

ZEON Network: World's decentralized blockchain: the scalable and secure platform

Kirill Levin, CTO
zeon.network

November 7, 2018
ver.: 2.0

Abstract

ZEON Network is a decentralized platform for secure purchase in all areas of the new crypto-economy, insurance and finance services. The ZEON token is the most effective tool for fast, profitable and anonymous payment transactions. We promote the creation of a new global financial system and develop it for the common good of the community. We as a foundation solve the main problems, such as: high-risk ICO primary coin market, expensive cryptocurrency transactions, weak liquidity on the selected exchanges and theft of the user capital on these exchanges through hacking. We carry out a mass adaptation of the cryptocurrency for regular users, give them complete anonymity as participants, anonymity of their payments and wallets the security of any purchases, the possibility of earning with participation in the consensus: PoS 3.0 (Masternodes Erebus and stacking).

Contents

1. Intro. Mission. Problems & solutions	3
2. ZEON: Characteristic. Emission. Sale. Distribution	4
3. ZEON Consensus	5
3.1 Equilibrium mechanism	6
3.2 Decentralized management	6
3.3 Block	6
3.4 Inflation and deflation	6
3.5 Masternodes vs stacking	6
3.6 Anonymity with ZEONx	8
4. ZEON Wallet	8
5. Atlas: safe investments	9
5.1 Hyperion oracle	10
5.2 Periods of funding for the crowdsale team	11

1. Intro. Mission. Problems & solutions

Loss of funds:

- *Users lose funds purchases in crowdsales
- *Growth of coins/token does not occur
- *Lack of demand, which results in the removal of coins from crypto exchanges
- *Large crypto funds also lose purchase despite the availability of staff analysts and traders.

Crypto exchanges hacks:

- *Irrevocable disappearance of coins from wallets on the exchange
- *Risk of capital loss at crypto exchanges as a result of hacking and theft

Low speed and high cost of transactions:

- *Time-consuming and expensive transactions deprive users and traders of the ability to effectively manage their portfolio.

Absence of purchase insurance:

- *99% of coins in the crypto exchange market are not provided with anything, and in the event of project failure or the hacking of the exchange, users completely lose their purchase.

Lack of liquidity:

- *Leads to an inflated cost of trade and often it is many times higher than the declared fees and charges.

Lack of transparency of the trade actual costs:

- * Traders cannot calculate the costs of planned exchange transactions.

What are the problems users face?

Founders and developers of ICOs raise funds, but they tend think about the product implementation with the lowest priority. After the collection of purchases, users are left unattended surrounded by trolls that spread F.U.D, no one has any answers to their questions and they often become victims of unfulfilled promises and even fraud. In crypto users are not insured in any way. In all such cases, this leads to a loss of capital, a devaluation of purchased coins and users disappointed in the crypto industry.

What are the solutions to these problems in the ICO market?

There are projects out there, that are aimed at solving the problem of fraud and "WDS"*. Such decisions are based on the collection of collective purchase portfolios, which are then purchased in the ICOs that are studied.

But the problem remains the same: control over the portfolio is in the hands of a few or a group of people who can commit a human error. There are also projects that use smart contracts that regulate funding based on the ICO developers reports according to the roadmap. This approach also does not solve the problem of fraud and "WDS". It turns out that the reports are attractive, but users bear huge losses.

* "WDS" - Weak Detailed Study of the project or start-up.

What is the ZEON solution for the market of purchases in the ICO projects?

1. The ZEON project solves the problem of "mass adoption" of cryptocurrency into everyday life of people.
2. The problem of safe purchase in ICO projects can be solved with the help of the blockchain technology as an open system. Transactions will become simple and completely confidential with our own blockchain with consensus (PoS 3.0) and a user-friendly interface provided for all services.
3. Our team solves the above-mentioned problems of users and traders using our own blockchain, an intellectual crypto-economic protocol for regulating fair financing for the ICO projects developers:

- The ZEON has developed a mechanism that independently operates in the interests of users (backers), and also takes into account the current needs of the ICO/crypto developers.
- The protocol is based on the method of fair funding, when the ICO founders receive payments equivalent to their work done.

