



KIRA Protocol

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Redefining Decentralized Finance

While the number of projects utilizing *Proof of Stake* (PoS) consensus is rapidly increasing, *centralized exchanges* are the only place where such assets can be traded and *staked* at the same time. There is no *trustless* solution that exists, to enable *stakeable*-asset holders to trade while earning *block and fee rewards*. Effectively majority of the *stakeable*-assets become centralized in hands of third party custodians and entirely loose security guarantees of their networks.

Cryptocurrency enthusiasts are forced to use *centralized exchanges* (CEX'es) as almost all existing *decentralized exchanges* (DEX'es) struggle to maintain liquidity, cannot scale or are dependent on authorities hosting the backend service to enable easy communication with the blockchain applications. Kira Protocol eliminates all of those disadvantages while allowing asset exchange to occur in the true P2P fashion, without requirement for any middleman thus virtually eliminating potential downtime.

Kira Protocol is designed to incubate and secure hundreds of new interconnected Proof of Stake networks with the value of real world assets such as tokenized Fiat, commodities and trusted crypto-assets such as Bitcoin, Ethereum or stablecoins, rather than only artificially created tokens with no real value or utility. All the value at stake can be not only fully liquid but also trustlessly traded, and at the same time provide traders and stakeholders with returns not achievable in case of any other DeFi systems.

Kira Protocol bootstraps the next paradigm by allowing token holders to stake any of their assets regardless if that's cryptocurrency or fiat, and by doing so - crowdfund new ecosystem projects. All without forcing investors to exchange their existing assets for other tokens or expose them to risks such as market volatility, theft or losses due to lack of liquidity of the tokens they acquire as it often happens in case of STO's and ICO's.



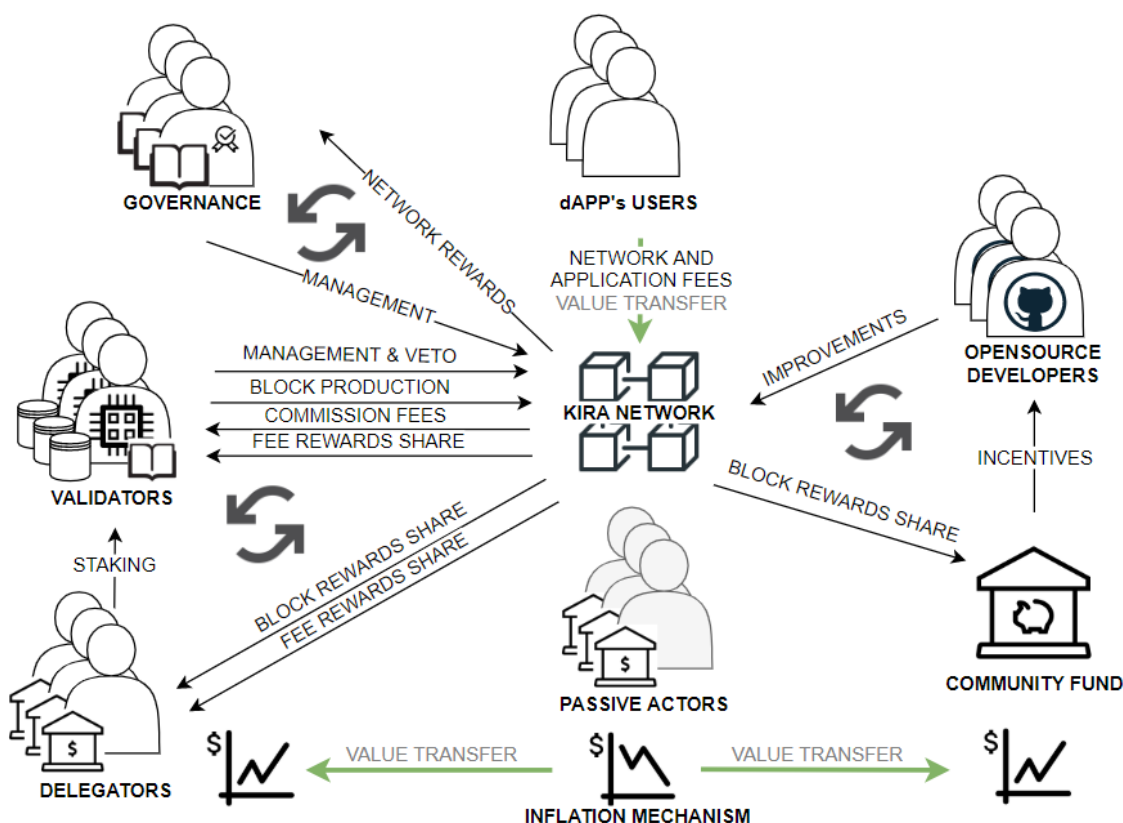
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Overview

Kira Protocol is a set of tools designed by the Kira Core team to secure Kira Network and induce value into its native staking asset KEX (Kira Token). Purpose of the Kira Network is to become a cryptocurrency ecosystem incubator and over time become its number one security layer.

The economy of Kira Network is designed as a multiple, independent positive feedback loop subsystems for the purpose of continuously inducing value into the system and incentivising network actors to coordinate their on-chain and off-chain operations. Network operations (Validators) are incentivised from fees paid by the users of the native dAPP's deployed on the Kira Network, such as Interchain Exchange or Initial Delegator Offering Modules.



Kira Network, Basic Economic Principles

Kira Protocol is a layer built on top of the Web3 / Intechain SDK's such as Persistence, Cosmos SDK and Substrate (Polkadot, Ethereum 2.0) that can be later reused by other interchain projects and cascade its evolution. Kira Core team will also provide a crowdfunding platform to enable more ecosystem projects to build upon its protocol and further contribute to its growth (Initial Delegator Offering's).

Kira Interchain Exchange

Interchain Exchange; is a scalable, trustless and permissionless asset exchange built to demonstrate core economic principles of the Kira Protocol and offer a fundamental value proposition (network fee revenues) to the Kira Protocol Token (KEX) holders.

The main utility of the Kira Exchange module is to provide full liquidity (through staking derivatives) to all assets at stake while enabling traders to benefit from the block and network fees. In combination with the MBPoS consensus Kira Exchange Protocol enables traders to stake and trade Bitcoin, Fiat, commodities and other assets at the same time.

Furthermore, Kira Exchange Protocol protects the cryptocurrency ecosystem from the honeypot attacks caused by the centralized exchanges which accumulate large amounts of stakeable assets.

Initial Delegator Offerings

Blockchains such as Cosmos, Polkadot, Dfinity, Ethereum 2.0, Tezos and others, secured through the process of staking (delegating, bonding or nominating), enable their Validators to earn commission fees from the block and fee rewards. Kira Protocol utilizes staking mechanism for the purpose of crowdfunding, allowing investors to hold full custody over their existing assets while maintaining liquidity and acquiring tokens with minimal possible risk involved. Initial Delegator Offerings (IDO's), invented and licensed by JSC Kira Core provides a superior and low risk alternative to Initial Coin Offerings, and other crowdfunding and token distribution mechanisms such as lock-drops.

Decentralized Development

On-chain contracting module is a tool enabling new developers to be onboarded and incentivised to trustlessly and transparently evolve, improve and audit blockchain applications deployed on the Kira Network. Kira Core is going to be one of the first employees of the Kira Protocol governance and on-chain contracting module.

Consensus

Almost every permissionless, decentralized network tends to [centralize more](#) over time, regardless if that's due to the bias in favor of geographical location with access to cheaper electricity, miners specialization or due to cartels accumulating stake-able assets, power and influence. Although none of those should be considered inherently bad and outright compromising for the protocol, however it is clear that the cryptocurrency community expects a solution that will allow for growing rather than decreasing trust and decentralization over time.

The Multi-Bonded Proof of Stake (MBPoS) is the first consensus to allow long term network decentralization. In contrast to the Proof of Stake where only a single asset can be staked and become centralized over time, a Multi-Bonded Proof of Stake not only allows multiple assets to become stake-able but also enables constant rotation of power in the network and increase of the operators (validators) count. This implies that before centralization risk starts to undermine the value of the native stake-able asset - new operators and tokens can be introduced into the system to rebalance the power and stake distribution.

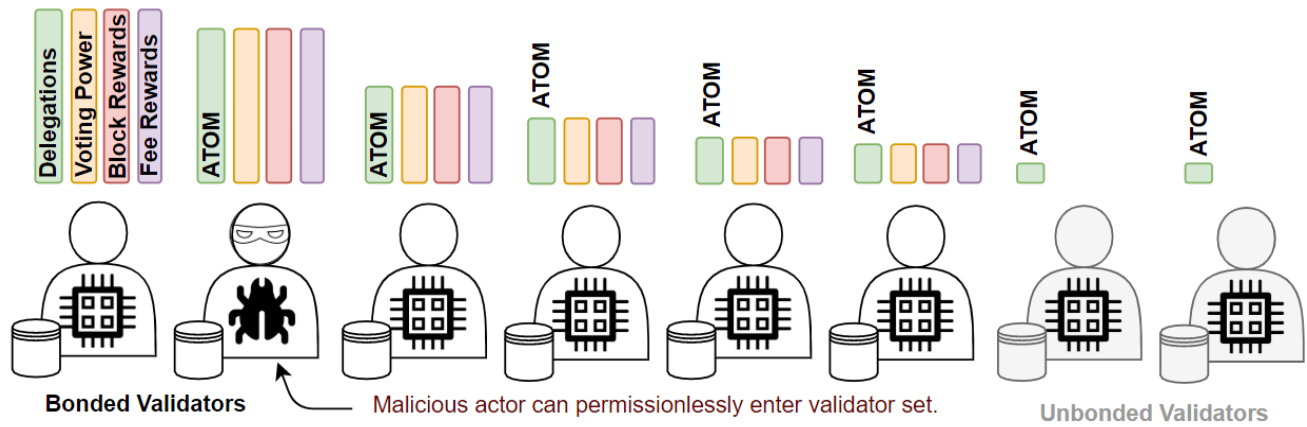
Centralization risk of a single stake-able asset has a greater long term security impact on the network than a small theoretical reduction of revenues from staking. A certain equilibrium point exists where reducing amount of rewards that a single stake-able asset can generate in favour of other foreign tokens might not only decrease centralisation risk and increase the security of the network but also become positively reflected in the value of the original stake-able asset thanks to increased trust in the network security. Furthermore MBPoS offers a meaningful alternative to the [shared security](#) in case of securing new and not yet trusted networks, while enabling full independence from the *relay chain* faults.

