

*A distributed social economy with a new link at heart -  
One that compensates you for caring about sharing*

**Token Economy**

Version 1.2  
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*2key New Economics Ltd.*

## **Dear Citizen Of The New World**

This network is built for the people, by the people.

We've invested time to make this paper readable.

If you plan to be part of the 2key network, you should start by reading the Whitepaper, which constitutes the main marketing material for the 2key Network. You can find the most updated whitepaper always linked from our site at <https://2key.network>.

This tokenomics paper is a work in progress.

As such, the tokenomics paper will be constantly updated to reflect our progress as well as the updates in the market, economy and blockchain ecosystems.

Please note that anything you read here may be changed as this crypto-big-bang unfolds before us and as we work to adapt as well.

We're working hard to stay ahead of the curve, and to ensure anyone purchasing 2KEY tokens and participating in the 2key Network, contributing to the strength and viability of the 2KEY economy - will be well served, and for this reason we're constantly adapting our tactics, strategy and product to make sure we're keeping a tight product market fit.

This tokenomics is for informational purposes only, it does not entail or constitute any recommendation or suggestion to purchase 2KEY tokens, nor does it attempt to promise any returns or profits from purchasing 2KEY tokens. Any early adopters of the 2key Network reading this should perform their own due diligence before purchasing 2KEY tokens and participating in the 2key Network.

We strongly encourage anyone with doubts, questions or unclarities regarding 2KEY token or the 2key Network, underlying tokenomics, technology, product, architecture or any other subject area, to contact us at on our TG group at: [https://t.me/twokey\\_official](https://t.me/twokey_official) or write us an email at: [hello@2key.network](mailto:hello@2key.network). Also, please be aware that the White Paper is our central descriptive document on the network, protocol and product, and you should read it before choosing to participate.

We thank you for your interest in 2key Network

And hope you will join us in building a new kind of human web,  
for the people, by the people

Sincerely.

**eiTan LaVi**, Founder & CTO  
2key New Economics Ltd.

# Disclaimer

The 2KEY token is a utility token, therefore we do not provide any warranties nor can we discuss any uplifts/downfalls in token price. What we do analyze in our papers is effects that usage of the economy might have on the demand of the 2KEY token, as well as mechanisms to promote long term viability and strength of the 2KEY token economy.

# 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 success in providing productive services to the network. This 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 providing services; whereby the users' contribution is measured by success in connecting demand of contractors on the network for business results with supply of referrers and converters, to eventually produce target results in campaigns, such as lead generation, sales conversion, app installs, HR fulfillment, content consumption, assistance with services, etc.

2KEY is complemented by the network's participation reputation score, reflecting the success of each participant's labour in promoting the 2key distributed economy and strengthening it, e.g. by participating successfully as contractor, referrer, converter, integrator or miner.

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 valuable services you provide to the network and its users, the higher you will be compensated for each individual action and rewarded by the network.

2key network is 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 reputation.

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.

## 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 service providers which focus on providing selective information relay services, mostly by referring links from the creators to others who may be interested. Whenever a link passing through a referrer ultimately reaches its target and conversion occurs, the referrer receives a payment. The payments for referrers are mostly success based, meaning, success in leading to conversions is required for payment eligibility.
- **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 Remuneration

A reputation mechanism is introduced with the goal of incentivising good user behavior across the network, by periodically remunerating users according to their earned 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 measures the value of their services by factoring 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.

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

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

This form of recognition is designed to compensate, on the network level, participants who have served to grow and strengthen the network. For the sake of including dedicated users in the network remuneration 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 Remuneration 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:

Role	Desired Behavior	Undesired Behavior
Contractor	<ul style="list-style-type: none"><li>• Initiate contracts.</li><li>• Complete and accept contracts that were converted.</li><li>• Use moderators in order to optimize performance and protect other participants.</li></ul>	<ul style="list-style-type: none"><li>• To not respect converted contracts in any way.</li><li>• Collude with other participants in fake contracts to increase reputation.</li><li>• Cancel an active campaign, since this will cause damage to referrers that are invested in driving conversions.</li><li>• Spammers- contractors that initiate multiple campaigns for the sake of fishing for publicity in massive amounts that could damage the</li></ul>