Payments are increased if their work satisfies the interests of their users and vice versa. The crypto-economic protocol is controlled by reliable data obtained from the oracle (hereinafter referred to as Hyperion), which in turn monitors the value of the ICO token/coin on cryptocurrency exchanges.

- In case the ICO token/coin has a stable growth on the exchange, the ZEON protocol increases the ICO project funding. If the value of the ICO token falls on the exchange or is generally lower than it was in the course of the crowdsale, then the ZEON protocol proportionally reduces the funding for the ICO developers.
- The ZEON crypto-economic protocol: the first and only solution of its kind that allows solving many problems in the ICO market, including fraud and "WDS".

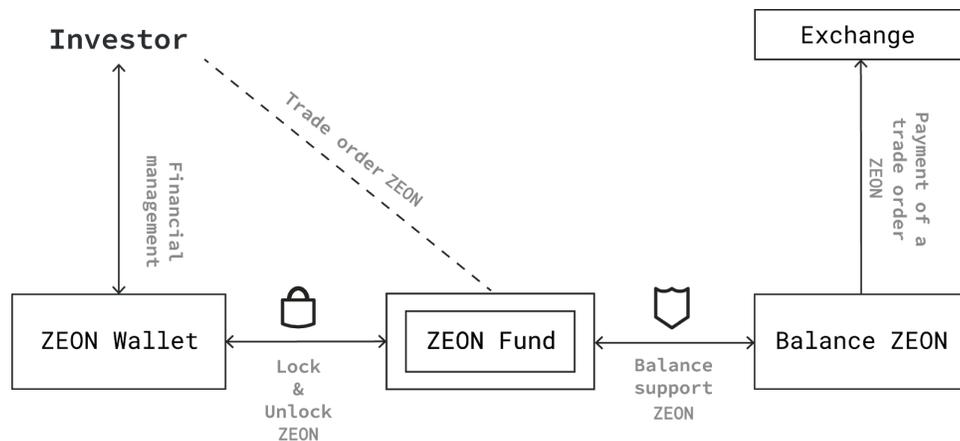
What is the ZEON solution for safe and highly liquid trading on crypto-exchange markets?

We are developing the world's first unique tool for safe and highly liquid trading on cryptocurrency exchanges.

The ZEON Trading platform is a decentralized and automated trading application for cross-chain trading.

The ZEON platform places its own balances of ZEON tokens on cryptocurrency exchanges so that our users can receive an immediate "swap" simultaneously on several exchanges. The ZEON Fond, which has sufficient number of ZEON tokens on its balance, distributes and maintains the balance among the cryptocurrency exchanges based on the daily turnover of a specific exchange.

Users no longer have to risk their own funds by placing them directly on the exchange. ZEON Trading users have a huge advantage by using ZEON in trading. For a detailed description of the workflow, see the section Trading and Liquidity.



2. ZEON: Characteristic. Emission. Sale. Distribution

The main function of ZEON - universal and secure payment instrument, fast exchange, anonymous transaction, cross-chain trading, insurance and financial services. ZEON does not belong to and is not managed by any person or company, and its network is protected by its users and their thousands of nodes around the world.

General:

PoW Phase Period: masternodes.

PoS Phase Period: X Block size: 2 MB

Block Time: 60 Seconds (Re-targeting every block)

PoS Stake Eligibility:

Min Input Age: 60 minutes
Maturity Confirms: 101 confirms
Wallet Status: requires wallet to be kept running & online or hourly
Coin Emission Rate: max. 666 ZEON per block (always less due to burnt fees & unused treasury)
Coin Supply Control: fees are burnt from coin supply.

