Abstract

This document describes AlfaToken – a cryptofinance marketplace powered by smart contracts. We are building an automated, efficient, and cryptographically secured marketplace for the crypto economy that will allow to issue, collect, borrow, lend, profit from, earn interest on, and save the cryptocurrency. The marketplace includes 3 parts (Crowdfunding, Lending, and Savings) that are consisting from 5 main services.

The Crowdfunding part represents a service to create crowdsale smart contracts. Our Secured Automated Smart Contracts Technology allows users to issue own tokens and create smart contracts for Pre ICO or ICO without knowledge of coding by simply filling out a form on our website. This compelling solution solves the problem many entrepreneurs face when they want to raise investments for their startup but do not have a blockchain developer in the team or not willing to wait for a manual smart contract development that can take around a week without regard of testing and vulnerabilities searching. We believe that such a solution representing the first entry point in the crypto economy community should be available for everyone.

The Lending part constitutes from 3 services to get loans secured by 1) tokens, 2) cryptocurrency, and 3) tokenized real assets.

The service to get a loan secured by tokens - AlfaLoan™ - allows businesses to get a cryptocurrency loan from a pool of lenders on the marketplace by providing their tokens for financing specific Pre ICO, ICO, and Post ICO related expenses such as a website and smart contracts development, listing on ICO tracking websites, launching a PR campaign, running a roadshow to reach investors, and listing on crypto exchanges. This comprehensive AlfaLoan™ solution helps companies with no extra budgets to boost their business by listing on top crypto exchanges for example after a successful ICO that can be complicated as exchanges listing fees may go till two hundred thousand U.S. dollars and even above. From the other hand the AlfaLoan™ solution may be very attractive for investors seeking high interest rates on their cryptocurrency assets.

The service to get a loan secured by a cryptocurrency enables a short selling on any crypto exchange. This AlfaMargin™ service allows traders to profit from altcoins price drops by holding their deposits in cryptocurrency. The needed altcoins will be provided by the AlfaToken marketplace instantly and they will be sent directly to a trader wallet on any crypto exchange. With AlfaMargin™ service traders will have a reliable and convenient short selling provider and will be able to open short positions on any their favorite exchange gaining from altcoins price drops. The further development of AlfaMargin™ service envisages the direct integration with crypto exchanges via an Application Programming Interface.

The service to get a loan secured by a tokenized real asset is designed to provide mortgages on blockchain technology - AlfaGages™. With this service everyone will be able to get a p2p loan

in cryptocurrency secured by real estate to purchase a house or an apartment. AlfaGages™ will remove cost and friction from the process, create transaction records that are infallible and incorruptible, and facilitate near-instantaneous settlement.

AlfaToken provides new tools for managing risks - unlike traditional forms of collateral, blockchain assets are divisible, fungible, and liquid – these advantages can be fully realized by AlfaToken's Value at Risk Model.

The Savings part consists from a service to earn an interest by making a savings deposit - AlfaDeposit™ - on the AlfaToken cryptofinance marketplace. Cryptocurrency holders will be able to put their unused funds and gain an interest. AlfaToken will use these funds to finance AlfaMargin™ and AlfaGages™ services.

AlfaToken cryptofinance marketplace will be specifically designed for blockchain assets and will be operating as a layer protocol on top any public or permissioned blockchain allowing underlying asset to be used for access to the marketplace services.

Disclaimer

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW AND EXCEPT AS OTHERWISE SPECIFIED IN A WRITING BY ALFATOKEN: (i) THE TOKENS ARE SOLD ON AN "AS IS" AND "AS AVAILABLE" BASIS WITHOUT WARRANTIES OF ANY KIND, AND ALFATOKEN EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES AS TO THE TOKENS, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT; (ii) ALFATOKEN DOES NOT REPRESENT OR WARRANT THAT THE TOKENS ARE RELIABLE, CURRENT OR ERROR-FREE, MEET YOUR REQUIREMENTS, OR THAT DEFECTS IN THE TOKENS WILL BE CORRECTED; AND (iii) ALFATOKEN CANNOT AND DOES NOT REPRESENT OR WARRANT THAT THE TOKENS OR THE DELIVERY MECHANISM FOR TOKENS ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS.

Some jurisdictions do not allow the exclusion of certain warranties or disclaimer of implied terms in contracts with consumers, so some or all of the exclusions of warranties and disclaimers in this Section may not apply to you.

Table of Contents

Introduction

A smart contract is a computer protocol intended to facilitate, verify, or enforce the negotiation or performance of a contract. Smart contracts allow to perform credible transactions without third parties. These transactions are trackable and irreversible[1]. Smart contracts were first proposed by Nick Szabo in 1994[2].

Proponents of smart contracts claim that many kinds of contractual clauses may be made partially or fully self-executing, self-enforcing, or both. The aim with smart contracts is to provide security that is superior to traditional contract law and to reduce other transaction costs associated with contracting.

The phrase "smart contracts" was coined by Nick Szabo in 1996, and reworked over several years. Szabo's first publication, "Smart Contracts: Building Blocks for Digital Free Markets" was published in Extropy[3] and then later reworked as "Formalizing and Securing Relationships on Public Networks[4]." These documents described how it would be possible to establish contract law and related business practices through the design of electronic commerce protocols, between strangers on the Internet. In 1996 Szabo described smart contracts as follows:

New institutions, and new ways to formalize the relationships that make up these institutions, are now made possible by the digital revolution. I call these new contracts "smart", because they are far more functional than their inanimate paper-based ancestors. No use of artificial intelligence is implied. A smart contract is a set of promises, specified in digital form, including protocols within which the parties perform on these promises[2].

Szabo, inspired by researchers like David Chaum, also had a broader expectation that specification through clear logic, and verification or enforcement through cryptographic protocols and other digital security mechanisms, might constitute a sharp improvement over traditional contract law, even for some traditional kinds of contractual clauses (such as automobile security interests that provide for repossession) that could be brought under the dominion of computer protocols[4].

With the present implementations, based on blockchains[5], "smart contract" is mostly used more specifically in the sense of general purpose computation that takes place on a blockchain or distributed ledger. In this interpretation, used by AlfaToken, a smart contract is not necessarily related to the classical concept of a contract, but can be any kind of computer program. With this new technology AlfaToken intends to automate finance services by creating a cryptofinance marketplace that is described in the following sections.

1. Operations Implementation

There are a number of critical ongoing functions that will be performed to ensure that AlfaToken is a viable and vibrant marketplace.

1.1 Liquidity

Establishing an initial critical mass of supply and demand for AlfaToken is essential. This ensures that sufficient liquidity exists such that both borrowers and lenders are consistently able to find a match for their needs, and enables the subsequent development of network

effects where more borrowers attract more lenders and vice versa. To reach this critical mass, there will be a strong ongoing focus on attracting new borrowers and lenders. This will include global community engagement, targeted business development and institutional sales in Asia, Europe, and the Americas, as well as global multi-channel marketing. Additionally, there will be a partnership development program to identify and establish commercial partnerships with other ecosystem participants.

1.2 Compliance

The process of enabling new clients to access the services provided by AlfaToken has inherent challenges, needing to deliver both a positive customer experience and full compliance with relevant regulatory requirements. This on-boarding workflow will involve automated tools connecting internal and external functions.

