WHITEPAPER



BiLira

Your connection to the decentralized internet

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ABSTRACT

The BiLira token is a full-reserve stable cryptocurrency that is (i) built on the blockchain network,[1] (ii) issued and managed by the BiLira organization, (iii) backed by the Turkish Lira and collateralized 1 : 1, (iii) secure and compatible with ERC-20 token standards.[2] The BiLira organization is a joint stock company incorporated under the Turkish law with a vision to enhance the access of Turkish citizens to the decentralized and peer-to-peer (P2P) global financial network through the use of its price stable cryptographic token. The BiLira tokens can be created (minted) at the time of deposit, issued upon identity verification, redeemed (burned) for fiat money and transferred on the network using the BiLira platform.

Any currency carries within three essential functions; store of value, medium of exchange and a unit of account. Satisfying all of the said functions makes the Bilira token applicable for multiple use cases. The wide adoption and usage of cryptocurrencies has been extended through well established local and global crypto exchanges. The primary use case for the BiLira token is the ability to offer convenient on-ramp and off-ramp solutions for exchanges to combat high volatility in cryptocurrency markets. In this respect, the BiLira token permits the transaction of crypto to fiat trades which is critical especially during periods of market decline.

Superior to the legacy financial system, stablecoins present no risk of chargebacks. The BiLira network can be favored as a preferred payment option for charities, merchants and e-commerce sites. The transparent nature of BiLira's underlying technology allows it to be trackable by the public; a feature particularly valuable for financial, charitable and governmental organizations. All transactions involving the BiLira token will be governed by smart contracts to ensure the security of the network.

The BiLira team and network presents a unique mix of blockchain specialists, software engineers, financial executives and academicians to fulfill the vision of raising awareness on blockchain technology and establishing a connection from the traditional financial system to the decentralized internet of tomorrow.

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EXECUTIVE SUMMARY



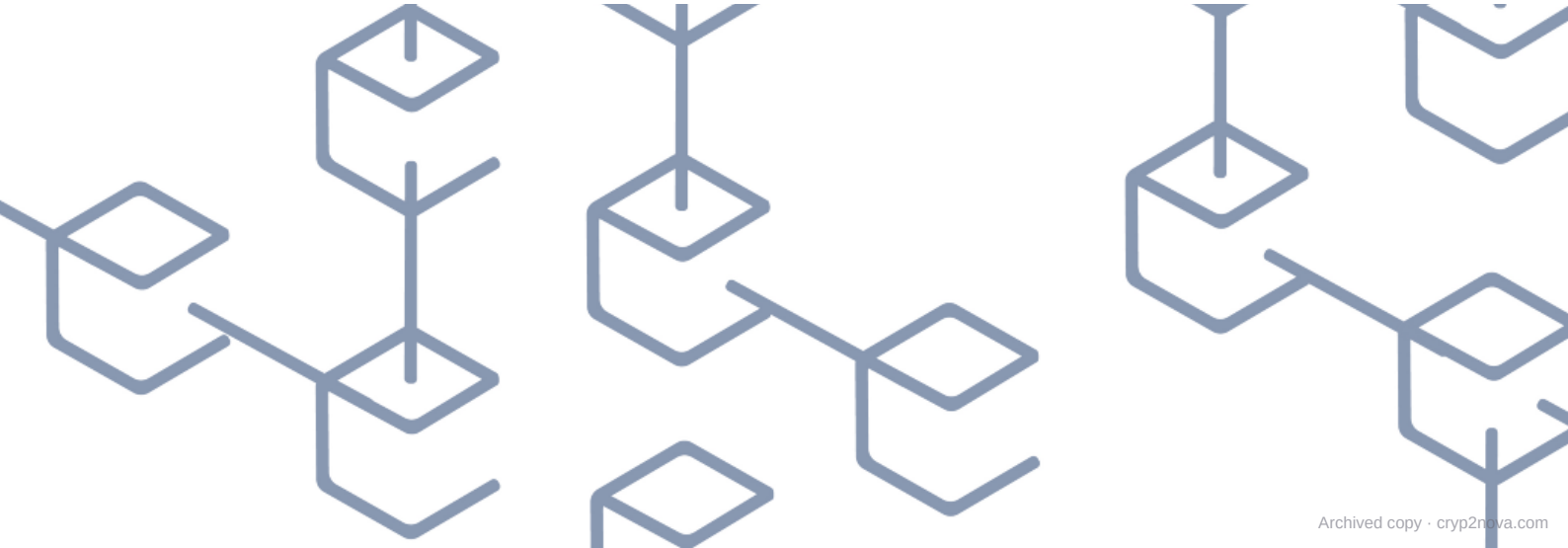
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THE BILIRA MISSION AND VISION

Our vision for BiLira is to offer every Turkish citizen a seamless connection to the decentralized internet. As emerging technologies continue to expand across the globe, the concept of open internet - a fundamental network of information which is free and accessible to everyone regardless of financial motives - has allowed individuals all around the globe to instantly, securely and effortlessly share information. The contributions of this advancement is immense and its impact is still unraveling around the world.

