ZHCASH

WHITE PAPER

PLATFORM
FOR DIGITALIZATION
information system

Ver 1.8 alpha

ZHCASH

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ZHCASH

1. INTRODUCTION

Market now

There are many models of the use of blockchain technology in traditional business, demonstrating its potential. For example, the blockchain made it possible to abandon the use of central servers for data storage, entrusting them to a distributed registry.

So there were smart contracts and decentralized applications presented to users in various areas: business, entertainment and communication.

And now thousands of the world's largest companies are ready to invest billions of dollars in blockchain development. This makes decentralized applications (or DApps for short) one of the most promising IT areas of the future, which attracts the attention of developers around the world.

For 2022, the share of the entire DApps and NFT ecosystem in terms of token turnover exceeded $20 billion, although the full potential of blockchain opportunities has yet to be revealed. Verified Market Research (VMR) experts predicted a compound annual growth rate of 33.7% in the next 8 years. They stated that the total market supply of the NFT space will grow to $231 billion by 2030.

Another promising direction for the development of blockchain technology in business is the tokenization of assets, i.e. the issuance and further circulation of rights to tangible and intangible assets in the form of tokens issued through digital systems based on blockchain.

Tokenization of real assets opens up new markets. Since the creation of tokens on the blockchain platform can be carried out much faster and with minimal costs, barriers to information exchange and trade are reduced. And assets that have undergone the tokenization process immediately enter the secondary market and can already be sold or bought.

This opens up great opportunities for the development of financial markets, reducing costs and simplifying the investment process. Research and surveys by the World Economic Forum and Deloitte and McKinsey companies suggest that up to 10% global GDP will be stored and processed using blockchain technology by 2025-27.

In the next 20 years, about 50% of financial assets, such as securities, bank guarantees or national money, can be tokenized. And the market depth can be more than 10 quadrillion dollars. It has already become clear that the development of tokenized assets is the immediate future of financial markets, which will completely change the existing management system.

Problems

However, despite the fact that blockchain technology opens up many advantages for business, a number of problems remain that hinder the wide development of this process. Firstly, to actively implement it in business processes, you need the specialized knowledge and skills of programmers required to use most products and services, as well as expensive infrastructure maintenance. Secondly, it is very difficult to develop decentralized applications - developers must take care of consensus, storage and many other things. This creates a high entry threshold for most SMBs.

Decision

We solved the above problems by creating the ZHCASH Network platform.

This is an open source universal blockchain platform that allows:

- Create decentralized applications based on smart contracts
- Create decentralized databases
- Issue cryptographic tokens
- Conduct crowdfunding campaigns
- All this can be done on the basis of a public or private blockchain

2. PROJECT DESCRIPTION

ZHCASH Network – **open blockchain platform combining the security of the UTXO model and many virtual machines, including EVM and x86 VM.**

The network is based on the consensus of PoS 3.0 and on a decentralized control protocol (DGP), which allows you to change certain blockchain settings using smart contracts. Through this, ZHCASH Network provides standardized, stable, and secure creation of decentralized applications and ecosystem development for smart contracts, making their development and application as easy as possible for business.

The ZHCASH platform allows everyone to create smart contracts and decentralized applications where you can choose your own rules for asset management, transaction format and other functions, so such applications can serve various areas of life and business - from finance to government document management and the gaming industry.

The platform provides a set of simple and functional technological solutions for using blockchain in any business task - from the simplest to the most complex:

1. **Development of decentralized applications** different varieties (DApps) with a high level of protection, created on the basis of the blockchain and working with smart contracts, which allows you to implement more functions, including financial ones, for managing fiat and digital assets.

2. **Creating cryptographic tokens** to create new digital assets and integrate them with other services, such as exchanges, traditional banks or payment cards, as well as, for example, buyer bonuses, communication bills or housing and communal services, where the token is a means of confirming ownership of the corresponding payment unit transferred to the blockchain, as well as many other assets.

3. **Create decentralized databases** secure information stores with a distributed registry based on complete Turing master contracts. There is a paradigm shift that will fundamentally change how data is stored, processed and transmitted internally. This shift gives rise to an abundance of new opportunities, including solving many annoying problems that haunt both large technology corporations and ordinary users. After all, if this technology evolves as intended, it could become a staple for a new, semantically structured Internet. Tim Burners. Lee, the creator of the Internet, says in a speech on Ted Talk: "There is a huge amount of related data. I only told you a small part. Information is contained in all aspects of our lives, from work to entertainment, and all the difficulties are not so much due to the number of its sources, but due to the construction of connections. When you link data, you get "power" that you don't get anywhere else.

4. **Crowdfunding campaigns** to find investors and finance business projects.

Our platform enables you to solve most complex problems and provides developers with a wide range of useful tools for implementing blockchain in business processes, which makes ZHCASH Network the most attractive and accessible solution for the market today.
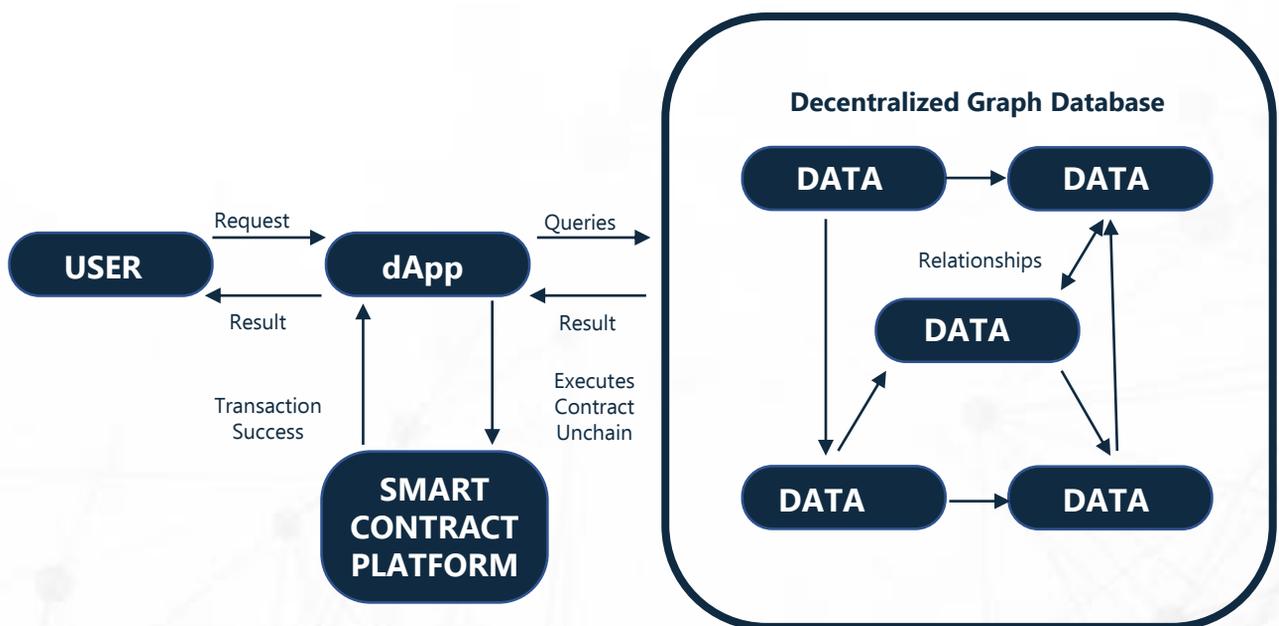
2.1. MISSION AND GOALS

