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss; (e) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument, unit in a collective investment scheme or any other kind of financial instrument or investment; (f) is not a loan to the Foundation, the Distributor or any of their respective affiliates, is not intended to represent a debt owed by the Foundation, the Distributor or any of their respective affiliates, and there is no expectation of profit; and (g) does not provide the token holder with any ownership or other interest in the Foundation, the Distributor or any of their respective affiliates. Notwithstanding the Safex Cash distribution, users have no economic or legal right over or beneficial interest in the assets of the Foundation, the Distributor, or any of their affiliates after the token distribution. To the extent a secondary market or exchange for trading Safex Cash does develop, it would be run and operated wholly independently of the Foundation, the Distributor, the distribution of Safex Cash and the Safex Marketplace. Neither the Foundation nor the Distributor will create such secondary markets nor will either entity act as an exchange for Safex Cash.

Table 1: Safex cash mining schedule.

	D1 1	3.50	- TD + 1
Year	Block	Mining	Total
	height	reward	supply
airdrop	0	/	10,000,000
1	262,500	60	25,750,000
2	525,000	130	59,875,000
3	787,500	200	112,375,000
4	1,050,000	270	183,250,000
5	1,312,500	340	272,500,000
6	1,575,000	410	380,125,000
7	1,837,500	480	506,125,000
8	2,100,000	400	611,125,000
9	2,362,500	320	695,125,000
10	2,625,000	260	763,375,000
11	2,887,500	200	815,875,000
12	3,150,000	160	857,875,000
13	3,412,500	120	889,375,000
14	3,675,000	100	915,625,000
15	3,937,500	80	936,625,000
16	4,200,000	64	953,425,000
17	4,462,500	52	967,075,000
18	4,725,000	44	978,625,000
19	4,987,500	40	989,125,000
20	5,259,375	40	1,000,000,000

Marketplace

The main value proposition of the Safex Blockchain is its embedded marketplace. The world has found that cryptocurrencies are highly effective for making international payments and purchases (Nakamoto, 2008). However, there are many shortcomings due to offsite clearing of the payments. Safex Blockchain addresses this by providing a fully functional marketplace mechanism where people are capable of offering their goods or services directly on the Blockchain and all payment clearing and processing takes place atomically via blockchain transactions.

There are a number of advantages to such a system:

1. No longer do people need to host complex services to provide purchasing

- mechanisms for cryptocurrencies.
- 2. The advancement permits fewer risks in service breach that leads to theft and compromised payment systems involving cryptocurrencies. Safex Marketplace eliminates the web server altogether because all payment and clearing is carried out cryptographically over a decentralized network.
- 3. Discovery of trading partners becomes more efficient so that you can find products and services readily.

The Safex Marketplace is a collection of markets and sale listings. People can interact with the marketplace term agreements. Within a term agreement are the parameters by which a transaction will be fulfilled. Among the attributes include: arbitration, escrow, digital receipts, timestamp proofs, cash on delivery. The possibilities of expanded data structures of a CryptoNote Transaction allows the network to implement various advancements in utility (Werner, 2012).

Void Market (when someone has no category marketplace listing). The Safex Marketplace permits any person to pay a listing fee which enables a digital contract to be embedded and executed by the blockchain network. These market listings bare no title, and are free formed with arbitrary parameters.

Title Market (A curated and centrally managed marketplace of vendors and participants). A title market is a listing that is backed by a staked participant. In order to post a listing, such a participant would need to be verified by the Title operator or be the controller of the Title. These listings are enabled to provide an identity; for example the title market for apples could be: apple, and within it are all verified sellers listings of apples, their prices, and terms of redemption.

The curator would then enable settings to provide the proper means for the vendors to fulfill their objectives of trading in their respective markets. The curator can enable or disable

anyone from participating in this particular title, for instance, should an apple vendor begin to sell electronics in the market for apples.

Escrow and Arbitration. Curators can also set arbitration rules, and the forms of escrow that are permitted on their market segment. This means that when a merchant decides to offer their product on a specific Title Market, they are enabling all of the rules set forward by the person who established that Title.

Costs of establishing a Title Market. The cost of establishing a Title Market and becoming its curator requires a Basic Account to pay and burn 200 Safex Tokens at the time of establishment. The curator of the market can set a fee for utilizing their segment and they will earn the fee from all sellers within their marketplace.

Encrypted Marketplaces. Any user has the ability to fully encrypted their market, and in order to participate in that market, the user must acquire the decryption key.

Finding and Interacting with hosted markets. The transaction hash, is the "web address" in the blockchain where a Title marketplace listing or void market listing can be parsed from.

While the blockchain marketplace cannot be censored in any way, the way people experience the marketplace can be regulated (voluntarily). Thus, a layer above the blockchain could act as a registry of these transaction hashes that represent the destination to a specific product or service within the Safex Marketplace. These addresses can then be filtered and curated on a website or an application.

Accounts

Users of the marketplace can establish a profile via a Safex Account. A Safex Account is able to display its identity and be stored in the blockchain. A basic account consists of a Name, Avatar, Website URL, Unique ID, and an array of PGP Keys. The most important aspect is the fact that a basic account could receive and give reputation.