The advent of cryptographic assets, blockchain computing and data sharing has initiated a new era of open internet allowing the public to exchange value and transact with one another like never before. Today, crypto assets and blockchain technology provide the means to transfer globally, securely and at a low cost. Establishing an open internet based on value exchange can pave the way for a seamlessly borderless and integrated world, which can eliminate barriers that enable the development of a global marketplace that is both economical and inclusive of everyone.

We believe that the future of the economy is going to be globally transparent, freely distributed and available to anyone who is willing to connect with the decentralized financial system. BiLira emerged from our aspiration to realize this vision with the intent of empowering the people rather than the few chosen gatekeepers. BiLira plans to create a secure network scheme to manage the creation, redemption and flow of price-stable crypto assets under a new structure that is independent of BiLira and joined by like minded partners.



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THE BILIRA MISSION AND VISION

Supplementary to the governance and auditing network, BiLira plans to assist the endeavors of current public blockchain frameworks in terms of offering technologies that address price volatility and transaction scalability issues within the ecosystem.

Specifically, BiLira plans to provide:



While the BiLira organization will become the primary licensed network member of the BiLira token mechanism, the network scheme and crypto asset technology will be further developed to cultivate certified network members and distribute the governance of protocols independent of the BiLira organization. This document outlines the BiLira team and Luna Foundation, the problems BiLira hopes to solve, how it is expected to operate, and how it should be managed. To simplify the content, a glossary of key terms is provided in the appendix.

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CRYPTO EXCHANGE USE CASE

For the last couple of years, Turkey has consistently been in the list of top 5 countries where citizens use or own cryptocurrencies.[3] Recent statistics reveal that Turkish residents are the most common cryptocurrency users around the globe, with one in every five people either using or holding crypto assets, which is twice as much compared to the second biggest consumer of cryptocurrencies.[4] The adoption of cryptocurrencies in Turkey is also supported by data surrounding the number of and total traffic on crypto exchanges which is ranked within the top 20 exchanges and top 5 countries respectively among the world.[5] With regard to the information above, the BiLira stablecoin issued by the BiLira team is planned to focus on issues surrounding the exchange of cryptocurrencies and the related risk associated with current exchange networks.



Turkish citizens have adapted the use of cryptocurrencies and Turkey has established multiple crypto exchanges contrary to other developed countries, which presents a unique opportunity for growth. Crypto exchanges are online marketplaces where verified users are allowed to buy and sell crypto assets such as Bitcoin, Ethereum and others. The issue of asset fluctuation in the crypto market has tampered with the trust of the public, which poses a problem on the further adoption of cryptocurrencies locally and globally. On the other hand, tokenized fiat money, such as BiLira, is price-pegged to the value of the Turkish Lira, eliminating any fluctuations and risk of value loss in the asset.

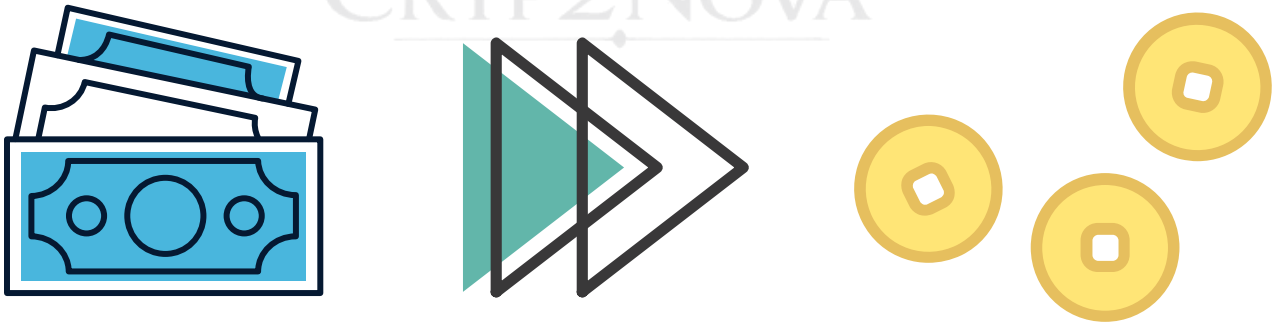
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CRYPTO EXCHANGE USE CASE

This allows price-stable tokens to provide easy and safe onboarding for people who are new and skeptical of crypto exchanges. In addition to fiat gateways, stablecoins also offer a hedging opportunity on volatile crypto assets which is a faster and cheaper option than traditional fiat on-and-off ramp solutions that current exchanges offer. Virtually, a user of any crypto exchange can choose to protect themselves from any loss that may be exerted by volatile crypto assets by exchanging their cryptocurrencies for TRY backed stablecoins which is designed to preserve its value.

Currently, many of the crypto exchanges in Turkey cannot offer a convenient way to on-ramp and off-ramp users. Only a few of the exchanges offer direct payments from qualifying banks and the rest depend on users depositing cryptocurrencies that they have acquired elsewhere in order to create and maintain liquidity. Implementing stablecoins such as BiLira that are tied to fiat reserves on these exchanges can be a convenience both for users and for exchanges. For example, listing BiLira on said exchange can open trading activity across multiple token types to create freedom for users and liquidity for exchanges.