In the case of Kira Protocol, a *fractional* voting power and revenue claim in relation to a native staking asset KEX can be assigned to a dynamically changing supply of foreign tokens. Those foreign tokens can then be delegated to the Kira validators and earn a portion of the block and network fees.

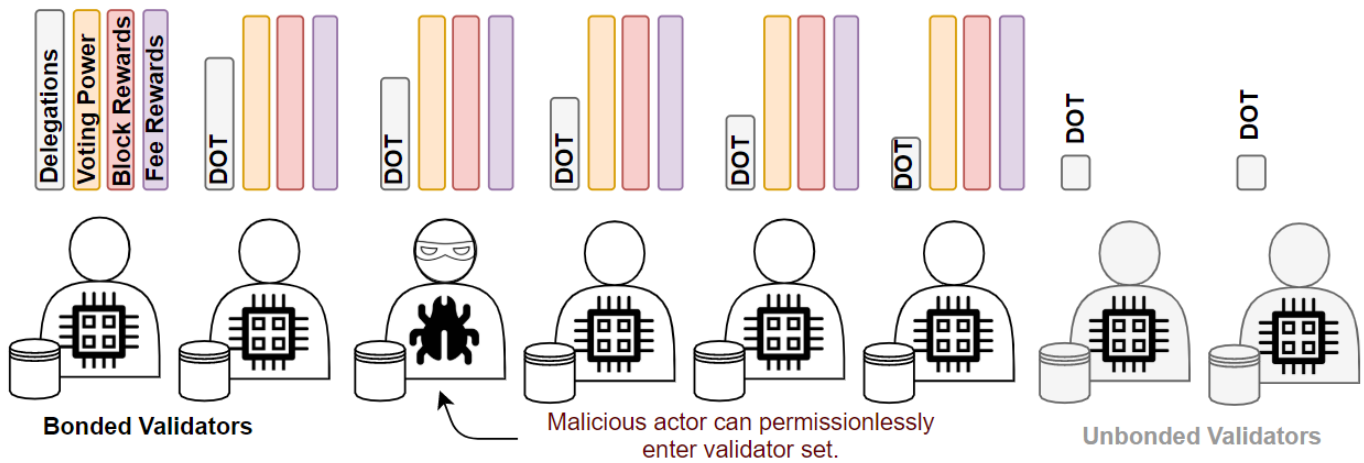
Process of multi-staking is *governance permissioned*, and every new validator or governance set member has to be individually accepted by the current governance set and in accordance to the current *Code of Conduct* (on-chain SLA). This guarantees that accumulating large quantities of tokens does not guarantee participation in the consensus or governance processes as in the case of plutocratic networks.

Comparison

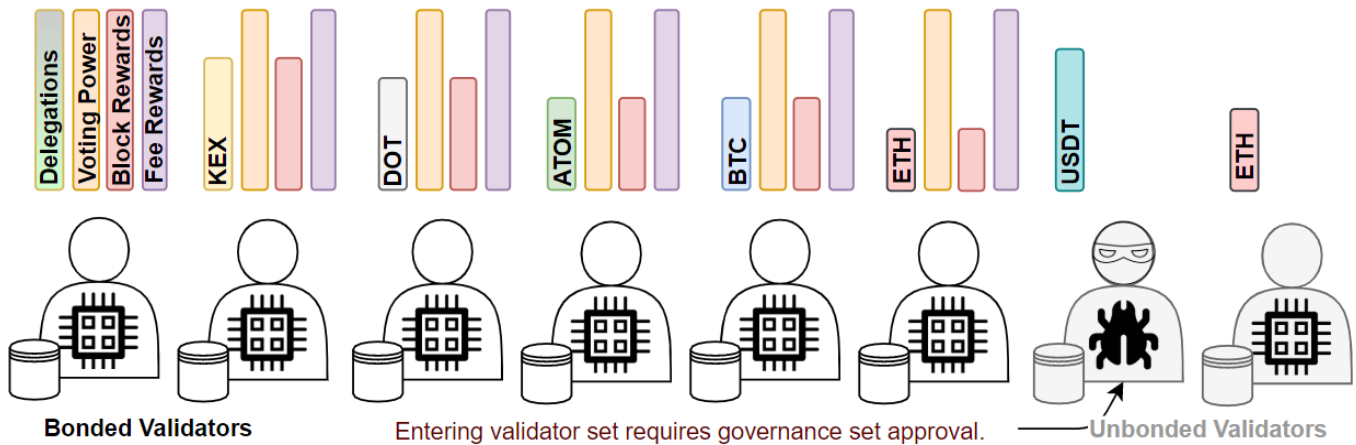
Bonded Proof of Stake



Nominated Proof of Stake



Multi-Bonded Proof of Stake



Multi-Bonded Proof of Stake belongs to the family of the Byzantine Fault Tolerant consensus systems, and despite appearances is simpler and more intuitive than its predecessors such as Bonded, Nominated or Delegated Proof of Stake. Each operator (validator) has an equal voting power and equal chance to propose new blocks. Entering and leaving the validator set is permissioned by the governance, while only a single - doublesign slashing condition exists. This is possible because in case of malicious behaviour - such as forks, delaying the consensus or other non compliance with the SLA rules, the governance has the right to evict such network operators breaking the agreed upon rules.

One of the most important distinguishing factors from other PoS consensus mechanisms is the fact that slashing occurs only when $\frac{1}{N}$, where $N \in (1, 3)$ of all validators commit a double-signing fault (attempt to create a fork). Furthermore even if such an event occurs the governance set decides on appropriate punishment (% of assets to be slashed) and if eviction from the validator set should occur. This behaviour is essential to mitigate issues where validators become evicted due to the software or hardware malfunction (that is not a fault of the operator) and guarantee safety of delegators stake which is essential when staking highly valuable assets such as Bitcoin, digital Fiat or commodities.

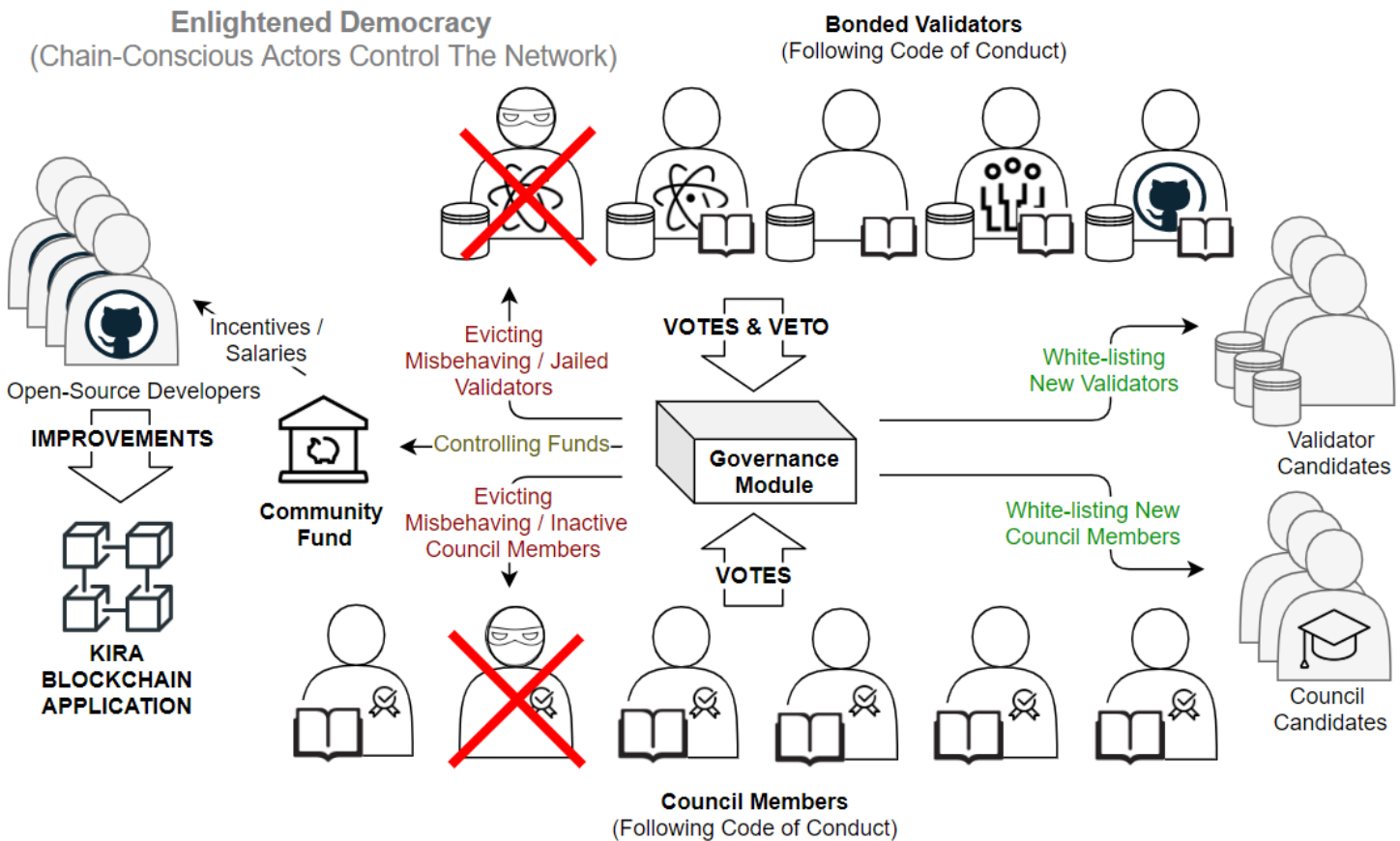
Rewards distribution in case of Kira Protocol occurs in two distinct ways, both present in the Bonded and Nominated PoS. Block rewards to delegators are distributed in proportion to the global stake bonded (BPOS way) while fee rewards are distributed in proportion to the (local) stake bonded to the individual validators (NBPOS way). This ensures that delegators who are present in the network for the purpose of only profit seeking have to distribute their stake to validators with a smallest amount of stake bonded in order to maximize their revenues - which effectively prevents stake centralization.