		network.
Referrer	<ul style="list-style-type: none"> <li>● refer links to potential converters that could fulfill the contract.</li> <li>● And with potential referrers that might have access to potential converters.</li> <li>● Use discretion when sharing in order to increase effectiveness.</li> <li>● Share links that he feels free to vouch for.</li> </ul>	<ul style="list-style-type: none"> <li>● Sybil attacks.</li> <li>● Collusion for reputation increase.</li> <li>● Spammers- sending unfiltered links for increasing chances of conversion, could negatively affect the reputation of the network.</li> <li>● Share links from bad contractors.</li> </ul>
Converter	<ul style="list-style-type: none"> <li>● Commit to purchases and complete transactions.</li> <li>● Also become a referrer when relevant.</li> </ul>	<ul style="list-style-type: none"> <li>● Collusion for reputation increase.</li> <li>● Enter wrong information.</li> <li>● DDOS attack harming the network.</li> <li>● Cheating viewing habits campaigns.</li> </ul>
Integrator	<ul style="list-style-type: none"> <li>● Offer trust based services: <ul style="list-style-type: none"> <li>○ Converter Validation</li> <li>○ Conversion Validation for off-ledger results</li> <li>○ Incentive Model Optimisation</li> <li>○ Campaign Results Optimisation</li> <li>○ Currency Exchanges</li> <li>○ 2key Sync Nodes</li> </ul> </li> <li>● Optimize campaigns.</li> <li>● Facilitate campaigns.</li> </ul>	<ul style="list-style-type: none"> <li>● Collude with bad actors.</li> <li>● Fulfill its roles in a negligent manner.</li> <li>● Charge over priced fees.</li> </ul>

### 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 fluctuation of the token value in the future in accordance to network growth, while starting with a brief explanation of token valuation in general followed by introducing the application of the 2KEY token.

We should emphasize, however, that these are accepted price level equations for currency based national economies, and we do not provide any warranties or statements regarding any



price uplifts or depreciation in token price. We are giving the below analysis as a baseline to consider possible effects that usage of the 2key Network might have on the economic strength and viability of the network.

## 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 vesting period.
- b. **Vested tokens** - tokens will be released into circulation pursuant a vesting schedule.

- c. **Mining:** 186M will be used for mining compensation as part of reputation mining, social mining, and MPSN mining.
- d. **Long Term Lockup:** in addition to any tokens not sold in the current TDE, this pool will be unlocked gradually in pulses, after 2,3,4,5,6 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	126M	21%	Fully vested after 15m
Social Minging	6M	1%	Fully vested after 12-36 months
Liquidation supply & Market Making	36M	6%	Liquidity depth for DEXs, Market maker and 2key exchange contract
Team	96M	16%	1 year lockup. 2Y vesting thereafter
Team Growth Fund	24M	4%	2 year lockup
Advisors, partners & early contributors	36M	6%	Vesting up to 24 months
Ecosystem Growth & R&D Fund	96M	16%	Dedicated for future R&D, locked for 2-6 years
Network Reputation Remuneration	120M	20%	Distributed over 10 years
MPSN Mining	60M	10%	Distributed over the network lifetime starting 24-36 months following TDE
<b>Total</b>	<b>600M</b>	<b>100%</b>	

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

## 2. Recharging Participation & Reputation Remuneration Pool:

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 remuneration pool, which will be depleted after a decade and refilled using this frozen 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. In other words, the lower the price level, the higher the price of the currency.

**Q-** In 2key - the products made available by the network could be counted as referrals or conversions or both, 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 payment according to the incentive mechanism:
  - 5 referrers earn 5% of the total remuneration each.
  - 2 referrers earn 10% of the total remuneration each.
  - 2 referrers earn 15% of the total remuneration each.
  - 1 referrer earns 25% of the total remuneration.

**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  $\Delta P$  :

→  $\frac{\Delta V}{\Delta Q} \geq 1$  then  $\Delta P \geq 0$ : 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  $\frac{\Delta V}{\Delta Q} = \frac{10^2}{10^9} = 10^{-8} \ll 1$ . 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 can provide an increase in the economy strength and viability.

## Token Economy

The 2KEY utility token design is based on the principle of social reputation as an underlying asset for maintaining a distributed economy around social sourcing. For this reason, expenses and earnings on the 2key.network are directly related to the users' reputation, in that the higher the reputation, the higher they will be compensated for their services to the network 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. **Integrator 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. **Campaign level service payments:** referrers who serve the network by selectively sharing campaigns in a way which leads to results, will receive their payment in 2KEY.
6. **Network level service payments:** participants of all types who provide valuable service to the network, by creating campaigns, referring, converting successfully, and providing other services or work helping the 2key Network to grow and blossom, will accrue participation reputation. A community remuneration mechanism will be used to periodically compensate active participants in direct relation to the reputation they have gained over that period.
7. **POS Mining:** In the full protocol version, participants will be able to mine 2KEY in POS manner by enabling their browsers to be utilised for validating and syncing state in campaigns which they're not participating in. 2KEY stake will be required in such cases for a participant to be eligible to serve as miner, and respective to the state, so will be the probability to be chosen as miner.
8. **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 commit a certain amount of tokens in a smart contract. This helps ensure from game theoretic perspectives, that the user depositing funds will adhere to the rules of the network and will provide services which bear positive outcomes for the network.
  - 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 a staked amount - used to guarantee payments to service providers in the campaign (e.g. referrers, integrators). In addition there might be required some extra-budget stake to insure cases of disputes.
    - **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 - The network may impose a limit on casual referrals (i.e. referrals which don't require referrers to stake any 2KEY in advance). 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, as the staked 2KEY can be used as collateral, and seized by the network and campaign contracts in case foul play is detected and verified.
- c. Integrator - the success and trust users have in the network is largely influenced by integrator actions, therefore, any integrator that wants to provide network services will be obligated to stake a considerable amount of 2KEY (e.g. 1m 2KEY). This will insure that in case of any wrongdoing, the integrator will have a lot to lose if a penalty is set or the staked tokens seized as a penalty for harming the network. The stake requirement might change depending on type of integrator/moderator, reputation and network conditions.