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BiLira is responsible for establishing stablecoin gateways, created and maintained by licensed and compliant network members, in order to offer fiat connectivity to certain exchanges. The governance and smart contracts will also be provided by the BiLira organization to enable issuing network members to mint BiLira for customers who may then use them to invest in crypto assets or manage risk exposure on supporting crypto exchanges.

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PAYMENT USE CASE

Over the last two decades, our understanding of many of the traditional financial organizations and instruments have been brought into question. The way we transact with one another has drastically changed with the technological and cultural movements of the 21st century. The rapid adoption of smartphones paved the way for wide use of mobile-based payments which have proliferated across the globe. With the emergence of digital wallets, peer-to-peer payments and digital payments to merchants, sending money has developed into effortless transactions. Historically, firms from the three sectors of finance, telecommunications and technology have amplified the use of mobile wallets, however a majority of these wallets are merely shreds of software built on top of the existing payment network and banking system. Each are designed to work with the web 1.0 and 2.0 era of online services, where the focus is mostly on companies and communities in terms of owning and sharing content. On the outside, everyone is free to exchange information and communicate openly, however the inner workings of money and payments on the internet still remain confined to certain financial organizations.



The BiLira team aims to bridge the gap between current payment infrastructures and the web 3.0 era of online services by providing a solution that allows digital wallets to be used as freely and openly as information on the internet. Just as content is free to move from one web browser to another, a fiat token connected to a network can flow between wallets without any barriers. The BiLira platform and stablecoin are designed to offer the convenience of text messaging combined with the charge-free and borderless services of email for storing and sending money instantly. People are free to choose what they share as content on the internet and many of the web services exchange and use information to better serve their users. This has greatly impacted the world wide adoption of the internet which is why we believe that for money to be another form of internet content it must establish ease of use, cost effectiveness, instant and transparent transactions.

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DONATION USE CASE

On top of crypto exchange and payment use cases, the BiLira team is especially excited about the potential benefits of cryptocurrencies for non-profit organizations. Charitable organizations often have to deal with issues surrounding transparency, accountability and restrictions on ways they can accept donations. Our goal is to address these barriers to philanthropy by implementing crypto based donations to improve the efficiency and direct impact of funds raised by charities.

The primary contributions of cryptocurrency based donations include total transparency, public responsibility and reduced administrative expenses. Every transaction on the blockchain is one-of-a-kind, which means that every donation via cryptocurrency can be tracked and accounted for by the charity as well as by the public. This can directly influence the integrity of the charity and can ensure donors of the clear usage of funds. Moreover, each transaction written on the blockchain is immutable and publicly verifiable to securely view and regulate the management of donations. A chunk of all donations are subject to associated processing and administrative costs which greatly diminish the potential impact of charities. Cryptocurrencies can reduce the overall costs by involving fewer intermediaries which will subsequently allow more funds to be allocated to intended causes.



Crypto-philanthropy is persistently being adopted by prominent non-profit organizations which have enhanced their contributions in recent years. For example, Fidelity Charitable established in 2015 is a global organization that received more than $100 million in cryptocurrency donations to date.[7] Accepting cryptocurrencies as a form of donation can benefit both donors and non-profit organizations. As BiLira, our aim is to offer charities in Turkey an opportunity to benefit from the many advantages of accepting crypto donations in order to maximize the effect of social good.

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SERVICE PROVIDERS: IDENTITY, COMPLIANCE, FRAUD, RISK

Blockchain technology and the advent of crypto assets present many benefits for the way we create, store, share and protect information within organizations. Blockchain technology acts as a facilitator to implement solutions that tackle real world issues without compromising the integrity of the data. The implementation of this technology greatly enhances the attainment of the above mentioned use cases: a mechanism that establishes and manages a gateway for sharing data between two parties that do not trust each other; a store of value that is transferable based on processing power, which is supported by the market and independent of the policies of an issuing government; and a publicly transparent system that keeps immutable records of all transactions.

BiLira plans to offer a service provider mechanism to support trust and identity decisions, rules for payment settlement and reversals, and the secure exchange of KYC/AML-related information to meet compliance obligations. Providers of services for fraud detection, risk assessment, identity management, AML monitoring, and other services on the network will be able to implement the BiLira service provider interface in order to participate in the network and earn fees for the services they provide to transacting network members.

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For example, when different wallet providers connect to one another using BiLira, it is important that these participating wallets meet applicable compliance and regulatory requirements, which include relevant KYC and AML obligations. BiLira's service provider interface will allow providers to supply features that support KYC and AML information exchange while leveraging cryptography to secure personal identifiable information (PII) and reduce the risk of PII leakage common to existing traditional payment networks.[8]

Assuring all BiLira customers of the transparency and security of funds is of utmost importance to our success. All information pertaining to the balance of funds held by our team, the amount of tokens in circulation and the number of BiLira tokens issued and redeemed will be disclosed through quarterly bank statements and independent third party audits to assure the safety of funds.