Validators just like in case of other PoS networks can charge commission fees but will also equally benefit from 50% of all fee rewards. As a result operators with smaller amounts of stake bonded can sustain their operations easier while operators with large amounts of stake bonded can't effectively form cartels and collude to decrease network security.

Governance

The Kira Protocol governance system is an evolutionary process aimed at continuously increasing decentralization without dependency on the wealth or stake distribution in the network. Security of the governance model is established as the result of three evolutionary steps to form a multicameral governance set.

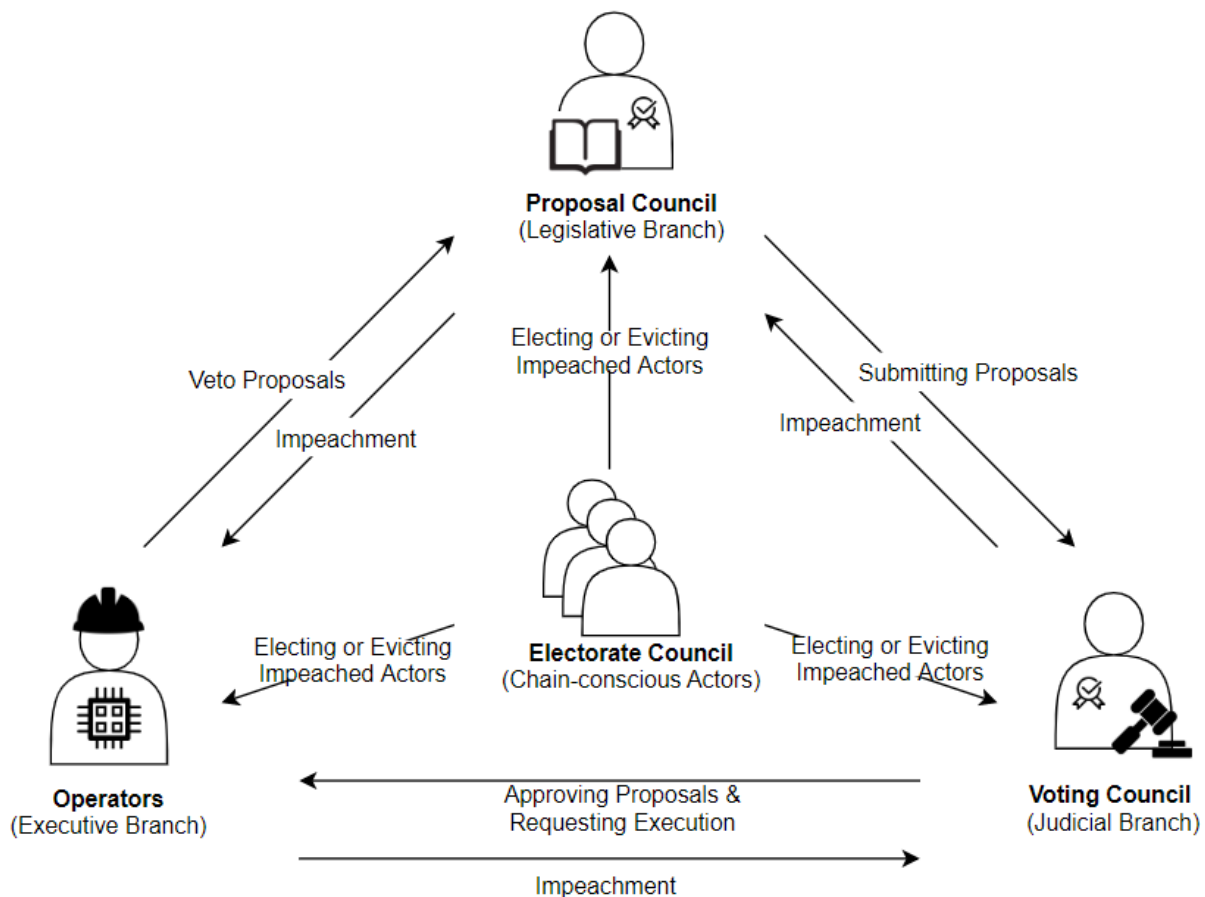
- Monarchy (Kira Core team governs the network)
 - Kira Core operates the first validator node and elects new validators
 - Kira Core team grants all validators equal voting power
- Technocracy (Validators govern the network)
 - Validators establish Code of Conduct (Service Level Agreement - SLA)
 - Validators elect non-validators as governance members (Counselors)
 - All counselors and validators are granted equal voting power
- Enlightened Democracy (Chain-conscious actors govern the network)
 - Number of council-members exceeds the number of validators
 - Validators receive veto power over all proposals
 - Governance set forms subsets (multicameral operation)
 - Governance subsets control operating under *checks and balances* model



Security of every PoS network is highly dependent on the culture, commitment and security of its operators (validators), if those operators were to collude, they can fully control the state machine. Slashing of assets at stake will not stop operators who can easily modify state transition logic of any blockchain application they execute. For that reason it is important to maintain a possibly large validator set (in proportion to the value of assets secured by the network) while ensuring that validators are not the only ones deciding who can participate in securing the consensus.

Multicameral operation of the Kira Protocol governance system works by enabling certain, unique addresses to vote or submit only specific proposal types. This is both a simple and effective implementation that also enables full nodes to detect if a state machine becomes maliciously modified by the network operators or as the result of the on-chain upgrade proposal containing signatures of the authorized governance bodies.

Those simple and generic, state-machine rules allowing specific addresses to vote or propose only specific proposals - enable creation of advanced, self evolving governance models, without requirement for any major changes to the governance module.



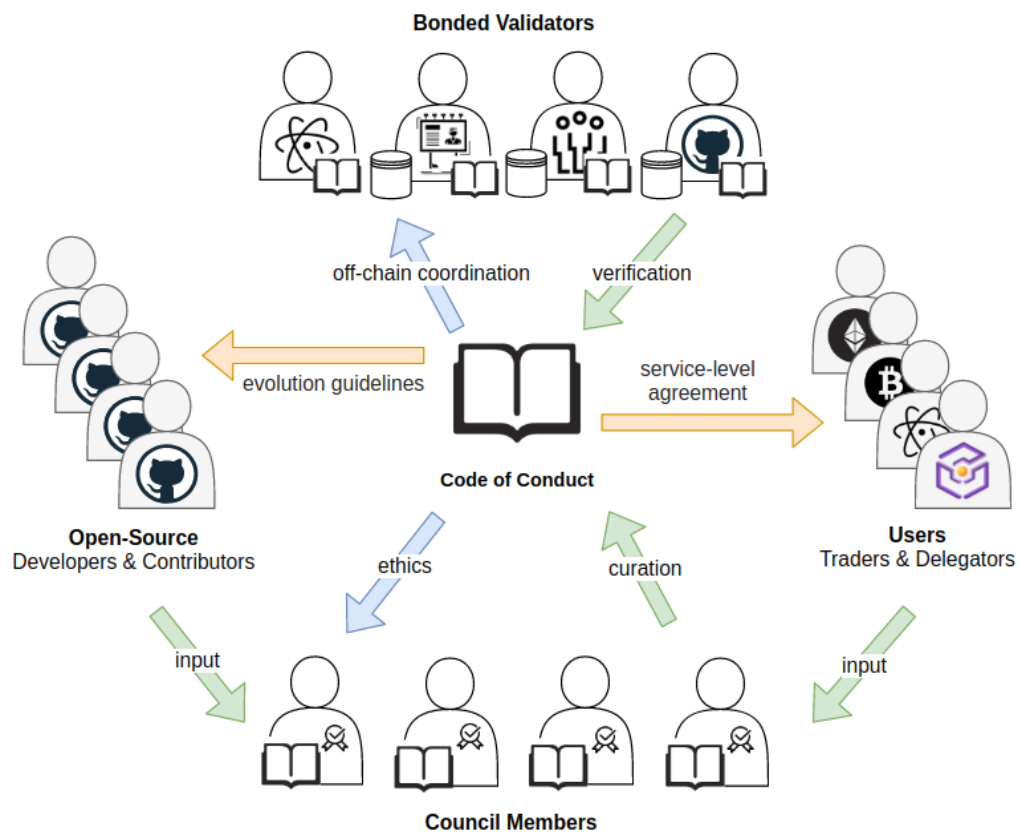
Example of the Checks and Balances governance model implementation with Kira Protocol

Code of Conduct

Code of Conduct (SLA) is a curated set of social and governance rules immortalized within blockchain state. This document contains a set of guidelines, such as expected and not expected behaviour of network actors, protocol for upgrades and security threats, incentivisation rules through the community pool and other set of rules used to coordinate various off-chain processes.

