White Paper for project

EscrowBlock

Contents

Introduction

The development of blockchain technologies attracts more and more attention of software developers all over the world. It is already clear that this approach will change many areas of normal life. Many areas of the economic ecosystem can use blockchain technology to reduce the cost of goods and services and increase the speed of delivery of the same. The process of interaction of counterparties is fundamental in any kind of business. Often, even paper contracts are not free from problems, since the costs of litigation sometimes exceeds the subject of the dispute. To protect yourself from such a situation you can use a conditional deposit to the account of a third party, which will act as a guarantor for any transactions. This is the service that EscrowBlock will offer its customers. The service platform will allow this using a new standard of interaction between counterparties, just as it happened with the appearance of the ERC20 standard for tokens. This will enable the EscrowBlock platform to be integrated into other smart contracts based on Ethereum to support the Escrow service.

Infinite Initial Offer of Tokens (IITO)

When a technology company working with crypto-currencies, such as EscrowBlock, want to attract investments through the initial offering of coins (ICO), it creates a basic plan of action and outlines it in the prospectus, this establishes the project's entities, describes what the project needs and what the project proposes upon completion, how much minimum funds are needed, how many virtual tokens the project founders will keep to themselves, what types of cryptocurrencies or fiat money are accepted for investing and how long the ICO campaign will continue. Due to the specifics of the EscrowBlock project, the ICO start period will be known, but the end period will depend on the funds collected at each stage. Thus, the IITO EscrowBlock will be terminated after the acquisition of all offered tokens for any

period of time. During the IITO, companies and individuals supporting the EscrowBlock initiative will pay for distributed tokens through payments in cryptocurrencies. These tokens are not the same as the shares of the company, which are sold to investors on an initial public offering (IPO).

To start work on the project, the funding raised must reach the minimum required threshold, if the minimum amount is not collected within a year the funding is returned back to the participants and the IITO is recognized as unsuccessful. If mandatory funding is collected within the established timeframe then it is used to start the new project and the IITO does not stop until all available tokens are sold. Early investors are motivated to buy tokens in the hope that the entire plan will be successfully implemented after the launch, which will cause the price of tokens to increase, compared to the purchase price, which will make it possible to profit.

Description of the project

The aim of the project is to create an EscrowBlock escrow platform for the Ethereum network blockchain. Such a platform can work as an independent environment, or be integrated into other Smart contracts (see glossary), to provide escrow services as part of any other project. Any token holder will be able to create an escrow contract for a transaction under the ESC9 standard. Such escrow contracts will be able to protect the deposit of one agent and the object of acquiring another agent from unpredictable circumstances. If the terms of the contract are not executed by any party, then such contract is frozen and transferred to one of the arbitration bodies of the EscrowBlock network. The bodies themselves are not elected in the literal sense, appointment to this post can only be made if you own a certain number of tokens and on this basis voting by the owners of the tokens is for that purpose.

Decisions on a disputable issue related to escrow are made through confirmation or cancellation of transactions. If such a decision is made there will be an explanation of the decision, if the counterparties involved in the transaction do not reach consensus, then the arbitrators may decide to transfer the decision to the higher-level for disputed contracts and it can arrange an anonymous vote among the token holders. Anonymous voting or a higher authority may decide in favor of one of

the counterparties or in favor of withholding the deposit in full and blocking and canceling the ratings of the counterparties in the system. Anonymous voting is only an extreme measure to resolve disputes between counterparties.

# Technical and organizational part of the project

The technical solution for the escrow platform will consist of several parts:

- ★ Multi-signature arbitration wallets
- ★ Examples of ESC9 contracts
- ★ Automatic distribution of dividends among token holders
- ★ Platform for anonymous voting to determine absolute consensus

The diagram of interaction between counterparties, arbitration bodies and absolute authority can be seen below. Arbitration bodies consist of arbitrators - holders of multi-signature wallets. Such multi-signature wallets aggregate contracts of the ESC9 standard, accept a deposit from one side and wait for a confirmation of receipt of the object by the other party. As soon as the receiving party confirms the transaction, a deposit is released to the sending side. Multi-signature wallets of arbitration bodies have a number of special tasks:

1. They can delay the automatic execution of transactions.
2. After a certain waiting period, the transaction for confirmation can be performed by any network user. Thus, time is limited from the beginning of the dispute by the party of the recipient of the object. This protects the agent, the owner of the object, from the illegal detention of transfer of the deposit.
3. The holding period for the transaction is prescribed in the escrow contract between agents.
4. An absolute authority may limit the right of confirmation for holders of a multi-signature purse on a priority basis. Also, the supreme body can remove and add new owners of the arbitration purse in exceptional cases with explanations to all holders of the tokens on the official website of the project with the reasons for such a decision.
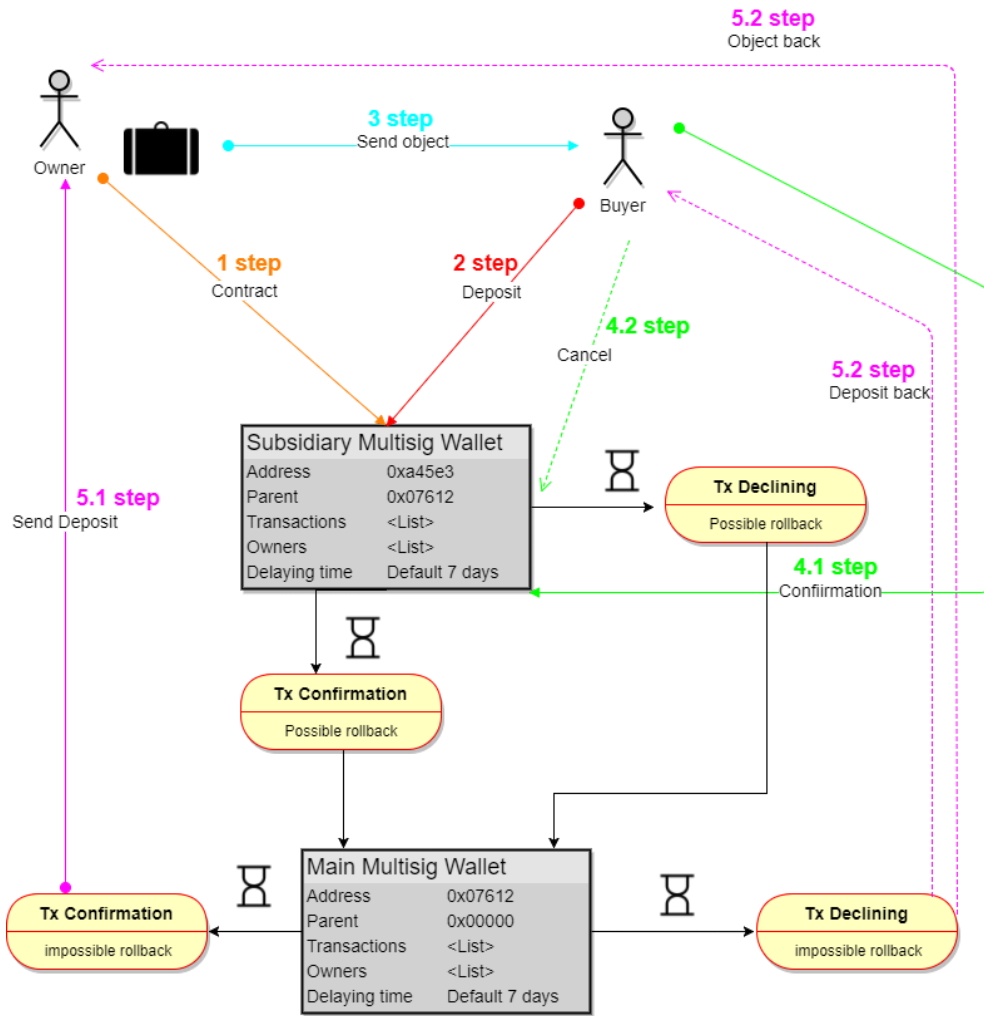
Examples of use

1. Using EscrowBlock for the rental market, like Airbnb

The owner of the rented premises (lessee) publishes an announcement of the available dates, costs and any other additional information. The tenant agrees with the lessor about the price of the deposit and the terms of the contract. The tenant transfers the deposit to the multi-signature arbitration wallet. Then a Smart contract for the rental property is automatically created. An example of the fields of the Smart Contract:

- ❖ Coordinates of the rented accomodation
- ❖ Short description
- ❖ Cost in local currency

- ❖ Password for hidden fields
- ❖ A hidden field for linking to an extended description on the web
- ❖ A hidden field with expanded description hash
- ❖ A price in ETH
- ❖ Tags