1.3 Regulations

While the regulatory environment and attitude towards digital assets is still evolving, it is our intention to work with appropriate authorities towards achieving regulatory approval for AlfaToken at the earliest opportunity. We intend to:

• conduct our business with honesty and integrity;
• pay due regard to the interests and needs of each and all our customers and must communicate with its customers in a way which is fair, clear and not misleading;
• maintain adequate financial and non-financial resources;
• manage and control our business effectively, and conduct our business with due skill, care and diligence; including having proper regard to risks to our business and customers
• have effective arrangements in place for the protection of client assets and money when it is responsible for them;
• have effective corporate governance arrangements;
• ensure that all systems and security access protocols are maintained to appropriate high standards;
• have systems in place to prevent, detect and disclose financial crime risks such as anti-money laundering and countering terrorist financing (AML/CTF);
• be resilient and develop contingency plans for the orderly and solvent wind down of our business.

1.4 Collaterals Approach

The level of initial collateral is determined using a Value at Risk model. VaR provides a measurement of the maximum change in value of an asset in a given time period with a specified probability based on historical data.

Assuming that returns and volatility follow a normal distribution we are using the Variance-Covariance method to compute the optimal collateral rate per contract:

$$VaR = p_0 - (p_0 (\alpha (1 - CL) + 1))$$

where:

p_0 = price of the contract at the initial;
α = inverse of cumulative distribution function of a normal distribution with mean $\overline{x}$ and volatility s;
CL = confidence level.

Confidence levels will be chosen to set initial collateral and upper and lower bounds for collateral levels. The initial level of collateralization will be based on two standard deviations using the following formula:

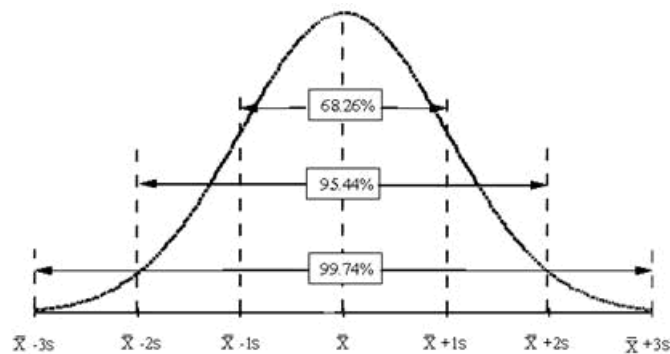$$s = \sqrt{\frac{\sum_{i=1}^{N}(x_i - \overline{x})^2}{N-1}}$$

where:

$\{x_1, x_2, \ldots, x_N\}$ - prices;
$\overline{x}$ - the mean value of prices;
N – number of prices in the sample.

An example of normal curve of standard deviation is presented on the following diagram:

The highest point on the curve is the average. The distribution is symmetrical about the average. Most of the area under the curve (99.7%) lies between -3s and +3s of the average. In addition, about 95.44% of the curve is between -2s and +2s of the average, while 68.26% of the curve is between -1s and +1s of the average.

1.5 Customer Support

While AlfaToken is designed to be a marketplace where users are able to autonomously initiate finance agreements, the importance of providing an outstanding customer experience warrants a high level of dedicated support. To ensure this support requirement is met, a multi-

tiered support model will be established to deal with customer and marketplace operational issues.

2. Technical Architecture

2.1 Core Principles

The AlfaToken architecture is guided by four core principles. These principles are ranked, such that when making a design decision related to a particular principle, that decision should not compromise higher ranked principles. The principles are as follows:

The first principle - Security - the architecture must ensure that users and their assets are protected from intended or inadvertent harm.

The second principle - Privacy - the architecture must ensure that users' personal information is protected.

The third principle - Transparency - the architecture must ensure that all interactions and transactions are visible.

The fourth principle - Scalability - the architecture must ensure that expectations of users for performance and reliability are met.

2.2 Hybrid Areas

The AlfaToken architecture is a component based architecture, where functional components are deployed across a hybrid of centralized and decentralized areas:

1) Decentralized area that includes:

• Distributed Ethereum ledger executing AlfaToken smart contracts;
• Additional distributed ledgers holding records of loan collateral and principal;
• Authenticated and publicly verifiable record of executed transactions.

2) Centralized zone, a secure and scalable cloud based infrastructure that includes:

• Publically exposed REST API endpoints that provide access to marketplace services;
• Internal micro services that implement selected marketplace business logic;
• Storage of private internal data;
• Gateways to access external services including KYC providers, pricing data, and to stream live data to AlfaToken tools;
• Secure Guard Extensions (SGX) based oracles that monitor activity and information from external data-sources and distributed ledgers.

2.3 Functional Components

Functional components of the AlfaToken architecture will provide the following services:

• Crowdsale smart contracts creating;
• Lending secured by tokens (AlfaLoans™);

- Lending secured by cryptocurrency that enables short selling (AlfaMargin™);
- Lending secured by tokenized real assets (AlfaGages™);
- Savings deposits in cryptocurrency (AlfaDeposits™).

3. Services Description

3.1 Crowdsale smart contracts

3.1.1 Summary

A service that allows to issue own tokens and create a smart contract for Pre ICO or ICO without coding skills.

3.1.2 Definition

Crowdsale smart contracts are used in a modern way of funds rising for businesses – in initial coin offerings (token sales). Smart contracts allow to automate the distribution of project tokens to investors.

3.1.3 Current Market Proposition and Problems

Thanks to a blockchain technology entrepreneurs have got a possibility to easily raise funds from investors all over the world. Basically having an outstanding idea it is currently enough to create a website, describe the project in a White Paper, issue own tokens and create a smart contract for Pre ICO. The last two points can be performed only by a blockchain developer. If there is no such a developer in the team this might be a challenge. There are very few experienced blockchain developers on the market and they cost expensive. Few projects are currently developing a service to automate the development of smart contracts: Etherparty, BlockCat, Agrello, but they do not have still a working product.

3.1.4 Solution

AlfaToken is also developing a service to automate the development of crowdsale smart contracts. To issue tokens it will be enough to fill out a form on our website with the following information:

- Token Name;
- Token Symbol;
- Total Tokens Number;
- Token Decimals;
- Re-issuance;
- Wallet Address.

The source code to create a new token is provided in Appendix A.

To create a smart contract for Pre ICO or ICO the following information will be required:

- Start Date;
- End Date;
- Number of Tokens for realization during campaign;

• Price for 1 token;
• Minimum possible purchase;
• When tokens should be allocated to investors;
• Minimum amount for considering the campaign as successful, if any;
• Should funds be returned to investors in case of unsuccessful campaign;
• Bonus system, if any;
• Escrow conditions, if any;
• Wallet Address to collect investments.

3.1.5 Market Size

The amount of ICOs is growing exponentially. 190 ICOs were launched in January 2018. All these projects are potential customers of the AlfaToken Crowdfunding solution.

3.1.6 Business Model

There will be a flat fee of $499 paid in ALFA tokens + $1,900 paid in project tokens at a pre-sale price.

3.2 Lending Secured by Tokens (AlfaLoans™)

3.2.1 Summary

Get a loan in cryptocurrency secured by project tokens for specific Pre ICO, ICO and post ICO related expenses (AlfaLoans™).

3.2.2 Definition

Token is a digital asset that is encrypted using cryptography. In our context tokens are project altcoins that are not traded on any crypto exchanges yet. Tokens are issued on top on one of blockchain networks (e.g. Ethereum or Bitcoin).