Transaction Send Eligibility:
Minimum Confirm: 7 confirms
Privacy Technology: Custom Zerocash Protocol
Key Features: Custom accumulator check-pointing system
6% of the earnings from the mining goes to the reserve ZEON Fund (withdrawn from the masternode award fee) to provide user operations
Minimum rate: 0,000001 ZEON
The transaction fee tends to 0 and is sent to the ZEON Fund for the development of the platform.

ZEON tokens emission

Coin emission is the rate at which new coins are created.
First coin emission is 50 000 000 000 ZEON. After that there will be a persistent coin emission like Monero and Ethereum, meaning it will not stop like Bitcoin.
It was designed this way because ZEON doesn't have or need miners, so our rewards are paid to people hosting our network (masternodes), people holding the coin and securing the network (stakers), and people working to improve and promote ZEON. It is a fully self-sustaining economic model which will function indefinitely.
A perpetual coin emission does not mean we have an infinite supply or any other setup that would devalue the currency.
As we will see in the inflation section, ZEON has one of the lowest inflation rates around. In fact, by staking you can not only offset inflation but you can earn for holding ZEON.

3. ZEON Consensus

Proof of Stake 3.0 (PoS) requires nodes running wallet software proving that it has coins in the blockchain in order to verify a block of transactions.
The participating nodes receive an amount of blocks proportional to their stake per set period as a form of reward.
Masternodes are nodes running the same wallet software on the same blockchain to provide extra services to the network. These services include coin mixing for increased privacy of transactions, instant transactions and a decentralized governance that provides a decentralized budgeting system with immutable proposal and voting systems.
Masternodes do provide a valuable service and should be rewarded for that service, but our aim here is not to reward them way beyond the extra value they provide.
This is achieved by creating an incentive to stake, which subsequently promotes liquidity in exchanges and controls the growth rate and count of the masternode network.

3.1 Equilibrium mechanism

This is an algorithm created by ZEON to maintain a healthy network balance between masternodes and stakers (55%-6-1%% vs 45%).
The treasury allocation in the block reward actually happens in each block.

```
if (mNodeCoins <= (nMoneySupply * .01) && mNodeCoins > 0) {  
    ret = blockValue * .94;}  
}
```

It can indirectly affect the total count of masternodes in the network by varying its reward size to alter its profitability versus staking.

Promotes staking by increasing its reward payment portion when masternode count is high and thus maintaining a high level of network security.

Profitability of masternode is kept higher than staking as long as the masternode count remains below the equilibrium threshold.

Our future plan to make staking anonymously (ZEONx).

3.2 Decentralized management

The ZEON project implements and develops its structure on the basis of transparent voting, a decentralized community.

The management system allows all participants to view the news, submit proposals, vote on proposals for the platform development, view their current status, vote on the proposals of the Hyperion oracle to increase or decrease the daily financing of projects.

Features:

1. Participation in voting is allowed to holders and masternodes. The sliding scale of the voting quotas is determined on the basis of the share amount and the masternode status.
2. A simple procedure for voting with clicks in the wallet/dashboard interface.
3. Quarterly reports of the team in writing and video format on the official website and Youtube channel.
4. 7% of the total amount of the reward for the block is reserved in the ZEON Fund.

The distribution of funds is decided by the voting of the community.

3.3 Block

ZEON has a coin emission of up to 666 ZEON per block. It currently allocates up to 39.96 ZEON to the ZEON Fund and 626.604 ZEON to Masternodes Erebus and stakers. The split between masternodes and stakers is determined by the Equilibrium mechanism.

3.4 Inflation and deflation

On most coins, inflation is as simple as the existing supply plus coin emission.

Most coins will pay transaction fees to their miners, which in turn incentivizes the miners to keep fees high.

ZEON doesn't need miners, so it simply burns fees out of the coin supply. This means the fees are kept at their absolute minimum and each burned fee actually causes some deflation. People are sensitive to the inflation rate of a coin because inflation represents the devaluation of your coin. Conversely, deflation would increase the value of your coins. This is all a function of supply and demand. Before accounting for fees burned out of supply, coin emission only creates about 4-5% inflation.