Effectively, an Account is capable of applying its sell orders to a Title Market or to the Void and represent its wares in that marketplace if approved by the Title Market Curator. A Basic account may not create a Title Market. This type of account can already begin to acquire reputation and give feedback on other transactions.

The cost of a basic account is a burn of 2 Safex Tokens. These tokens are staked and would earn incentives for the account.

Safex Network fees are paid in Safex Cash. Each action that involves manipulating data related to the marketplace takes the form of a transaction. These transactions bear a network fee that must be paid in Safex Cash.

Each trade enables a feedback event for building reputation. When someone concludes a trade with another party, so long as the trade took place with an account, each person may grant feedback to the other party. Both buyer and seller can award a reputation score between 1-5 as well as a text comment. Part of the provision from a trade is allocated so that people need not worry about additional payments for the data costs when leaving feedback.

Full confidentiality is established by encrypting the marketplace listing. It is also possible that users will want to privately share their marketplace listings. In order to facilitate this, users can encrypt their marketplace listing. Only those characteristics which are required for the Blockchain to process escrow remain visible. The conditions and descriptions of the product or service remain encrypted via PGP.

Treasury

Safex needs a way to finance future development and maintenance. Since safex is a completely decentralized community and software that has been demanded and built by a worldwide collective effort, it also will need to have some form to ensure the maintenance of its future. Other decentralized technology platforms such as Dash (Balazs, 2017) have found great success in proliferating their message and development contributions by offering bounties.

Safex will need to permit for such a provision so that innovation remains on a constant trajectory, and for there to be an unbiased reserve of finance to permit incentives to be made which the community could call on to demand improvements and the development of new features.

Treasury funding comes from trades on the marketplace. A provision of 0.02% on all transactions of Safex Cash will be charged from all sales events. This amount will be sent to a repository maintained by the Safex software.

Community appointed Chief Architect.

The community could appoint a chief architect who could allocate 50% of the finances based on a monthly balance average without approval from the community. The Chief Architect will submit a key that the blockchain software will recognize for spending funds. All expenses must be a proposal and should be put towards critical infrastructure bounties to developers, and other necessary expenses for the Safex software.

Nominating a chief architect. Nomination of a chief architect could take place once every 3 months. Also a majority of participating voters will determine the outcome of the vote.

Proposal for spending from the treasury for community initiatives. Anyone with

an account could make a proposal and anyone with Safex Tokens before the proposal was formed could cast a vote whether to approve or decline an expense. Majority of participants will determine the outcome of the proposal.

Blockchain

The Safex Blockchain focuses on addressing critical issues related to community adoption and sustainability. This means that people who find themselves using the currency mined on this blockchain must be able to maintain their sovereignty by protecting their balances in such a way that adversaries cannot analyze and make targets of the users. Therefore, the currency must employ anonymizing features to protect the people who use it.

Secondly, users should be able to exercise activities over the blockchain, in this case exposing a marketplace where people can buy and sell the things that they want and need from other people without leaving the confines of the Safex peer to peer network. In addition, the sustainability aspect depends on the blockchain not being constrained and prone to spam attacks due to full blocks as is the case with Bitcoin.

Dynamic block size deals with full blocks. A common flaw and the subject of intense controversy is the capacity of blocks in many blockchain networks, particularly in Bitcoin. The Safex Blockchain employs a dynamically adjusting block size limitation so that as block utilization increases so does the limitation in order to accommodate an ever expanding user base.

Encrypted communication via the blockchain. Anyone can store a PGP key in the Safex Blockchain for a fee. Therefore, messages can be encrypted using the identifier of the PGP key and stored in the blockchain for retrieval in the future by the recipient.

Ring Confidential Transactions ensure

fungible currency. A critical element of cryptocurrency is that it must be mutually interchangeable. One unit of Safex Cash must be in the same perception as another Safex Cash unit. This defines the "Cash" term of the Safex Currency. Therefore, the Safex Blockchain employs the use of Ring Confidential Transactions in order to preserve the fungibility of the currency so that each Safex Cash is viewed in the same way. This also means that when spending to a purchase agreement or sending a transaction the recipient has no knowledge of the purchasers other balances and has no knowledge of the purchasers spending habits (Noether, 2015).

RingCT for securing private wealth. Utilizing Ring Confidential Transactions means that only the sender and the receiver know which transaction is correct from the set of inputs used to form a transaction. On the one hand the sender who formed the transaction has information about the real transaction and on the other hand the recipient is able to sign off on a future transaction with their private key. These features are essential to maintain privacy that one should expect with their finances when utilizing a fully transparent and decentralized blockchain.

