2key
NETWORK

*A distributed social economy with a new link at heart -
One that pays you back for paying it forward*

Token Economy

Version 0.8
August 2019

The 2key Network

Abstract

On the highest level, the 2key Network employs a reputation economy, where reputation points are mainly gained and lost as a consequence of behaviour and results in participated campaigns.
Reputation is also affected by the user's contribution to the network, that includes effectively utilizing the network capabilities, referring new users, using and holding the native network token and generally following the rules of the network.

In general, a crypto asset can have several uses, it can serve as a vehicle to transact, to influence, to invest, to store value, and it could be used to empower an ecosystem. The latter has led us in the design of the network and specifically in the design of the 2KEY token economy.

The 2key network will circulate the 2KEY token as a native currency for interacting with the network.
2KEY is a reputation based token. Used to compensate users for utilizing their social capital to connect demand with supply, such as lead generation, sales conversion, assistance with services, etc.

2KEY is complemented by the network's reputation score, that is constructed of two elements, participation reputation and staking reputation. Participation reputation is derived from the user's social capital - gained and lost according to the results and behavior of each player in actively participated in campaigns, while the staking reputation derives from the average amount of 2KEY held by the network participant in a certain period, which reflects another aspect of user's commitment to the network.

The current age of social media dominance in our lives has led us to an ambivalent state in which our social status - our reputation and social influence in various domains is worth a lot on one hand, but is very difficult to monetize on the other. 2key is offering a tool to monetize this asset, that increases in value according to each user's contribution to their organic network - in the form of relevant sharing of web-links. This asset is a manifest of the connections a user has along with the effectiveness in influencing those connections to perform certain actions, therefore this social capital is derived from a user's ability to effectively drive conversions from referred links.
The more value you can contribute to the network and its users, the higher you will be compensated for each individual action and rewarded by the network.

The network was designed for maximizing ease of use by all parties, through enabling a high level of contract customization, including the use of any currency to transact between parties. However, for usage of network services, the 2KEY token will be used as a representative exchange of social capital.

The main goal of implementing an independent token in a decentralized network is to utilize it within the design of an inherent system of rules and network self governance through incentive schemes. The token, along with the reputation system, will guide the users towards a common goal of network success by encouraging good behaviour and discouraging bad actors from harming the network, as the goal of the network is to maximise user reputation.

2KEY will represent the value of social capital and enable not only the exchange of this asset for monetary gains, but also an opportunity to influence the direction of the network according to the reputation score.

Key Players on the 2key Network

There are four types of roles participants can play in the 2key network.

- **Link Creators** - Anyone can define a target and create a contract for achieving it on the 2key network. The network will seamlessly embed the contract within a 2key SmartLink that will carry it out independently.
- **Referrers** - referrers are network participants who relay links from the creators to others who may be interested. If the link reaches its target and conversion occurs, they'll receive a share of the reward.
- **Converters** - converters are the potential destination address for the links. These are the potential customers, and other target prospects, which the links aim to reach. When converters take the desired action through the link, the smart contract unlocks the reward and distributes it backward to each person in the referral chain.
- **Integrators -**
  Integrators are optional service providers on the 2key network. Contractors may choose to use their services to ensure transactions, uphold dispute resolutions, prevent abuse, provide KYC services and much more. We intend integrators to take a share of the rewards for successful conversions as payment for their services.

Network Reputation Reward

A reputation mechanism is introduced with the goal of incentivising good user behavior across the network, by periodically rewarding users according to their amassed reputation scores during the period. This mechanism is intended to foster a strong incentive for the 2key network to be primarily a work-in, believe-in economy. The mechanism distributes 2KEYs periodically (e.g. monthly) to network participants, according to their eligibility score (ES) which factors reputation points gained during the period along with carry on percentage from 2 previous periods:

After each month ends, at the beginning of the next month, The Reputation Rewards for the previous month will be allocated.
M0 = The previous calendaric month
M-1 = The month before the previous calendaric month
M-2 = The month before M-1

For example, if now is the beginning of September, the rewards distributed now take into account reputation gains from M0 (August), M-1(July), M-2 (June).