Under the guidelines of the Code of Conduct, Kira Protocol aims to organize hundreds or even thousands of network operators and provide them with means to cooperate in the clear, transparent and verifiable manner. Kira believes that through the brilliance of all of its active community members, a first truly decentralized Proof of Stake network can not only be brought to life but also continuously and efficiently operate, improve and evolve over time while maintaining clear and least error-prone protocol level implementation of the consensus and blockchain application logic.

In order to amend the content of the Code of Conduct, a small amount of tokens has to be locked as a deposit. Governance can then accept, reject or veto amendment within **N** days. In cases where change is accepted, deposit is returned to the proposer along with a small reward from the community pool. In the case where change is rejected, no reward is granted and deposit returned to the proposer. In case of veto, deposit is sent to the community pool.



Resolving Network Faults

In order to attract foreign capital (assets originating from outside of the cryptocurrency ecosystem) to participate in securing Proof of Stake (MBPoS) blockchain applications we must ensure that staking mechanism involves minimal possible risk of slashing (for delegators) while maintaining network security (resolving nothing at stake problem).

Currently majority of the PoS networks penalize delegations to the validators who are frequently offline and those who double-sign (attempt to fork). Those rules are often automated and expose delegators to multitude of risks, such as validators misconfiguring the node-software, blockchain application bugs or hardware failure. In most cases those faults do not threaten the network operation and are not the fault of the operators, yet are penalized and thus discourage delegators from placing their assets at stake.

Kira Protocol mitigates downtime risks by utilizing a governance permissioned validator set and thus being able to remove frequently offline validators from the set rather than penalizing delegators for delegating their stake to often unavailable operators. In case of double signing, Kira Protocol instantly jails validators that misbehaved, then allows governance to decide whether the misbehaviour occurred on purpose or due to other reasons and whether or not delegators should be penalized. Slashed assets are deposited in the community pool rather than destroyed (like in case of majority of other protocols) and can be used to reimburse potential damages or reward node operators (fisherman) tasked with detecting network or other operator faults.

Decentralized Development

Open-Source development is one of the most important positive feedback loop economy subsystems in the Kira Protocol. Kira Core Team aims to initially incubate the development process, however the long term network operations must continue without strong dependency on the participation of any single group of actors. In order to deliver the most optimal blockchain application that can efficiently evolve through the collective effort far beyond initial scope, Kira recognises dependency on the following economic instruments:

- Governance Controlled Community Fund Incentivising Development
- Blockchain Application Inducing External Value Into the Network
- Management, Roadmap and Coordination of The Evolution Process

Instead of funding development through a native token, Kira allows contractors to define desired currency as well as close the contract in the way that protects both parties, just like in case of real world employment contracts. Employers will also be able to pause the contract which will enable them to contribute within desired and flexible hours.

By enabling instant and predictable fractional payouts Kira Protocol can efficiently and without causing large market movements attract new actors to improve its ecosystem and eventually fully decentralize its development effort. Finally Kira Core Team will be one of the first actors to be employed in this manner and showcase the future of employment and freelancing.

Kira Exchange Protocol

Kira Interchain Exchange is a permissionless and trustless protocol enabling traders to earn passive income by staking any assets they have (including Fiat, commodities, BTC, etc..) while maintaining liquidity - being able to trade those assets at stake thanks to staking derivatives. This mechanism further creates a positive feedback loop of assets at stake increasing the network security, thus probabilistically deepening the orderbook liquidity and further increasing the fee revenues to attract delegations and assets from outside of the network. All thanks to the interchain protocols, such as IBC and XCMP.

Kira aims to establish itself both as a primary settlement layer within the Internet of Blockchains (IoB), and as a focal point for interchain commerce, by providing scalable order-books, OTC and a range of future decentralized finance (DeFi) applications that will be developed by our community and evolved via governance.

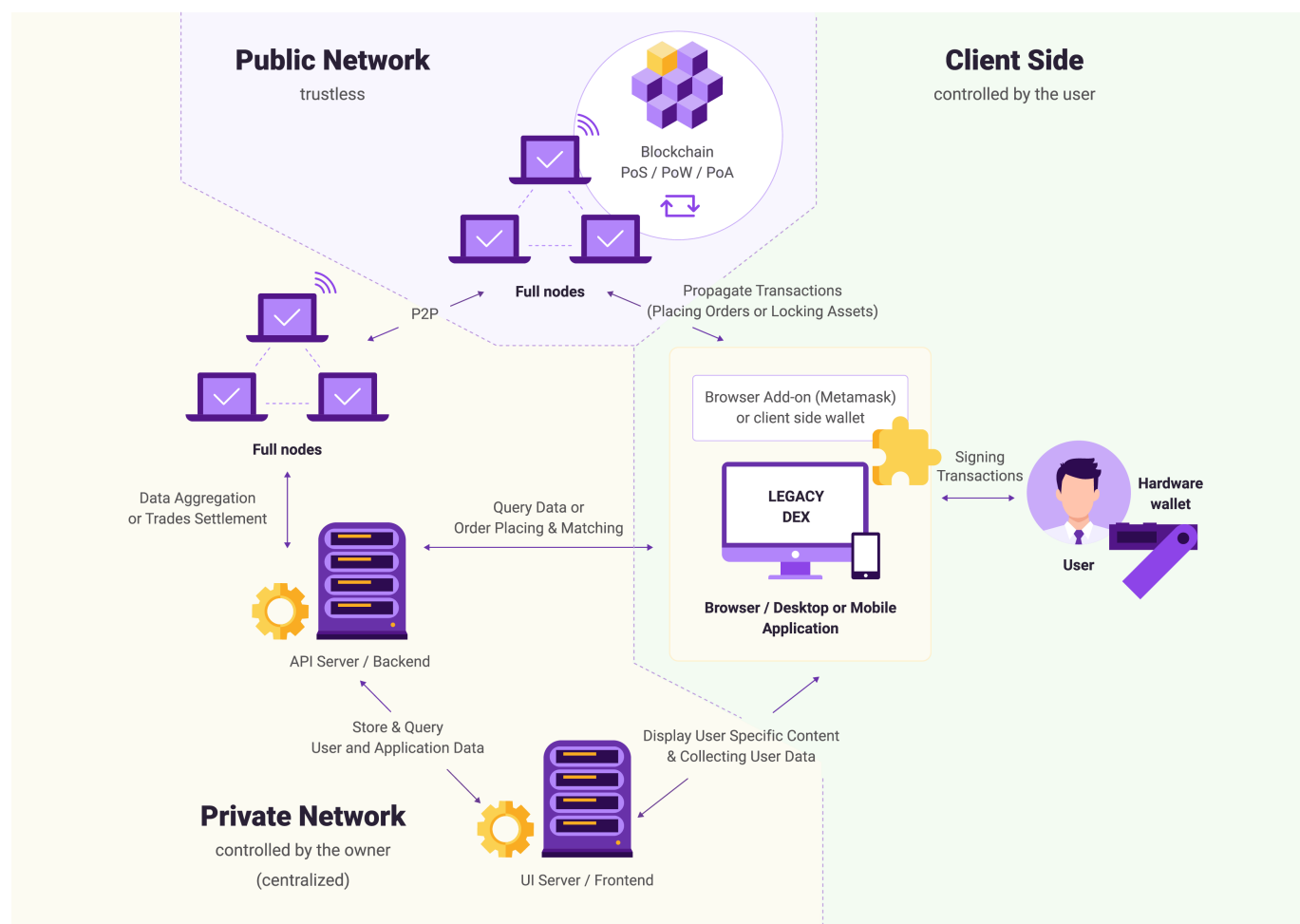
Our mission is to support the emerging proof of stake economy in realising its full potential by delivering a gateway for unfettered market access. We believe that all participants should be able to transact free from the whims of gatekeepers who might otherwise govern which tokens will (and will not) be permitted to trade. It is this freedom of exchange that is crucial to the security of blockchains operating under Proof of Stake consensus, and must be protected at all costs.

Protocol Guarantees

- Accessibility
 - Client Side Interchain Availability
 - Secure Access to The Network
- Scalability
 - Market Sharding
 - Interchain Validation and Slashing
- Ownership
 - Governance Curated Token Listing
 - Verification and Trust
- Liquidity
 - Liquidity Pool
 - Staking Derivatives
- Legal Compliance
 - Selective dApp execution
 - Transaction verification tools

