

THE TOKEN FUND

WHITE PAPER

Version 2.1
December 5th, 2017

○ Table of Contents

1. Introduction	4
2. Investors	5
3. Tokenized Fund	5
4. Leadership Team	7
5. Investment Strategy	9
6. Tokens	11
7. Economic Model.....	12
8. Technical Solutions.....	14
8.1. Components.....	14
8.2. Asset Management and the Website.....	14
8.3. Backend Service.....	15
8.4. Smart Contracts on Ethereum Blockchain	15
8.5. Investment Flow	15
8.6. The Code	15
9. Risks.....	16
10. Liquidation.....	16

○ Abstract

With the development of blockchain technology and the rapid growth of the crypto-currency market, new opportunities appear consistently in the field of Investment. The traditional economy changes its form, new values arise in the digital "world" and a significant role in these processes is played by decentralised technologies, in which cryptocurrencies and digital tokens play a critical role.

Most of private investors and even many professional participants do not have enough knowledge about the crypto currency markets or find it difficult to make a choice from a variety of objects for investment. For them, it is important not to miss the opportunities to get additional income, using safe and handy tool. Professionals of the crypto market (portfolio managers and traders) are also often not sufficiently open to potential investors. That's why The Token Fund was launched.

○ 1. Introduction

The past and current trend of initial coin offerings (ICO) has led to more than 1000 new cryptocurrencies being created which are traded daily. Some have proven to have gained trust and support among people in the community, whereas some have ended up in “pump and dump” territory. During 2017, the volume of trade at the crypto exchanges increased tens of times, in November, going over the threshold of 25 billion USD per day. At the same time, the total market capitalization of all crypto-assets increased from 18 to 300 + billion USD, which is more than 1600%. For comparison, the S&P 500 index for the same period added only 16%. The market price of the «main cryptocurrency» Bitcoin has grown more than 10 times in the last year.

However, returns can be misleading and expertise in the investment field as well as an understanding of crypto coin content is needed to gain optimal exposure into the crypto investment universe.

Cryptocurrencies are an evolving investment asset which shouldn't be overlooked by an investor willing to diversify its portfolio. As correlation between assets in the real economy is moving towards 1 (particularly at a time of distress on markets), cryptocurrencies have a much smaller correlation between themselves, in some cases close to zero. Therefore, assets from the new economy are serving as a natural hedge as they are disconnected from the traditional market and represent an alternative. Cryptocurrencies can be split into at least two types of assets:

- One group consists of pioneer currencies based on blockchain technology such as Bitcoin. This type of digital asset serves as an alternative for the transfer of wealth across the globe, being fully transparent, secure and effective. Its intrinsic value lies in its use as a medium of exchange and as a store of value. The number of transactions, demand and grade of trust drive the value of currencies such as these;
- The second group consists of “app tokens” that are more reminiscent of traditional company bonds, shares, where the company acts as a decentralised autonomous organization. Such projects have been growing exponentially in the last year as the community is perceiving the new economy as similar to the sharing economy. Importantly, such organizations can deliver value added services, which are comparable to the traditional economy but far more efficient and cheaper for the consumer.

We believe that the second group of cryptocurrencies, or better “app tokens” will, with the help of smart contracts, replace the traditional type of services. Growing interest in such assets may be promising something big, perhaps a revolution similar to the one the Internet provided in the early 90s. At that point, there wasn't an option to invest in a service such as the Internet. Now we believe there is and the best way to achieve it is to diversify assets via an investment vehicle such as a fund.

○ 2. Investors

The target group of investors consists of individuals and institutional investors who either have some understanding about the cryptocurrency world or those who mainly want to diversify a small part of their classical financial assets into the new economy. It is expected that the large majority of people outside the community are still sceptical about cryptocurrencies and that it will take time to gain support among them.