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GOVERNANCE & THE BILIRA ORGANIZATION

The software implementation of the stablecoin is expected to be carried out in three phases to maximize transaction throughput, safety of funds and customer satisfaction. In the first phase, BiLira will be responsible for minting, redeeming and managing all customer transactions and custodian accounts excluding third party services (KYC, AML, etc.). In the second phase, BiLira and partnering banks will have joint control over custodian accounts to ensure transparency and independent governance over all stablecoin transactions. In order to verify the price stability of the underlying asset, both parties will be regularly audited for solvency and security. In the final phase of implementation, the BiLira organization will hand over all governance of custodian accounts to partnering banks or a trusted portfolio manager. Fundamentally, the three phase software implementation is designed to provide the support, governance and stability that is essential to cultivate the trust of BiLira customers.

The BiLira organization also aims to continuously improve the decentralization of governance mechanisms and the protection of customer funds by offering certifications to organizations who are considering to be a member of our network. Our certifications will be directed towards strengthening the trust in issuing members and wallet providers, certifying regulatory compliance of network members, and providing the support necessary to ensure the continued functioning of operational transactions.

The company also plans to pursue business development and support programs to raise awareness on the subject of stablecoins as well as to establish an opportunity for individuals to adopt the use of BiLira in their everyday lives. BiLira will commit entrepreneurial, organizational and engineering resources to collaborate with private, public and non-profit organizations in order to develop a strong crypto infrastructure in Turkey. In doing so, the organization hopes to bring transparency to the inner workings of organizations, to provide accessibility to individuals from various backgrounds and to bridge the trust gap between the public and local businesses.

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TECHNOLOGY & NETWORK



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By exchanging price-stable crypto assets using a standard protocol across blockchains and fiat rails, BiLira enables compatible wallets to leverage services for compliance, identity, and risk management via the Bilira platform which has an established interface for service providers which are licensed to plug into the network. The technology provided by BiLira supports tokenized fiat money through asset-backed stablecoins, and enables high transaction throughput by employing the security and convenience of blockchain technology. This section describes the inner workings of said technology in more detail.

THE BILIRA FIAT TOKEN

The BiLira token will initially be built on top of the Ethereum network according to standard methods of the ERC-20 interface and will be further added as an asset on the AVA blockchain platform.[9] The current mechanism is set to allow the minting and redemption of tokens, pausing all activity or freezing of individual addresses, and upgrading the smart contract for resolving bugs or adding new features.

The BiLira organization will initially have full control over all roles and will eventually certify and authorize network members to make minters to serve BiLira token users. Each address is constrained to their respective roles to ensure the security and integrity of the network. The BiLira organization has ownership over all addresses which correspond to exclusive functionalities:

- Master Minter - Controls the addition, deletion and allowance of every minter
- Minters - Facilitates the minting and burning of BiLira tokens
- Pauser - Can pause any contract to prevent minting/redeeming and transferring of tokens
- Blacklister - Forbids a specific address from sending, receiving, minting/redeeming tokens
- Owner - Enables to re-assign any of the roles excluding the role of admin
- Admin - Permits a contract to re-assign itself and allows the contract to be upgraded

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SMART CONTRACT SPECIFICATIONS & SECURITY FEATURES

The BiLira token is built on the Ethereum network to allow for the development of smart contracts that can perform actions under certain conditions determined[10] and set by the BiLira network.[11] There are additional functionalities and oversight implemented on top that are critical for a fully-backed, secure, regulated and compliant stablecoin.



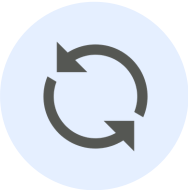
PAUSING

The entire contract can be paused in case a serious bug is found or there is a serious key compromise. All transfers, minting, burning, and adding minters will be prevented while the contract is paused.



BLACKLISTING

Under special circumstances that are mandated by law and enforced by regulatory and law enforcement authorities, BiLira has the obligation and the ability to blacklist an address, which blocks that address from receiving and sending BiLira tokens.



UPGRADEABILITY

The BiLira Token uses the OpenZeppelin Unstructured-Storage Proxy pattern.[12] BiLiraToken.sol is the implementation, the actual token will be a Proxy contract (BiLiraTokenProxy.sol) which will forward all calls to BiLiraToken via delegatecall. This pattern allows BiLira to upgrade the logic of any deployed tokens seamlessly.

SECURITY

In addition to the management of smart contract functionalities mentioned , the BiLira team has also instituted several safety precautions to protect and preserve the network:

1. Key Generation - All keys are generated, stored and managed by hardware security modules for strong authentication and safeguarded crypto processing.[13]
2. Key Storage - Keys that entail high-risk actions are stored offline in the BiLira cold storage system.
3. Multisignature - Major decisions and actions on the network require approval from at least three individual signers to provide security and fault-tolerance.
4. Revocation - All pending actions on the network can be revoked, nullified or eliminated before being executed to prevent malicious activity.