Accessibility

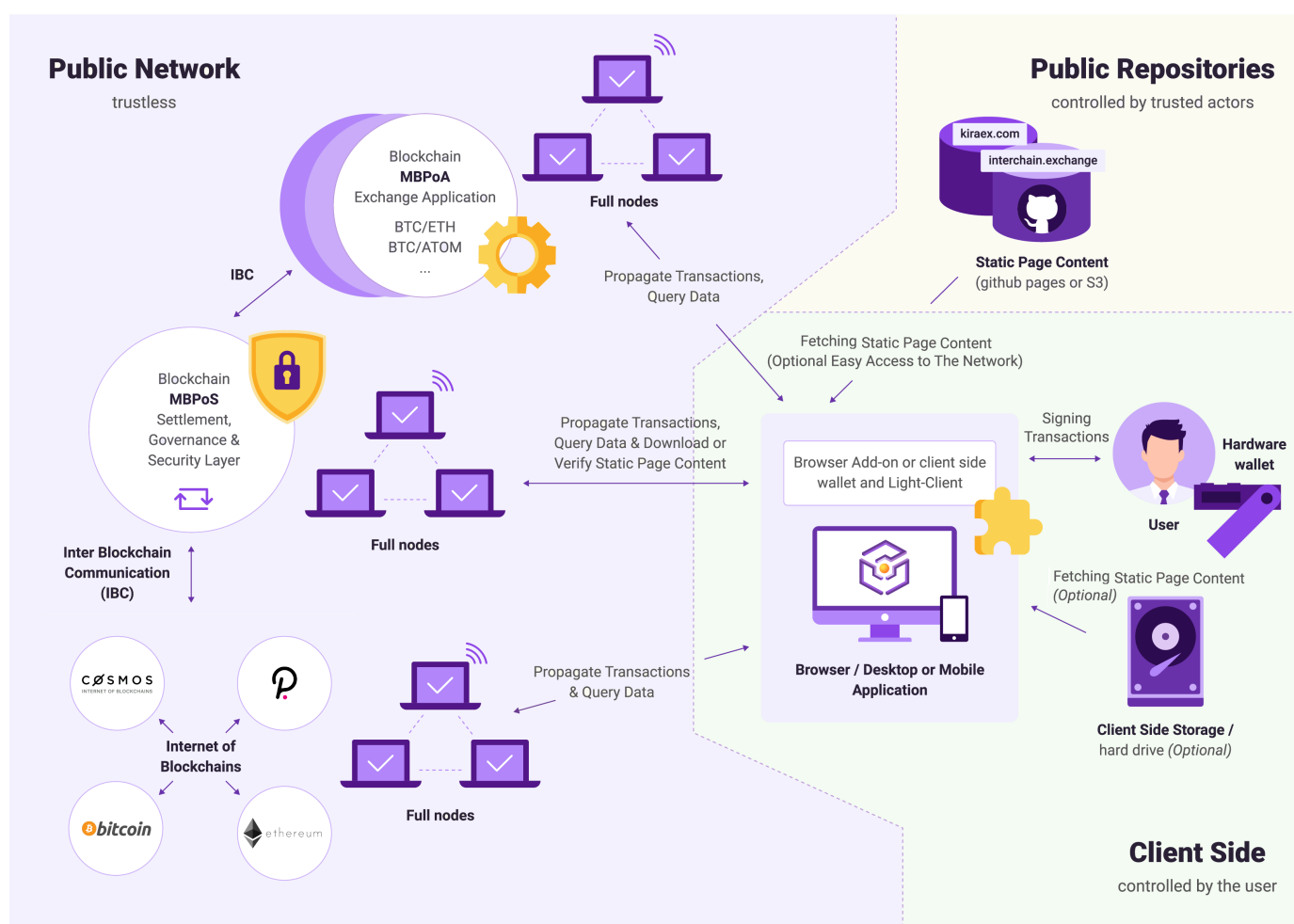
Users of centralised exchanges (CEXs) frequently discover that UIs can become unresponsive or altogether inaccessible during times of peak trading activity; inflicting frustration, monetary loss and opportunity cost. Users of today's DEXs experience similar issues, but can be further inconvenienced should the exchange's privately owned network layer (and their single identifiable operator) become the target of regulatory pressure; for example, one of the most popular DEXs was recently coerced into foisting KYC onto its users for compliance purposes.



Traditional (Legacy) Decentralized Exchanges — Architecture Overview

Most of the blockchain-connected application architectures utilize backend gateways e.g. API's for the purpose of the blockchain state aggregation or processing, most often operated by a single, centralized entity. This approach although allows frontend application efficiently present to the end user its on-chain information, also greatly reduces accessibility in case of faults. Gateway faults or censorship can prevent non sophisticated users from accessing their funds in a timely manner especially in the case where the backend service is not open-sourced. Lack of market access can incur losses as severe as in case of centralized exchange hacking.

Kira Protocol, on the other hand, offers a completely decentralised trading experience. Because the trading or any other dApp UI is delivered trustlessly over the decentralized network itself, Kira (like Bitcoin) puts itself beyond jurisdiction and enables peer-to-peer asset exchange with full anonymity. No KYC is ever required and users retain full and exclusive custody of their funds.



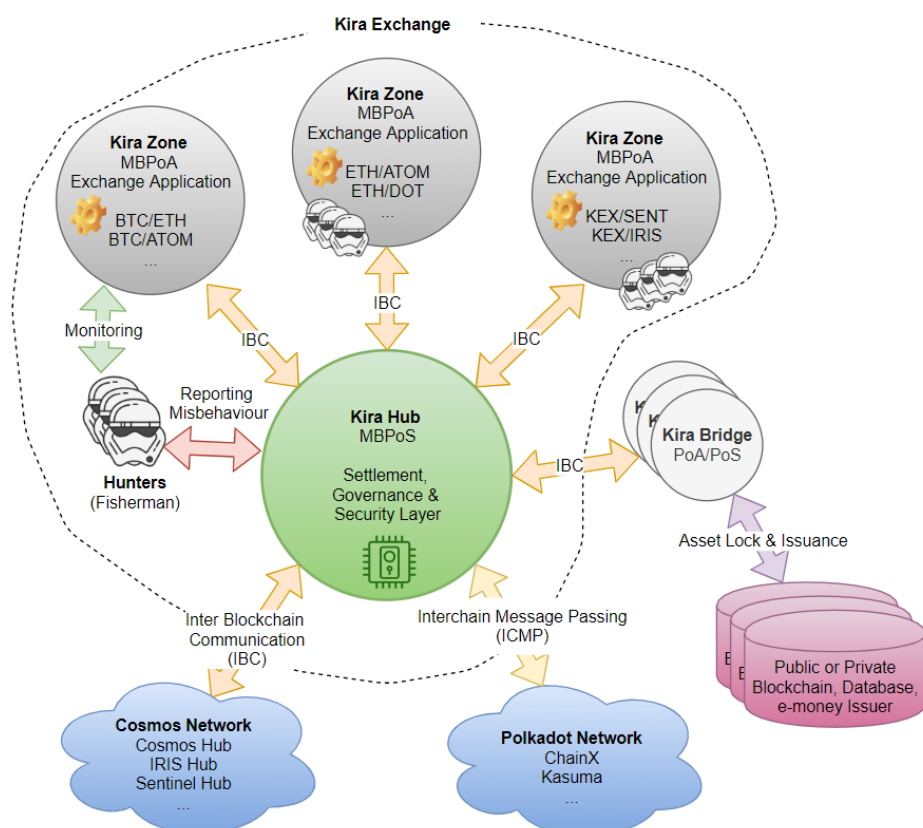
Kira Interchain Exchange Protocol — Architecture Overview

The scalable decentralized applications (dApps) of the future demand highly reliable gateways to the internet of blockchains that users can depend upon, even in extreme circumstances. Today, the majority of centralized (and even decentralized) exchanges hinge upon the availability of backend services, via which users requests are proxied in order to trade. Not only does this architecture threaten application availability when the system is stressed, attacked, censored or down for maintenance, but it also exposes users to a [multitude of threats](#), even in the presence of security best practices such as multi-factor authentication.

Scalability

Kira Exchange Protocol consists of many independent, interconnected shards called zones where various cryptocurrencies can be traded in a fully parallelizable manner to achieve centralized exchange experience and transaction throughput while maintaining decentralized exchange level of asset security, in order for them to remain fully within user custody even if originating from various different blockchains.

While the next generation networks like Cosmos and Polkadot provide access to broad economy of their native ecosystem tokens and legacy cryptocurrencies via the standards like [IBC](#) or [XCMP](#) - Kira directly bridges to them and offers a trustless exchange of assets between various Internet of Blockchains (IoB)



Kira Hub - Is a blockchain application operated under Byzantine Fault Tolerant Multi-Bonded Proof of Stake (BFT MBPoS) consensus engine that provides a governance, token issuance, token incubation and settlement layer for entire exchange, as well as interchain routing.