For each of the 3 month we get the following values per network participant:
$\Delta(PR)$ accumulated **Participation Reputation** for that month: The rules of reputation will be published soon, and they will be simple rules of the game, e.g. how many points are earned each conversion made, depending on steps distance from converter, how many chains were involved, and the contract category. And how many points are lost each time a participant gets reported for spam or is auto-found to act in an abusive/fraudulent manner.

$\Delta(SR)$ accumulated **Staking Reputation** for that month: The rules for reputation will be published soon, and here too they will be simple. In the case of staking reputation, the points gained for each month will basically be a sum of the amount of tokens held each day for the days of the month. So e.g. if you held 30 2KEY for 2 days, you would get 60 points for that month..

Given the above, we can compute **ES**: the Eligibility Score for each user for that reputation rewards allocation:

$$ES = (\Delta(PR) \cdot \Delta(SR))_{M0} + (\Delta(PR) \cdot \Delta(SR))_{M-1} * 0.5 + (\Delta(PR) \cdot \Delta(SR))_{M-2} * 0.25$$

This form of recognition is designed to reward both staking reputation (SR) and participation reputation (PR) in the network, but to greatly regard those who both participate and stake their earned 2KEYs in a certain period. For the sake of including dedicated users in the reward program even when they were unable to participate during the last period, the eligibility score

takes into account also participation and staking in the preceding two months prior to the allocation month.

The Network Reputation Rewards pool will also be used for network self-marketing campaigns, which will be signups, installs and user onboarding campaigns, contracted by 2key.network itself. As such, participating converters and referrers will gain a reputation and be eligible for the period rewards for bringing in new active users to the network.

Network Requirements

The usage of the network dictates a few requirements that were regarded in the design of the token economy.
Creating a truly decentralized ecosystem, requires us to use the tools at our disposal for increasing trust by all parties of the network. This type of decentralized trust could only derive from the understanding and belief that it is in all parties' best interest to act according to the rules of the network and create a situation in which any harmful act will be too costly for any participant to attempt it.

The main network requirements are as detailed in the table below:

Stakeholder	Desired Behavior	Undesired Behavior
Contractor	- Initiate contracts. - Complete and accept contracts that were converted. - Use moderators in order to optimize performance and protect other stakeholders.	- To not respect converted contracts in any way. - Collude with other participants in fake contracts to increase reputation. - Cancel an active campaign, since this will cause damage to referrers that are invested in driving conversions. - Spammers- contractors that initiate multiple campaigns for the sake of fishing for publicity in massive amounts that could damage the network.
Referrer	- Share links with potential converters that could fulfill the contract. - And with potential referrers that might have access to potential converters. - Use discretion when sharing in order to increase effectiveness. - Share links that he feels free to vouch for.	- Sybil attacks. - Collusion for reputation increase. - Spammers- sending unfiltered links for increasing chances of conversion, could negatively affect the reputation of the network. - Share links from bad contractors.
Converter	- Commit to purchases and complete transactions. - Also become a referrer when relevant.	- Collusion for reputation increase. - Enter wrong information. - DDOS attack harming the network. - Cheating viewing habits campaigns.
Moderator	- Offer trust based services: - Converter Validation - Conversion Validation for off-ledger results - Incentive Model Optimisation - Campaign Results Optimisation - Currency Exchanges 2key Sync Nodes - Optimize campaigns. - Facilitate campaigns.	- Collude with bad actors. - Fulfill its roles in a negligent manner. - Charge over priced fees.

Valuation Mechanics

One of the goals in token design is to create a strong tie between network performance and valuation of the native currency.
In this section we explain this tie and the possibilities for valuation increase according to network growth, while starting with a brief explanation of token valuation in general followed by introducing the application of the 2KEY token.