3.5 Masternodes vs stacking

ZEON Erebus is a multi-level masternode system that encourages users to set up new nodes, save and buy ZEON to increase profitability.

1. Any node can become an Erebus masternode and a participant in a decentralized voting system.
2. Interaction: ZEON Wallet helps to communicate between owners of masternode.

Masternodes with dynamic IP address			InstantSend
Private send (split into different parts, at each stage a new one is selected, masternode mixing, mixing in advance)			Simplicity of participation in management: viewing offers, statistics, voting in 1 click
User-friendly interface			Information and statistics
Set up in 1 click for all operating systems			Multi-node on IP
Low entry cost price of the masternode. About \$ 3000 at the initial coin offering stage.			Compulsory rates for masternode
We use the Equilibrium algorithm to distribute payments between stackers and masternodes			Structure: Rates (45%) Masternodes (48%) Reserve Fund (6%) Charity (1%)

7 levels of the masternode system: we have thought out the procedure of compensation for each level (without taking into account the growth rate of ZEON):

200000 ZEON - level 1: Tantalus

1000000 ZEON - level 2: Idmont + 3%

2000000 ZEON - level 3: Gration + 5%

4500000 ZEON - level 4: Ares + 7%

9000000 ZEON - level 5: Actaeon + 10%

18000000 ZEON - level 6: Chiron +12%

36000000 ZEON - level 7: Cronos + 15%

MASTERNODES EREBUS

	pros	cons
Better rewards	✓	✗ Higher running cost due to higher resource requirement
More predictable profitability and payout rate by looking at analytics	✓	✗ Not the easiest to setup and troubleshoot when you run into issues (in future it will be a user-friendly design)
Ability to vote on new proposals & changes	✓	✗ Require from 3000\$ to setup 1 masternode
Can be hosted away from your main wallet	✓	

STAKING ZEON

	pros	cons
Easier to <u>setup</u> (just hold ZEON in our wallet)	✓	✗ Unpredictable profitability & frequency of payout. All depend on how much you hold
No initial startup time unlike a masternode *which requires* 3-6 days intialstion before being able to be used	✓	✗ Most likely less payout amount / frequency than masternode (due to higher competition & lower block reward)
Flexible (less penalty/delay for being offline for over an hour like a masternode)	✓	
No minimum or specific amount of ZEON is needed to activate staking	✓	

3.6 Anonymity with ZEONx

With the ZEON zPoS 3.0 you can maintain your anonymity while also receiving rewards for storing ZEONx.

Staking with ZEON has key advantages for all users who prefer to use zPoS:

1. Equal reward for block compared to ZEON staking.
2. Allows you and your coins to remain anonymous during staking.

In case of public staking people can scan through the explorer and see which addresses are engaged in staking coins, their balance and even localize the source addresses.

With zPoS this will no longer be the case. ZEON uses the Zerocash protocol to achieve greater anonymity than most other confidential coins on the market. Everything will be without manual coinage for ZEONx. When ZEONx is in the process of staking, it generates 4 new ZEONx denominations.

ZEONx provides a coin-mixing service at the protocol level using zero-knowledge proofs to break the connection between the sender and the recipient and hence ensure 100% anonymity and untraceability (better than Monero).

Anonymous ZEONx transactions are performed very quickly: just 0.5 seconds before the coinage and 2.5 seconds for payment

4. ZEON Wallet

The ZEON Wallet is a secure wallet that allows to make deposits, exchange cryptocurrency, P2P transactions (the Mediator interface), as well as provides the ability to safely purchase the crypto/ICO projects, insurance and financial services and to trade on decentralized and centralized exchanges (the Trading interface).

Smart and secure ZEON Wallet is able to record not only transaction numbers, but names and metadata (identifies the person, displays his photo or logo, other information). This will simplify the interface and make it user-friendly.

The ability to bind a public wallet to a unique name reduces the risk of an error.

Example:

The name "pingcha059" instead of
"76f411475428afc90947ee320161bbf18eb6048".