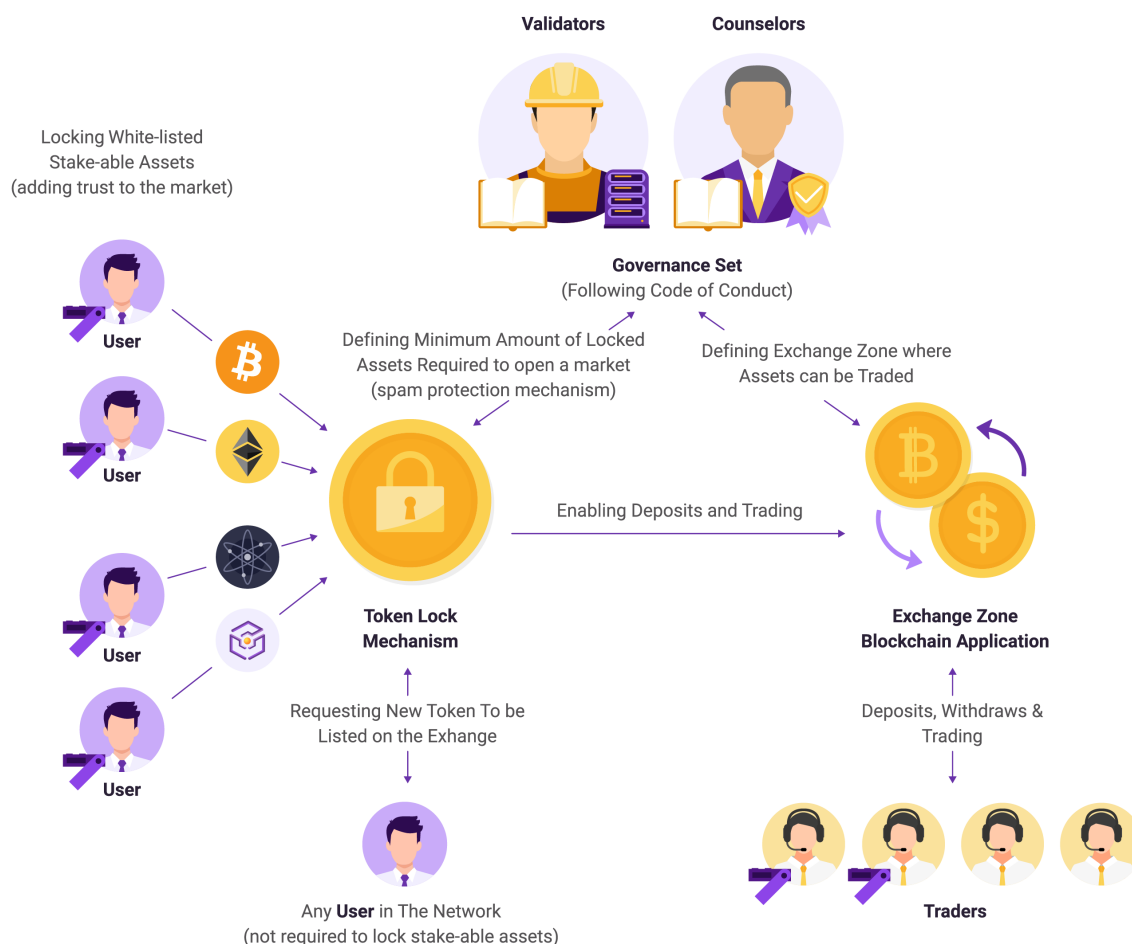
Kira Zones - Are an independent set of Interchain Slashable Byzantine Fault Tolerant Multi-Bonded Proof of Authority (MBPoA) blockchains operating specialized parallelizable order books.

Kira Bridges - Secure, independent set of PoA or PoS blockchains (deployed using Kira toolkit) allowing communication, asset transfer with various non IBC compatible networks, databases and e-money issuers.

Ownership

Management of most exchanges is disjointed from their users and network operators. The listings, withdraws, deposits, exchange and other fees are usually either enforced by the protocol and limit usability of the system or driven by business decisions without a say nor a veto power from the community. Kira Exchange Protocol takes entirely the opposite approach; by enabling a simple and permissionless process in which new tokens can be listed in a matter of minutes. We call it 'Permissionless Instant Token Listing'.

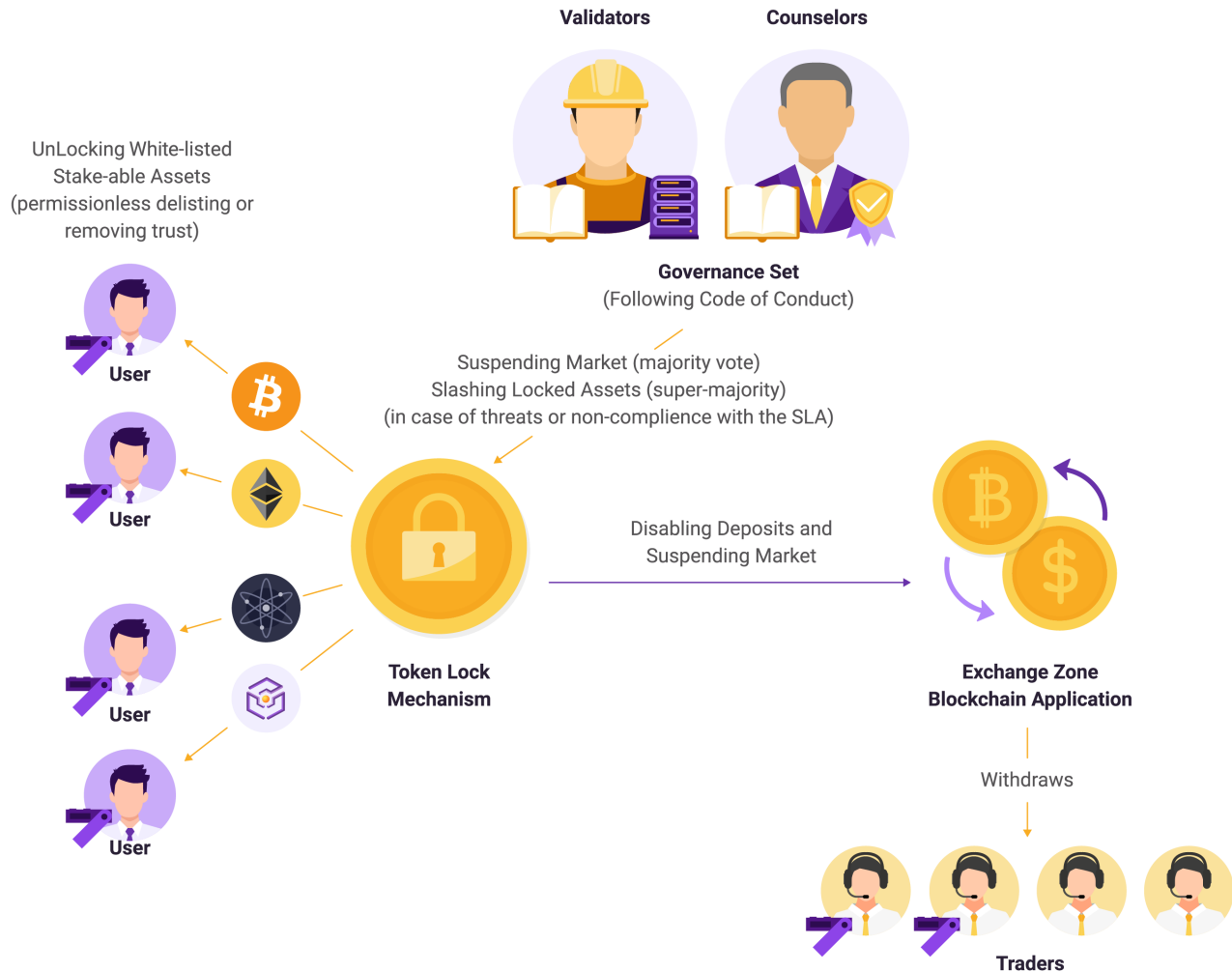
Token Listing Mechanism



- In order to list a new token, there has to be a minimum amount of whitelisted tokens locked, in order to enable the trading of the new asset.
- The amount which has to be locked is defined by the governance.
- Users are able to collectively lock assets, meaning that it's not up to one person whether a token is traded or not.
- If the amount of locked assets is not met, or if the assets are unlocked, the trading of that token will be stopped within a predefined time period.

In this way, tokens are included by default but can be removed at a later date by community action, thus decentralising decision making in the listing process.

Token DeListing Mechanism



With Kira Exchange Protocol, a transparent consensus of operators, users and elected council members helps not only optimize exchange operations by actively adjusting parameters that steer the economy but also adds a second layer of security in the form of activity monitoring, insurance, and governance managed validator slashing on top of the underlying protocol. The governance set can thus not only control the economy but also help prevent fraud and reimburse users in case of potential application faults, unforeseen events or malicious acts.

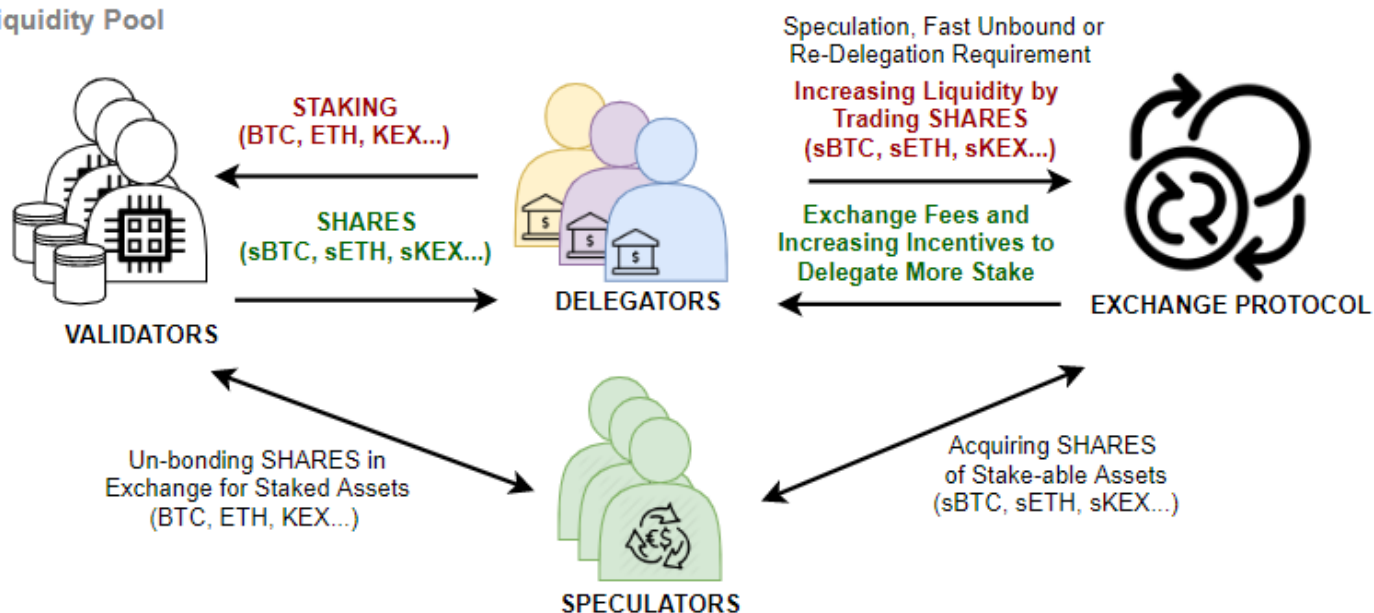
Finally, the governance provides “smart slashing” which ensures that bonded tokens are safe in case of validator accidental faults that do not threaten the network as well as incentivise an open source development and audits allowing for constant improvement and maintenance of the network. The further is possible because slashed assets are deposited to the community pool rather than destroyed.