Nevertheless, inflated equity valuations, negative yields and a lack of alternative opportunities to invest in the current investment environment will force investors to take part in cryptocurrencies and businesses created upon blockchain technology. The exponential rise of blockchain technology used in real businesses is already delivering visible value added effects to the economy. Undoubtedly such a revolution, although gradual, will not be overlooked by the retail investors.

○ 3. Tokenized Fund

There are various types of funds that already invest in crypto assets (Hedge Funds, Classic ETFs, Closed-End Funds, Venture Capital Funds). Independent and still a small segment of the market are tokenized funds. The key phenomena here is that investors acquire a share calculated by reference to the assets in the fund, implemented through tokenized smart contracts.

What are the advantages of tokenized funds? Consider the answer to this question, listing the main potential features of tokenized funds:

Characteristics	Description
Class of assets that the fund can invest in	Any tokenized assets
Period of operation of funds	Stipulated by terms of the fund, can be evergreen or with a limited investment period and term
Types of funds (investor category)	Any category of investor, regardless of the amount of investment (the restriction to the capacity of the crypto-active market itself)

The certification of the rights to shares of investors in the fund	In the form of fund tokens. The value of 1 token is equal to the total value of assets in the fund's portfolio divided by the total number of tokens. The security of storing the fund's tokens and the authenticity of the transaction history for investors is ensured by the technology of blockchain
Automation of the process for mutual settlements	Receipt of investors' funds, issue of tokens (shares) and reverse process of payment of funds are fully automated: payment processing is connected with the fund's smart contract. The fund commission is also automated with the help of a smart contract.

○ 4. Leadership Team



VIKTOR SHPAKOVSKY
MANAGING PARTNER, FUND MANAGER

Co-founder at the Digital360 web development agency.

facebook.com/shpakovskycom



VLADIMIR SMERKIS
MANAGING PARTNER, FUND MANAGER

Managing Partner at Brandship.me. Ex-deputy vice-president for international development at Mail.ru Group.

linkedin.com/in/smerkis



IGOR DOGANOV
FUND MANAGER

Began his career at the investment company Finam, becoming the head of the regional training centre. Certified appraiser, worked in the mortgage division of Bank Otkritie.

facebook.com/igor.doganov



VADIM KOLEOSHKIN
PARTNER, PRODUCT MANAGER

Hi-tech entrepreneur and software engineer. Co-founder of Jufy Projects (more than 100 successful corporate projects). Co-founder of a fintech company Zerion (powering ICOs around the globe).

linkedin.com/in/vadim-koleoshkin



ALEXEY BASHLYKOV
PARTNER, ETHEREUM DEVELOPER

Chief Technology Officer (CTO) at Zerion.

facebook.com/abashlykov



EVGENY YURTAEV
PARTNER, ARCHITECT

CEO at Zerion. Founder and developer at CryptoTrader.

facebook.com/shpakovskycom



EUGENE YURYEV
HEAD OF PRODUCT DESIGN

Co-founder at Bikelane Studio, Miami, one of the leading firms in creating visual identities and app UI's for the largest sports companies and rapidly growing financial start-ups.

linkedin.com/in/deusdictum



DMITRY SHMAKOV
CHIEF MARKETING DIRECTOR

Has great experience in marketing and related industries. ChronoPay — VP Marketing and Business development, Rambler Internet holdings — Communications Director, International Media Group — CEO, Goodwin Augmented Reality — CEO.

linkedin.com/in/dshmakov



SERGEY RASTORGUEV
FRONT-END ENGINEER

Experienced front-end engineer focused on single-page applications powered by React. Solves uncommon problems and simplifies complex things with the help of new methods. Has an experience of cooperation with leading companies, such as Art. Lebedev Studio.

linkedin.com/in/sergey-rastorguev



ALEKSANDR VOLKOV
LEAD BACKEND DEVELOPER

Full-stack developer and software engineer with more than 10 years of experience, including project developments for the energy sector. Certified PHP and cryptography engineer.

facebook.com/avolkov85

OUR FUND MANAGERS ARE RESPONSIBLE FOR:

RATIONAL
INVESTMENT
DECISIONS

EFFICIENT,
TRANSPARENT AND
PROVABLE
OPERATIONS

SECURITY AND
CONTINGENCY
MEASURES

DEVELOPMENT OF
THE FUND IN
TERMS OF
MARKETING AND
CUSTOMER SERVICE

○ 5. Investment Strategy

The investment strategy of the fund is focused on maximizing profitability with a controlled level of risk.