The lessor sees that the money is on deposit and lets the tenant have access to the rental property. After the expiry of the tenant's term, the Lessee confirms the deposit transfer transaction or opens a dispute. If the tenant does nothing, then after 7 days (the retention period can be changed depending on the application), the lessor receives the deposit. If the tenant opens a dispute, the automatic transfer of the deposit is frozen and the arbitration body starts to make a decision. (For more details, see resolving disputes in the system). Both sides of the transaction exposes each others ratings for the transaction. If, in the manual mode, this is not performed after 1 month it will automatically be set at 10. If the lessor claims damage to the property and does not receive compensation from the lessee, the arbitration body will make a decision if this is the case. If the lessee does not fulfill the demand for payment of compensation, then it is blocked and the rating is annulled. The arbitration body itself compensates the costs for the lessor from the Risk Coverage Fund.

2. Using EscrowBlock for the freelance service market, similar to Upwork

The contractor of the software product publishes an announcement about the required service to find an applicant . The contractor negotiates with the applicant to determine the price of the deposit (or if the project is ongoing, the price of deposits). The contractor transfers the deposit (s) to the multi-signature arbitration wallet. Then the Smart contract for the freelance market is automatically created. Example fields of such a Smart contract:

- ❖ Short description
- ❖ Cost in local currency
- ❖ Password for hidden fields

- ❖ A hidden field with a link to an extended description
- ❖ A hidden field with expanded description hash
- ❖ Tags
- ❖ Price in ETH

The applicant sees that the money is on deposit and starts the work. After acceptance of the completed work the contractor confirms the deposit transfer transaction or opens a dispute. If the contractor does nothing after 7 days (the retention period can be changed depending on the application), the applicant receives the deposit. If the contractor opens a dispute, the automatic transfer of the deposit is frozen and the arbitration body begins to make a decision. (For more details, see resolving disputes in the system). Both sides of the transaction expose each other's ratings for the transaction, if in manual mode this is not performed it will automatically be set at 10 after 1 month.

3. Using EscrowBlock for the cross-border cargo delivery market

The customer publishes an advertisement about the intention to purchase a product and finds a supplier. The supplier negotiates with the customer about the price of the deposit. The customer transfers the deposit to the multi-signature arbitration wallet. Then the Smart Contract for the cross-border cargo delivery is automatically created. Example fields of such a Smart contract:

- ❖ Short description
- ❖ Cost in local currency
- ❖ Password for hidden fields
- ❖ A hidden field with a link to an extended description
- ❖ A hidden field with expanded description hash
- ❖ A hidden field with an amount
- ❖ Tags
- ❖ Price in ETH

The supplier sees that the money is on deposit and sends the goods. If the supplier needs a deposit for the goods and he/she has a good delivery rating, the arbitration

body can release the deposit in advance, assuming all the risks for an additional insurance fee (commodity leverage, a guarantor for the deposit). After receiving the goods by the customer, the customer confirms the deposit transfer transaction (if the deposit has already been transferred, then confirms receipt) or opens a dispute. If the customer does nothing, then after 7 days (the retention period can be changed depending on the application), the supplier receives the deposit. If the customer opens the dispute, the automatic transfer of the deposit is frozen and the arbitration body makes a decision. (For more details, see resolving disputes in the system). Both sides of the transaction expose each other's ratings for the transaction, if in manual mode this is not performed it will automatically be set at 10 after 1 month.

4. Using EscrowBlock to introduce escrow into any type of business

After the completion of a certain phase of project financing, the organization EscrowBlock will publish open libraries for various programming languages and various frameworks so that developers can quickly and easily integrate EscrowBlock's escrow solution into their businesses. Thus, the business will not need to resort to the services of intermediaries for the transfer of funds. The business connected to EscrowBlock will automatically have a guarantee against fraudulent schemes.