OUR MISSION – give business simple tools for integrating and developing blockchain technologies in real life. To do this, we created the ZHCASH Network platform and are working to form a business community around it.

Our team has the following goals:

1. Provide business with useful tools for creating decentralized applications and developing smart contracts based on their own private or public blockchains, which make it possible to solve problems related to transparency, trust and efficiency.

2. Increase business efficiency by enabling asset tokenization and crowdfunding. We help businesses save resources, become more competitive and efficient by digitalizing almost any assets, and conducting crowdfunding campaigns will give access to a completely new audience to get the necessary investments.

3. Enable any user of the ZHCASH Network platform to earn revenue. We offer new opportunities for all participants in our platform. Each user inside the system can choose how to earn it.

2.2. PROJECT HISTORY

ZHCASH Network was conceived as a **next-generation hybrid and versatile blockchain platform** that would contain impressive features and capabilities..

The first version of the network was called ZeroHour and was launched in mid-2018. It took more than a year to test the network after the official start and generation of the Genesis block. During this time, the developer community has changed and expanded significantly, and the platform itself has acquired even more useful features.

The new ZHCASH Network platform contains many impressive features that were previously planned - hybrid algorithms and protocols ZTXO (UTXO), POS, IPOS, DPOS, Offline POS, DPG. Universal ABI with support for all versions of Solidity.

The first ZHCASH test network appeared in 2018. At the end of 2019, the project was subject to big changes for the better and a major update, in which the QTUM core was taken as the basis (usually read as Quantum).

BLOCKCHAIN CHARACTERISTICS:

Unit generation time	120 seconds
Block size	2MB
Total coins	10 billions ZHC
Block reward 800 ZHC	~1%
Consensus	Proof of Stake
Specialty	ZTXO (UTXO), POS, Offline POS, DPOS, DGP
EVM + virtual machine x86	
Programming languages	Solidity, C/C++, Rust, Python
Full support and compatibility with ERC20, ERC721, GO, C, C++, C#, Java, Python.	

In addition to technological changes, we have introduced a completely new decentralized autonomous organization (DAO) business model to the network.

Thus, by the end of 2022, we have successfully completed the programming of all technological innovations and network infrastructure prototypes. At the beginning of 2023, a new business model and strategy for the further and rapid development of the platform and eco system were successfully implemented.

Now we have reached a full start and can offer participants of the ZHCASH Network platform unique values in the project functionality (information system) and opportunities for profitable investments and development of decentralized applications, databases and smart contracts.
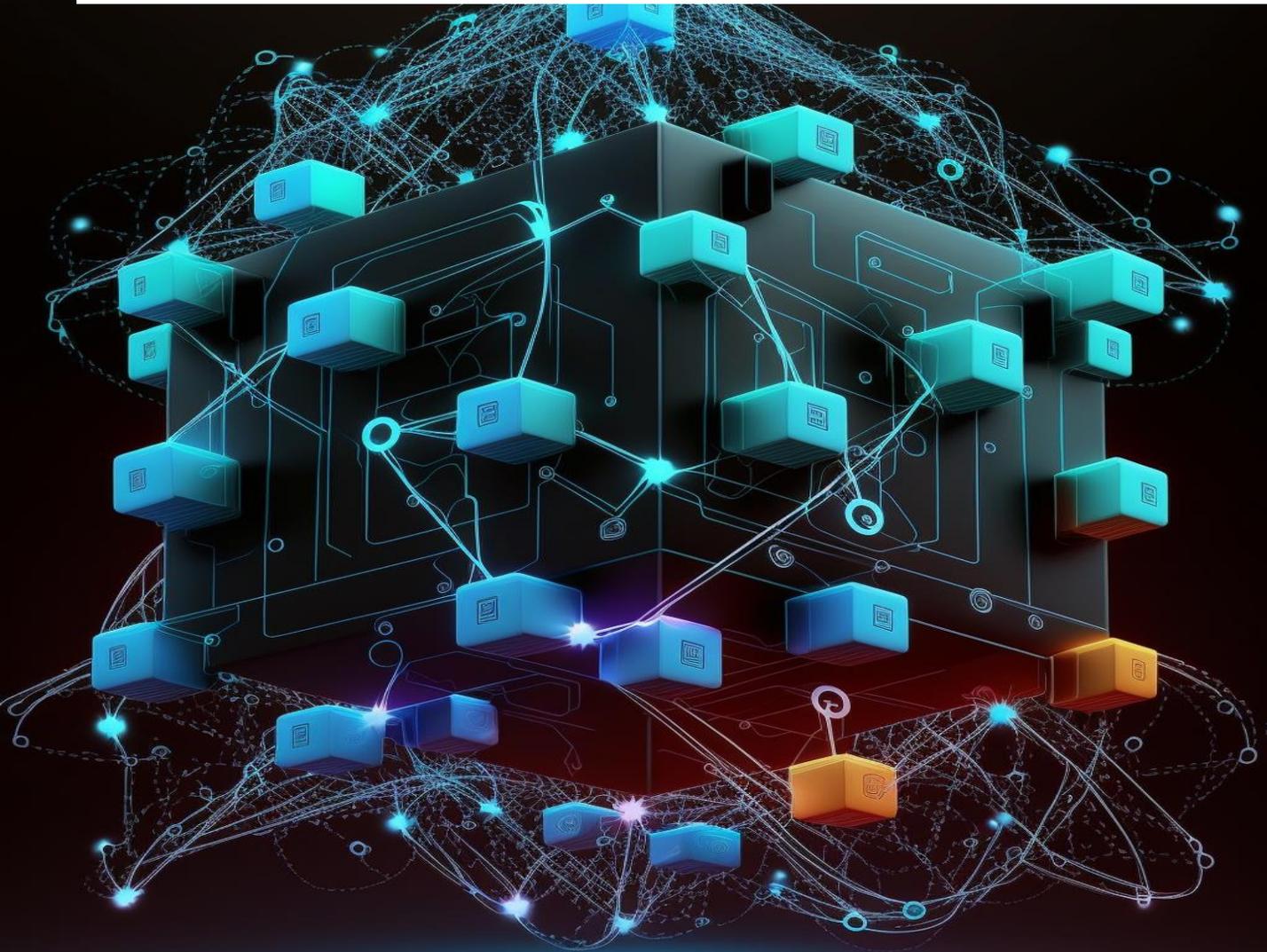
2.3. TERMS