RISKS

You acknowledge and agree that there are numerous risks associated with acquiring Safex Cash, holding Safex Cash, and using Safex Cash for participation in the Safex Market-place. In the worst scenario, this could lead to the loss of all or part of Safex Cash held. IF YOU DECIDE TO ACQUIRE SAFEX CASH, YOU EXPRESSLY ACKNOWLEDGE, ACCEPT AND ASSUME THE FOLLOWING RISKS:

 Uncertain Regulations and Enforcement Actions: The regulatory status of Safex Cash and distributed ledger technology is unclear or unsettled in many jurisdictions. The regulation of virtual currencies has become a primary target of regulation in all major countries in the world. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including Safex Cash and/or the Safex Marketplace. Regulatory actions could negatively impact Safex Cash and/or the Safex Marketplace in various ways. The Foundation, the Distributor (or their respective affiliates) may cease operations in a jurisdiction in the event that regulatory actions. or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. After consulting with a wide range of legal advisors and continuous analysis of the development and legal structure of virtual currencies, a cautious approach will be applied towards the distribution of Safex Cash. Therefore, for the token distribution, the distribution strategy may be constantly adjusted in order to avoid relevant legal risks as much as possible. For the token distribution, the Foundation and the Distributor are working with the specialist blockchain department at Bayfront Law LLC.

2. Inadequate disclosure of information: As at the date hereof, the Safex Marketplace is still under development and its design concepts, consensus mechanisms, algorithms, codes, and other technical details and parameters may be constantly and frequently updated and changed. Although this Blue Paper contains the most current information relating to the Safex Marketplace, it is not absolutely complete and may still be adjusted and updated by the Safex Development team

- from time to time. The Safex Development team has no ability and obligation to keep holders of Safex Cash informed of every detail (including development progress and expected milestones) regarding the project to develop the Safex Marketplace, hence insufficient information disclosure is inevitable and reasonable.
- 3. Competitors: Various types of decentralised applications and networks are emerging at a rapid rate, and the industry is increasingly competitive. It is possible that alternative networks could be established that utilise the same or similar code and protocol underlying Safex Cash and/or the Safex Marketplace and attempt to re-create similar facilities. The Safex Marketplace may be required to compete with these alternative networks, which could negatively impact Safex Cash and/or the Safex Marketplace.
- 4. Loss of Talent: The development of the Safex Marketplace greatly depends on the continued co-operation of the existing technical team and expert consultants, who are highly knowledgeable and experienced in their respective sectors. The loss of any member may adversely affect the Safex Marketplace or its future development. Further, stability and cohesion within the team is critical to the overall development of the Safex Marketplace. There is the possibility that conflict within the team and/or departure of core personnel may occur, resulting in negative influence on the project in the future.
- 5. Failure to develop: There is the risk that the development of the Safex Marketplace will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any

digital asset, virtual currency or Safex Cash, unforeseen technical difficulties, and shortage of development funds for activities.

- 6. Security weaknesses: Hackers or other malicious groups or organisations may attempt to interfere with Safex Cash and/or the Safex Marketplace in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Furthermore, there is a risk that a third party or a member of the Foundation, the Distributor or their respective affiliates may intentionally or unintentionally introduce weaknesses into the core infrastructure of Safex Cash and/or the Safex Marketplace, which could negatively affect Safex Cash and/or the Safex Marketplace. Further, the future of cryptography and security innovations are highly unpredictable and advances in cryptography, or technical advances (including without limitation development of quantum computing), could present unknown risks to Safex Cash and/or the Safex Marketplace by rendering ineffective the cryptographic consensus mechanism that underpins that blockchain protocol.
- 7. Other risks: In addition, the potential risks briefly mentioned above are not exhaustive and there are other risks (as more particularly set out in the Terms and Conditions) associated with your acquisition of, holding and use of Safex Cash, including those that the Foundation or the Distributor cannot anticipate. Such risks may further materialise as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Foundation, the Distributor, their respective affiliates, and the Safex Development team, as well as understand the overall framework, mission and vision for

the Safex Marketplace prior to acquiring Safex Cash.

Conclusion

We have outlined a path that will solve the most important issues that face cryptocurrencies today. Those of fair currency distribution, a rigorous incentive model for promotion of the ecosystem to more participants, the means to remain secure when spending funds within the digital realm, and finally a mechanism through which people can engage in meaningful trade among each other.

From here the Safex Development team is able to produce a minimum viable product that can go to the market and serve the people to conduct crypto commerce. The future will be full of innovations beyond the initial implementation and only because we took the first steps will those enhancements and optimizations be possible. The early adopters are the first to the market and will be veterans of utilizing our novel platform and be leaders in the new economic model that cryptocurrencies have presented to us. We have found the best way to distribute money to support real utilization, while maintaining the incentive for people to participate fairly along the way. This project intends to stand the test of time and should be considered a global infrastructure that is being cultivated for the long term.

References

Balazs, K. (2017.) Governance and Budget System, https://dashpay.atlassian.net

Mises L. (1953.) The Theory of Money and Credit, Yale University Press, New Haven, CT, USA

Nakamoto, S. (2008.) Bitcoin: A Peer-to-Peer Electronic Cash System, bitcoin.org

Noether, S. (2015.) Ring Confidential Transactions, https://eprint.iacr.org

Rogers E. (1983.) Diffusion of innovations (3rd ed.). New York: Free Press of Glencoe,

USA Seigen et al. (2013.) $CryptoNight\ Hash\ Function,$ cryptonote.org

Werner et al. (2012.) $CryptoNote\ Transaction$ $Extra\ Field,\ cryptonote.org$