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MINTING & REDEMPTION

BiLira contracts manage the minting and the redemption/burning of stablecoins, which can be used for both the exchange and wallet interoperability use cases. Customers who on-board through a stablecoin on-ramp, such as a web application created and maintained by the BiLira team or a verified token-issuing network member, can transfer fiat funds into the BiLira issuer's account. The issuer then executes a series of commands with the BiLira network to verify, mint, and validate fiat tokens pegged to the value of those deposited funds. The customer can then transfer BiLira tokens elsewhere in order to use them. Redemption follows the reverse sequence: fiat tokens are burned when a customer visits an off-ramp such as a web application maintained by the BiLira organization. Upon successful verification and validation, funds from underlying fiat reserves would be transferred to the customer's external bank.

Consider this example: Murat is a trader on crypto exchanges, and he would like to purchase crypto assets on exchanges that do not provide direct fiat connectivity to his Turkish bank account, and he would also like to hedge his risk exposure to the volatility of crypto assets on those exchanges by maintaining some of his holdings in the form of BiLira tokens that are pegged to the Turkish lira.

Murat visits the BiLira web application created and maintained by the BiLira company. Murat signs up for a customer account, which requires validation of KYC/AML requirements, and then begins the deposit process in order to turn his fiat TRY into tokenized TRY tokens. The deposit process requires Murat to transfer TRY from his bank account into the BiLira account. Murat has a limit on the amount of funds he may transfer (and thus the number of BiLira tokens he may acquire) in a given time period.

Once Murat's transfer settles, the BiLira platform initiates the process required to execute the transfer of BiLira tokens to Murat. These tokens may be taken from existing reserves from BiLira networks buffer of pre-funded fiat assets to increase the speed of the process; if no such reserves are available, then the BiLira network uses the company protocols to mint new tokens. Murat then receives the tokens, and the value of those tokens directly corresponds to the value of the funds he deposited into the system.

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MINTING & REDEMPTION

Murat may transfer the BiLira tokens to an address in a wallet or on an exchange so that he may use them to support his trading activity. The BiLira network maintains a blacklist of forbidden addresses in order to protect Murat and other network participants from known bad actors and to support regulatory compliance.



When Murat -- or one of Murat's counterparties who may have acquired some of the BiLira tokens -- wishes to redeem the tokens and withdraw the underlying fiat money, then the process is executed in reverse: Murat returns to the issuing BiLira platform, deposits the tokens into a wallet address made available to his account on the BiLira web application, and the BiLira network executes a transfer of underlying TRY reserves into Murat's registered bank account.

The tokens are withdrawn from circulation, and either placed in reserve to service future requests, or else burned/destroyed if the value of those tokens surpasses the prefunded fiat buffer maintained by the BiLira network. This process is subject to authentication and authorization, verification, validation, and compliance similarly to the deposit sequence.

Note that access to stablecoins need not be in a dedicated web application as in this example, but could also occur in a wallet, exchange, mobile app, or other product created by a licensed, compliant, token-issuing member of the BiLira network.

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WALLET TO WALLET TRANSACTIONS

A cryptocurrency wallet is a software program that can send and receive digital currencies as well as monitoring your balance. The BiLira organization intends to offer its customers compliant, reliable, safe, high-speed transfers between individuals who intend to use our platform.



If you want to purchase BiLira tokens or any other cryptocurrency, you will need to have a digital wallet. These wallets are programmed to store your public and private keys which allow the user to have sole ownership of their digital assets. Whether it be sending or receiving digital currencies, every transaction is recorded on a public blockchain to transparently and securely keep account of every users wallet balance.

There are several types of wallets to store digital currencies which typically include desktop, online, mobile or hardware wallets. The BiLira token is compatible with all ERC-20 standard digital wallets. Our organization recommends users to signup for the most prominent and secure wallet/browser providers which are MyEtherWallet (MEW) and MetaMask. Both are open source, free to signup and easy to use for generating wallets as well as executing transfers.

Each wallet can only be controlled by you which gives you total freedom over your funds. Any ERC-20 token wallet provider can provide simple and fast transactions for free or a flat charge, which is a fraction of traditional bank fees, to transfer tokens on the blockchain network. A wallet address is like a bank account number which you can share with people who would like to transfer funds into your wallet.

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MERCHANT PAYMENT

BiLira also plans to facilitate compliant, reliable, safe, high-speed transfers between an individual who uses a consumer wallet app and a merchant who uses a point of sale by adding a digital wallet address. The consumer wallet and the merchant point of sale software can interact using the BiLira network standard. This is analogous to a web browser accessing a remote website using the HTTP protocol without resorting to use of a closed private network.