ZHCASH network

ZHCASH (ZERO HOUR CASH) NETWORK – open blockchain platform (Information system) combining the security of the UTXO model and many virtual machines, including EVM and x86 VM, based on the consensus of PoS 3.0 and on a decentralized control protocol (DGP), allowing the application of smart and intelligent master contracts.

ZHC – is the platform gas and internal unit for creating and maintaining decentralized applications (DApps), smart contracts, new crypto assets and tokens, and is also used for all transactions and transactions between participants and for paying network fees.

NETWORK PARTICIPANTS ZHCASH

VALIDATOR (Validator, from English valid - valid, valid, lawful) - is a special network participant or DAO ZHCASH participant who owns an active PoS node or Supernode, maintains continuous and uninterrupted network operation, attracts Delegators to his Supernode, develops the platform and eco system..

DELEGATOR (Validator, from English valid - valid, valid, lawful) - an active member of the network who takes part in maintaining the stability of the network by entrusting his coins to the Validator and receiving rewards for this through ENERGY tokens.

MINER (Miner, from English mine - to get) - a network member that produces ZHC gas using the PoS algorithm or through a collective staking pool using the OffPoS (Offline Proof-of-Stake) algorithm.

CREATOR (Creator, from English create - to create) - an active network member or developer who uses the platform to achieve their business goals.

USER – network member who uses system services.

DAO FUNCTIONARY – (Decentralized Autonomous Organization) member of a decentralized autonomous organization (aka validator), in which the coordination of the ZHCASH network and resource management is carried out by voting of participants (validators) and acting on the basis of rules, the implementation of which is ensured by smart contracts based on blockchain technology.

NETWORK TECHNOLOGIES ZHCASH

SUPERNODE – a network server with a dedicated API address that supports infrastructure operation, acts as a reference node, and provides the operation of DPoS, PoS, and IPoS algorithms. A large number of Supernodes form a stable network, allows you to increase decentralization and security, as well as ensure greater reliability of transactions.

STAKE – a certain amount of coins stored on a personal wallet or Supernode wallet.

DPOS (Delegate Proof of Stake) – advanced PoS consensus model (Proof of Stake) mining, which does not require the cost of buying computing equipment, in which Supernoda is the reference node of the network and participates in the algorithm of delegated proof of share when finding a block, and their owners receive a reward from the network.

POS (Proof of stake) **–** mining consensus algorithm, in which users' wallets are full-fledged nodes of the network and participate in transaction processing, for which wallet owners receive a reward when they find the block. To organize PoS node requires the constant presence of a wallet in the network and as many coins on the wallet as possible.

IPOS (Invest Proof of Stake) is a staking algorithm used by Delegators, which allows you to delegate ENERGY tokens, exchange them for gas (ZHC coins) and other assets, and receive rewards for maintaining network liquidity.

POS NODE (Proof of Stake) – Software QT purse or trusted PoS node always on which ZHC ZHCASH platform gas is located online, taking part in confirming transactions and generating new units in the network for commission.

2.4. STRUCTURE OF THE PLATFORM

ZHCASH

– hybrid platform interconnecting block circuits and virtual machines Ethereum (EVM).

– flexible information system based on ETH blockchain and smart contracts for business digitalization, token creation and decentralized applications (DApps).

The ZHCASH platform combines useful complementary services that make the integration of blockchain technology into business processes easy and accessible :

- Trusted parent blockchain
- Smart Contract Designer
- Token Designer
- Sidechain Constructs
- API for integration into your own projects
- Castomized explorer of units
- Castomized multi-platform wallet
- Customizable Web Wallet for receiving, recording, storing and exchanging tokens
- Ability to create a decentralized payment system
- Creation of crypto assets (cryptocurrency, token, digital asset)

The structure and distribution of roles in the ZHCHAIN allows users to easily and efficiently interact with all elements of the system and with each other.

Thus, the ZHChain platform is a set of services on the basis of which users, depending on their tasks, can use different implementation schemes of information system elements.

2.5. NETWORK MEMBERS

There are several main roles for users in the ZHCASH Network. Each network user will be able to choose any of these roles depending on their business tasks.

VALIDATOR

VALIDATOR – this is a special member of the ZHCASH network, which owns the Supernode, supports continuous and uninterrupted network operation, and also attracts Delegates to its Supernode, supports continuous and uninterrupted network operation, is engaged in platform development and ecosystem.

Validator network task ZHCASH:

Ensure uninterrupted operation of the network;
Seek new Delegates to their Supernode;
Develop services based on the ZHCASH blockchain;
Popularize the ZHCASH blockchain platform

ZHCASH platform benefits for Validator :

- Network Uptime Fee
- Remuneration for involvement of Delegates
- Fast and reliable blockchain platform operation
- Ability to create decentralized applications (DApps)
- Large selection of smart contracts (ERC20, ERC721, DEFI, NFT)
- Blockchain Decentralized Voting System
- Participation in a decentralized autonomous organization (DAO)
- Shareholder-level participation in a decentralized venture capital fund
- Open API for Developers and Wallet Management
- Participation in DPoS mining
- Participation in IPoS mining
- Participation in PoS mining

How to become a Validator online ZHCASH?