1 feature

The ability to safe participation at crowdsales

2 feature

It has an extra-safe functionality of wallet with transaction confirmation via a special code

3 feature

Multi-asset (any block code compatible with the ZEON Wallet)

4 feature

Direct integration into the accounts of decentralized and centralized cryptocurrency exchanges as a payment gateway

5 feature

Built-in calculator with a conversion rate of coins and altcoins to ZEON, which obtains the rate on the exchange

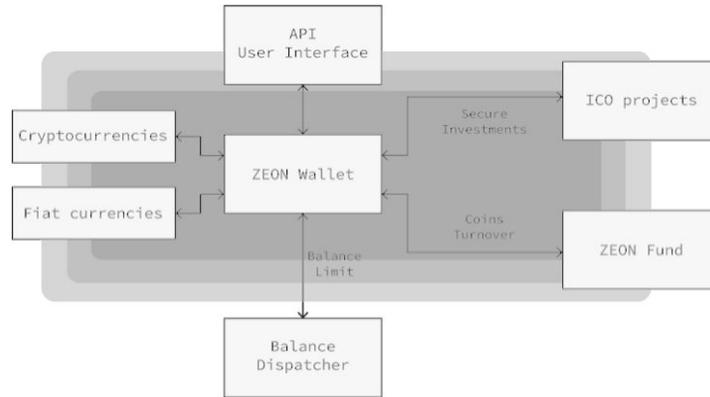
6 feature

Decentralized and risk-free storage and sending of crypto assets (BTC, ETH, LTC, ZEON, any sub-tokens on Ethereum)

7 and 8 feature

The ability to separately confirm specific orders for trading on exchanges through the system (code)

The mode of full anonymity of the wallet, its balances and the history of transactions.

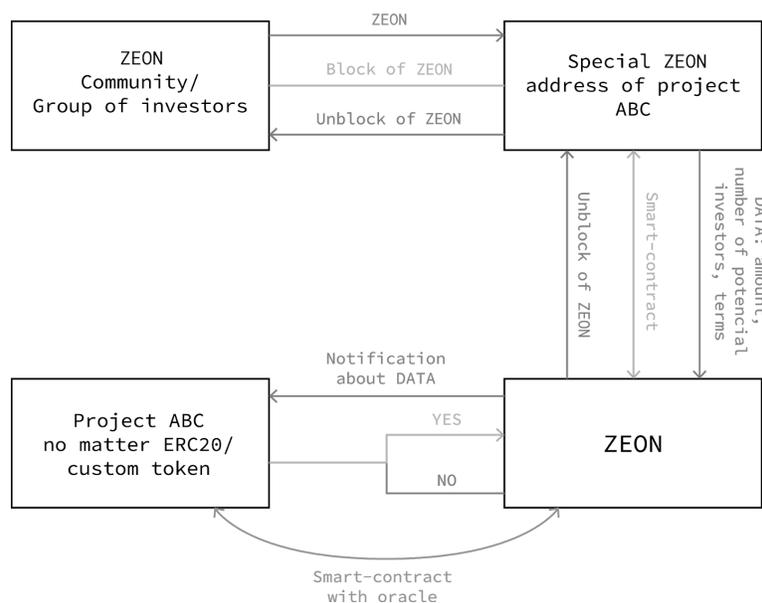


5. Atlas: safe investments

The ZEON platform provides ICO/crypto developers an individual wallet address for free to collect purchases of ZEON tokens. Developers of ICO project can regulate the maximum possible amount of purchases of ZEON tokens.

The following is implemented and displayed in the dashboard of the user:

- individual ZEON wallet address of ICO/crypto project for secure purchase (integrated with the Hyperion oracle)
- name of the ICO project
- maximum amount of collected purchases of ZEON
- dates of purchases collection
- opportunity to vote for/against this project (1 ZEON = 1 vote)
- feature of safe purchase of ZEON
- additional information.



2 types of interaction with the ICO/crypto project:

1. ZEON token holders are initiator of secured purchases.
2. ICO/crypto project is an initiator of secured purchases.

The user can be sure that his purchase is reliably protected by the ZEON protocol.