The Token Fund token (hereinafter referred to as TKN) weighted by its market cap targets conservative investors. Note, however, that cryptocurrencies have extremely high volatility in practice, compared to traditional financial instruments and are without a doubt risky investments. Daily volatility (standard deviation) in many cases exceeds 10%. On the other hand, cryptocurrencies have very low correlation (in many cases close to 0) when compared with one another. This is a very positive sign for fund efficiency at delivering risk diversification.

All cryptocurrencies and tokens have a monetary (fiat) value. Even the price of cryptocurrencies and tokens traded only in a pair to BTC is ultimately expressed in USD, because Bitcoin has this rating. Thus, the key indicator for the fund profitability - dynamics of the TKN price in USD (US dollars). At the same time, the additional goal is to maximize profitability in comparison with the cryptocurrencies accepted as settlement in fund: BTC and ETH.

The primary investment focus of the fund's portfolio is on solutions that enable the essential autonomous infrastructure for supranational economy: decentralised computation, data storage and communications, decentralised exchanges, investment solutions, prediction markets, pegged assets protocols, cross chain gross settlement systems, identity protocols, DAO and smart contract frameworks, reputation systems and social networks.

The Token Fund managers hold the view that diversification is necessary not only in terms of including a large number of assets in the portfolio. It is also important to leave the possibility of extracting income from various market conditions and new investment opportunities (Initial Coin Offering). That is why a combined investment strategy will be applied. Investment and trading decisions will be made in the following types of strategies:

PORFOLIO INVESTMENT WITH A MEDIUM AND LONG-TERM HORIZON PLANNING (AT LEAST 60% OF THE FUND'S ASSETS)

Evidence from the practice of investing in stocks suggests that passive portfolios can outperform the actively managed accounts in the long term, especially if the investor tends to low volatility and stable income from assets. Passive accounts track indices and have low transaction costs because of lower mandatory turnover. Currently, there is no generally accepted index for crypto assets, however passive funds can determine their own investment policy with the help of index characteristics.

In practice, creating an index which will be implied in The Token Fund portfolio structure is usually done by setting a structure according to market capitalisation of known currencies. Being the most dominant currency by market cap, Bitcoin may easily takes more than 50% of all portfolio. That is why certain limits have to be imposed on the structure. Market cap shouldn't be the only factor affecting the index structure. Traded volume should play an important role, as well as the "free float" of the currencies. Seeking the optimal structure of

The Token Fund portfolio is more art than science. As mentioned, currencies should be added to the portfolio based mostly on their market cap by applying some limitations:

- Only eligible currencies can enter the selection process (currencies based on blockchain technology);
- The portfolio should be limited to those currencies which are easily tradable on the exchange on a daily basis. Average daily turnover in last 6 months should therefore not be below 100,000 USD. Exceptions can be done only for cryptocurrencies and tokens acquired during the initial placement (ICO, ITO, TGE of the projects), while the share of assets sent to a separate project can not exceed 5% of the fund's assets at the time of investment.
- Once a selection is made, the structure of the portfolio is based on pre-defined rules. A rational investor does not want to be too exposed to individual currencies, therefore maximum weight should be applied (25%).
- Because of the high risk of the cryptocurrency market volatility, especially the alt coin market, maximum weight of Bitcoin and Ethereum may be applied more than 25%.