3.2.3 Current Market Proposition and Problems

The modern way to raise funds for a startup via initial coin offerings (token sales) is assuming the tokens issuance in order to exchange them into investments. In order to make the initial coin offerings (ICO) successful it is necessary to have a good idea, build a team of experts, develop an MVP or a product, launch a PR campaign, make an investors outreach and many other activities. Difficulties may occur if a project didn't succeed to get initial investments before a Pre ICO, during the Pre ICO campaign, or don't have enough funds after a successful ICO for extra costs such as listing of tokens on crypto exchanges. Listing on top exchanges can bring a higher demand on project tokens and positively influence the project capitalization and reputation. The problem is that top exchanges are currently requiring a payment around $200,000 to list tokens. Not every project can afford such a fee even if the ICO passed successfully.

In this situation projects founders can take decision to sell some amount of their tokens on a regular crypto exchange or refuse from a listing on top exchanges. AlfaToken would like to propose another way – a possibility to get a loan secured by project tokens.

3.2.4 Solution

AlfaToken will provide a marketplace for projects and investors interested to provide loans in cryptocurrency secured by tokens for specific purposes. The process of borrowing will be as follows:

1) The project representative applies for a loan (AlfaLoan™) on the AlfaToken website indicating a specific purpose of expenses. The list of possible use of funds supposed to be as follows:

• Website development;
• Smart contract development;
• Listing on ICO tracking websites;
• PR campaign;
• Roadshow;
• Listing on crypto exchanges.

2) Smart contract is created automatically based on application.
3) Lenders indicate the amount that they are ready to provide and an interest rate (based on the AlfaToken marketplace suggestion).
4) AlfaToken calculates and indicates the needed amount of collateral for a borrower.
5) The project representative sends the required amount of collateral to the smart contract address.
6) Lenders send a cryptocurrency to the same smart contract address.
7) Smart contract automatically transfer funds to a project representative wallet.
8) Project returns a loan in the following proportion: 50% in the cryptocurrency, 50% in project tokens.

3.2.5 Market Size

The amount of ICOs is growing exponentially. 190 ICOs were launched in January 2018. In the same time the percent of successful ICOs dropped to 23% in November 2017[6]. In order to have a successful ICO it is required currently to have a budget from $500-750K. Taking this info into the consideration we can assume that the potential demand on loans secured by tokens is $73M monthly.

3.2.6 Business Model

A fee for creating a smart contract to apply for an AlfaLoan™ will cost $0.99 in ALFA tokens. AlfaToken will take also a percent from the borrower on a daily basis equal to 0.09% from the collateral in project tokens. If a borrower pays interest in ALFA tokens a discount will be provided.

3.3 Lending secured by cryptocurrency that enables short selling (AlfaMargin™)

3.3.1 Summary

Profit from a price drop of altcoins borrowing them from AlfaToken (AlfaMargin™) and making trades on any your favorite crypto exchange.

3.3.2 Definition

Short selling is the sale of a security that is not owned by the seller or that the seller has borrowed. Short selling is motivated by the belief that a security's price will decline, enabling it to be bought back at a lower price to make a profit. Short selling may be prompted by speculation, or by the desire to hedge the downside risk of a long position in the same security or a related one.

3.3.3 Current Market Proposition and Problems

Traders currently have very few options to profit from a price drop of tokens on the market. Unlike in traditional finances there is no any special financial organization other than crypto exchanges that provides a short selling service. From around 150 major exchanges only 9 are providing such a service. The total volume of trading on these nine exchanges is only 12.7% of total trading volume on all exchanges ($22,000M). It means that traders prefers for different reasons to make 87.3% of trades on different exchanges without having a possibility to short trade on them. Problems with current short selling providers are as follows:

1) They are not available in all countries (Gdax, BitFlyer);
2) Very limited amount of cryptocurrency pairs available for short trading (Kraken, CEX.IO, BitMarket);
3) They are not available for small traders due to initial deposit requirements (Bitfinex).

Short Selling Provider	Trading Volume, $	Cons
Bitfinex	1,106M	Unavailable for small traders – an initial deposit equal to $10,000 is required
Gdax (Coinbase)	506M	Unavailable in 220 countries
Kraken	337M	Only 6 cryptocurrency pairs are available
BitFlyer	253M	Unavailable everywhere excepting Japan, some US states, and EU countries
Poloniex	191M	Only BTC markets are unavailable
Quoinexchange	123M	Instant borrowing may be difficult as a margin trading is provided by traders and not by the exchange
Coinone	104M	A Korean exchange partially translated into English
CEX.IO	31M	Only 2 cryptocurrency pairs are available (ETH/BTC, BCH/BTC)
BitMarket	2M	Margin available only in a Polish national currency (PLN)
Total	**2,653M**	

3.3.4 Solution

AlfaToken will allow traders to profit from a price drop of altcoins on any crypto exchange by their choice. The process of borrowing will be as follows:

1) Trader applies on the AlfaToken website for an altcoin that he intends to short sell.
2) Smart contract for the application is created automatically indicating a collateral amount to be provided and a current borrowing rate.
3) Trader sends the required amount of collateral to the smart contract address.
4) AlfaToken sends the needed altcoin directly to a trader's deposit address on any crypto exchange.
5) Trader sells the altcoin on the exchange, and waits until the price drops to buy it again on a lower price in order to return to AlfaToken.
6) Trader returns the altcoin to the smart contract address and gets his collateral back automatically.

AlfaToken will provide altcoins to traders from any country without limitations after a simple registration. The interface will be translated into major languages.

3.3.5 Market Size

The total trading volume on all crypto exchanges is currently equal to $22B daily. Depending on a market sentiment the percent of short positions on a market may theoretically be equal to almost 100%.

3.3.6 Business Model

A fee for creating a smart contract to apply for an altcoin loan will be $0.99 in ALFA tokens. AlfaToken will take also a percent for the borrowed altcoin on an hourly basis from a trader deposit. A percent will depend on an altcoin and a market situation and in average will be equal to 0.01%.

3.4 Lending secured by tokenized real assets (AlfaGages™)

3.4.1 Summary

The service that allows to purchase a real estate by getting a p2p mortgage in cryptocurrency (AlfaGage™)

3.4.2 Definition

Peer-to-peer (p2p) mortgages in cryptocurrency (AlfaGages™) – is a debt instrument, secured by the collateral of specified real estate property, that the borrower is obliged to pay back with a predetermined set of payments. Peer-to-peer method of debt financing removes the middleman from the process enabling individuals to borrow and lend money without the use of an official financial institution as an intermediary. P2P mortgages can be used by individuals and businesses to make large real estate purchases without paying the entire value of the purchase up front. Over a period of many years, the borrower repays the loan, plus interest, until he/she eventually owns the property free and clear.

3.4.3 Current Market Proposition and Problems

Blockchain technology may radically alter the process through which consumers buy a home, as well as the way financial institutions handle mortgages. Specifically, the technology could remove cost and friction from the process, create transaction records that are infallible and incorruptible, and facilitate near-instantaneous settlement. It could also dramatically change the way mortgages are serviced and sold on the secondary market. A better process helps borrowers as well as lenders. For one thing, a borrower could see lower closing costs. Having a third-party intermediary involved in a mortgage transaction can cost as much as 1% to 2% of a property's value. Blockchain could reduce or eliminate the need for a third-party intermediary in the mortgage process and instead allow two parties to interact directly instead. There are about 30 projects that are offering p2p mortgages, among them SoFi, National Family Mortgage, LendInvest, Landbay, Proplend, Zopa, LendingClub and other. AlfaToken intends to put the whole process on blockchain.