The point of this solution is that the development team receives a certain, reasonable and fair amount of daily funding, which can gradually increase or decrease:

If the ICO token/coin has a stable growth on the exchange, the ZEON protocol increases the ICO project funding. If the value of the ICO token falls on the exchange or is generally lower than it was in the course of the crowdsale, then the ZEON protocol proportionally reduces the funding for the ICO developers.

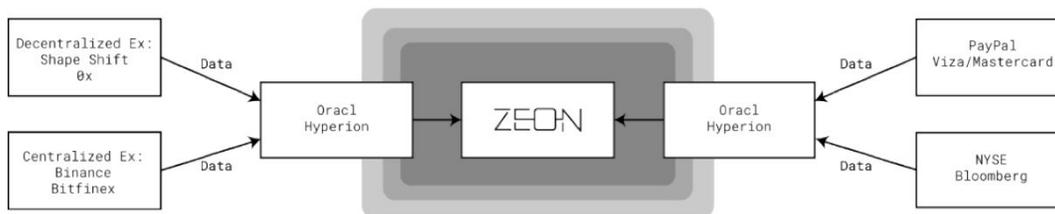
If the ICO token/coin disappears from all exchanges, the ZEON protocol initiates user voting to close the ICO and return all ZEON tokens back to its users.

Secured purchases become possible by ZEON main blockchain, smart-contracts, Hyperion oracle and smart blockchains. More detailed information about this system that we called ATLAS we will publish after ICO because of confidentiality.

5.1 Hyperion oracle

It was created on the decentralized service of oracles Oraclize. It is designed to provide data collected on cryptocurrency exchanges. Oraclize ensures that the data received from the source is authentic and unoccupied. It is achieved by tracking the returned data together with a document called "proof of authenticity".

Hyperion links the data flow between the ZEON platform blockchain and existing decentralized exchanges.



The Hyperion system receives data from the outside world, for example the startup coin issue on the exchange and the current exchange rate of this coin to store this data in the protocol for subsequent analysis.

Receiving data from the outside world occurs daily during three (3) calendar days.

After that, the protocol analyzes and determines the "average arithmetic value of the current value of the ICO token" (hereinafter "New Price") using the formula:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i = \frac{1}{n} (x_1 + \dots + x_n).$$

After determining the New Price, the smart contract determines the "percentage (%)" of the ICO token growth" (hereinafter "Q") relative to its initial value (hereinafter "One Price")

Formula:

$$(\text{New Price} * 100 / \text{One Price}) - 100 = Q$$

Hyperion receives data from the outside world to determine the New Price in the base currency of the ICO project.

The base currency is determined by the ICO founders at the very beginning. Changing the base currency of the ICO is prohibited by the contract.

5.2 Periods of funding for the ICO team

1. The period of token adaptation on the exchange is 15 calendar days from the date of listing.
2. The main period is thirty (30) calendar days.
3. The special period is 10 calendar days (occurs in case of force majeure circumstances).

The amount of ICO team daily funding (hereinafter W) is determined by a special formula at the beginning of any period and remains unchanged during this period.

Please note! The number of days of each period, at the end of such a period, is summed up with three (3) days for the work of Hyperion. The W value of the current period extends to these three days of the oracle's work.

The formula for determining the amount of daily funding (W value) of the ICO team).

After the end of the ICO, the project team has a start balance (hereinafter $Start_Balance$), which is the total amount of the collected purchases (total amount of ZEON).

According to the ICO roadmap, the team determines the total number of days (hereinafter Max_Period) required for the development of the entire project. Usually it is 400 - 600 days.

To determine the value of W the contract takes into account the current date of the calendar (hereinafter NOW).

Also, the contract takes into account the calendar date of the last withdrawal of the ZEON by the ICO team (hereinafter $Last_Withdrawn$).

