

# **Yellow Paper**

# **DES**Decentralized Escrow





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### Annotation

Blockchain has proved its worth as a decentralized distributed ledger and growing worldwide interest in this subject testifies it directly.

Introduced by Blockchain, a new paradigm of relations between people that excludes intermediary services from this process, is not used to the full extent of its power, and it's also being manipulated in part. The reason is that management of structures and servicing services around Blockchain are not different from the classical, capitalist approach.

In its turn, ICO (Initial Coin Offering) - as a new type of business ideas and acting projects funding is gaining more and more popularity. The amount of money entering the economy, therefore, has been increasing from year to year and is already estimated at billions of US dollars.

Moreover, the classic scheme of investment raising - crowdfunding, long established its viability and truly global scale also stands in the way of global changes and adjustment to the new e-commerce paradigm.

DES keeps up with the times, catches the market movement and will be a necessary deputy in the new economy development.



#### Introduction

Common sense, pragmatic and precise calculation is not keeping pace for such growing kind of investment, as ICO. There is a precious sight of ideas appear at the market, and it is not possible physically to monitor purity of a project team intentions and business plan operability. Investors at least a little, but try to invest hastily in the maximum number of companies, and thinking: "Maybe the shares that I have bought will grow and I shall become rich in no time."

Yes, Blockchain is really a technology that will allow to arise companies with multibillion-dollar capitalization. Nevertheless, this does not exclude emergence of unscrupulous projects that at the start of fundraising campaign do not plan to immediately withdraw money after ICO close and disappear. But at the moment the projects receive large sums of money enough to live comfortably for a very long time, not being responsible for the non-return of these funds to investors, it involves laziness and reluctance to implement the conceived ideas. The profit they can receive with the ideas implementation is delayed in time and probability of achieving it is not 100%, but the funds from ICO are already on hand.

It follows that innovative approach collecting (ICO) is in compromised state.



# Existing problems

- 1. Absence of final trust in Startups.
- 2. Lack of confidence in escrow, as a rule, with a single person or a company standing behind it back.
- 3. Lack of control over funds expenditure during project implementation.
- 4. Lack of a convenient interface for interaction with Startup on its way to obtaining the final product.

#### **Problem Solutions**

Escrow, multisig is an excellent solution for increasing the security of collection, storage and distribution of value. But classically it also does not exclude the presence of the human factor and can be manipulated in a varying degree.

The solution of the above problems with confidence in the project, team consistency and the confirming intermediary (escrow) is:

- Decentralized Escrow (DE).
- The Decentralized Escrow Platform (PDE).

DE allows, by majority voting, to determine the further financing of the project, which previously distributed the stages of receiving tranches for the idea implementation.

As we understand, it is impossible instantly to write a program code, create a working model and a profitable business, the stages of its implementation are divided in time and take at least six months, or even more. Therefore, creation of Roadmap and phased financing is normal and realistic practice, without its presence, it is possible to question the project viability and Startup desire to spend raising funds as per its intended purpose.

Each stage of the project includes the necessary work, which Startup undertakes to perform by the certain date and provide them to the investors' court for the next financing round.

DE consists of voting mechanism, where the decision is made by the majority (more than 51%) of direct campaign participants, project investors according to the number of shareholding.



#### For Whom? What are the benefits?

#### For Startups:

PDE allows not to doubt of the Startup intention to create a finished product, which was announced at the start of the campaign, and in case of force majeure circumstances that may affect the project implementation to protect investors from unforeseen losses;

- simple and easy feedback from investors;
- possibility of improving the product in the process of creation.

#### For investors:

PDE allows you to get an accurate idea of startup team integrity, its intention to follow exactly, established steps to create the product;

- at the time of the financing stages, it will be seen how competent the team is, how professionally it studies and knows the market where the project is created;
- maximum safety and security for invested funds. Full refund of reserved investments is made in case of non-observance of established obligations and unreasonable failure of the terms of execution.

#### For ICO / crowdfunding platforms.

PDE will create trusting attitude to the site and projects that are exhibited on it. It will be one of the important reasons for increasing the turnover of domestic digital assets and, ultimately, the company's capitalization.

For common purchasing business:

PDE allows to create conditions for honest sales;

- carry out safe collection of funds for mutual purchases of share capital. Customers control the capital until the seller would fulfill his obligations.

#### For community / crypto community:

In general DE will help to restore cryptocurrencies capital market and crowdfunding sphere.

- It will not allow to grow in number of unscrupulous projects, using for their greedy purposes: on the one hand, financial illiteracy of the population, lack of in-depth blockchain technology knowledge; and, on the other hand, growing in geometric progression interest to the crypto industry, where, in most cases, an ordinary investor neglects basic security and accepts in faith some pseudo - experts' statements.



#### PDF additional use:

- 1. Features integration into existing crowdfunding platforms in addition to ICO-platforms, such as: Kickstarter, Boomstarer and others.
  - 2. One-time use for making any decisions / voting.
- 3. Permanently use by any community or company, if it's necessary to make a variety of decisions from time to time.
- 4. As an independent platform with all Decentralized Escrow functionality for placing projects and attracting investments in internal tokens DESC.