Formula

Token valuation is calculated according to the formula used to evaluate currency:

$$M \times V = P \times Q$$

When:
M= Token supply- The amount of tokens in circulation, hence the amount of tokens that are not locked and could be freely traded or used.
V= Velocity of exchange- The amount of times a token changes hands in a certain period of time.
P= Price level of the token- amount of tokens needed to purchase an average good or service in the platform.
Q= Quantity- amount of products transacted in a certain period.

M*V= The monetary supply of the economy- the amount of tokens multiplied by the amount of times a token is used on average in a certain time frame, results in the amount of tokens used within that time frame.

P*Q= Network GDP- the amount of products sold multiplied by the average price level per product, results in the total value that was transacted in a certain time frame.

2KEY application

M- In the 2key network the circulating token supply is not stagnant. As detailed below, following the TGE (Token Generation Event) there is a period of up to 24 months in which tokens are released to circulation due to vesting, in addition to long term increases and decreases of token supply as follows:
   1. **Added Supply**:

a. **Public sale** - Tokens sold in the TDE will be added to circulation, most of which at the end of the TDE, and any bonuses will be released according to a 6-12 month vesting period.
b. **Vested tokens** - tokens will be released into circulation pursuant a vesting schedule to be released into circulation within 24-36M, according to quarterly vesting periods.
c. **Network Participation Rewards**: 200M yearly for 10 years distributed as participation rewards, after 10 years, replaced by the deep freeze pool proceeds.
d. **Long Term Lockup**: in addition to any tokens not sold in the current TDE, this pool will be unlocked gradually in 4 pulses, after 2,3 and 4 years following the TDE. Depending on market conditions, these tokens might be used for additional liquidation supply, or additional TSEs, or be kept out of circulation.

Token Distribution Table

Item	Number of Tokens	Size	Vesting Schedule
Token Sale Event	150M	15%	Fully vested after 15m
Bounties	10M	1%	Fully vested after 12-36 months
Liquidation supply & Market Making	60M	6%	Liquidity depth for DEXs, Market maker and 2key exchange contract
Team	120M	12%	1 year lockup. 2Y vesting thereafter
Advisors, partners & early contributors	60M	6%	90 days lockup, afterwards 1Y weekly vesting
Reserve	400M	40%	14% released 24M from TDE, another 14% release after 36M from TDE, another 14% released after 48M from TDE. Tokens are unlocked but will not necessarily be released to market.
Network Reputation Rewards	200M	20%	Distributed equally over 0 years - 2% per year.
Total	1B	100%	

Updated distribution tables and projected volumes, taarifs and market caps can be found [here](#)

2. **Removed Supply**:

As explained below, a network tariff is collected from every transaction and sent to deep freeze for 10 years, in order to recharge the participation and reputation reward pool, which will be depleted after a decade and refilled using this freezed pool.

V- velocity is the average amount that the token has changed hands within a certain time frame. We expect this amount to increase with the level of usability of the platform, however due to reasons explained below, the goal is to keep it contained from increasing significantly.

P- the price level represents the amount of tokens needed to purchase an average service or good, thus, the higher the price level the more tokens are needed for purchasing a single product and the lower the value of the token. Therefore, the goal is for the price level to decrease with the growth of the network.

Q- In 2key - the products sold by the network to contractors could either be viewed as referrals or conversions, which will affect the way we measure P accordingly. Regardless which method we choose Q will increase according to the growth in transaction volume.

We choose to observe each referral as a separate product in light of the method that the deal is structured, in which referrers each have a unique deal structure that is "negotiated" between the contractor and each referrer individually, often via a Moderator serving an incentive model on behalf of the Contractor.