Formula:

$$W = (Now - Last_Withdrawn) * (Start_Balance / Max_Period * Q)$$

example #1

The ICO project collected 1 000 000 ZEON.

In the first period of 30 days, the value of $Q = 100\%$

$$W = (Now - Last_Withdrawn) * (Start_Balance / Max_Period * Q)$$

$$W = (5 - 4) * 1\,000\,000 / 350 * 100\% = 2\,857,1 \text{ ZEON}$$

Further upon the next main period, the oracle Hyperion reports the first current value of Q , which will be the key factor in determining the amount of daily funding.

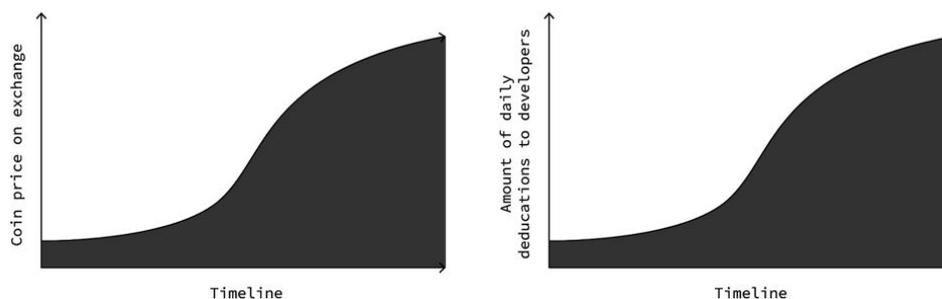
example #2

The Hyperion oracle determined the value of $Q = 150\%$

$$W = (Now - Last_Withdrawn) * (Start_Balance / Max_Period * Q)$$

$$W = (5 - 4) * (1\,000\,000 / 350 * 150\%) = 4\,285,7 \text{ ZEON}$$

The figure shows how the growth of the token proportionally affects the increase in the size of the "daily team funding".



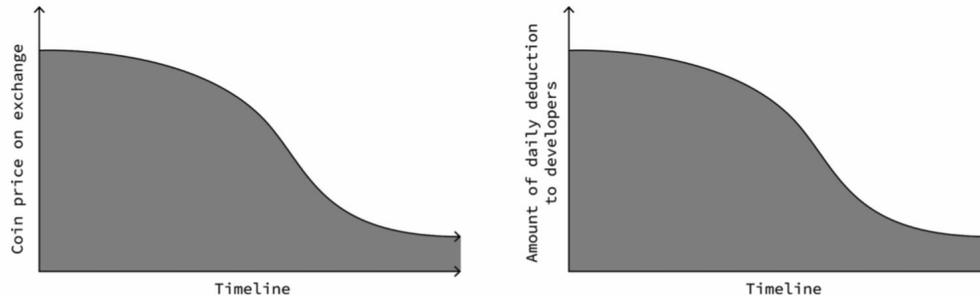
example #3

The Hyperion oracle determined the value of $Q = 65\%$

$$W = (\text{Now} - \text{Last_Withdrawn}) * (\text{Start_Balance} / \text{Max_Period} * Q)$$

$$W = (5 - 4) * 1\,000\,000 / 350 * 65\% = 1\,857 \text{ ZEON}$$

The figure below shows how the growth of the token proportionally affects the reduction in the size of the "daily team funding".



Initiation of users voting occurs through the protocol reaction to force majeure situations. Let's consider different variants of such force majeure situations:

Example No. 1 of the force majeure

If the % percentage of token growth (Q value) after any of the periods is less than 5%, the protocol initiates user voting to reduce the "daily team funding" by 1.5% of the minimum 5%.

$$5\% - 1.5\% = 3.5\%$$

$$Q = 3.5\%$$

With a positive result of user voting (on reducing), the protocol determines the "daily team funding". Example:

$$W = (\text{Now} - \text{Last_Withdrawn}) * (\text{Start_Balance} / \text{Max_Period} * Q)$$

$$W = (5 - 4) * (1\,000\,000 / 350 * 3.5\%) = 100 \text{ ZEON}$$

With such token indicators when the value of Q is less than 5%, the mechanism of the contract determines the next "special" period in the amount of 10 calendar days.