3.4.4 Solution

AlfaToken will provide a marketplace for projects and investors interested to provide mortgages in cryptocurrency secured by tokenized real estate. The process of borrowing will be as follows:

1) The borrower begins an online application for an AlgaGage™ on the AlfaToken website;
2) The smart contract is created automatically indicating the borrower pre-qualified interest loan amounts and interest rates.
3) The borrower can choose the loan amount and interest rate most appropriate for him, complete the application and receive a letter of pre-approval for the loan.
4) The borrower submits the offer to the seller and closes the loan. At this point, the borrower uploads the purchase agreement, lock in the interest rate, obtain a property appraisal and sign the final documents.

3.4.5 Market Size

The approximate total market size of p2p mortgages is equal to $2.5B with an average yearly growth rate of 100%[6]. The breakdown by regions[6,7]:
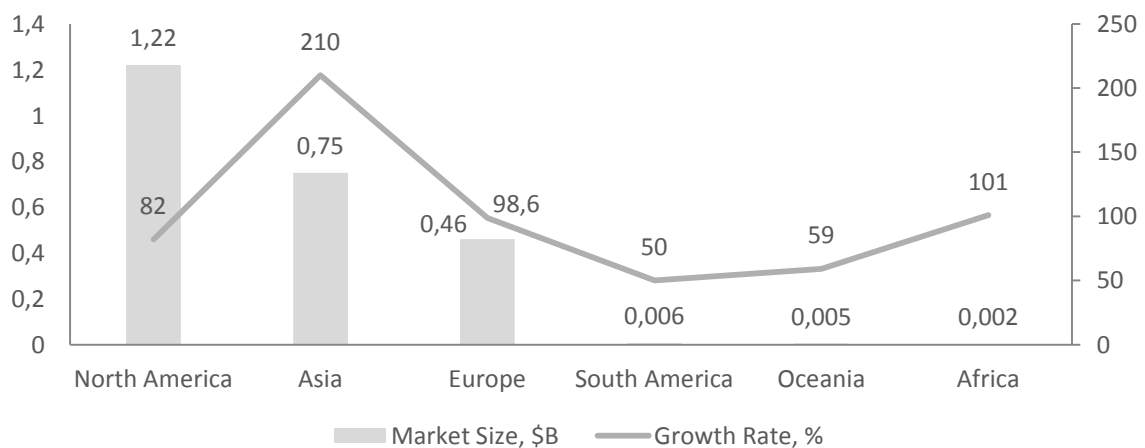
3.4.6 Business Model

A fee for creating a smart contract to apply for an AlfaGage™ will be $0.99 in ALFA tokens. AlfaToken will take a monthly commission from a borrower through a smart contract. If a borrower pays commission in ALFA tokens there will be a discount.

3.5 Savings Deposits (AlfaDeposits™)

3.5.1 Summary

A service that allows to earn an interest by opening a savings deposit in any cryptocurrency on the AlfaToken Marketplace (AlfaDeposit™).

3.5.2 Definition

Deposit is a transaction involving a transfer of funds to another party for safekeeping. When funds in cryptocurrency are deposited to AlfaToken account, it earns interest. This means that, at fixed intervals, a small percentage of the account's total is added to the amount of cryptocurrency already in the account.

3.5.3 Current Market Proposition and Problems

Cryptocurrency owners currently have very few options to earn an interest on their deposits. There are 2 types of projects that are providing such a service:

1) Crypto exchanges that are using funds for a margin trading services;
2) Mining projects that are funding their operations.

Here is the description of both types of projects:

Project	Accepted Coins	Annual Interest Rate	Comments
Bsave	BTC	1.59%	A project of Coinbase
Magnr	BTC	1.28%	
Coincheck	BTC	5%	New registrations are temporarily suspended. Plans to add ETH, XPR, FCT, REP.
Liqui	BTC, ETH	24%	Margin trading is not launched yet
OXbtc	BTC, LTC	5%	Funds are used for the mining

As indicated above there is no still an offer for earning an interest for the deposit in cryptocurrencies other than Bitcoin.

3.5.4 Solution

AlfaToken will propose a wider range of cryptocurrency to deposit and earn an interest. Cryptocurrency owners will only need to transfer their funds to a smart contract address in order to start earning an interest.

3.5.5 Business Model

AlfaToken will gain from deposits investing them in other marketplace services that are generating a higher interest (short selling, mortgages).

4. Roadmap

Following is the AlfaToken roadmap:

1) MVP for Crowdsale smart contracts – Q4'2017
The minimum viable product development of a service for building crowdsale smart contracts on Ethereum blockchain.

2) AlfaToken Pre Initial Coin Offering – Q1'2017
AlfaToken will be held a Pre Initial Coin Offering in Q1' 2017. Please find more details on the AlfaToken Pre ICO in Appendix B further in this document.

3) AlfaToken Initial Coin Offering – Q2'2018
AlfaToken is planning to hold an ICO campaign in Q2'2018.

4) Crowdsale smart contracts – Q3'2018
Everyone will be able to issue its own tokens, create a smart contract for Pre Initial Coin Offering or Initial Coin Offering and deploy it on the Ethereum blockchain. It will be as simple as filling out a form on the website, so they will not need any additional developers for these purposes any more.

5) Listing of AlfaToken (ALFA) on crypto exchanges – Q3'2018
We will intent to list our ALFA token on a few popular crypto exchanges after the Initial Coin Offering.

6) Loans secured by cryptocurrency to enable short selling – Q4'2018
Traders will be able to profit from an altcoins price drop on any crypto exchanges by getting a loan secured by a cryptocurrency.

7) Loans secured by tokens – Q1'2019
Projects will be able to pay for listings on crypto exchanges after ICO as well as other Pre ICO or ICO related expenses including a website and smart contract development, listing on ICO tracking websites, launching a PR campaign, making a roadshow.

8) Loans secured by tokenized real assets – Q3'2019
Everyone will be able to purchase a real estate be getting a mortgage in cryptocurrency.

9) Deposits in cryptocurrency – Q2'2020

Everyone will be able to deposit a cryptocurrency and earn an interest.

5. Crowdsale

5.1 Terms and Conditions

PLEASE READ THE FOLLOWING CROWDSALE TERMS AND CONDITIONS CAREFULLY. NOTE THAT SECTION "DISPUTE RESOLUTION. ARBITRATION" CONTAINS A BINDING ARBITRATION CLAUSE AND CLASS ACTION WAIVER, WHICH AFFECT YOUR LEGAL RIGHTS. IF YOU DO NOT AGREE TO THESE CROWDSALE TERMS AND CONDITIONS, DO NOT PURCHASE TOKENS FROM ALFATOKEN LTD.

Your purchase of AlfaToken tokens (each, a "Token") during the Crowdsale (as defined below) is subject to these terms and conditions of sale (the "Terms"). Each of you and AlfaToken is a "Party" and, together, the "Parties" to these Terms.

By purchasing Tokens from AlfaToken during the Crowdsale, you will be bound by these Terms and any terms incorporated by reference. If you have any questions regarding these Terms, please contact AlfaToken team at info@alfatoken.com. You and AlfaToken agree as follows.