Example:

A contract is set for the sale of a smartphone with the following parameters:
➔ M=1B
➔ Price tag: 2ETH
➔ Duration: 1 Month
➔ ARC's per referrer: 10
➔ Initial referrers: 5
➔ Max Referral Reward Per Conversion: 100 2KEY

Assuming the item was converted by:
● Full use of the maximum chain of 10 referrers.
● Each referrer in a converting chain is attributed a share of the referral reward according to the incentive mechanism:
  ○ 5 referrers earn 5% of the reward each.
  ○ 2 referrers earn 10% of the reward each.
  ○ 2 referrers earn 15% of the reward each.
  ○ 1 referrer earns 25% of the allocation.

Q- represents the amount of referrals (network produce) sold to the contractor, therefore this scenario will result in an increase in Q of 10.

P- Meanwhile the average price level per referral from the contract is $\frac{5*5+2*10+2*15+1*25}{100} = 10$ 2KEY.

P*Q- Network GDP increase: P*Q= 10*10=100

M- the token supply remains 1B.
V- velocity for the period of the contract, as long as that is the only deal on the network for that time frame will be $\frac{100}{1B}$.

Following these assumptions we will examine how the ratio between the changes in velocity and quantity $\frac{\Delta V}{\Delta Q}$ affect the changes in the price level ΔP :

→ $\frac{\Delta V}{\Delta Q} \geqq 1$ then $\Delta P \geqq 0$: Velocity increase more than the increase in quantity, in a certain period, would result in an increase in the price level.

→ $\frac{\Delta V}{\Delta Q} <1$ then $\Delta P <0$: Velocity increases less than the increase in quantity, in a certain period, would result in a decrease in the price level.

In our example this could be materialized by showing that if the change observed in velocity is less than $\frac{100}{1B}$ than the network GDP will need to grow in less than 100 and since Q will remain the same according to the contract, the downward pressure is entirely on P. Explicitly, computing for $\frac{\Delta V}{\Delta Q}$ we get $\frac{\Delta V}{\Delta Q} = \frac{\frac{10^2}{10^9}}{10} = 10^{-8} \ll 1$. This means that on the atomic level of the network, each conversion made in a 2key campaign, as it distributes 2KEY from a single source to multiple referrers, acts to strengthen the economy and lower the price levels of 2KEY.

To summarize, there is a correlation between velocity and price level, in which the lower the increase in velocity, in a certain time period, the lower the price level will be.

As velocity will most likely increase in a growing network, the token economy should be designed in a way that constraints the token velocity growth to be less than the growth that should be generated by the growth in transaction volume ("Q"). This will result in a decrease in the price level, thus an increase in token value.

Token Economy

The 2KEY utility token design is based on the principle of exchanging reputation - social capital for goods and services. For this reason, network related expenses paid on the 2key.network are directly related to the users' reputation, in that the higher the reputation, the higher they will be compensated and the lower the fees that are imposed on them.

The network economy was designed through regarding both the network requirements and valuation mechanisms, with the goal of creating a cohesive economy that supports and complements the intended functionality of the network.

2KEY is embedded deeply in the 2key.network and empowers all activity on the platform by complementing the network infrastructure with the following uses:

1. **Contract Operation**- Contractor will pay referrer in 2KEY. The 2KEY amount will be set at the contract launch by the contractor, after which an incentive mode is discharged. There are three incentive modes available; vanilla mode, manual mode, or moderator optimization. According to the incentive mode selected, the referrer will be allocated and presented with the potential compensation quoted in 2KEY.

2. **Means of payment**- An alternative means of payment per contractor's decision. The contractor will also be able to offer pricing in 2KEY by offering a % of the price in 2KEY as a discount. Granting a discount through usage of 2KEY will increase the contractor reputation in light of the contribution to the the 2key network. This will result in lower fees charged by the moderator and lower network tariffs will be imposed as well, which will enable the contractor to offer better prices when involving 2KEY as a means of payment. The contractor will also be able to offer the converter an alternative of paying with a selected currency or 2KEY, while offering a better price for paying with 2KEY, because they would be decreasing moderator fees for currency exchange.
The contractor is incentivised to use 2KEY through the following:
   - Enabling to offer a better price through network incentives.
   - Increase reputation as a contractor and a network user.
   - Obtain the needed 2KEY balance for executing other contracts.