If after a "special" period of 10 days, the value of Q is again less than 5%, the protocol re-initiates the voting of users.

The rate to reduce the "daily team funding" will be equal to the 1.5%.

The previous value of Q minus 1.5% in our case $3.5\% - 1.5\% = 2\%$.

With a positive result of users voting on reducing, the protocol determines the "daily team funding". Example:

$$W = (\text{Now} - \text{LastWithdrawn}) * (\text{Start_Balance} / \text{Max_Period} * 2\%)$$

$$(5 - 4 * 1\,000\,000 / 350 * 2\%), W = 57,14 \text{ ZEON}$$

With a negative result of users voting on reducing, the value of Q will be equal to the value of Q of the previous period, but not more than 5%. The next "special" period will be 10 days. Example:

$$W = (\text{Now} - \text{LastWithdrawn}) * (\text{Start_Balance} / \text{Max_Period} * 3.5\%)$$

$$(5 - 4 * 1\,000\,000 / 350 * 3.5\%), W = 100 \text{ ZEON}$$

With three consecutive positive results of users voting on reducing the "daily team funding", the protocol initiates a vote to close the ICO.

In case of voting AGAINST closing the ICO, the protocol returns to the previous "special" period of 10 days, where the value of Q will be equal to the value of Q of the previous period but not more than 5%. After this period the contract will again take into account the possible three consecutive voting.

Example No. 2 of the force majeure

If the protocol determines the value (Q) as negative, that is, the value of the token is lower than the cost of the token on the last day of the ICO by 50% (for example, $Q = -40\%$), the protocol initiates a vote to close the ICO.

Example:

The price of the token on the last day of the ICO = 1 USD.

The value (Q) after any of the periods = 0.5 USD or less. The protocol initiates a vote to close the ICO.

If the voting results DENIED closing of the ICO, the protocol determines the next "special" period of 10 days using the value (Q) of the previous period, but not more than 5%.

Example No. 3 of the force majeure

If the value (Q) is less than 30% after the expiry of 180 calendar days from the beginning of the first main period (with any number of passed periods), the protocol initiates a vote on closing the ICO. Example:

The price of the token on the last day of the ICO = 1 USD.

The value (Q) after 180 days with any number of periods = 1.3 \$ or below this value, the protocol initiates a vote on closing the ICO.

Example No. 4 of the force majeure

If for any of the periods the ICO token disappears from all the cryptocurrency exchanges, on which it was previously placed, and there are no new placements as well, the protocol initiates a vote on closing the ICO.

If the voting results DENIED closing of the ICO, the protocol determines the next "special" period of 10 days using the value (Q) of the previous period, but not more than 5%.

Mechanics of the ZEON protocol in case of force majeure

1. The protocol urgently introduces the powers of users in the form of collective voting.
2. The protocol takes 51% of the votes from the number of users in the form of a positive decision.
3. The protocol accepts token votes, which were received only by transferring ZEON.
4. Tokens that belong to the team or advisers are not allowed to vote.

Voting system for ICO users

The purpose of the system is the possibility for users to influence the process of spending the collected funds by a start-up. The protocol initiates voting only in of force majeure circumstances. The results of voting can reduce the amount of the "daily team funding" up to the possibility of a full refund of purchases to their owners (with the exception of funds that have already been spent).

When the voting occurs, the system sends a notification to all users (via email, telegram, which they indicate when registering ZEON Wallet) about the beginning of the vote and its reason 24 hours before the start. Voting lasts 24 hours taking into account the time zone of the ICO. The weight of votes is calculated in proportion to the volume of purchases in relation to the total amount of purchases. The voting results are taken into account in case of 51% or more votes.

Mathematical calculation and modeling showed that even with obvious fraud on the part of the ICO team, users who used the ZEON can lose up to 12% of their purchases. Unlike other users who will lose 100% of their purchases.