5. Using EscrowBlock for escrow in any cryptocurrency or fiat transactions

Each blockchain network has a list of transactions that can be checked. In the same way payment systems of fiat money provide access to the list of transactions. After the completion of a certain phase of project financing, the EscrowBlock organization will integrate various options for accepting escrow into its platform. So for example, the owner of an object can receive BTC from the buyer. The buyer receives instructions from the arbitration authority on which address in the network block, then must send a transaction with a certain amount of BTC (the transaction amount is added with the sum of 4 minimum decimal points, for example, the transaction

value is 0.000012, the balance 7845 is added and 0.000012000000007845 is obtained if the maximum cryptocurrency decimal points is 18. The tenant assigns to the Smart contract that the transaction will be in BTC and indicates from which address it will conduct the transaction. The owner of the object indicates which address he will accept the deposit after confirmation. Thus, only the multisignature arbitration wallet and the lessee will know the amount of the transaction. Furthermore, the automatic system checks the compliance of the three transaction parameters in another block system within a period of 24 hours, if the sender's address, the amount of departure, the address of the recipient are confirmed, then the deposit is credited and after confirmation of the transaction it is sent to another blockchain of the network to the owner of the object. The automatic system of verification will be protected from forgery of the depository transaction and re-crediting of the deposit.

In the same way, it is possible to implement a deposit scheme with any system of acceptance of fiat payments, for example, Stripe.

Advantages for the seller

★ Guarantee of receiving money for the fulfillment of all conditions of the object delivery

★ No additional solutions and services are required, after the 4th stage of fundraising, EscrowBlock will create services for the most common types of transactions with escrow with open source code.

★ No need to look for customers, many customers are too afraid to carry out transactions because of the risks associated with the quality and deliverability of the object. Once you offer escrow through EscrowBlock services, many customers who use services in other areas can find you.

★ Global rating. If you rent a room, order software and send a shipment of transboundary goods, you will get a general rating for all services and a private rating for each sector.

★ Integration into your own business on the basis of open protocol ESC9.

- ★ No need for call centers, a support team to resolve disputes over transactions. Escrowblock will deal with all situations.
- ★ Receive money from the deposit before the completion of the transaction with good ratings.
- ★ Protection against fraudulent schemes.
- ★ Several ways to resolve disputes.
- ★ Settlement of disputes at the level of consensus and decision of the community, which guarantees transparency of the process.
- ★ A small commission for escrow services.

Benefits for the buyer

- ★ No worry about the object, if it is not of described quality or any of the conditions are violated you will be refunded in full.
- ★ Confirm the transaction for sending the deposit only after checking the description of the object.
- ★ A multi-level fraud tracking system will not allow you to work with an unreliable seller.
- ★ If you forget to confirm the transaction to send a deposit, it will be executed automatically at the agreed time. Alternatively, you can extend the execution time after agreement with the seller.

Business model of the project

From each deposit of escrow there will be a commision charged for the service. The size of the commission can be reviewed in each individual case, but in general it will be 1% of the amount deposited. All commissions are sent to the multi-signature wallet of the absolute authority, and from there it will be converted to a smart contract for the community-determined dates to pay proceeds, according to the proportions of the possession of the ESCB tokens. The EscrowBlock organization will receive dividends on general terms.

Example of calculating the profit from investments in the project EscrowBlock:

If the owner has 10 000 tokens, this is approximately 0.0001% of all tokens scheduled for release and the anual services of Escrowblock reach $500 million (13 500 transactions at $ 100 per day), then the profit from the service will be $5 million. Thus, the token holder will receive a dividend of $ 500 each year, this is without taking into account the growth of the price of the token on the open market.

> "The growth of the share economy is estimated from $14 billion in 2014 to $335 billion in 2025. This estimate is based on the rapid growth of Uber and Airbnb as landmark companies in this field."
>
> **Source:**
>
> https://www.brookings.edu/research/the-current-and-future-state-of-the-sharing-economy/

Many walks of life require escrow, so the introduction of the EscrowBlock service will reduce the cost of services between counterparties and provide unsurpassed security.

The EscrowBlock fund will exist on the collected funds during the IITO and on the dividends from the interest on the service as will the IITO participants.

Structure IITO

EscrowBlock will conduct IITO (an infinite initial offering of tokens) which will protect the interests of investors. Typical ICOs offer bonuses depending on the timing of investment, which does not take into account the interests of investors in full. EscrowBlock will offer bonuses for participating at stages, based on its riskiness and importance. Investors can monitor the process and contribute additional funds after confirming the stage. The stage itself is determined only by the amount of collected funds.

1. Development of ESC9, specifications and testing of the basic model in specific markets (up to $40,000).
2. Development of the hierarchy of multi-signature arbitration wallets,

deployment of the entire functioning system on Ethereum Mainnet, preparation for launching its own Ethereum-like network block for an independent transaction environment (up to $100,000).