Consider this digital wallet interoperability example: Selin has a mobile wallet app which holds a balance in Turkish liras. Selin would like to purchase a book from Ahmet who owns a bookstore. Selin waits in line at the cashier of the book shop and she uses her digital wallet to pay Ahmet's digital wallet address connected to the point of sale app. Even though Selin and Ahmet have apps by varying companies, these apps can interoperate because both support transfers of Turkish liras are on the same blockchain. Using BiLira tokens, the apps achieve interoperability and can seamlessly facilitate a payment based on supporting a common open protocol. This is a highly lucrative alternative for merchants especially because the fee charged by payment processors which is 3% will be lowered to a flat fee for all transactions that accept payments from a digital wallet.

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EXISTING TECHNOLOGY & IMPLEMENTATION STRATEGY

BiLira plans to enable practical development of its implementation by utilizing open source technology and intellectual property contributions. The protocols, APIs, and business rules defining interactions between network participants will represent a level of abstraction above any particular implementation of rules set forth by existing smart contracts and protocols. The initial implementation of the BiLira protocol supports significant transaction volume in development across fiat to crypto currencies. BiLira plans to implement the protocols on top of the Ethereum and Avalanche platform as a series of smart contracts and ERC-20 tokens. The BiLira team plans to leverage the existing implementation to accelerate development of a new implementation of the protocol.

STABLECOIN DESIGN

Four general approaches exist for a price-stable token strategy:

FIAT - COLLATERALIZED

FIAT ASSETS IN RESERVES COLLATERALIZE TOKENS AND THUS PROVIDE PRICE STABILITY BY PEGGING TOKEN VALUE TO RESERVED FIAT VALUE



CRYPTO - COLLATERALIZED

CRYPTO ASSETS IN RESERVES COLLATERALIZE TOKENS AND PROVIDE PRICE STABILITY PEGGED TO THE VALUE OF THOSE RESERVED CRYPTO ASSETS



ALGORITHMIC NON-COLLATERALIZED

SOFTWARE ECONOMIC MODELS AIM TO PROVIDE PRICE STABILITY WITHOUT RELYING ON UNDERLYING COLLATERALIZED ASSETS



HYBRID

A BLEND OF THE THREE BASIC APPROACHES ABOVE



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EXISTING TECHNOLOGY & IMPLEMENTATION STRATEGY

BiLira aims to provide the first design: a fiat-collateralized approach. One unit of tokenized fiat currency is backed by one unit of reserved fiat. More so than the other approaches to stablecoin development, the fiat-collateralized approach requires meeting traditional regulatory requirements, requires issuing members to have strong auditable reserve capability for traditional backing assets (such as fiat banking relationships), and provides less decentralization -- and it is also currently the most effective approach in terms of price stability.

The BiLira organization addresses the centralization tradeoff by envisioning a network of multiple token-issuing members, thus providing multiple reserves and liquidity sources for network users rather than presenting a single collateralization gateway point of failure. This approach is distributed, though it is not designed nor it is aimed to be entirely decentralized.

Further, the BiLira organization itself enforces requirements related to audits/solvency, compliance, and capitalization thresholds and limits. This eliminates reliance on any one issuing members to provide these controls. BiLira, as a technology provider and network scheme, provides such governance and is incentivized to maintain compliance and solvency from all its verified issuing members.

The interaction between a user and the BiLira network is codified in a series of smart contracts created and maintained by the BiLira team, along with a protocol and network policies to facilitate such interactions. New users must on-board into the BiLira network, and new fiat tokens join the scheme through that process. The contracts created and maintained by BiLira network are intended to be open source software, subject to ongoing global peer review as well as formal security review, and evolved through internal BiLira engineering development as well as through collaboration with open source developers around the world.

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TEAM & ORGANIZATION



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BILIRA ORGANIZATION

While the BiLira organization is established as the owner, organizer and administrator of the network, it is proposed that the governance of operations and transactions are to be relayed on certified network members and market makers in the coming months. The BiLira organization is planned to operate with working capital, employees and technology stack that is independent of network members and organizational partners. Upon instituting a network of members that actively contribute to the operations of the stablecoin platform, The BiLira team plans to act merely as a founding member as the source of the original open source technology.

The BiLira organization aims to satisfy four key objectives:

- Provide R&D capability, support and maintenance of the BiLira stablecoin and software implementation. This includes managing the BiLira website, customer dashboard, code repository and facilitating the support of third party engagements (code contributions, partnerships, product development, etc.).
- Provide the business development, governance and compliance functions for the BiLira Network, including business development efforts to generate use cases and promote the adoption of products and services offered by the organization. Prospectively, organization endeavors will be towards integrating consumer wallets, merchant networks and decentralized finance products.
- Provide safety of funds, compliance reviews, custodian services, due diligence of members, and optional certification for network participants in order to demonstrate, and maintain high degrees of trust that satisfy both legal obligations and expectations of the public.
- Raise the awareness of Turkish citizens on the topic of cryptocurrencies and blockchain technology. Contribute engineering, decentralized finance products and support services to underlying distributed ledger infrastructure both locally and globally.

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BILIRA ORGANIZATION

The BiLira organization is planning to become a significant global organization with partnerships and organizational networks in all major countries and markets around the world. The organization is intending to grow as an all-together convenient gateway to crypto assets and decentralized finance products by providing a stable currency that is globally compliant, publicly transparent and compatible with diversified digital wallets.