Liquidity

Kira Exchange Protocol liquidity is induced by enabling transfers of the stake-able assets in the form of shares bonded to validators (staking derivatives). Staking derivatives are automatically issued assets, representing tokens at stake. For example by staking BTC, a staking derivative sBTC would be issued to the delegator, and while the BTC would remain illiquid and slashable, a sBTC could be freely transferable and tradable. If the BTC were to be slashed due to validator misbehaviour, a sBTC derivative would be able to claim only a portion of the BTC it is representing.

In other words Kira Exchange Protocol allows their users to earn passive income from the block rewards, network fees and exchange fees by staking their BTC, ETH, ATOM, DOT, e-Fiat, tokenized commodities, and other tokens while maintaining ability to trade and realize the value of their assets at stake. The liquidity pool is thus embedded into a consensus engine and self fuels itself by attracting more and more assets to be deposited to secure the network, in exchange for continuously growing incentives along the amount of assets delegated.

Liquidity Pool



Kira's Liquidity Pool mechanism creates a predictable opportunity for speculators to acquire shares of stake-able assets below the value they represent. It also creates utility for delegators to unbound their own stake without having to wait for an unbound period. Increased use of the exchange, due to the liquidity of all stake-able assets, increases the revenues generated through the exchange fees and creates even more incentives to stake. Finally, along with constantly increasing stake, the security of the network raises - thus increasing trust.

Legal Compliance

Kira enables its validators to decide whether or not to participate in the consensus of exchange zones or only remain part of the Kira Hub, thus enabling validators greater legal compliance compared to other networks such as Ethereum 2.0, where all validators are forced to take part in the execution of all smart contracts (including exchange dApp's) regardless of their behaviour or legal status in their individual jurisdictions.

Kira Core also aims to provide validators with tools enabling them to process transactions of only specific individuals whose identities are KYC'd through a 3rd party distributed digital identities networks (dID's). This will enable Exchange Zones to become customized with individual validator sets and specific types of tokens, geared towards greater security and compliance while maintaining an option for censorship resistance in case of exchange zones and their operators who prefer to maintain their privacy.

Kira Protocol Token

Kira Protocol Token (KEX) is a native staking asset of the Kira Protocol. Staking KEX is the most efficient way of claiming revenues from the Kira Network operations (block and fee rewards). Kira's native token KEX is also used as the base denomination currency of all other foreign assets (BTC, ETH, ATOM, DOT, etc...) that can be used to stake as well as pay network and exchange fees.

Holder Incentives	Delegator Incentives	Validator Incentives
<ul style="list-style-type: none"> • Lowest possible network fees when paid in KEX • Lowest possible exchange fees when paid in KEX 	<ul style="list-style-type: none"> • Highest possible reward rates when staking KEX • Up to 99% of all block rewards <ul style="list-style-type: none"> • Distributed in KEX token • Proportion to global stake • Up to 50% of all exchange and network fees <ul style="list-style-type: none"> • Distributed in foreign tokens • Proportional to local stake 	<ul style="list-style-type: none"> • Commission fees • Network fees (from each block proposed) <ul style="list-style-type: none"> • Hub Validators <ul style="list-style-type: none"> • 50% of all network fees • Equal chances to propose blocks • Zone Validators <ul style="list-style-type: none"> • 50% of all exchange fees • Equal chances to propose blocks

Kira Protocol Token Holders - Incentives for Kira Network Actors

Kira Token is essential in order to induce the flow of value away from the passive actors (non-delegators) and users who pay exchange fees - to delegators and validators that have to continuously benefit from the network operations to ensure its maintenance, security and availability.

Kira Protocol Governance is tasked with defining revenue share of each token in the Multi Bonded Proof of Stake consensus, with a limitation that revenue claimed by stakeholders of the foreign assets cannot be greater than a revenue claim of KEX token holders. This mechanism protects the holders of the native staking asset while providing flexibility in attracting new users to deposit, stake and trade other foreign assets using Kira Protocol.

Initial Delegator Offering

Initial Delegator Offering (IDO) is a crowdfunding mechanism utilizing distributed networks with a native-asset inflation or other incentivisation mechanism for the network operators (Validators, Mining Pools, Delegators or Miners). Initial Delegator Offering is applicable to any type of distributed applications, especially Proof of Work, Proof of Authority or Proof of Stake blockchains. As opposed to traditional, crowdfunding mechanisms such as Initial Coin Offerings (ICO's), IDO investors never lose custody or liquidity of their assets while acquiring tokens through interchain mining rather than auction mechanism.

Kira Protocol Token (KEX) will be a first ever token distributed through the IDO process.

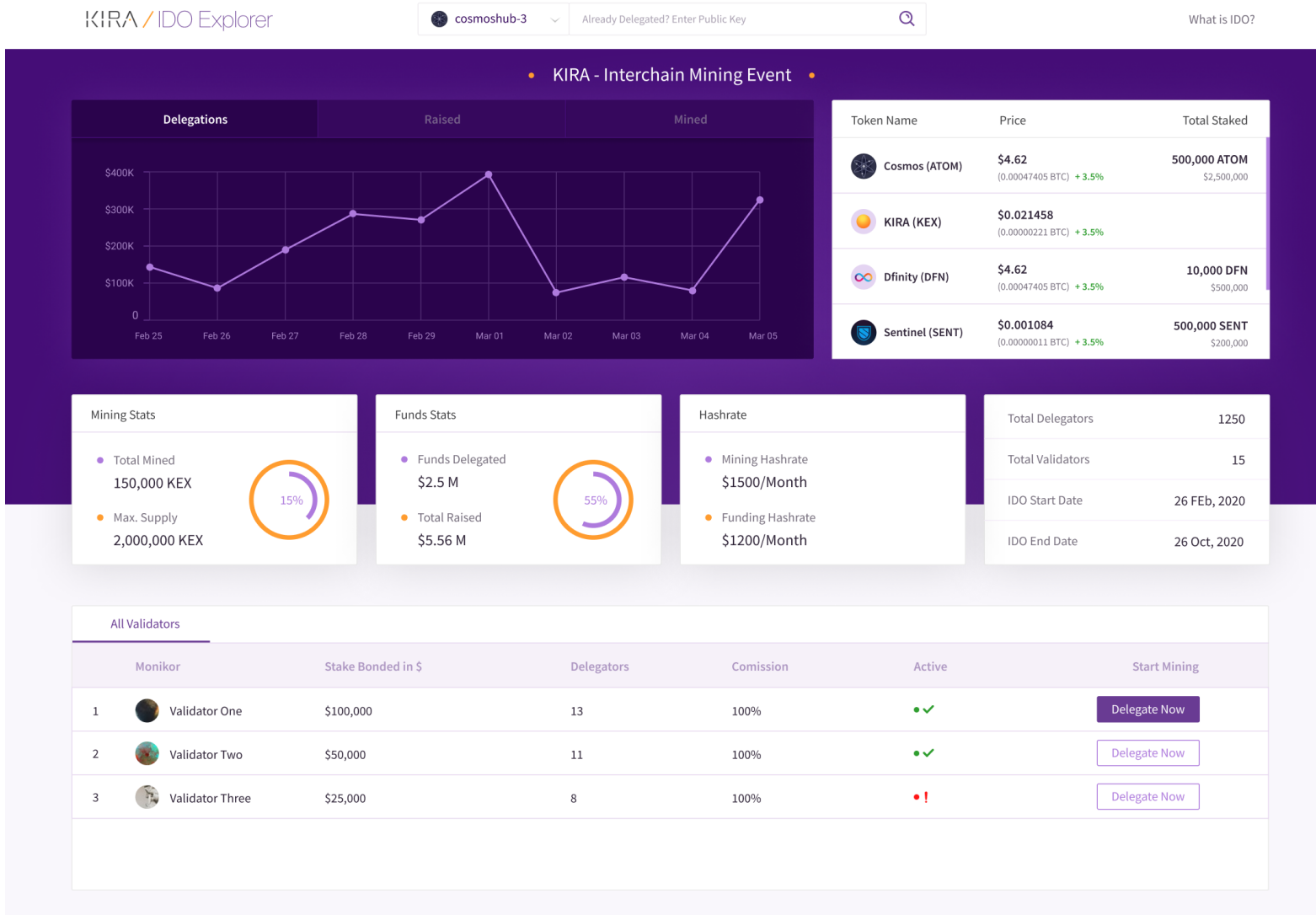
Initial Coin Offering (ICO)	Initial Delegator Offering (IDO)
<ul style="list-style-type: none"> • Requires (investment) exchange of tokens or fiat currency for tokens • Investment can't be pulled out or refunded • Investor is required to reveal his identity through KYC process • Tokens sold through ICO have high risk of becoming a security and compromising legality of the public offering (STO regulations) 	<ul style="list-style-type: none"> • Requires trustless locking of assets (interchain mining) to generate tokens • Assets used to mine tokens can be pulled out at any time • No KYC is required as no sale or exchange of asset for tokens is taking place • Tokens mined in the IDO are not issued by the Kira Core, there are no limitations to the type of tokens being mined as Kira Core only operates a data aggregation service

Initial Coin Offering (ICO) and Initial Delegator Offering (IDO) comparison

The first initial delegator offering will be an off-chain process operated in the centralized manner by the Kira Core Team and deployed on multiple blockchains such as Cosmos, Polkadot, Dfinity and other highly valuable and trusted networks. Kira Core will operate validator nodes on those networks and enable delegators who stake their funds on them to mine KEX Tokens.