3. Development of the programing part of the EscrowBlock system and interface for the main software platforms (up to $200,000). The beginning of the offering of tokens on cryptocurrency exchanges.

4. Development of libraries for various programming languages and frameworks (up to $500,000).

5. Development of a system for working with deposits in different blockchain networks and payment gateways (up to $1,000,000).

6. Development of a system for the rental market (analogous to Airbnb) (up to $4,000,000).

7. Development of a system for the freelance market (analogous of Upwork) (up to $6,000,000).

8. Development of a system for the market of cross-border cargo delivery (up to $8,000,000).

9. Risk Coverage Fund ($10,000,000).

The unspent amount at any stage of the project development goes to the next level and eventually will settle in the Risk cover fund.

For the foundation of the fund, EscrowBlock will release ESCB tokens, which are Smart contracts based on the Ethereum blockchain network (see Glossary). EscrowBlock will ensure that the collected funds will be used for the stated purpose. After the registration of EscrowBlock, the fund will be subject to audit by certified public accountants who will guarantee transparency of operations and the safety of stored funds.

Name of the token - Smart contract ESCB.

The initial number of tokens is set at **100 000 000**. The final number of tokens is undefined, due to the possible need for additional emission in the form of bonus tokens, depending on the IITO phase and the ETH course. The number of tokens with regard to bonuses in stages is **106 368 000**. (see the section on the distribution of

tokens). The number of tokens distributed with regard to the referral program and the ratio of distribution shares can not exceed **110 368 000**. In each transaction for the purchase of tokens, the release of the tokens for the EscrowBlock dividends will be calculated in the ratio indicated in the distribution of tokens without regard to the referral program bonus.

The initial price of one token is set at **$0.1 (USD)**.

The IITO period will only have a start date. The IITO will be completed only after a fundraising of **$10 000 000 (USD) (adjusted for the original ETH rate and growth forecast)**. After collecting the entire amount for the implementation of all planned stages, an additional issue will not be possible.

Please keep in mind that the tokens for the EscrowBlock fund will be issued with the Cliff/Vested condition, which means that all tokens distributed for EscrowBlock can not be transferred to another address within the first 12 months (the Cliff period). Then the Vested period will last up to 18 months, during this period only the equidistributed part for the transfer to another address will be available. After the Vested period, the total amount of tokens can be transferred or sold.

This will mean that the EscrowBlock team can only manage the tokens after one year of working on the project. In this case, the receipt of dividends in this period is possible. This scheme is needed to protect the market from dumping the price of the token.