To summarize in a user matrix:

Participant	Token Usage	Incentives
<b>Contractor</b>	<ul style="list-style-type: none"> <li>❖ Pay for referrers to retrieve converters.</li> <li>❖ Pay penalty for canceling campaign after engaging referrers.</li> <li>❖ Pay for moderator services.</li> <li>❖ Pay network tariffs.</li> <li>❖ Earn 2KEY as a part of payment.</li> <li>❖ Stake 2KEY to initiate a contract.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Receive tokens and lower tariffs with increased reputation.</li> <li>❖ For receiving 2KEY as a payment method the contract will receive subsidies in the form of lower tariffs.</li> <li>❖ Staking (dis-incentive for network abuse)</li> </ul>
<b>Referrer</b>	<ul style="list-style-type: none"> <li>❖ Earn for retrieving converters- receive a higher % for better targeting.</li> <li>❖ Stake 2KEY for professional use.</li> </ul>	<ul style="list-style-type: none"> <li>❖ A staking mechanism for limiting spam.</li> <li>❖ Reputation and monetary incentives for improving targeted sharing and for sharing quality goods.</li> <li>❖ Pay penalties for abusing the network, guaranteed by the reputation system and/or staking.</li> </ul>

<b>Converter</b>	<ul style="list-style-type: none"> <li>❖ Earn 2KEY by completing a variety of tasks such as reading or watching.</li> <li>❖ Pay 2KEY for goods and services.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Contribute time and efforts for the network and receive discounts and be able to pay with tokens earned.</li> </ul>
<b>Integrator</b>	<ul style="list-style-type: none"> <li>❖ Earn 2KEY for providing network services.</li> <li>❖ Pay 2KEY for using the network to recruit additional clients or executing business models</li> <li>❖ Stake tokens for joining the network.</li> <li>❖ Trade 2KEY in the open market, which will establish constant liquidity providers for the token.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Behave according to the rules of the network or lose staked tokens.</li> <li>❖ Moderators can also be penalized for wrongful behaviour and banned for low ratings.</li> </ul>

## 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.

Within the context of a single campaign, any massive intra-campaign reputation loss due to harmful actions, colluding, spamming, disputes etc.. may lead to also slashing of staked 2KEY by any of the participant types. Within the context of the network, loss of global reputation due to negative actions can lead to heightened staking requirements in future campaigns participated, being barred from participating in campaigns and in severe cases being barred from the network at large.

### **2KEY Token Circulation:**

An in depth look at the 2KEY internal circulation mechanism can be found [here](#)

## Summary

**Reputation is the underlying asset** of 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 remunerations 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.

**A balance of incentives is maintained by the protocol to drive players to continuously earn participation reputation.** Our goal is to incentivise users to optimally participate in the network (e.g. earning remuneration and keeping them staked as 2KEY in the campaign contracts). To these ends, The economy is launched with a Network level Reputation Remuneration

mechanism to enhance the network effect and growth, and promote positive service of participants to the network. Periodically (e.g. each month) a portion of tokens will be distributed amongst all network participants, relative to an eligibility score which factors participation reputation earned that month and the 2 months prior to it. The optimal remuneration score greatly favors active participants who have also helped network stability by keeping earned or budgeted 2KEY staked in campaign contracts.

For **Early Adopters** (participants in the pre sale and private sale), their participation as converters in the 2key token sale campaigns will earn them participation reputation similar to converters in other campaigns on the network. Further, just as referrers can increase their participation reputation by locking their payments in the campaign contracts, so too converters in the 2KEY token sale campaigns can earn more reputation for keeping their purchased tokens in the campaign contracts. For all participants, increased participation reputation leads to higher eligibility scores for the network level reputation remuneration mechanism.

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 earning 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 fees are earned on the network by Integrators (2ey Ltd. included, as the base Integrator). The value of this is that it directly links any large-scale earnings made on the network by Integrators to the viability of the tokenomics.

**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 Remuneration.