PORTRFOIO INVESTMENT AND TRADING WITH A SHORT-TERM HORIZON PLANNING (NOT MORE THAN 40% OF THE FUND'S ASSETS)

This strategy is implemented by managers and the analytical team of the Fund to decrease the volatility of the TKN price on the falling market and to use the market move during "flat" periods. These positions can be accounted for in large part within the general balances of USD, BTC, ETH.

Once the portfolio structure rules are set, rebalancing rules should be defined. Namely, The Token Fund structure becomes very dynamic with the daily movement of prices. Therefore, weekly or monthly rebalancing is proposed, whereby the fund managers makes the required transactions to reset investment fund structure in accordance with predefined rules. The fund managers reserves their right to rebalance the portfolio to its target structure within 1 day of the rebalancing date. Similarly, the weights of the fund's investments will be set according to the rules, where deviation of +/- 5 percentage points is allowed during the rebalancing period.

The fund managers reserve the right not to participate in the separation (splits) of existing blockchain systems (hardfork), if these decisions are dictated by the investment strategy of the fund, as well as for security reasons.

Predefined rules will be followed by the fund managers regularly unless specific market events occur (low liquidity of certain currencies, investments are too risky despite their growing market cap, systemic risk spreading, etc.). As mentioned, the fund managers will act in the interest of the fund's investors and their investments, therefore it reserves its right to overrule fund policy rules when an experienced team of currency analysts assesses that too risky investment decisions could be undertaken.

○ 6. Tokens

Supply of TKN depends on incomes and outcomes of fund's capital. Every time a purchaser sends BTC or ETH to The Token Fund BTC or ETH address The Token Fund issues TKN based on a price which is calculated at 12:00 and 00:00 UTC each day.

$$\text{TOKEN PRICE} = (\text{Value of Assets} \oplus \text{Supply})$$

$$\text{PURCHASER'S TOKENS} = (\text{Investments} \ominus \text{Token Price}) \ominus \text{Entrance Fee}$$

Every time a TKN holder sends TKN to The Token Fund account tokens are destroyed. Payout is calculated based on a price which is calculated at 12:00 and 00:00 UTC each day.

$$\text{TOKEN PRICE} = (\text{Value of Assets} \oplus \text{Supply})$$

$$\text{INVESTMENTS} = (\text{Investments} \ominus \text{Token Price}) \ominus \text{Entrance Fee}$$

7. Economic Model

Entry fee. Any time a purchaser wants to enter The Token Fund 5% of issued tokens is being deducted to reward fund managers and tech support. The allocation of rewards is the following:

- **Fund managers:** 4% of tokens
- **Tech support:** 1% of tokens.

Exit fee. Any time a purchaser wants to exit The Token Fund 5% of bitcoins or ether of payout is being deducted to reward fund managers and tech support. The allocation of rewards is the following:

- **Fund managers:** 4% of bitcoins or ether;
- **Tech support:** 1% of bitcoins or ether.

Figure 2 shows rewards allocation for entering and exiting the fund.