Distribution of tokens

- Among users: 66%;
- Stored to receive dividends in EscrowBlock: 30%;
- Incentive campaign: 4%;
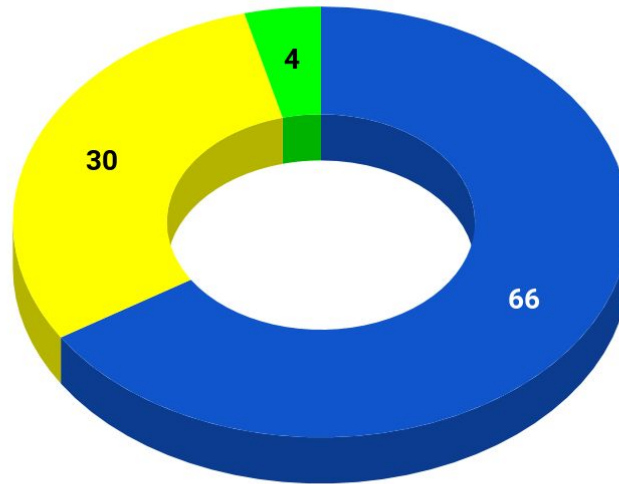
● **Among users** ● **Saved to receive dividends EscrowBlock** ● **Incentive campaign**
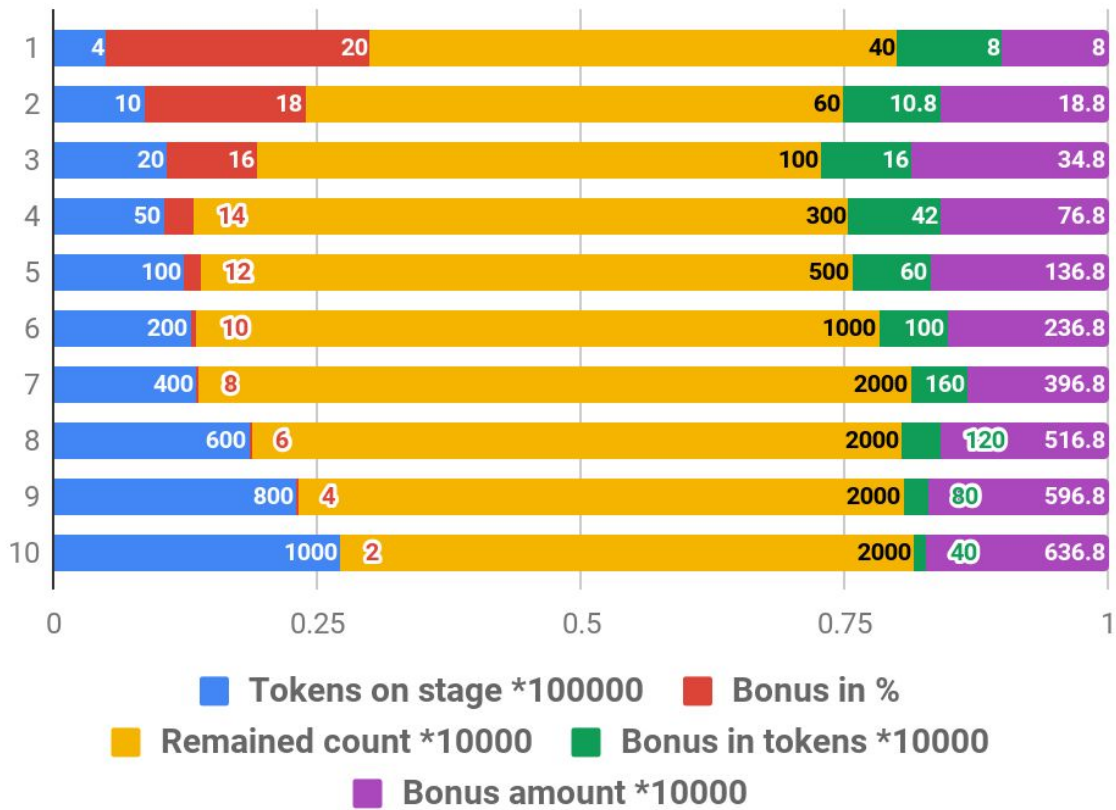
Bonuses when paying for tokens

Each stage of financing has less risks than the previous one, so bonus tokens decrease in proportion to the funding phase. At the first stage, the bonus is **20%**, the next 9 stages will be set at **2%** each stage.

Based on this, we can calculate the number of tokens allocated at each stage.

#	Stage IITO	Bonus in percents	Remained count	Bonus in tokens	Bonus amount	Total number of tokens
1	400 000	0,20	400 000	80 000	80 000	480 000
2	1 000 000	0,18	600 000	108 000	188 000	1 188 000
3	2 000 000	0,16	1 000 000	160 000	348 000	2 348 000
4	5 000 000	0,14	3 000 000	420 000	768 000	5 768 000
5	10 000 000	0,12	5 000 000	600 000	1 368 000	11 368 000
6	20 000 000	0,10	10 000 000	1 000 000	2 368 000	22 368 000
7	40 000 000	0,08	20 000 000	1 600 000	3 968 000	43 968 000
8	60 000 000	0,06	20 000 000	1 200 000	5 168 000	65 168 000
9	80 000 000	0,04	20 000 000	800 000	5 968 000	85 968 000
10	100 000 000	0,02	20 000 000	400 000	6 368 000	106 368 000
Sum			100 000 000	6 368 000		

1	4	20	40	8	8
2	10	18	60	10.8	18.8
3	20	16	100	16	34.8
4	50	14	300	42	76.8
5	100	12	500	60	136.8
6	200	10	1000	100	236.8
7	400	8	2000	160	396.8
8	600	6	2000	120	516.8
9	800	4	2000	80	596.8
10	1000	2	2000	40	636.8

■ Tokens on stage *100000   ■ Bonus in %
■ Remained count *10000   ■ Bonus in tokens *10000
■ Bonus amount *10000

Program "Bounty"

Each buyer of tokens during the IITO can use the referral program, which provides for the purchase of tokens with the address of the referral. This purchase will generate an additional 2% for the buyer and for the referral. That will give 4% of bonus tokens for such transactions. Since the purchase can be carried out without referral, the total number of tokens under the "bounty" program will be between 0 and 4 000 000.