To become a Validator, you need:

1. Get a recommendation from the functionaries (participants) of the DAO.
2. Make a voluntary and non-refundable (donat) donation to the network development fund, developers and infrastructure maintenance in exchange for a stake of 20 million ZHC and participation in DAO ZHCASH. All DAO participants are shareholders of the decentralized venture fund Zero Gravity Foundation.
3. Purchase or deploy your own dedicated server.
4. Install (or compile from source) and run the software QT wallet on the dedicated server. Take part in PoS mining.
5. Get the status "Validator" and "functionary" DAO ZHCASH..

Requirements for operation of the Supernode

✓ The Supernode server must have a stable network connection and sufficient resources to operate. The supernode is a full-fledged reference node of the network.

✓ The ZHCASH wallet must always be 100% synchronized with the network, have a high uptime - this is a relative value that shows the time of uninterrupted operation of the supernode over a certain period. Valid minimum uptime is 95%. If Supernode servers meet all requirements, they receive their monthly validation fee.

✓ The latest QT software version of the ZHCASH wallet must be used. Administrators must update the software on their sites and watch the hardware in a timely manner. The ping time for each server is collected by the network statistics and monitoring system. At the time of the start of the Supernode, the server is connected to the unified statistics system ZHCASH Network.

✓ To connect, you need to install additional software on the server (Windows/Linux compatibility) and specify a server key in it. The host server must always respond correctly to requests from the ZHCASH Network monitoring system. Leased or own servers must ensure their security and continuity in order to avoid various kinds of attacks and fines for network malfunction.

Validators rating

All Supernodes are included in the rating, which is formed according to the following parameters :

PLACE	In what place is the Validator in the ranking
VALIDATORS	The name of the Supernode, the presence of a website and media channels
COMMISSION	Amount of the Validator's reward for managing Delegates' coins
SUPERNODE STEAK	How many coins are in a supernode stake
DELEGATES STEAK	How many coins delegated Delegates
GENERAL STEAK	Who has more steak, he is higher in the ranking
DELEGATORS	Number of people trusting their Supernode coins
UPTIME	Minimum uptime for 95% rewards
PENALTIES	How many coins did not receive Supernode if she violated the conditions
START	Start date of the supernode and number of days of operation of the supernode

A certain number of Supernodes can work simultaneously in the network, their priority in the rating is determined by the size of the total stake. During the development and scaling of the network, a decision was made on a fixed number of supernodes. A total of 111 Supernodes will be released..

Specification for Supernode server

Recommended requirements:

| 4GB RAM | 40GB SSD | x64 2.0 GHz 4 vCPUs | HSM |

Penalty table (uptime):

Uptime	Fine in %, from steak
96% -98%	0,5%
> 95%	1,0%

Requirements for candidates for validators

Recommended requirements:

- Community is welcome
- Landing Page or Supernode and Community Site
- Supernode Development Concept
- Taking part in the development of the network
- Attracting new partners and validators
- Desire to work in a team

DELEGATOR

DELEGATOR – this is an active member of the ZHCASH Network, who takes part in maintaining the stability of the network by delegating his coins to the Validator and receiving a reward for this from the mining IPoS.

Benefits of the ZHCASH Platform Network for Delegate:

- Profitability from mining IPoS
- Easy and simple delegation of coins to the Supernode
- The security of delegated coins, subject to the use of 2FA!

Minimum Delegation Stake to Supernode Delegate Pool = 100 000 ENERGY

The delegate may at any time withdraw his coins, which will be returned after 60 days, during this period the reward will not be accrued.

How to Become a Delegate on the ZHCASH Network?

To become a Delegate, you must :

1. Purchase ZHC coins
2. Delegate ZHC coins to any supernode through the main console (main office) ZHCASH.ORG

DEVELOPER

DEVELOPER OR CREATOR – this is a member of the ZHChain, which creates casual digital assets and assets, decentralized applications, smart contracts, databases and uses the platform to achieve its digitalization goals by integrating blockchain into its business.

Benefits of the ZHCASH Network platform for Creator:

- Designer of ZRC smart contracts (ERC20, ERC721) from simple to complex
- Create your own classic token or NFT token in 2 clicks in the main web console without programming skills.
- Create smart contracts in popular programming languages, including the main - Solidity
- Ability to create decentralized databases and applications
- Fast and reliable operation of the blockchain platform
- Instantaneous liquidity of created digital asset and automatic access to P2P exchange of deferred orders for exchange on ZHC
- P2P Deferred Order Exchange for Token Exchange for ZHC
- Full anonymity of Double Spend Transaction Protection (UTXO) payments
- Low commissions within the network and instant transfers in the L2 network of the web console
- Low Asset Creation Fee
- Fast transactions on the network with a potential bandwidth of 1 to 100 thousand per second.
- Castomized multi-platform wallet
- High security, wallet protection with password or passphrase
- Main management web console (personal account) with useful tools
- Open API for Developers and Wallet Management
- Mobile wallet apps for Android and iOS
- One wallet installer for all operating systems
- **Web wallet compatible with QT and Lite wallets**

How to become a developer online ZHCASH?

1. [Download](#) and install a full-fledged ZHCash network node.
2. Purchase ZHC coins that serve as gas for developers and pay online transaction fees.
3. In the ZHCash wallet, set the parameters of your smart contract and create it by pre-compiling a smart contract. A smart contract template for creating a token based on the standard ZRC20 (ERC20) can be downloaded on our [Github](#) or take from open sources. You can migrate ETH smart contracts from ERC20, ERC721, and other platforms that support the Solidarity programming language.
4. Develop and run a decentralized application or database.

POS MINER and NFT minter

POS MINER – is a member of the ZHCASH network that can mine ZHC gas using PoS mining or Offline PoS mining.

NFT minter – is a member of the ZHCASH network that can mine, create, sell or mint NFT tokens.