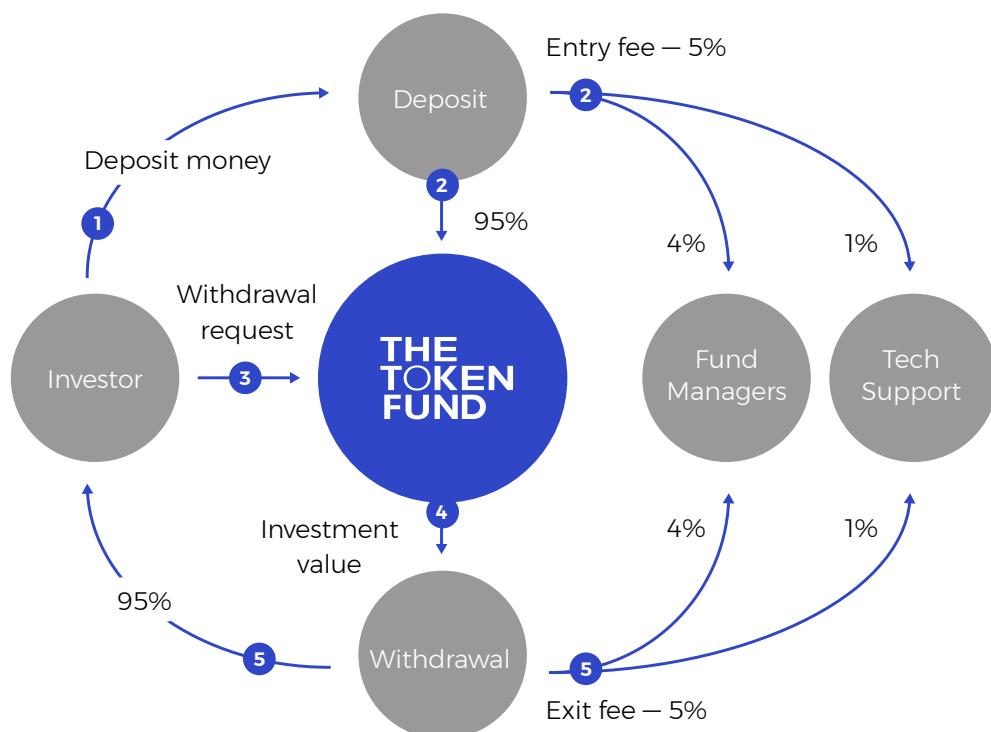


FIGURE 2. DEPOSIT/WITHDRAWAL MONEY ALLOCATION.

Tokens are produced on the Ethereum platform, operating standard ERC-20.

Ethereum based tokens rely on a well-established Ethereum infrastructure, benefiting from several advantages:

- Security and solidity;
- Use of robust and well-supported clients (Ethereum-based tokens can be managed with official Ethereum clients);
- Ethereum smart contracts enable a very transparent and secure way of reward -sharing among the token holders.

8. Technical Solutions

8.1. COMPONENTS

The technical solution for The Token Fund consists of three main elements: User-facing website, backend server for asset management and smart contracts on Ethereum blockchain. Figure 1 contains basic technical solution overview.