3. **Moderator fees**- Moderator services will be priced and paid in 2KEY.

4. **Network Tariff**- Each transaction executed on the network will involve a tariff that is set as a % of the transaction. The tariff is imposed according to the following:
   a. **Non- Moderated Contracts:** These types of contracts will incur a minor network tariff that will be imposed on the contractor as a usage fee of the network.
   b. **Moderator Tariff**: a fixed (network-wide) tariff will apply for every moderated contract as a percentage from the moderator fee. In these contracts the contractor will not be imposed with any fees.

All network tariffs are sent to a 10 year deposit smart contract which will be commenced at network launch. This part of the tariff will be deposited and remain locked until the period is over, at which point a network based decision will be made. The network will decide whether to release the tokens and recharge the fund for the network reward program, or burn them by keeping the contract locked for good.

5. **Staking models**- Staking 2KEY is inseparable from using the network, in light of it's deployment in launching contracts and offering services within the platform. Staking is a mechanism that requires the user to keep a certain amount of tokens in his own wallet or a smart contract. Staking is completely separate and different from fee structures as not only do the users maintain ownership of the tokens, but they also receive compensation for staking, through the 2KEY reward program. The staking mechanism is detailed below for each network participant:

   a. Contractor- staking is required to insure proper payment to referrers and in case of penalties. In order to launch a 2key smart contract, contractors might be required to deposit a % of the deal into the contract before launching it, depending on the type of campaign launched:
      - **Budget campaigns** (installs, information, content, leads) - in these types of campaigns the contracts are fully paid in 2KEY and the entire amount of 2KEY will be deposited in the smart contract in order to launch the campaign, thus the deposited 2KEY will be considered the staked amount.
      - **Acquisition campaigns** - in these campaigns the contractor earns 2KEY from the conversion, therefore the contractor could use the earned 2KEY's to finance the referral payment. In these cases the contractor will be required to stake an amount of 2KEY through the smart contract. The amount staked will vary according to the reputation of the contractor, number of active contracts and number of tokens held at the moment of contract launch. Due to the nature of these contracts the rate of the required stake will be between 0.5%-5%, as the higher the reputation the lower the required amount. Some moderation services will offer referrer protection, and by purchasing the service the contractor will be absolved of staking requirements for a fee.

   b. Referrer - anyone can refer up to 3 contracts in a set period as a casual referrer. However, once that limit is reached, referrers will be required to stake a certain amount of tokens according to the amount of contracts they are involved in,the amount of 2KEY they are projected to earn and their reputation. This is done in order to discourage network abuse by the referrer in the form of spamming and colluding.

   c. Moderator - the success and trust users have in the network is largely influenced by moderator actions, therefore, any moderator that wants to provide network services is obligated to stake 1,000,000 2KEY. This will insure that in case of any wrongdoing, the moderator will have a lot to lose if a penalty is set or the staked tokens seized as a penalty for harming the network.

To summarize in a user matrix:

Participant	Token Usage	Incentives
Contractor	❖ Pay for referrers to retrieve converters. ❖ Pay penalty for canceling campaign after engaging referrers. ❖ Pay for moderator services. ❖ Pay network tariffs. ❖ Earn 2KEY as a part of payment. ❖ Stake 2KEY to initiate a contract.	❖ Receive tokens and lower tariffs with increased reputation. ❖ For receiving 2KEY as a payment method the contract will receive subsidies in the form of lower tariffs.
Referrer	❖ Earn for retrieving converters- receive a higher % for better targeting. ❖ Stake 2KEY for professional use.	❖ A staking mechanism for limiting spam. ❖ Reputation and monetary incentives for improving targeted sharing and for sharing quality goods. ❖ Pay penalties for abusing the network.
Converter	❖ Earn 2KEY by completing a variety of tasks such as reading or watching. ❖ Pay 2KEY for goods and services.	❖ Contribute time and efforts for the network and receive discounts and be able to pay with tokens earned.
Moderator	❖ Earn 2KEY for providing network services. ❖ Pay 2KEY for using the network to recruit additional clients or make profit ❖ Stake tokens for joining the network. ❖ Trade 2KEY in the open market, which will establish constant liquidity providers for the token.	❖ Behave according to the rules of the network are loose staked tokens. ❖ Moderators can also be penalized for wrongful behaviour and banned for low ratings.