Advantages of the ZHCASH platform for Miner:

- Ability to mine ZHC through Offline PoS based on Lite versions of wallets.
- At the end of 2022, the network completely stopped supporting PoW mining.
- Ability to create NFT tokens and minting or selling them.
- In 2022, network users launched many smart contracts and various affiliate programs with the ability to mine tokens.

How to become a Miner or NFT minter on the ZHChain?

1. Register with web console (main office) **ZHCASH.ORG**
2. To mine ZHC, you must have coins.
3. To create NFT tokens using the constructor in the web console, you must join the NFT club. The created NFT tokens can be sold on the NFT market or sent to any QT and Lite wallets.
4. Connect to the mining pool in the personal console in the Mining pools section.
5. Affiliate program (for attracting new participants and miners - get income from mining according to the IPoS algorithm of attracted miners) in the main management web console **ZHCASH.ORG**

MEMBER

MEMBER – this is a member of the ZHCHAIN Network who uses the network services.

Benefits of our ZHCASH platform for the User:

- Ease of use of the platform
- Solidity's Primary Smart Contract Programming Language
- ZRC (ERC20, ERC721) DEFI and NFT support
- The possibility of a crosschain with similar networks
- Console wallet (main office) with a lot of useful services
- Visual creation of smart contracts based on the trained neural network
- Various services
- Large infrastructure and eco-friendly system
- Low cost of gas inside the network
- High transaction speed
- Active User Community
- Open Developer Community
- Bounty and Airdrop programs

How to become a ZHCASH User?

1. Download and install the ZHCASH wallet or use the wallet of the main management console.
2. Purchase ZHCASH coins or receive them through the Bounty program, Airdrop (free distribution of coins) or raffles..

2.6. UNIQUE VALUE

ZHCASH developers took as the basis of their product all the best from the leaders of the blockchain industry. The ZHCASH platform builds on Bitcoin and Ethereum innovations with some significant differences. Platform gets the best of both worlds and many other opportunities.

ZHCASH Network is ready to offer users a set of unique values for the quick and convenient creation of smart contracts, decentralized applications and databases, the release of cryptographic tokens, crowdfunding campaigns and many other capabilities. Ability to create DEFI smart contracts and NFT tokens.

Focus on the business segment of the market

The creation of master contracts, which in technical terms significantly exceed the usual smart contracts. Developers can create any types of smart contracts (including small ones) to embed in block chains. The ZHCASH Network platform has a simple goal: to change the way and format of storing information in application databases.

Example: The centralized method of storing the information of each database is located on the same server, which makes it available for attacks and hacks. In the case of ZHCASH Network, the database information will be presented as a blockchain on the block circuit.

- Automated process for launching master contracts.
- High-quality adaptation for mobile devices.
- A quick process of making a change to the blockchain with the consent of most network members (thanks to the decentralized DGP protocol).
- Elementary creation of all types of tokens, coins and digital assets.
- Simple and affordable migration of ERC20 and ERC721.
- Simple creation of infrastructure blockchain (open and closed type).
- Affordable technology from a financial point of view.
- Minimum source data requirements and the ability to create DApps.

- Low fees for any transactions.
- Low fee to create a smart contract.
- Low token creation, execution, and modification fees.
- PoS third generation mining.
- Wallets are full-fledged nodes of the network and participate in the processing of transactions for which they are rewarded.
- All commissions of the network receive PoS miners.
- IPoS mining - the algorithm for accruing remuneration to Delegates.
- DPoS mining is an algorithm for accruing remuneration to Validators.
- Reference node rating and reference node candidate rating. Limited number of reference nodes.

Compatibility with Bitcoin and Ethereum

- The ZHCASH Network platform is compatible with bitcoin and Etherium ecosystems, combining the capabilities of the Ethereum virtual machine (EVM).

- The platform extends the language of bitcoins scripts to work as a means of transferring code to the version of EVM ZHCASH. With this, you can now execute intelligent contracts and run decentralized applications easily and securely in environments that were previously unavailable to build entire chains, combining the endless capabilities provided by intelligent contracts with the stability and maturity of the bitcoin ecosystem.

- ZHCASH is compatible with existing Ethereum contracts and all networks based on the Solidarity programming language, as well as with bitcoin gateways, and will support backward compatibility even if the system is updated.

Availability of decentralized applications (DApps)

- The platform allows enterprises to develop decentralized applications. Unlike centralized applications, DApps directly connect users and developers without involving an intermediary.

- One of the main goals of the platform is to change the way application databases are stored. Instead of a centralized method of storing the database on a single server, applications running on the ZHCASH Network platform will be stored in the database as transactions in a block chain. This can be represented as a small program that is configured to automatically execute predefined actions.

Example: A car or house is sold automatically as soon as the second party receives a predetermined amount to itself in the account. This will save from the services of a realtor or automobile broker, and maybe even lawyers. The main achievement is that the need for a third party disappears. Here, the technology ensures that the conditions under which the transaction takes place are met.

Availability of smart contracts

Unlike existing platforms, these are new types of contracts, very similar to SO (permanent bank order). They are performed in automatic mode when a certain algorithm is inserted.

Example: If the bank provides a monthly payment by the client, the smart contract performs the same function, but then the financing is automatically allocated to those industries that are necessary to close the financial issues of banks. These are more complex mechanisms, but at the same time the most promising.

Decentralized Management Protocol (DGP)

DGP makes it possible to change certain blockchain settings using smart contracts.

Account Abstraction Level (AAL)

AAL separates applications from the underlying protocol, supporting blockchain operation, while allowing you to add more capabilities in smart contracts in the future.

x86 Virtual Machine

The x86 virtual machine will support C, C++, Rust, Python and others, helping to adapt smart contracts.

UTXO Model

UTXO (unspent transaction output) -Exits unspent transactions. which the user receives and can spend in the future. The unspent result is easier to explain through analogy.

UTXO provides simple payment verification (SPV), which just allows customers to check transactions without deploying a full-fledged node.

ZRC – master contracts

- Instead of the usual smart contracts in the ZHCASH network, the so-called master contracts now function - a single ERC20 standard. Their main feature is an instant response to external circumstances;
- Any changes in the business relationship of the parties that signed the master contract are immediately sent to the blockchain. You can no longer delete or edit this data;
- ZHCASH Network supports smart contracts written for the Ethereum virtual machine and for the x86 virtual machine while providing backward compatibility with Ethereum contracts. Full support and compatibility with ERC20, ERC721.