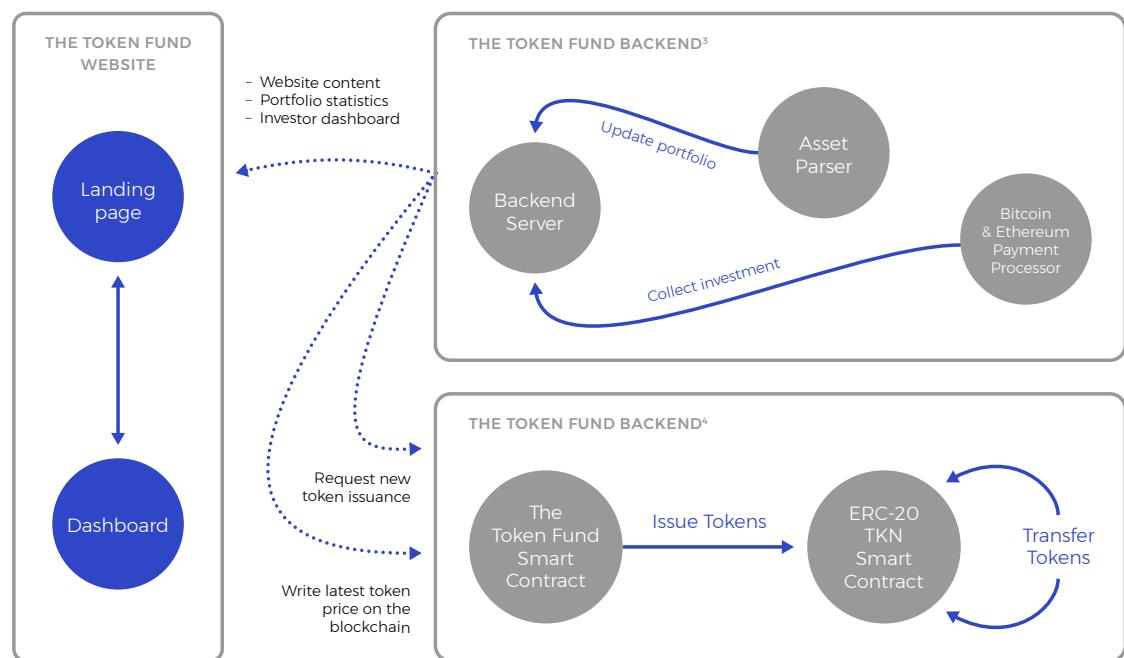


FIGURE 1.
THE TOKEN FUND TECHNICAL SOLUTION OVERVIEW.

8.2. ASSET MANAGEMENT AND THE WEBSITE

All the fund's assets are located at publicly accessible [Google Sheet](#). Every 12 hours asset parser component calculates current portfolio value and fund performance using API of popular blockchain explorers in order to receive balances of fund wallets and information from the token smart-contract. Fund performance and portfolio composition from the table are graphically displayed on the front page of The Token Fund.

The client who wants to make investments and purchase TKN must undergo the KYC procedure ("know your customer"), for which identification documents are needed. The KYC procedure is carried out through the website interface.

In the dashboard an investor is able to create a wallet and back up the keys for it. An address provided by an investor or newly generated one is used by the service to issue new tokens.

8.3. BACKEND SERVICE

Backend service is responsible for storing wallet addresses for investors and for interacting with Ethereum Smart Contract. It takes current token supply from TKN contract and calculates last token price based on the fund portfolio asset value. After that, it acts as an oracle by publishing the latest price of the token on The Token Fund contract. The backend is also responsible for initialising new token issuance once it gets investment in Bitcoin or Ethereum through the dashboard.

8.4. SMART CONTRACTS ON ETHEREUM BLOCKCHAIN

The business logic of The Token Fund is controlled by two smart contracts on the Ethereum blockchain: one is a token that stores the balances of investors in the fund (TKN contract), and another is responsible for issuing new tokens in exchange for invested money (The Token Fund contract). TKN contract is based on the ERC-20 standard token contract with an extra function that allows new token emission. This function is only accessible by The Token Fund contract.

8.5. INVESTMENT FLOW

A regular way of investing requires sending bitcoin or ether to the personal investment address available in the dashboard. After receiving an investment, the backend triggers the function on The Token Fund contract that calculates the number of tokens the investor should be distributed based on the current price of the token. After that, the backend service executes issuance function on The Token Fund contract to mint new tokens for a new investor.

8.6. THE CODE

You can find the code of all our contracts at these links:

[GitHub repository](#)

[TKN contract](#)

[The Token Fund contract](#)

[Asset parser](#)

○ 9. Risks

The purchase of TKN carries with it significant risks. Purchasers and fund managers are exposed to the following risks: inherent market risk, liquidity risk, technological risk, loss risk, theft risk, regulatory risk, miscomprehension risk. By sending bitcoins or ether to address the purchaser agrees that he or she understands and accepts these risks and potential losses of all funds without a possibility to restore. Fund managers do not hold any risks except for risk of losing personal investments.

For security reasons, fund managers reserve the right not to disclose information about the way of storing crypto-assets, or to change the content of information published in the public domain.

○ 10. Liquidation

The following events could trigger the liquidation procedure:

**DECISION
OF TWO FUND MANAGERS**

**IMPOSSIBILITY OF THE FUND
ADMINISTRATION BY BOTH
MANAGERS**

The following procedures will be executed in case of liquidation:

1

All available **holdings**
are exchanged into ETH
in 2 weeks period

2

All **ETH are split** across
TKN holders
proportionally to their
share of The Token Fund
(excluding fees)

3

All **ETH are sent**
to the registered
addresses of TKN holders

If there is an illiquid asset under possession, it is held by fund managers or a trusted person until it could be exchanged into ETH.