5.2 ALFA Tokens

ALFA Tokens are the key to using the AlfaToken marketplace, they manage the contract creation, security testing, network fees, monitoring, and management of the entire marketplace services. ALFA is a transferable ERC-20 compliant digital token deployed on the Ethereum network, and is the in-app currency that powers the AlfaToken marketplace. The ALFA token serves as a method of validating the user's interactions with AlfaToken and will allow users to interact wuth the marketplace. In the future, ALFA will serve as access for services on multiple blockchains, integrating these disparate blockchains into one unified view within the AlfaToken marketplace. The total supply will be 9 million ALFA tokens and will never be increased beyond this cap. Tokens that are used on the marketplace will go back into the marketplace supply. We will provide a service for users to purchase ALFA from this supply.

AlfaToken intends to create a total of 9 million Tokens. 7,950,000 of those will be made available for sale in the Token Sale, as defined below (the "Sale Tokens"). Further information is contained in Appendix B of this document. AlfaToken hold the right to burn 1% (or bigger amount) of all its profit in tokens each day or to buy them from exchanges.

5.3 Start and Duration of Pre ICO

The Pre ICO will begin at 11:00 am GMT (UTC +0) on January 22, 2018 and will end at 11:00 am GMT (UTC +0) on April 22, 2018 (the "Pre ICO End Date"), or when all of the Sale Tokens have been sold, whichever is earlier.

5.4 Eligibility

In order to be eligible to participate in the Crowdsale you must comply with all the terms and conditions set forth in these Terms and also have an Ethereum wallet that supports the ERC-20

token standard in order to receive any Tokens purchased from AlfaToken (the "Token Receipt Address"). AlfaToken reserves the right to prescribe additional guidance regarding specific wallet requirements. In the Crowdsale all major cryptocurrencies as well as wire transfers will be the accepted payment currencies. The list of accepted cryptocurrencies is available on our website.

5.5 Sale of Tokens

Price. Payment Currencies. Exchange Rates. The price per Token is indicated in Appendix B. ("Price Per Token"). Your purchase is not guaranteed until AlfaToken receives the full amount of the Purchase Price.

Delivery of Tokens. AlfaToken will deliver the quantity of Tokens you purchase in the ICO after you pass the KYC/AML procedure in the end of ICO. If the KYC/AML procedure will not be completed by you AlfaToken can take the right to return your investments back to you.

5.6 Purpose and Use of Tokens in the Ecosystem. Possible Migration of Tokens

The purpose of the Tokens is to fuel the smart contract automation (the "Services") within the ecosystem (the "Ecosystem"). Additional information regarding the Ecosystem, the Services and AlfaToken is summarized in this document.

While AlfaToken is developing certain applications and software for use in the Ecosystem, AlfaToken does not operate or control the Ecosystem. AlfaToken is not responsible or liable for the Ecosystem or any third-party uses of the Ecosystem.

Purchase, ownership, receipt or possession of Tokens carries no rights, express or implied, other than the right to use Tokens as a means to enable usage of and interaction with Services enabled by the Ecosystem, if successfully completed and deployed. In particular, you understand and accept that Tokens do not represent or confer any ownership right or stake, share, security, or equivalent rights, or any right to receive future revenue shares, intellectual property rights or any other form of participation in or relating to the Ecosystem and/or AlfaToken and its corporate affiliates, other than any rights relating to the provision and receipt of Services in the Ecosystem, subject to limitations and conditions in these Terms. The Tokens are not intended to be a digital currency, security, commodity or any kind of financial instrument.

AlfaToken reserves the right to migrate the ERC-20 Tokens to another protocol in the future should AlfaToken determine, in its reasonable discretion, that doing so is necessary or useful to the operation of the Ecosystem.

5.7 Scope

Unless otherwise stated herein, these Terms only govern your purchase of Tokens from AlfaToken during the Crowdsale.

Any use of Tokens in connection with providing or receiving Services in the Ecosystem may be governed by other applicable terms and conditions and policies.

5.8 Cancellation. Refusal of Purchase Requests

All Token purchases from AlfaToken are final, and there are no refunds or cancellations, except as may be required by applicable law or regulation. AlfaToken reserves the right to refuse or cancel Token purchase requests at any time in its sole discretion.

5.9 Token Allocation

Important information about AlfaToken's creation and intended use of the Tokens is provided in Appendix B to these Terms. By purchasing Tokens, you acknowledge that you have read and understood Appendix B to these Terms. AlfaToken keeps the right to allocate investments received as described in Appendix B before the end of the Token Sale.

5.10 Acknowledgement and Assumption of Risks

You acknowledge and agree that there are risks associated with purchasing Tokens, owning Tokens and using Tokens for the provision or receipt of Services in the Ecosystem, as disclosed and explained in Section "Certain risk relating to purchase, sale and use of tokens" of these Terms. BY PURCHASING TOKENS, PURCHASER EXPRESSLY ACKNOWLEDGES AND ASSUMES THESE RISKS.

5.11 Security

You are responsible for implementing reasonable measures for securing the wallet, vault or other storage mechanism you use to receive and hold Tokens purchased from AlfaToken, including any requisite private key(s) or other credentials necessary to access such storage mechanism(s). If your private key(s) or other access credentials are lost, you may lose access to your Tokens. AlfaToken is not responsible for any losses, costs or expenses relating to lost access credentials.

5.12 Personal Information

AlfaToken may determine, in its sole discretion, that it is necessary to obtain certain information about you in order to comply with applicable laws or regulations in connection with selling Tokens to you. You agree to provide AlfaToken such information promptly upon request. You acknowledge that AlfaToken may refuse to sell Tokens to you until you provide such requested information and AlfaToken has determined that it is permissible to sell you Tokens under applicable laws or regulations.

5.13 Taxes

Any amounts that you pay for Tokens are exclusive of all applicable taxes. You are responsible for determining what, if any, taxes apply to your purchase of Tokens, including, for example, sales, use, value added, and similar taxes. It is also your responsibility to withhold, collect, report and remit the correct taxes to the appropriate tax authorities. AlfaToken is not responsible for withholding, collecting, reporting, or remitting any sales, use, value added, or similar tax arising from your purchase of Tokens.

5.14 Purchaser Representations and Warranties

By sending a cryptocurrency or a wire transfer to purchase Tokens from AlfaToken, you represent and warrant that:

• you have read and understood these Terms (including all Appendixes);
• YOU ACKNOWLEDGE AND AGREE THAT THERE ARE RISKS ASSOCIATED WITH PURCHASING TOKENS, OWNING TOKENS AND USING TOKENS FOR THE PROVISION OR RECEIPT OF SERVICES IN THE ECOSYSTEM INCLUDING (BUT NOT NECESSARILY LIMITED TO) THE RISKS DESCRIBED IN SECTION "CERTAIN RISK RELATING TO PURCHASE, SALE AND USE OF TOKENS" OF THESE TERMS;
• you have a sufficient understanding of technical and business matters (including those that relate to the Services and Ecosystem), cryptographic tokens, token storage mechanisms (such as token wallets), and blockchain technology to understand these Terms and to appreciate the risks and implications of purchasing the Tokens;
• you understand the restrictions and risks associated with the creation of Tokens as set forth herein, and acknowledges and assumes all such risks;
• you have obtained sufficient information about the Tokens, the Services and the Ecosystem to make an informed decision to purchase the Tokens;
• you understand that the Tokens confer only the right to provide and receive Services in the Ecosystem (and potentially contribute to the technical development of the Ecosystem), and confer no other rights of any form with respect to the Ecosystem or AlfaToken, including, but not limited to, any ownership, distribution, redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights;
• you are purchasing Tokens solely for the purpose of receiving Services, participating in the Ecosystem, and supporting the development, testing, deployment and operation of the Ecosystem, being aware of the commercial risks associated with AlfaToken and the Ecosystem;
• your purchase of Tokens complies with applicable laws and regulations in your jurisdiction, including, but not limited to: (i) legal capacity and any other threshold requirements in your jurisdiction for the purchase of the Tokens and entering into contracts with AlfaToken; (ii) any foreign exchange or regulatory restrictions applicable to such purchase; and (iii) any governmental or other consents that may need to be obtained;
• you will comply with any applicable tax obligations in your jurisdiction arising from your purchase of Tokens;
• if you are purchasing Tokens on behalf of any entity, you are authorized to accept these Terms on such entity's behalf and that such entity will be responsible for breach of these Terms by you or any other employee or agent of such entity (references to "you" in these Terms refer to you and such entity, jointly);
• you have obtained independent legal advice with respect to same before accepting these Terms, and, in accepting these Terms, you further represent and warrant to AlfaToken that you have been so advised to obtain independent legal advice, and that prior to accepting these Terms you have obtained independent legal advice, or have, in your discretion, knowingly and willingly elected not to do so;
• you are not a citizen or resident of a geographic area in which access to or use of the Services or the acceptance of delivery of the Tokens is prohibited by applicable law, decree, regulation, treaty or administrative act, and if your country of residence or other circumstances change

such that the above representations are no longer accurate, you will immediately cease using the Services;

• if you are registering to use the Services on behalf of a legal entity, you further represent and warrant that: (i) such legal entity is duly organized and validly existing under the applicable laws of the jurisdiction of its organization; and (ii) you are duly authorized by such legal entity to act on its behalf; and

• none of the funds being used to purchase the Tokens are to the your knowledge proceeds obtained or derived directly or indirectly as a result of illegal activities, and the funds being used to purchase the Tokens which will be advanced by you under these Terms will not represent proceeds of crime and/or money laundering and you acknowledge that AlfaToken may in the future be required by law to disclose your name and other information relating to these Terms, on a confidential basis, and to the best of the your knowledge, none of the funds to be provided by you to AlfaToken are being tendered on behalf of a person or entity who has not been identified to you, and you will promptly notify AlfaToken if you discover that any of such representations cease to be true, and will promptly provide AlfaToken with all necessary information in connection therewith.

5.15 Indemnification

To the fullest extent permitted by applicable law, you will indemnify, defend and hold harmless AlfaToken and its respective past, present and future employees, officers, directors, contractors, consultants, equity holders, suppliers, vendors, service providers, parent companies, subsidiaries, affiliates, agents, representatives, predecessors, successors and assigns (the "AlfaToken Parties") from and against all claims, demands, actions, damages, losses, costs and expenses (including attorneys' fees) that arise from or relate to: (i) your purchase or use of Tokens; (ii) your responsibilities or obligations under these Terms; (iii) your violation of these Terms; or (iv) your violation of any rights of any other person or entity.

AlfaToken reserves the right to exercise sole control over the defense, at your expense, of any claim subject to indemnification under this Section. This indemnity is in addition to, and not instead of, any other indemnities set forth in a written agreement between you and AlfaToken.

5.16 Disclaimers

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW AND EXCEPT AS OTHERWISE SPECIFIED IN A WRITING BY ALFATOKEN: (i) THE TOKENS ARE SOLD ON AN "AS IS" AND "AS AVAILABLE" BASIS WITHOUT WARRANTIES OF ANY KIND, AND ALFATOKEN EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES AS TO THE TOKENS, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT; (ii) ALFATOKEN DOES NOT REPRESENT OR WARRANT THAT THE TOKENS ARE RELIABLE, CURRENT OR ERROR-FREE, MEET YOUR REQUIREMENTS, OR THAT DEFECTS IN THE TOKENS WILL BE CORRECTED; AND (iii) ALFATOKEN CANNOT AND DOES NOT REPRESENT OR WARRANT THAT THE TOKENS OR THE DELIVERY MECHANISM FOR TOKENS ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS.

Some jurisdictions do not allow the exclusion of certain warranties or disclaimer of implied terms in contracts with consumers, so some or all of the exclusions of warranties and disclaimers in this Section may not apply to you.

5.17 Limitation of Liability

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW: (i) IN NO EVENT WILL ALFATOKEN OR ANY OF ALFATOKEN PARTIES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES OF ANY KIND (INCLUDING, BUT NOT LIMITED TO, WHERE RELATED TO LOSS OF REVENUE, INCOME OR PROFITS, LOSS OF USE OR DATA, OR DAMAGES FOR BUSINESS INTERRUPTION) ARISING OUT OF OR IN ANY WAY RELATED TO THE SALE OR USE OF THE TOKENS OR OTHERWISE RELATED TO THESE TERMS, REGARDLESS OF THE FORM OF ACTION, WHETHER BASED IN CONTRACT, TORT (INCLUDING, BUT NOT LIMITED TO, SIMPLE NEGLIGENCE, WHETHER ACTIVE, PASSIVE OR IMPUTED), OR ANY OTHER LEGAL OR EQUITABLE THEORY (EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE); AND (ii) IN NO EVENT WILL THE AGGREGATE LIABILITY OF ALFATOKEN AND ALFATOKEN PARTIES (JOINTLY), WHETHER IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE, WHETHER ACTIVE, PASSIVE OR IMPUTED), OR OTHER THEORY, ARISING OUT OF OR RELATING TO THESE TERMS OR THE USE OF OR INABILITY TO USE THE TOKENS, EXCEED THE AMOUNT YOU PAID TO ALFATOKEN FOR THE TOKENS.

THE LIMITATIONS SET FORTH IN THESE SECTION WILL NOT LIMIT OR EXCLUDE LIABILITY FOR THE GROSS NEGLIGENCE, FRAUD OR INTENTIONAL, WILLFUL OR RECKLESS MISCONDUCT OF ALFATOKEN.

Some jurisdictions do not allow the limitation or exclusion of liability for incidental or consequential damages. Accordingly, some of the limitations of this Section may not apply to you.

5.18 Release

To the fullest extent permitted by applicable law, you release AlfaToken and the other AlfaToken Parties from responsibility, liability, claims, demands and/or damages (actual and consequential) of every kind and nature, known and unknown (including, but not limited to, claims of negligence), arising out of or related to disputes between users and the acts or omissions of third parties. You expressly waive any rights you may have under any other statute or common law principles that would otherwise limit the coverage of this release to include only those claims which you may know or suspect to exist in your favor at the time of agreeing to this release.

5.19 Dispute Resolution. Arbitration

Arbitration. Except for any disputes, claims, suits, actions, causes of action, demands or proceedings (collectively, "Disputes") in which either you or AlfaToken seeks to bring an individual action in small claims court or seeks injunctive or other equitable relief for the alleged unlawful use of intellectual property, including, without limitation, copyrights, trademarks, trade names, logos, trade secrets or patents, all Disputes arising out of or in connection with these Terms, or in respect of any legal relationship associated therewith or derived therefrom, will be referred to and finally resolved by arbitration administered by the Singapore International Commercial Court. The place of arbitration will be Singapore.