Example: Some users enter into a contract for the purchase of goods and their transportation from point A to point B. An ordinary smart contract will be considered fulfilled only when the goods arrive at point B.

The master contract can be connected to the transaction by a third party - for example, a freight carrier registered in the ZHCASH system, who takes the goods from point A. Upon accepting the goods, he sends information to the system, and the recipient can monitor the fulfillment of the contract terms online.

Another feature of master contracts is adaptation to industry standards. We are starting to develop and test contract templates for various industries: telecommunications, the Internet of things, logistics, trade, entertainment, and so on.

PoS, DPoS, IPoS, Offline PoS mining and Layer 2 solutions

The ZHCASH platform provides network members with various coin mining opportunities. With the growth and development of the platform, production conditions can be improved, changed, complicated by the voting method of DAO ZHCASH and decentralized puncture of DGP management.

In 2023, there were significant changes and improvements in the network: the cancellation and removal of PoW mining algorithms, the introduction of a new Offline PoS algorithm for Lite versions of wallets. For the first quarter of 2023, the blockchain network has become 90% decentralized and independent of developers and validators. Network users got a unique opportunity to easily transfer NFT tokens between QT and Lite wallets, including the mobile version of the Lite wallet.

Thanks to Layer2 technology, there is a large network scaling. We are also developing unique Layer 2 solutions that we are going to implement in 2023 and 2024.

Mobility and flexibility

Based on Bitcoin's UTXO model, the Simple Payment Verification Protocol (SPV) is supported by default by the ZHCASH platform codebase.

As a result, you can execute intelligent contracts from lite wallets that can be easily installed on any mobile device by announcing the age of mobile decentralized applications. Thanks to this, the block chain is finally ready to imagine itself in a world in which half of all Internet traffic is generated by smartphones and tablets.

A simple payment verification protocol allows you to integrate the ZHCASH Network platform into any application. In fact, ZHCASH Network will allow you to combine any decentralized applications in the world, creating one single block chain (despite the fact that most of the traffic is generated using mobile applications, the load in which is much lower than standard PCs).

P2P exchange of deferred orders (offers)

On the basis of the ZHCASH platform, a P2P exchange of deferred orders (offers) was launched with the designer of smart contracts ERC20 audited and token market.

NFT tokens and site

The ZHCASH platform supports the ERC721 standard on which NFT tokens are based. NFT is a non-fungible token, non-replaceable, or unique token. NFT works on the blockchain, they first appeared back in 2017 in the Ethereum system. The original ERC721 specification was proposed by Dieter Shirley as a proposal to improve Ethereum (EIP), which is mainly the process of introducing new standards into Ethereum. The official authors of the standard ERC721 are William Entriken, Dieter Shirley, Jacob Evans and Nastasya Sachs. NFT is a type of cryptographic token, each instance of which is unique and cannot be exchanged or replaced by another similar token, although tokens are usually interchangeable in nature.

Based on the ZHCASH platform in the main console, the NFT exchange and the NFT token constructor with decentralized data storage in the IPFS network are successfully operating and developing. From the end of 2022, the network began to support the transfer of NFT tokens between QT and Lite wallets, including the mobile Lite version.

Currently, ERC721 tokens are mainly used as collectibles, since the idea is that each NFT will become more expensive or unique over time. A token is simply a smart contract or code snippet in ZHCASH. A ERC721 token is created by writing a piece of code in a programming language, such as Solidarity, which follows the same base pattern or base code.

Tokenization of assets

- The platform provides a full-featured technology solution for developing smart contracts based on the most popular standards of ERC20 and ERC721, issuers of digital assets and is designed to solve any business problems from the simplest to the most complex;

- Digital assets are created on our platform on the basis of the ZHCASH blockchain platform and have the ability to use the new asset and integrate them with other services: exchanges, traditional banks, payment cards, etc.;

- The movement of digital assets occurs directly between network accounts, bypassing intermediaries such as banks, SWIFT system or card systems;

- Familiar financial products are sold at a new level. Companies can issue assets on the basis of the open public blockchain platform ZHCASH;

- Tokenization of assets on the platform is not limited to traditional securities or payment means. It is possible to tokenize almost any asset, object and even object, and any registered user can become the issuer of such an asset.

Example: Buyer bonuses, communication bills or utility bills, where the token is a means of confirming ownership of the corresponding payment unit transferred to the blockchain, as well as many other assets.