Limitation of Liability

THE INFORMATION PROVIDED IN THIS DOCUMENT IS NOT INTENDED FOR DISTRIBUTION TO, OR USE BY, ANY PERSON OR ENTITY IN THE UNITED STATES OR THE REPUBLIC OF SINGAPORE, OR IN ANY JURISDICTION OR COUNTRY WHERE SUCH DISTRIBUTION OR USE WOULD BE CONTRARY TO ANY LAW OR REGULATION, OR WHICH WOULD SUBJECT THE TOKEN FUND AND/OR ENTITY CREATING THE TKN TOKENS (INCLUDING THEIR AFFILIATES) OR ANY OF THEIR PRODUCTS OR SERVICES TO ANY REGISTRATION, LICENSING OR OTHER AUTHORISATION REQUIREMENT WITHIN SUCH JURISDICTION OR COUNTRY.

YOU ARE ONLY ALLOWED TO PURCHASE TKN TOKENS IF AND BY BUYING TKN TOKENS YOU COVENANT, REPRESENT, AND WARRANT THAT YOU ARE NEITHER A U. S. CITIZEN OR PERMANENT RESIDENT OF THE UNITED STATES, NOR DO YOU HAVE A PRIMARY RESIDENCE OR DOMICILE IN THE UNITED STATES, INCLUDING PUERTO RICO, THE U. S. VIRGIN ISLANDS, AND ANY OTHER POSSESSIONS OF THE UNITED STATES. IN ORDER TO BUY TKN TOKENS AND BY BUYING TKN TOKENS YOU COVENANT, REPRESENT, AND WARRANT THAT NONE OF THE OWNERS OF THE COMPANY, OF WHICH YOU ARE AN AUTHORISED OFFICER, ARE U. S. CITIZEN OR PERMANENT RESIDENT OF THE UNITED STATES, NOR DO YOU HAVE A PRIMARY RESIDENCE OR DOMICILE IN THE UNITED STATES, INCLUDING PUERTO RICO, THE U. S. VIRGIN ISLANDS, AND ANY OTHER POSSESSIONS OF THE UNITED STATES. SHOULD THIS CHANGE AT ANY TIME, YOU SHALL IMMEDIATELY NOTIFY THE CREATOR OF TKN TOKENS.

CREATOR OF TKN TOKENS SHALL RESERVE THE RIGHT TO REFUSE SELLING TKN TOKENS TO ANYONE WHO DOES NOT MEET CRITERIA NECESSARY FOR THEIR BUYING, AS SET OUT HEREUNDER AND BY THE APPLICABLE LAW. IN PARTICULAR, THE CREATOR OF TKN TOKENS MAY REFUSE SELLING TKN TOKENS TO U. S. CITIZENS, PERMANENT RESIDENTS OF THE UNITED STATES AND THOSE USERS WHO DO NOT MEET ELIGIBILITY CRITERIA ESTABLISHED BY THE CREATOR OF TKN TOKENS FROM TIME IN ITS SOLE DISCRETION.

The data content of this document is intended for general information purposes only and does not constitute solicitation of or an offer to purchase any securities. This document should be used for general research purposes only. It does not, nor does it purport to, constitute any form of professional investment advice, recommendation or independent analysis. Consequently, the information contained on this document has not been prepared in accordance with the relevant rules and regulations governing such publications in various jurisdictions.

CLIENT SUPPORT AND THE FUND'S NEWS



TheTokenFund



TheTokenFund



the-token-fund



TheTokenFund



slack.thetoken.io



support@thetoken.io

THE TOKEN FUND

THETOKEN.IO