No Class Arbitrations, Class Actions or Representative Actions. Any Dispute arising out of or related to these Terms is personal to you and AlfaToken and will be resolved solely through individual arbitration and will not be brought as a class arbitration, class action or any other type of representative proceeding. There will be no class arbitration or arbitration in which an individual attempts to resolve a Dispute as a representative of another individual or group of individuals. Further, a Dispute cannot be brought as a class or other type of representative action, whether within or outside of arbitration, or on behalf of any other individual or group of individuals.

Notice. Informal Dispute Resolution. Each of you and AlfaToken will notify the other party in writing of any arbitrable or small claims Dispute within 30 days of the date it arises, so that each of you and AlfaToken can attempt in good faith to resolve the Dispute informally. Notice to AlfaToken will be sent by e-mail to AlfaToken at info@alfatoken.com. Notice to you will be by email to the email address provided to AlfaToken. Your notice must include: (i) your name, postal address, email address and telephone number; (ii) a description in reasonable detail of the nature or basis of the Dispute; and (iii) the specific relief that you are seeking. If you and AlfaToken cannot agree how to resolve the Dispute within 30 days after the date notice is received by the applicable party, then either you or AlfaToken may, as appropriate and in accordance with this Section, commence an arbitration proceeding or, to the extent specifically provided for in Section (a), file a claim in court.

Governing Law and Venue. These Terms will be governed by and construed and enforced in accordance with the laws of Singapore, without regard to conflict of law rules or principles that would cause the application of the laws of any other jurisdiction. Any Dispute between the Parties arising out or relating to these Terms that is not subject to arbitration will be resolved and governed through the courts of Singapore, with the venue being Singapore.

5.20 Severability

If any term, clause or provision of these Terms is held unlawful, void or unenforceable, then that term, clause or provision will be severable from these Terms and will not affect the validity or enforceability of any remaining part of that term, clause or provision, or any other term, clause or provision of these Terms.

5.21 Miscellaneous

These Terms constitute the entire agreement between you and AlfaToken relating to your purchase of Tokens from AlfaToken. AlfaToken may assign AlfaToken's rights and obligations under these Terms. AlfaToken's failure to exercise or enforce any right or provision of these Terms will not operate as a waiver of such right or provision. AlfaToken will not be liable for any delay or failure to perform any obligation under these Terms where the delay or failure results from any cause beyond AlfaToken's reasonable control. Purchasing Tokens from AlfaToken does not create any form of partnership, joint venture, or any other similar relationship between you and AlfaToken. Except as otherwise provided in herein, these Terms are intended solely for the benefit of you and AlfaToken and are not intended to confer third-party beneficiary rights upon any other person or entity. You agree and acknowledge that all agreements, notices, disclosures, and other communications that AlfaToken provides to you, including these Terms, will be provided in electronic form.

5.22 Certain Risks Relating to Purchase, Sale, and Use of Tokens

Important Note: As noted elsewhere in these Terms, the Tokens are not being structured or sold as securities or any other form of investment product. Accordingly, none of the information presented in the following Sections is intended to form the basis for any investment decision, and no specific recommendations are intended. AlfaToken expressly disclaims any and all responsibility for any direct or consequential loss or damage of any kind whatsoever arising directly or indirectly from: (i) reliance on any information contained in the following Sections; (ii) any error, omission or inaccuracy in any such information; or (iii) any action resulting from such information.

By purchasing, owning, and using Tokens, you expressly acknowledge and assume the following risks.

5.22.1 Risk of Losing Access to Tokens Due to Loss of Private Key(s), Custodial Error or Purchaser Error

A private key, or a combination of private keys, is necessary to control and dispose of Tokens stored in your digital wallet or vault. Accordingly, loss of requisite private key(s) associated with your digital wallet or vault storing Tokens will result in loss of such Tokens. Moreover, any third party that gains access to such private key(s), including by gaining access to login credentials of a hosted wallet service you use, may be able to misappropriate your Tokens. Any errors or malfunctions caused by or otherwise related to the digital wallet or vault you choose to receive and store Tokens in, including your own failure to properly maintain or use such digital wallet or vault, may also result in the loss of your Tokens. Additionally, your failure to follow precisely the procedures set forth in for buying and receiving Tokens.

5.22.2 Risk Associated with the Ethereum Protocol

Because Tokens and the marketplace are based on the Ethereum protocol, any malfunction, breakdown or abandonment of the Ethereum protocol may have a material adverse effect on the marketplace or Tokens. Moreover, advances in cryptography, or technical advances such as the development of quantum computing, could present risks to the Tokens and the marketplace, including the utility of the Tokens for obtaining Services, by rendering ineffective the cryptographic consensus mechanism that underpins the Ethereum protocol.

5.22.3 Risk of Mining Attacks

As with other decentralized cryptographic tokens based on the Ethereum protocol, the Tokens are susceptible to attacks by miners in the course of validating Token transactions on the Ethereum blockchain, including, but not limited, to double-spend attacks, majority mining power attacks, and selfish-mining attacks. Any successful attacks present a risk to the marketplace and the Tokens, including, but not limited to, accurate execution and recording of transactions involving Tokens.

5.22.4 Risk of Hacking and Security Weaknesses

Hackers or other malicious groups or organizations may attempt to interfere with the marketplace or the Tokens 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, because the marketplace is based on open-source software, there is a risk that a third party or a member of the AlfaToken team may intentionally or unintentionally introduce weaknesses into the core infrastructure of the marketplace, which could negatively affect the marketplace and the Tokens, including the utility of the Tokens for obtaining Services.

5.22.5 Risks Associated with Markets for Tokens

The Tokens are intended to be used solely within the marketplace, and AlfaToken will not support or otherwise facilitate any secondary trading or external valuation of Tokens. This restricts the contemplated avenues for using Tokens to the provision or receipt of Services, and could therefore create illiquidity risk with respect to the Tokens you own. Even if secondary trading of Tokens is facilitated by third party exchanges, such exchanges may be relatively new and subject to little or no regulatory oversight, making them more susceptible to fraud or manipulation. Furthermore, to the extent that third-parties do ascribe an external exchange value to Tokens (e.g., as denominated in a digital or fiat currency), such value may be extremely volatile and diminish to zero.

5.22.6 Risk of Uninsured Tokens

Unlike bank accounts or accounts at some other financial institutions, Tokens are uninsured unless you specifically obtain private insurance to insure them. Thus, in the event of loss or loss of utility value, there is no insurer arranged by AlfaToken, to offer recourse to you.

5.22.7 Risks Associated with Uncertain Regulations and Enforcement Actions

The regulatory status of the Tokens and distributed ledger technology is unclear or unsettled in many jurisdictions. It is difficult to predict how or whether regulatory agencies may apply existing regulation with respect to such technology and its applications, including the marketplace and the Tokens. It is likewise difficult to predict how or whether legislatures or regulatory agencies may implement changes to law and regulation affecting distributed ledger technology and its applications, including the marketplace and the Tokens. Regulatory actions could negatively impact the marketplace and the Tokens in various ways, including, for purposes of illustration only, through a determination that the purchase, sale and delivery of the Tokens constitutes unlawful activity or that the Tokens are a regulated instrument that require registration or licensing of those instruments or some or all of the parties involved in the purchase, sale and delivery thereof. AlfaToken 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.