Expansion, refinement of the blockchain ecosystem of previous generations

- ZHCASH developers continued to focus on expanding the Bitcoin script language.
- DGP Decentralized Management Protocol
- EVM + virtual machine x86
- Programming languages: Solidarity, C/C + +, Rust, Python
- Full support and compatibility with Solidity (ERC20, ERC721), GO, C, C++, C # and Java
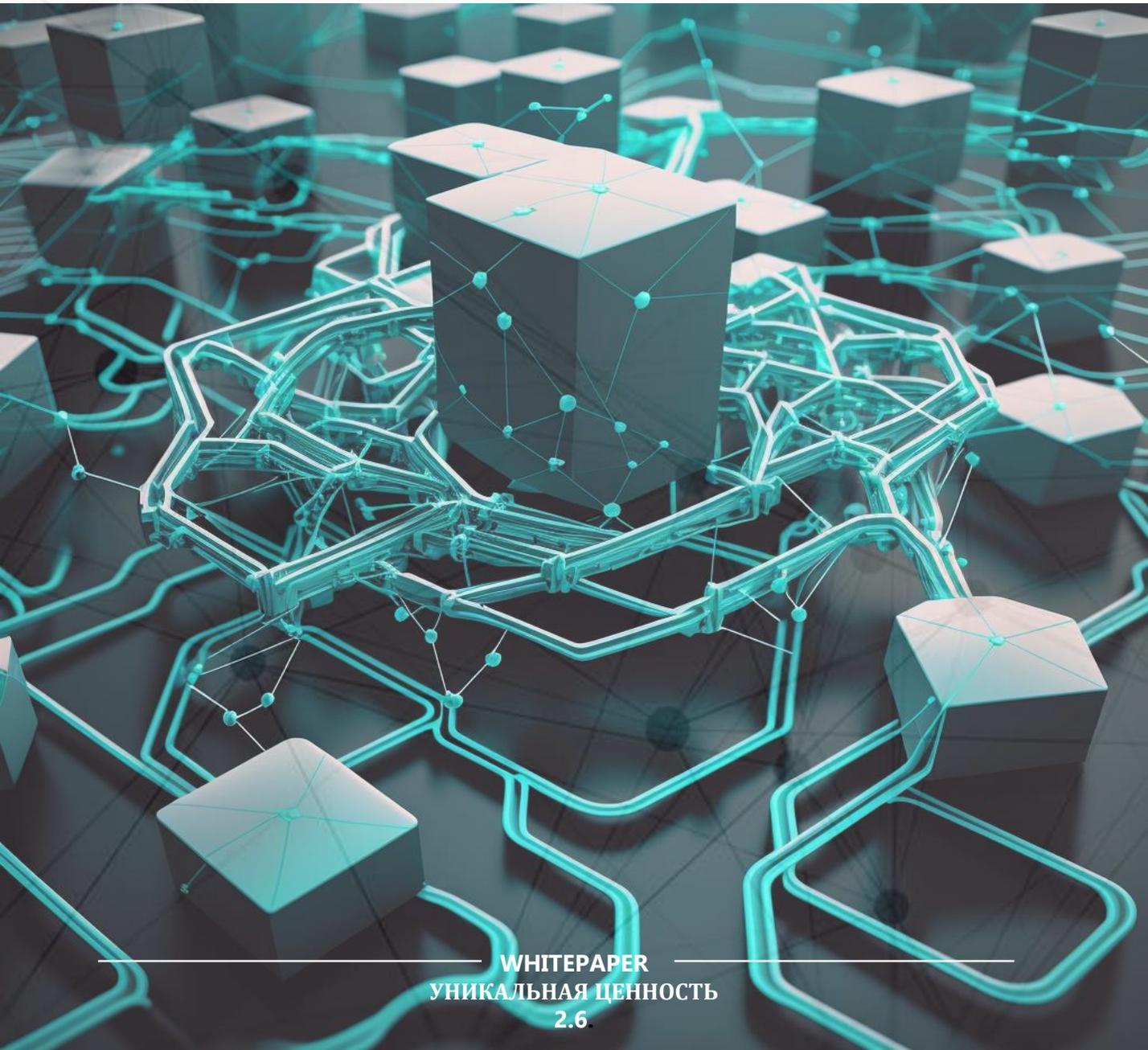
2.7. FEATURES PLATFORMS

ZHCASH Network is an open-source fifth-generation blockchain platform that combines the security of the UTXO model and many virtual machines, including EVM and x86 VM.

The network is based on the consensus of PoS 3.0 and on a decentralized control protocol (DGP), which allows you to change certain blockchain settings using smart contracts. As a hybrid system, combining the most advanced functionality from what is now on the market.

Functional Analysis	Ethereum	NEM	EOS	NEO	WAVES	NXT	ZHCASH
Blockchain version	2.0	3.0	3.0	3.0	4.0	2.0	5.0
Smart Contracts	+	-	+	+	+	-	+
DApps	+	-	-	-	+	-	+
Tokenization of assets	+	+	+	+	+	-	+
Crowdfunding Platform	+	-	-	-	+	-	+
DEX Exchange	+	-	-	-	+	-	+
Consensus Algorithm	POW	POI	DPOS	dBFT	POS	POS	POS, DPOS
Transaction Transfer Rate	до 20 в сек	up to 4000 per second	1 mln per second	10,000 per second	1000/second	5/second	From 10 thousand per second and higher
Prog. System language	Go, C++, Rust	Java, C++	Java	C#	Scala	Java	C++, Ruby, Java etc.

Of the many innovative blockchain platforms, it is the ZHCASH Network that can become one of the leading platforms in many areas of IT business and digitalization of the business of the real sector of the economy. Already at the first stages of the development and formation of the platform, users and developers praised the global technological potential of the ZHCASH platform.

3. PLATFORM BUSINESS MODEL

3.1. REWARD PLATFORMS

The open blockchain business model of the developer platform provides for several sources of income. The main source of income will be commission income.

The main priority of the platform is the availability of services for customers. That is why we have made some of the lowest commissions, among similar platforms.

COMMISSIONS ONLINE:

NETWORK COMMISSIONS	COST
Average projected fee for any transactions including creation and execution of a smart contract	From 0,005 ZHC *
Average projected fee for creating a digital asset	From 0,5 ZHC *

* As the network develops, the commission, the cost of gas (BIP) can change both less and more. Commissions in the management console (the main office of the platform) differ from commissions P2P the network.

3.2. NETWORK MEMBER REWARDS

Users involved in maintaining the network are also rewarded and participate in the distribution of income within the network.

VALIDATOR REMUNERATION

The Validator's reward consists of:

- **DPoS** (Delegate Proof-of-Stake) Supernode mining takes place on a fixed Supernode stake, which is equal to 20 million ZHC for 2023. Profitability is formed based on the complexity of the network and can decrease or increase every 1000-10000 blocks.

- **PoS** (Proof-of-Stakes) mining Supernodes. Depends on the value of the Supernode steak free of DPoS. Reward for the found 800 ZHC unit. You can see the yield in the steak calculator: ZEROSCAN.IO/MISC/STAKE-CALCULATOR.

- The Validator Commission depends on the number of Delegates in the pool and the total amount of ZHC in the Validator pool. Profitability is formed based on the complexity of the network and can decrease or increase every 1000-10000 blocks.

- Remuneration of DAO members for active network development. Distribution of assets and revenues of decentralized venture capital fund Zero Gravity among participants of DAO ZHCASH.

- Dynamic Multi-Level Partner Program Reward up to 10% of the revenue of Delegates (Profitability is formed based on the complexity of the network and can decrease or increase every 1000-10000 blocks) who have delegated ENERGY tokens to the delegate pool of Supernodes by your referral link to the main P2P management console ZHCASH.ORG

The distribution of remuneration takes place in automatic mode and can change both in the larger and the smaller direction as the complexity of the network increases.

USER DELEGATOR

1. By delegating ENERGY tokens to the Supernode, the Delegator receives a daily reward from IPoS mining from the amount delegated to the Validator.