Bonus tokens under the "bounty" program are summed up with other bonuses and are calculated on the basis of the amount spent for the purchase of ESCB tokens.

Calculating a share for EscrowBlock

We calculate the share allocated to the tokens for EscroBlock, for example, buying 1000 tokens in the first stage with a referral bonus.

1. The purchase amount is 1,000.
2. Bonus at the first stage 200.

15

3. Referral bonus 20.

4. A total of 1 220 tokens are transferred to the account of the buyer.

The referral bonus for calculating the share of EscrowBlock is not taken into consideration, therefore the base number of tokens is 1200. The share of EscrowBlock is 30%, therefore without taking into account the referral program 1200 is 70% of the total. The calculation factor is 30% / 70% = 0.428571. Thus, the issue for tokens to the EscrowBlock account will be 514.285714. Following this logic, you can calculate that EscrowBlock will eventually receive 45 586 290 tokens. Each stage for EscrowBlock will issue tokens under the condition of Cliff/Vested, which will limit actions with them for 12 months. EscrowBlock will receive dividends along with the general provision on their receipt.

Receipt of dividends

Each holder of tokens has the right to demand the receipt of dividends from a special Smart contract in specified periods. Prior to voting, the period between receiving dividends will be 6 months. The period for receiving dividends will last for one week, during which time all transactions with tokens are frozen. The receipt of dividends can be initiated either manually or by waiting in the queue to receive them. If, during the payment period, automatic distribution has not been performed for the entire queue, then these payments will be postponed to the next payment of dividends.
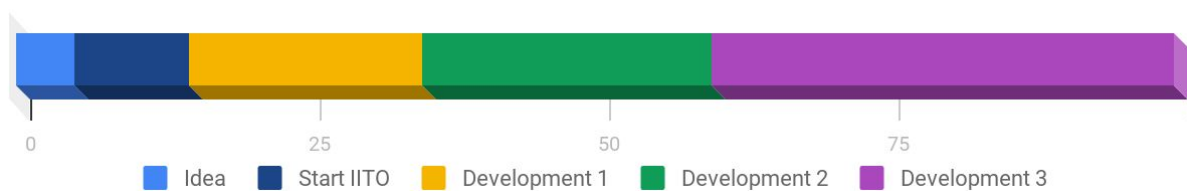
Use of funds
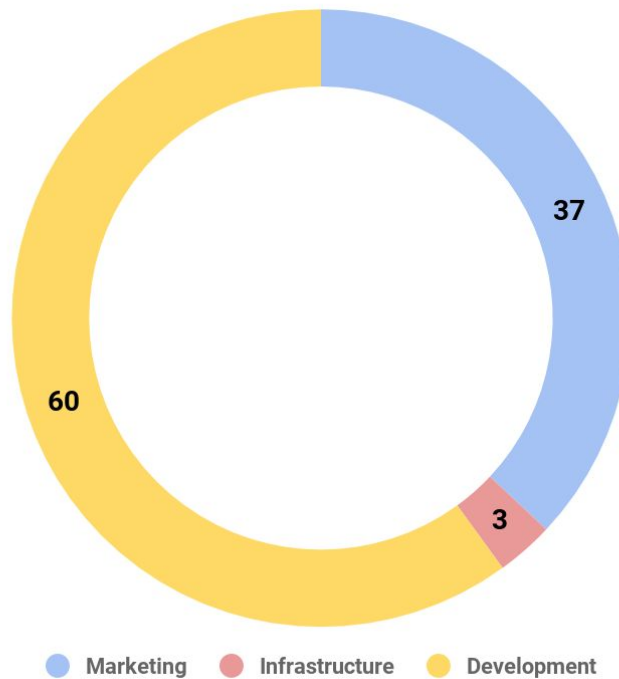
Marketing: 37%

Development: 60%

Infrastructure: 3%

Project roadmap

- **from 01.12.2017 –** early stage, modeling of all processes, verification of project feasibility
- **02/04/2018 –** the beginning of IITO
- **Q2 2018 –** the beginning of development of the first 3 stages
- **Q3 2018 –** the beginning of development of stages 4-6
- **Q2 2019 –** the beginning of the development of stages 7-10

Competitors

https://payfair.io/ – decentralized guarantee-service and p2p crypto-exchanger for Ethereum blockchain.