5.22.8 Risks Arising from Taxation

The tax characterization of Tokens is uncertain. You must seek your own tax advice in connection with purchasing Tokens, which may result in adverse tax consequences to you, including withholding taxes, income taxes and tax reporting requirements.

5.22.9 Risk of Competing Platforms

It is possible that alternative platforms could be established that utilize the same open source code and protocol underlying the marketplace and attempt to facilitate services that are materially similar to the Services. The marketplace may compete with these alternatives, which could negatively impact the marketplace and Tokens, including the utility of the Tokens for obtaining Services.

5.22.10 Risk of Insufficient Interest in the Marketplace or Distributed Applications

It is possible that the marketplace will not be used by a large number of individuals, companies and other entities or that there will be limited public interest in the creation and development of distributed platforms (such as the marketplace) more generally. Such a lack of use or interest could negatively impact the development of the marketplace and therefore the potential utility of the Tokens, including the utility of the Tokens for obtaining Services.

5.22.11 Risk Associated with the Development and Maintenance of the Marketplace

The marketplace is still under development and may undergo significant changes over time. Although AlfaToken intends for the Tokens and marketplace to function as described in the Whitepaper, and intends to take commercially reasonable steps toward those ends, AlfaToken may have to make changes to the specifications of the Tokens or marketplace for any number of legitimate reasons. Moreover, AlfaToken has no control over how other participants will use the marketplace, what products or services will be offered through the marketplace by third parties, or how third-party products and services will utilize Tokens (if at all). This could create the risk that the Tokens or marketplace, as further developed and maintained, may not you're your expectations at the time of purchase. Furthermore, despite AlfaToken's good faith efforts to develop and participate in the marketplace, it is still possible that the marketplace will experience malfunctions or otherwise fail to be adequately developed or maintained, which may negatively impact the marketplace and Tokens, and the potential utility of the Tokens, including the utility of the Tokens for obtaining Services.

5.22.12 Risk of an Unfavorable Fluctuation of Ether Value

If the value of ETH fluctuates unfavorably during or after the Crowdsale, the AlfaToken team may not be able to fund development, or may not be able to develop or maintain the marketplace in the manner that it intended. In addition to the usual market forces, there are several potential events which could exacerbate the risk of unfavorable fluctuation in the value of ETH, including another DAO-like attack on the Ethereum network; or significant security incidents or market irregularities at one or more of the major cryptocurrency exchanges.

5.22.13 Risk of Dissolution of the AlfaToken or Marketplace

It is possible that, due to any number of reasons, including, but not limited to, an unfavorable fluctuation in the value of ETH (or other cryptographic and fiat currencies), decrease in the Tokens' utility (including their utility for obtaining Services), the failure of commercial relationships, or intellectual property ownership challenges, the marketplace may no longer be viable to operate or AlfaToken may dissolve.

5.22.14 Risk Arising from Government Rights

Because Tokens confer no governance rights of any kind with respect to the marketplace or AlfaToken, all decisions involving AlfaToken's products or services within the marketplace or AlfaToken itself will be made by AlfaToken at its sole discretion, including, but not limited to, decisions to discontinue its products or services in the marketplace, to create and sell more Tokens for use in the marketplace, or to sell or liquidate AlfaToken. These decisions could adversely affect the marketplace and the utility of any Tokens you own, including their utility for obtaining Services.

5.22.15 Unanticipated Risks

Cryptographic tokens such as the Tokens are a new and untested technology. In addition to the risks included in Section "Certain risk relating to purchase, sale and use of tokens" of these Terms, there are other risks associated with your purchase, possession and use of the Tokens, including unanticipated risks. Such risks may further materialize as unanticipated variations or combinations of the risks discussed in in Section "Certain risk relating to purchase, sale and use of tokens" of these Terms.

Appendix A

Example of Source Code

Here is the example of source code to create a new token:

```
contract MyToken {

  mapping (address => uint256) public balanceOf;

  function MyToken(

    uint256 initialSupply

    ) {

    balanceOf[msg.sender] = initialSupply;

  }

  function transfer(address _to, uint256 _value) {

    require(balanceOf[msg.sender] >= _value);

    require(balanceOf[_to] + _value >= balanceOf[_to]);

    balanceOf[msg.sender] -= _value;

    balanceOf[_to] += _value;

  }

}
```

Appendix B

Dates

Pre ICO is starting on January 22, 2018 11 am GMT (UTC +0) and ending on April 22, 2018 11 am GMT (UTC +0) or when sold out whichever comes first.

Allocation of Tokens

Only 9 million ALFA tokens will ever be created. The ALFA tokens will be allocated as follows:

• 86.4% (7,760,000) to be sold by the AlfaToken to Pre ICO and ICO purchasers;
• 7.78% (700,000) to be held by the AlfaToken team;
• 1.94% (175,000) are reserved for advisors;
• 1.94% (175,000) are reserved for the bounty program;
• 1.94% (175,000) represents a reserve fund.

All unsold tokens from the ICO will be burned.

Price

ALFA Price during the Pre ICO will be as follows:

• January 22, 2018 11 am GMT – March 12, 2018 11 am GMT – 1 ALFA = 0.002 ETH;
• March 12, 2018, 11:01 am GMT – March 26, 2018, 11 am GMT – 1 ALFA = 0.0022 ETH;
• March 26, 2018, 11:01 am GMT – April 9, 2018, 11 am GMT – 1 ALFA = 0.0024 ETH;
• April 9, 2018, 11:01 am GMT – April 22, 2018, 11 am GMT – 1 ALFA = 0.0026 ETH.

Bonuses

The following discount on a wholesale basis for larger volume purchasers will be applied:

• $5,000+ receives a 1.5% bonus;
• $25,000+ receives a 10% bonus;
• $100,000+ receives a 45% bonus.

Funds Distribution

Received funds will be distributed as follows:

• 20% – R&D;
• 20% – community & partnership;
• 50% – marketing;
• 10% – sales.

For more information regarding our Pre ICO please contact us at info@alfatoken.com. The detailed information regarding ICO will be provided after the Pre ICO.

References

1) Smart Contracts, Explained. Cointelegraph. Oct. 31, 2017
https://cointelegraph.com/explained/smart-contracts-explained

2) Nick Szabo – Smart Contracts: Building Blocks for Digital Markets
http://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/LiteratuLi/LOTwinters
chool2006/szabo.best.vwh.net/smart_contracts_2.html

3) Extropy Institute Resources
https://archive.is/zWbhL#selection-607.412-607.469

4) Nick Szabo – Formalizing and Securing Relationships on Public Networks
http://firstmonday.org/ojs/index.php/fm/article/view/548

5) Philip Stafford, Hannah Murphy – Has the blockchain hype finally peaked?
https://www.ft.com/content/5e48f9ec-b651-11e6-ba85-95d1533d9a62

6) Number of successful ICOs drops to 23% in November. Coinfox. Dec. 1, 2017
http://www.coinfox.info/news/8300-number-of-successful-icos-drops-to-23-in-november

7) Annual crowdfunding industry report. Massolution
http://reports.crowdsourcing.org/index.php?route=product/product&product_id=54

8) Marketplace Lending: A Maturing Market Means New Partner Models, Business
Opportunities. Cognizant Reports
https://www.cognizant.com/InsightsWhitepapers/Marketplace-Lending-A-Maturing-Market-
Means-New-Partner-Models-Business-Opportunities-codex989.pdf