Reputation Rules

In the next version of the tokenomics model we'll publish a first version of the 2key Reputation Rules. These are designed to be simple and universal, like the rules of the game, stating when and how reputation points are gained and lost when participating in the 2key network. In general, reputation goes up the more conversions a user facilitates, and the closer the conversions happen to the user's referral, and reputation goes down the more negative feedback received from other users. All feedback is public so anyone giving it out should be able to stand behind their feedback.

These rules will be enforced on the network level, and moderators will be able to construct incentive models to optimise on these rules. You could think about it like the rules of Go vs the algorithms trying to win the game. These rules will define what good and bad behavior causes the various player types (Moderators, Contractors, Referrers, Converters) to lose and gain reputation on the network, and the rules themselves will promote a positive network effect serving the network participants, as each player has a direct financial incentive to maximise their reputation.

So if, for example, the rules state that every confirmed spam report from a user causes the reported user to lose one reputation point in the category of the respective contract, and every direct conversion earns the user 5 reputation points, every 2nd degree conversion earns the user 3 reputation points, and every 3rd degree conversion earns the user 1 reputation point, (assuming single, non-shared referral chains), then an incentive model offered by a moderator could try and optimise the bids and the rewards distribution offered to referrers in the campaign so to maximise reputation for participating players, and overall campaign reputation derived thereof. The idea is that the more reputation gained by players in the contract, the better the contact outcome for all participants, and of course, for the contractor. Incentive model optimisation has to take into account many more factors, but the maximisation of reputation is key for getting the best results, both for the network, and from the network.

2KEY Token Circulation:

An in depth look at the 2KEY internal circulation mechanism can be found here

Summary

Reputation is the asset being traded on the network, worthy of monetary benefit to the various players per their roles. **Contractor Reputation** results in expanded exposure and trust on the network, raising the likelihood of quality referrers and converters to join their campaigns. **Referrer Reputation** results in higher referral rewards and exposure to campaigns with higher referrer reputation thresholds for joining. **Converter Reputation** results in higher discounts offered or higher rewards in cases where conversions earn money (e.g. information contracts), as well as increased likelihood to receive offers with increased quality thresholds for Converters. **Moderators**, as for-profit service providers, will rely on gaining high reputation to be chosen by contractors to serve in their campaigns. Higher **Moderator Reputation** will drive the moderator's value in the network leading to additional clients, and the ability to increase fees. Often, the reputation of the various players will interact to settle a price point for fees or rewards in the campaigns. While it's possible to both sell and buy goods, services and products on the 2key network utilising any form of cash (fiat or crypto), inner- network transaction are paid with 2KEY, such as fees earned by Moderators, rewards earned by referrers and converters, and network tariffs.

The main participation roles of Contractor, Referrer, Converter and Moderator, each earn **Participation Reputation** based on a category scheme which is mapped on a 4 level deep, 1600 category taxonomy which spans all walks of life. In this way, reputation can be highly differentiated between roles and campaign categories, so that the various players can specialise in specific areas of expertise, experience and influence. The price-point dynamics mapping reputation to fees, prices or rewards in campaigns being played out in the network will be continuously monitored, and a live exchange rate table will be published into the registry contract of the economy, to publicly update the going standard rates in the network. It will then be easy for the network participants to maintain an open reputation market where social capital can be fairly monetised by the various players.