LUNA FOUNDATION

Awareness of blockchain technology and use of crypto assets all around the globe greatly depends on the education and knowledge of the general public. As such it is important to establish a non-profit foundation that is aimed towards teaching younger generations about researching, understanding and using the latest advancements in technology and innovation. The Luna Foundation founded by the members of BiLira will address a broader audience in efforts to not only raise awareness and educate individuals on the topic of technological literacy but also to support the launch and initial adoption of the BiLira platform. Under one roof, Luna Foundation will organize and carry out seminars, workshops, social responsibility projects which will encompass topics such as crypto assets, blockchain, automation, artificial intelligence, open finance, decentralization, social justice and related fields of technological innovation.

Embracing upcoming technological advancements as a country will require both a mindset and a sociocultural shift in individual perspectives. In order to aid Luna Foundation in fulfilling its mission and vision, our resources and network will offer support both to national and international organizations as well as inviting individuals and organizations to collaborate on projects that have a direct impact on the citizens of Turkey.

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TEAM

BiLira's team dynamics play an essential role in planning, developing and implementing our vision for the products and services we deliver. With respect to our company values and beliefs, our union is based on transparency, innovation and decentralization which promotes diversification among team members and enhances our development both personally and as an organization.

TEAM MEMBERS & BACKGROUND

BiLira's founding team presents deep knowledge and experience in blockchain technology, open finance and software development with prior engagement in internet technology, online services and banking industries. Co-founders Sinan Koc, Murat Firat and Vidal Arditi have developed and worked on multiple companies that offer a range of public and private products, platforms and software solutions that have helped innovate traditional services.

The founding team is joined by seasoned executives, advisors, mentors and a broad leadership team adding immense experience to the BiLira organization. With a unique combination of top finance executives, venture builders and blockchain specialists, the management team represents one of the most experienced and talented firms in the Turkish Financial Technology industry.

SİNAN KOÇ - CEO

Is a seasoned entrepreneur and venture builder who has been working in the blockchain ecosystem for multiple years. He graduated from Wharton School of Business at the University of Pennsylvania with a degree in Entrepreneurship and Finance. He co-founded Geld, a peer to peer payment app and licensed it to Akbank in 2018. He then joined ConsenSys Token Foundry as Head of Sourcing in NY and specialized in Initial Coin Offerings.

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ATİLLA MURAT FIRAT - CTO

Is a computer engineer with a deep knowledge of the blockchain space. He graduated from the University of Toronto with a major in Electrical and Computer Engineering with a minor in Business. He has worked as a developer on blockchain projects at the Royal Bank of Canada and Coinbase. He has been rewarded with multiple awards at blockchain hackathons and successfully completed the ConsenSys Blockchain Developer Academy.

VİDAL ARDİTİ - COO

Is an experienced data analyst, full-stack developer and blockchain specialist. He graduated from Duke University with a degree in Psychology and a minor in Computer Science. He completed the ConsenSys Developer Academy, aided the formulation of Geld and has advised blockchain startups/hackathons as a mentor. He has extensive experience in trading cryptocurrencies and closely follows advancements in innovative/disruptive technologies.

ORGANIZATIONAL STRUCTURE, INVESTORS & ADVISORS

The BiLira team consists of a decentralized structure where the rules, roles and responsibilities are distributed among various levels of the organization. This talent includes individuals from software engineering, project management, distributed computing, business development, finance, legal and compliance. The BiLira organization will be supported by a strong board of advisors with deep experience in internet platforms, protocols and consumer products, enterprise development, open source software, and also broad expertise in cryptocurrency and blockchain technology.

The BiLira organization is backed by private and strategic investors to aid in fulfilling the company vision and mission. Our team closely works with professional and academic organizations which include Turkish regulators, blockchain academissions, market makers, investment funds, financial advisors and venture builders. The BiLira network is supported by both local and global partners with decades of experience in personal finance, compliance structures, future technology and the consumer internet space.

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REGULATORY STATE

The advent of cryptocurrency and blockchain technology represents the most significant technology breakthrough since the emergence of the commercial internet, and the BiLira organization believes it is crucial to build strong relationships with governments who are seeking to understand the technology and ensure that markets can adopt it while also addressing key risks to society, the economy, and consumers. Due to this fact, the BiLira team has focused on deep and high-quality engagement with regulators since its inception, and holds formal talks with BDDK (Banking Regulation and Supervision Agency), SPK (Capital Markets Board of Turkey), MKK (Central Securities Depository of Turkey) and TCMB (Central Bank of the Republic of Turkey).

Similar to most global regulations set forth for digital assets and cryptocurrencies, Turkish regulators are yet to enforce policies that govern crypto assets. The relevant regulatory institutions mentioned above have not determined whether to recognize blockchain technology and cryptocurrencies as legal tender which is why the sector is currently unregulated. The BiLira team foresees the Turkish government to announce cryptocurrency-friendly regulations and policies as a means to attract investment in future technology companies as well as to favor the advancement of financial instruments and local institutions. The current regulatory climate will enable the BiLira organization to offer fiat to crypto and crypto to fiat currency exchanges in Turkey.