The team is mainly focused on p2p exchange. With Escrow service as part of the platform. Compete more with the exchange of currency, than with other participants of the escrow market. There is no clear description of the platform itself. It is necessary to wait for the release. ICO is over, tokens can be purchased on stock exchanges.

https://descrow.com – decentralized Escrow platform.

The team is mainly aimed at escrowing ICOs. ICO currently in process.

https://forseti.im – a set of all kinds of services, including identification and reputation model.

The team is mainly aimed at escrowing ICOs. In the pre-sale phase. There is no mention of an ICO as of yet.

https://arbi.expert/ – legal consulting and escrow services for ICO # 1.

The team is mainly aimed at escrowing ICOs. There is no mention of an ICO as of yet.

Team

Key team members are presented below. When developing technical functionality, it is planned to hire an undetermined number of developers. When solving organizational, legal and other issues, it is planned to hire highly qualified specialists in the necessary fields, which will not be the core of the EscrowBlock project team.

Konstantin Viktorov

The founder and technical director of the project EscrowBlock. More than 14 years in the field of information technology. He created from scratch or participated in projects for large companies such as Aeroflot, TELE2, Velcom, Upwork, Toptal, etc. He has experience in building from scratch highly loaded real-time systems, the

experience of creating software in different programming languages for different spheres of human activity. He has a bachelor's degree in the field of physics of magnetic phenomena.

Kevin Hollands

Founder and highly qualified investor in the markets of cryptocurrencies, real estate and construction. He has more than 20 years of practical experience, a huge track record in project management. Kevin manages all aspects of investment, including strategic management of companies working in the investment and construction business.

Regulatory documents

Considering the need to process personal data, here is an approximate but incomplete list of standards, regulations and laws that need to be followed:

1. [ISO/IEC 27000 family of standards](#) – define the requirements for the storage, processing and transmission of personal identification information;
2. [GDPR](#)– the basic data processing requirements (General Data Processing Regulation, GDPR) define the basic principles of working with personal information;
3. Laws [AML/CFT](#) – the list of legislative requirements for a set of measures to prevent the laundering of proceeds from crime and measures to counter the financing of terrorism.

Most of these laws, requirements and directives apply only to the European Union. In this case, the basic rules for other jurisdictions can be drawn from this list.

Conclusion

The world is changing rapidly and the new challenges of modern life make it necessary to adjust the established processes so that they correspond to modern trends. Together with EscrowBlock, anyone can participate in the creation of a new economic history. Conditional deposit is the link in transactions with counterparties, which confirms the hypothesis of the need for a new approach in this area to

improve competitiveness, quality and convenience of services. EscrowBlock offers not only the development of a new platform for escrow on blocking technology, but also the formation of competitors in the market of "shared economy", which shows rapid growth. Thus, the implementation of each stage of our project will increase the cost of the tokens and the number of received investments in multiples. We hope for the implementation of each project implementation of EscrowBlock in stages. In the future, such projects can grow into separate types of business, which will increase the capitalization of the entire platform. The limited release of tokens and the condition of their availability to complete all transactions in the system will guarantee the growth of their prices.

Glossary

Ethereum – an open source technology that allows you to build a decentralized, unchanging chain of transactions. Each transaction can be executed with certain conditions recorded in the Smart Contract.

Smart contract – written in the Solidity language, the logic that runs in the Ethereum environment, which allows you to extend the transaction logic to the network block.

Token – Smart contract that gives the right to interact with the platform, the right to receive dividends, etc. Tokens are written in the language of Solidity and are based on the blockchain technology of Ethereum.

Protection of personal information - a set of measures and solutions for processing and storing data related to identity, as well as anonymous and pseudonymous information. Classification, storage, analysis, processing and accessibility of this data will comply with the directives of the European Commission, including the "General Data Protection Regulation (GDP)" and others.

Multi-signature arbitration wallets (arbitration body) – special Smart contract controlled by a group of participants who can confirm or cancel transactions. Using the mechanism of multi-signature wallets, you can create a chain of gateways for transactions and control the execution or return of funds in a timely manner.

The owner of the object – is the lessor, the supplier, the developer of the software product, etc. That is, the person who implements the object and receives the deposit as a reward.

The beneficiary – is the lessee, the buyer, the customer of the software product. That is, the person who deposits on the object to purchase the product or service.