For every dollar-pegged value acquired by Kira Validators on the networks they operate on, Kira Foundation (non-profit tasked with KEX token distribution) will credit Kira delegators with equivalent dollar-pegged value of KEX tokens.

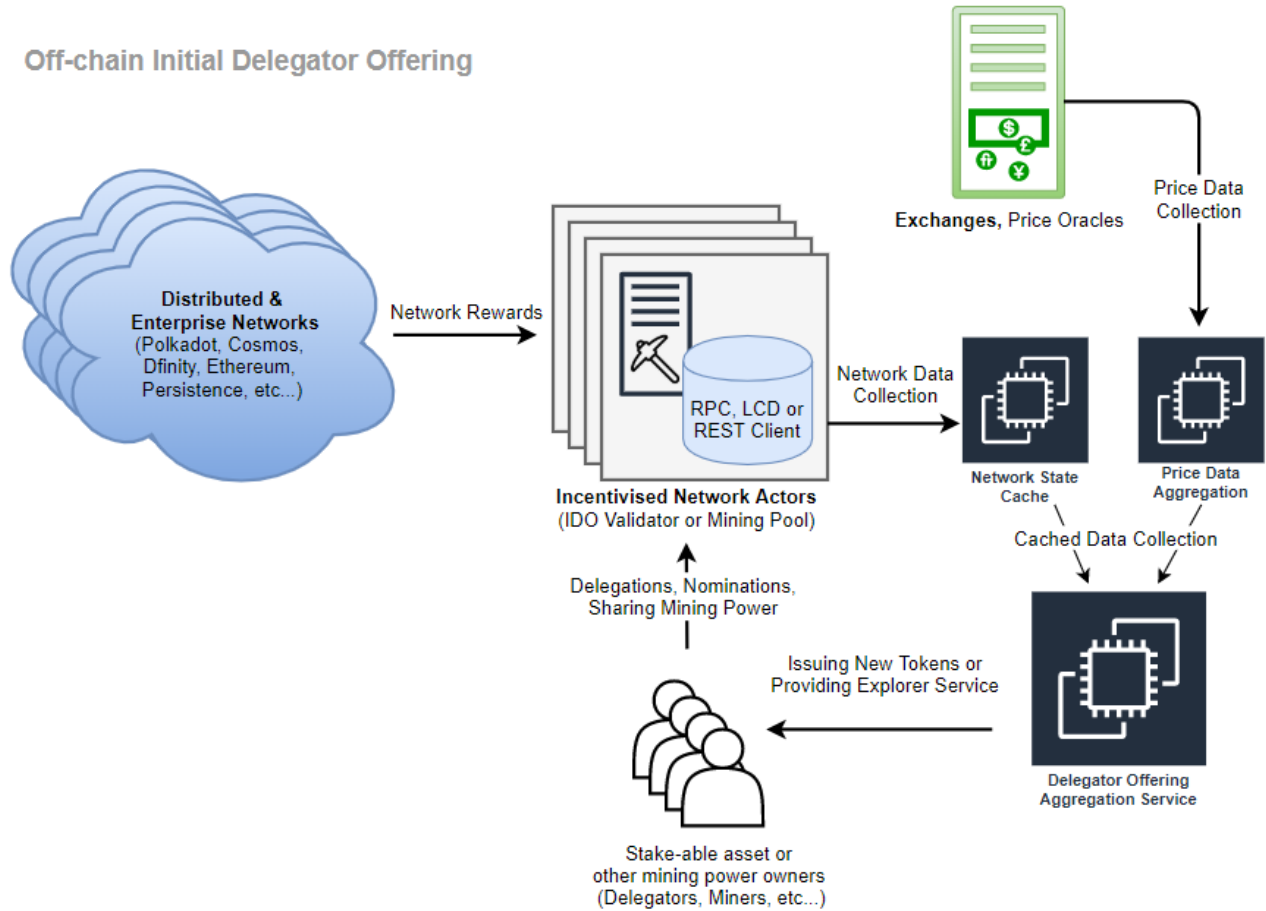
Delegators of the Kira Validators (investors) will be able to preview earnings and state of their delegations in the Kira IDO Explorer tool developed by the Kira Core. Finally investors will not have to take any other action then delegation of their assets, no registration of the public key will be required to later redeem KEX tokens, making the crowdfunding process incredibly simple for the investor.



Kira Initial Delegator Offering Explorer Prototype

Initial Delegator Offering is essential to incubate Kira Core operations and enable the team to deliver a fully featured Kira Protocol. As the result of the IDO, no less than 51% of the entire initial KEX token supply will be distributed within 24 months of the start of the interchain mining process.

Off-chain Initial Delegator Offering



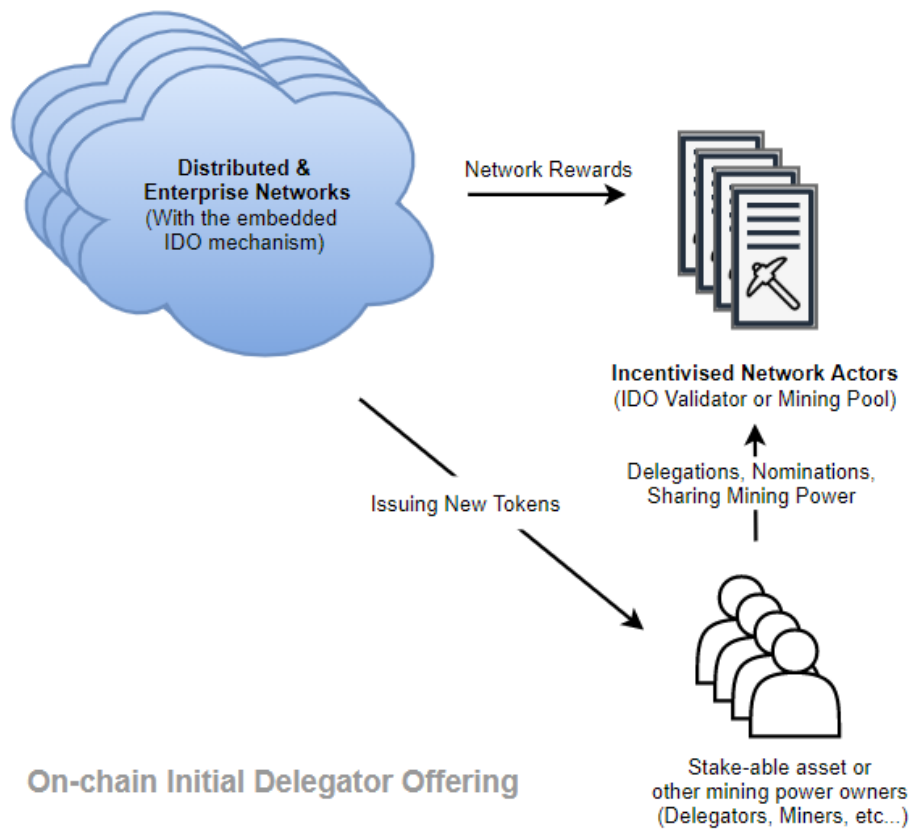
Off-chain Initial Delegator Offering Service Visualization

Decentralized Offerings

Through the on-chain Initial Delegator Offering module, Kira Protocol makes it simpler for everyone to deploy their own, trustless, highly available and transparent Initial Delegator Offering without the need to operate any centralized backen software.

By deploying a validator node on the Kira Network, new interchain projects, businesses or even non profits will be able to crowdfund their own operations and benefit from the following features:

- Automatic, instant and trustless token distribution
- Staking of any foregin asset thanks to the MBPoS consensus
- Full liquidity of assets at stake thanks to Kira Staking Derivatives
- Issued Tokens can become instantly tradable thanks to Kira Exchange Protocol
- Lowest possible risks of slashing than in case of any other DeFi product



On-chain Initial Delegator Offering Visualization

Initial Delegator Offerings as a Service (IDOaaS) will be further offered by the Kira Core to new projects who do not wish to operate their own validator nodes (e.g. lack necessary expertise). As a result Kira Protocol can become the founding stone of the next economic paradigm and help new businesses to crowdfund their operations and expand the interchain ecosystem while inducing foreign capital into the cryptocurrency space.

Licensing

Kira Protocol and improvements to Bonded/Nominated Proof of Stake consensus mechanism in the form of the Multi-Bonded Proof of Stake as well as other Kira Core inventions are released under the MIT license **with exception for the Initial Delegator Offerings**.

Initial Delegator Offering is an invention and intellectual property of Kira Core JSC, released under the Affero General Public License, version 3 (AGPL). Modifying the Initial Delegator Offering (IDO) (for example, creating a new blockchain application or off-chain offering software or service), reimplementations, use in other software, or otherwise creating new work based on any materials related to Initial Delegator Offering, licensed under the AGPL, your software will be automatically licensed under the AGPL and needs to be made available to everyone who is a recipient of your new or modified software or interacts with it remotely over a network.

You must inform your users that the source code is available and acknowledge Kira Core JSC as intellectual property owner. You need to prominently include a distinct and highly visible [Kira Core Logo](#) and "download source" button or link on your website, such as where programs are downloaded, and in the user interface of any software that interacts with your modified code. The "download source" button must allow anyone to directly download the exact source code and applicable cryptographic keys needed to install or use the modified AGPL software.

If you would prefer different licensing terms, Kira Core JSC offers commercial licensing options. For more information, contact us at partners@kiracore.com