TECHNOLOGICAL CONTRIBUTIONS

The BiLira organization is contributing core technology and open source software to develop the first TRY backed stablecoin. BiLira’s pioneering work in building seamless consumer on and off ramp experiences and using fiat currency on top of underlying blockchain settlement and integration layers are core to BiLira’s operations. Other technology innovations include systems and services for layering KYC and AML risk decisions into payment networks and transactions, and systems for providing instant liquidity and conversion between fiat and crypto assets.

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ADDITIONAL INFORMATION & UPDATES



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ADDITIONAL INFORMATION & UPDATES

The BiLira team will periodically update this paper to reflect our technical, business and social progress about our project.

All major updates will be announced on our website:

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GLOSSARY

Anti-Money Laundering rules (AML): A set of procedures, laws or regulations designed to stop the practice of generating income through illegal actions. Application Programming

Blockchain Technology: A continuously growing list of records, called blocks, which are linked and secured using cryptography and computation

Burning: An intentional action taken by the coin's creators to "burn" — or remove from circulation — a specific number from the total available tokens in existence.

Crypto Asset / Cryptocurrencies: A cryptographic unit of data and software code which has value as a tradeable asset.Crypto Exchange: Similar to traditional financial exchanges, crypto exchanges are marketplaces where individuals can buy and sell digital assets.

Decentralization: Design of a network that’s not managed by a central party and instead driven by peer-to-peer interactions without existence of a third party.

Digital/Crypto Wallet: A software program that stores private and public keys and interacts with various blockchain to enable users to send and receive digital currency and monitor their balance.

ERC-20 Token: Tokens designed and used solely on the Ethereum platform which follow a list of standards so that they can be shared, exchanged for other tokens, or transferred to a crypto-wallet.

Ethereum Network: An open-source, public, blockchain-based distributed computing platform and operating system featuring smart contract functionality.

Fiat Money: A government-issued currency such as Dollar, Euro and the Turkish Lira. The value of fiat money is derived from the relationship between supply and demand and the stability of the issuing government, rather than the worth of a commodity backing it.

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GLOSSARY

Governance: All of the processes of governing, whether undertaken by a government, a market or a network

Interface (API): A set of routines, protocols, and tools for building software applications. An API specifies how software components should interact. In general terms, it is a set of clearly defined methods of communication between various software components.

Know Your Customer (KYC): Rules and processes in which a business identifies and verifies the identity of its clients. The term is also used to refer to the bank and anti-money laundering regulations which govern these activities.

Liquidity: The ability to quickly and easily buy and sell assets on the market without altering the price of the asset.Minting: An intentional action taken by the coin's creator to create new tokens

minting noktadan sonra kalmış, aşağıya alınması gerek?

Stablecoin: A term used to describe a crypto asset that is pegged to underlying reserved assets and/or managed by software algorithms in order to enforce price stability.

Open Internet: A fundamental network neutrality concept in which information across the World Wide Web (WWW) is equally free, available and independent from the financial motives of Internet Service Providers.

Public Keys: A public, alphanumeric number derived from private key and used to receive cryptocurrency.Private Keys: A secret, alphanumeric password/number used to spend/send cryptocurrency.

Smart Contract: A computer protocol intended to digitally facilitate, verify, or enforce the negotiation or performance of a legal contract. Smart contracts allow the performance of credible transactions without third parties.

Store of Value: Assets that are stable in value and do not depreciate over time.

Tokenization: The process of issuing a representation of a real and tradeable asset which is similar to the process of securitization.

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REFERENCES

1. V. Buterin et al., “A next-generation smart contract and decentralized application platform”, 2014
2. Ethereum Wiki, “ERC20 Token Standard”, 2018
3. The Block, “Binance traffic in the last 6 months”, 2019
4. Statista Global Consumer Survey, “ING International Survey Mobile Banking”, 2018
5. Morgan Stanley Research, “Cryptocurrency trading volume by legal location of exchange”, “Number of cryptocurrency exchanges by legal location of exchange”, 2018
6. U. Naik, D. Shivalingaiah, “A Comparative Study of Web 1.0, Web 2.0 and Web 3.0”, 2009
7. Fidelity Charitable, “Giving Report”, 2018
8. N. Kaaniche, “Cloud data storage security based on cryptographic mechanisms”, 2014
9. Yin, et al. “Scalable and Probabilistic Leaderless BFT Consensus through Metastability.” ArXiv.org, 21 June 2019, https://arxiv.org/abs/1906.08936.
10. W. Egbertsen, G. Hardeman, M.Hoven, G. Kolk and A. Rijsewijk, “Replacing Paper Contracts With Ethereum Smart Contracts”, 2016
11. Ethereum, “Solidity Documentation”, 2016 - 2019
12. OpenZeppelin, “OpenZeppelin SDK Documentation”, 2019
13. The National Institute for Standards and Technology, “Digital Signature Standard (DSS)”, 2013

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