The open market will dynamically maintain conversion rates between reputation and monetary returns, and this will be tracked and displayed in a public contract, allowing the market prices to continuously consolidate. For example, for a certain category, there will be an updated exchange rate between reputation score for a referrer in that category, to the current average/median referral reward offered to such referrers for 1st degree conversions, 2nd degree conversions etc. Feeding aggregated price-point analytics back to the market can allow the market prices to sync network wide to achieve better market depth and stability.

Staking 2KEY is awarded reputation points under a role type of **Staker. Staker Reputation** scores are a product of the number of days 2KEYs were staked and the average amount of 2KEYs that was staked each day. Staker Reputation can be earned even prior to the token distribution, so that early contributors actually earn reputation points on future tokens, per their contribution or purchase amount in the private sell, presell or public sell prior to actual token

distribution. The network incentivises participants to gain Staker reputation by conditioning the periodic participation rewards not only on participation reputation but also on staking reputation.

A balance of incentives is maintained by the protocol to drive players to continuously earn both participation reputation and staking reputation. Our goal is to incentivise users to optimally combine participating in the network AND staking 2KEYs (e.g. earning rewards and keeping them in 2KEY). To these ends, The economy is launched with a Global Reputation Rewards mechanism to enhance the network effect and growth in the first decade of the network, which might be extended pending community decision regarding the network tariffs. Periodically (e.g. each month) a portion of tokens will be distributed amongst all network participants, relative to an eligibility score which factors both participation reputation earned that month and staker reputation earned that month. The optimal reward score greatly favors active participants who have also staked 2KEYs that month. Those who've only staked but not participated, and those who've only participated by haven't staked (e.g. changed immediately all earned 2KEYs to fiat), will be eligible for significantly lower rewards.

For **Early Contributors,** continued staking will be incentivised by considering the pre-distribution staking reputation as valid current staking reputation for purposes of consideration for the Global Reputation Rewards. As long as early contributors stake a vast majority of the currently unlocked 2KEYs, the staking reputation stemming from their entire holdings (including locked up tokens) will be considered. This serves to incentivise early contributors to purchase tokens as early as possible, and to hold on to them.

The 2key network also functions as an open economy for service providers who can serve in various roles as Moderators in 2key campaigns. Moderators offer such services as serving proprietary incentive models optimising campaign results, validating converter conditions, validation of conversions themselves, aiding in dispute resolution, serving as 2key sync nodes allowing campaign browsers to sync a higher level state etc. 2key Moderators earn a fee from each conversion in campaigns which they were elected to serve in. An **important part of the tokenomics is hard wiring the business model of Moderators with the viability of the 2KEY token:** From each profit made by a moderator in each campaign, a network tariff is automatically charged by the 2key campaign contract, which then takes these taxed 2KEYs and sends them for long term lock up in the future supply pool. The future supply pool is frozen for a period of 10 years, meaning that these tokens affect to directly limit supply of 2KEY whenever profit is made on the network by Moderators (2ey Ltd. included, as the first moderator to offer its services). The value of this is that it directly links any large-scale profit made on the network to the viability of the tokenomics, since for any profit, a percentage is taken out of circulation, to limit supply and increase the standing value of the remaining tokens.

2key Nodes are another aspect of the tokenomics. In order to allow the ad-hoc off-chain browser networks to run 2key campaigns in a decentralised manner, there needs to be some bulletin board where participating browsers can log their transactions with the campaign

contract, and sync with the transactions performed by others. For this sole purpose any participant working with the 2key webDapp or mobile apps, can elect to become a 2key node, and sell their IO for 2KEY. 2key Nodes only function as bulletin boards for running campaigns and browsers, so this is another way to earn 2KEY by passively participating in 2key campaigns, earning 2KEY and **Maintainer Reputation** for providing your client's bandwidth to help 2key campaigns get synced on participating browsers. 2KEYs earned by a participant enabling their browser or mobile app to become a 2key node, are also subject to Staking Reputation and subsequent Global Reputation Rewards.