# About DE platform (an example for ICO)

- 1) The platform allows to integrate through an open API with smart ICO fund-raising contracts, written for any Blockchain (for example: Ethereum), or do with any ICO-platforms (WINGS, WAVES, OpenLedger, etc).
- 2) Integrated projects load their Roadmaps on PDE which includes three simple parameters:
  - 2.1) Duration
  - 2.2) Planned works scope by the end of the duration
  - 2.3) Next tranche

Example: 100 BTC were funded during ICO by the date (01.05.2017)

Period	0 (start)	1-st	2-nd	3-rd
Duration	01.05.2017	01.06.2017	01.08.2017	01.09.2017
Works		Set up project site	1) Create messenger 2) Tokens bound	Product Launch
Tranche amount	10 BTC	20 BTC	50 BTC	20 BTC



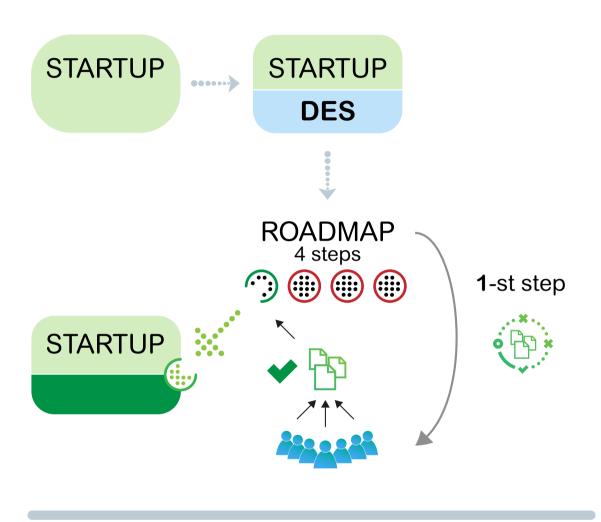
- 3) Investors who owned a share of tokens purchased during ICO vote for project continued financing at each stage, except the Zero one (the Beginning).
- 4) Voting decision is adopted by the majority (more than 51% of project shares).
- 5) At every stage (period) Startup downloads on PDE required progress reports / references to show them all to investors.

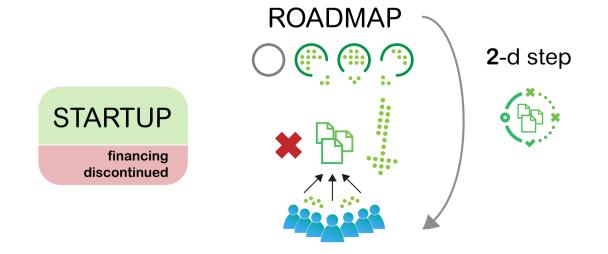
At that moment, there are two buttons appear/become active in investors' account:

- 1- "Accept work / send next tranche"
- 2- "I lost confidence, I ask to complete financing", plus, investor will need to fill in a free feedback form, where he will subjectively state the reason for his decision. This gives opportunities to Startup to track feedback from investors, which is important for the team and the project improvement, to see mistakes and correct them even at the stage of negative emergent, when such letters are minority, and the project gets further tranches by the majority.
  - 6) After decision making (more than 51% of project shares):
    - "YES" the next tranche to Startup is listed;
- "NO" remaining funds payback to investors to addresses funds came from.
- 7) All ICO funds are stored on a purse with investors Multisig signature only (an open smart contract) (neither Startup nor DE service has it). Each signature has its own weight number of shares in % (percentage points).
  - 8) Additional functionality:
- 8.1) Startup can state the project delay no longer than for 6 months. But only one delay for each project stage is available.
- 8.2) Ability to set another votes percentage, which affects the decision (from 1 to 100 %). Such opportunity is only give to communities that use PDE for different types of voting.



PDE operation. General scheme.







# General phases of project development.

#### Completed tasks

- **Stage 1.** Escrow smart contract prototype is made.
- **Stage 2.** The creation of the project concept. Create website, groups, and chats in social networks.

#### In process

- As the project is being created for ordinary investor primarily, we collect and process feedback from the community through various communication channels to improve and refine the project concept.
  - Further product development.
  - Improve the project concept.

#### Next development steps

**Stage 3.** Conduct funds precommitment phase (pre-ICO).

Infrastructure development fundraising and preparation for the main ICO:

- Team work financing.
- Take up creation of Decentralized Escrow platform based on the existing prototype, available experience and community feedback.
- Build up a multifunctional website. Develop a smart contract for the ICO. Bounty-campaign development (award system) for project advertising in social networks and on specialized crypto-exchange forums. Promotional materials preparation and distribution.

#### **Stage 4.** Core fundraising (ICO)

- Primary fundraising with initial tokens offer (ICO).
- Funding the team until the product is created and serviced, improved, and supplemented with new features and capabilities.
  - Finance the work of the project development team, increase partner



# Reference points of PDE development.

- 1. Create escrow-smart contract prototype. The prototype is ready and available at the link: http://icomatiq.herokuapp.com/
  (Designed by Chain.Cloud)
- 2. Create escrow-smart contract.
- 3. Create platform with DE functionality.
- 4. Reach cooperation agreements with the leading ICO and classic crowdfunding platforms.
- 5. Involve companies and communities in decentralized voting and using escrow for various tasks solving.

For more information, visit https://descrow.org/ or email: info@descrow.org

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