2. The reward from IPoS mining is formed based on the complexity of the network and can decrease or increase every 1000-10000 blocks.

3. Affiliate program reward of up to 10% from attracting new miners using the IPoS algorithm using your referral link to the main console (main web office) zhcash.org

Minimum stake and time to delegate 100,000 ENERGY / 60 DAYS
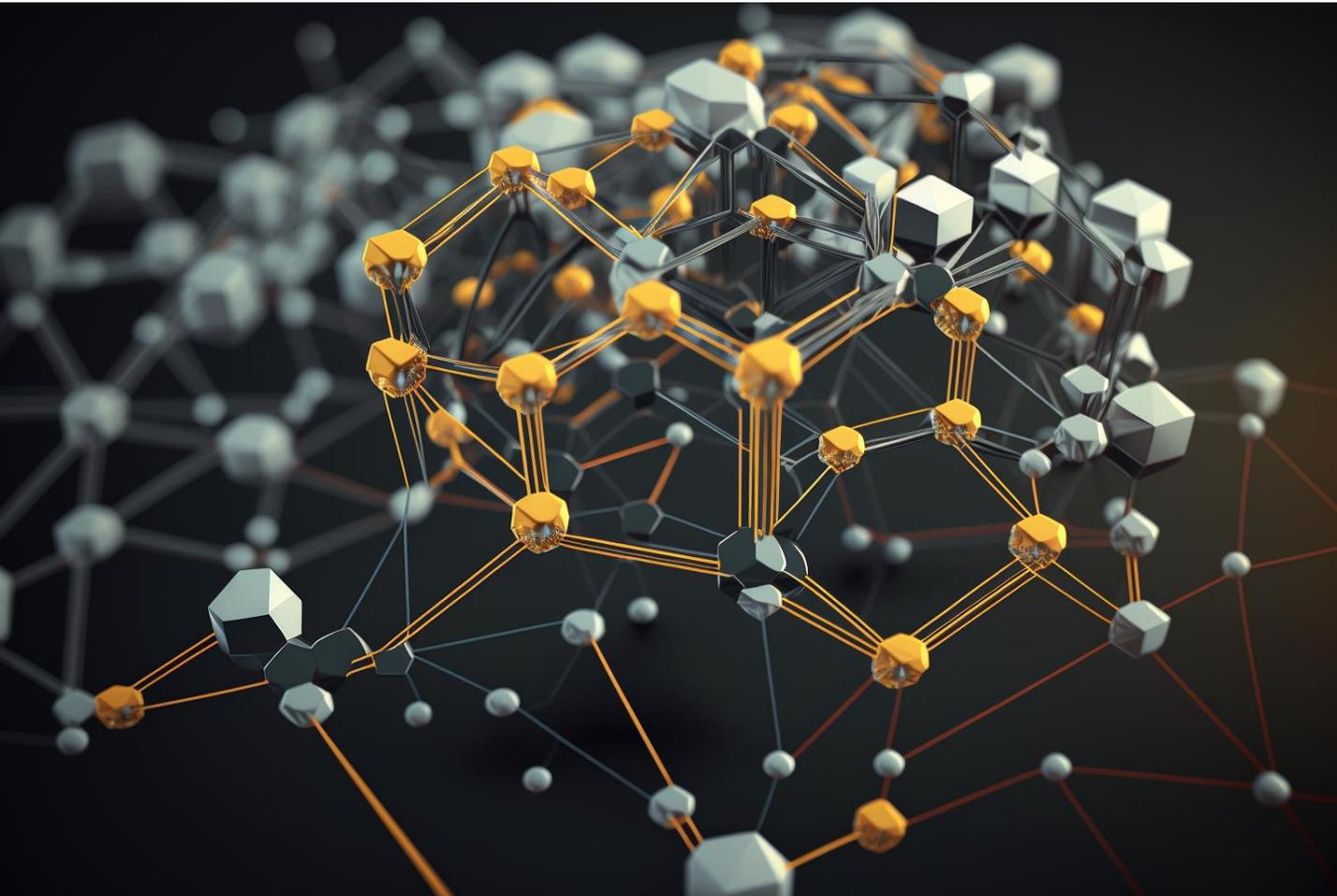
3.3. DEVELOPMENT FORECAST

Total of network users	50 000	150 000	250 000	500 000	2 000 000
Average number of online transactions per hour	100	500	2 000	5 000	10 000
Average transaction size, ZHC	1 000	2 000	2 500	3 500	5 000
ZHC Projected Cost, $	0,003	0,01	0,02	0,05	0,1
Total network turnover, million $	2,628	87,600	876,000	7 665, 000	43 800,000
Projected Supernode Cost, $	250 000	500 000	750 000	1 000 000	5 000 000

The models presented are only a projection designed to estimate income and expenditure levels.

Real financial indicators may differ from those planned.

Nevertheless, such a model is necessary to assess the economic viability of the project.

3.4. DAO ZHCASH

From a management perspective, ZHCASH aims to be a decentralized autonomous organization (DAO).

This means that any DAO functionary can influence management according to his share, and the main goal of DAO will be to create a decentralized business model based on the smart contract system.

The launch of DAO is our priority for the next few years. It is DAO that will further formulate the rules according to which the platform will function, and key decisions will be made by the main functionaries and network participants.

DAO-organization (decentralized autonomous organization) is a modern type of autonomous organizations whose activities are based on blockchain technology. The structure and hierarchy of such organizations differs from the usual one: DAO companies do not have owners, CEO, directors, and so on. All aspects of the management and execution of tasks in DAO companies are solved by voting of members of the DAO community. As soon as the vote for a certain performer is completed, he immediately begins work. If the performer does not work well - does not have time on time, irresponsibly treats the tasks - the voters can simply withdraw their vote, thereby immediately stopping cooperation with the performer. This mode of interaction eliminates any problems associated with leadership sympathies. In addition, the most important advantage of DAO companies is that by building a structure around smart contracts, rather than people, it is much easier to find opportunities for financing and management from anywhere on the planet. DAO, or a decentralized autonomous organization, is much wider than a typical organization, as a social group that brings people together to achieve a common goal.

Main tasks of DAO functionaries:

- Promotion and development of ZHCASH platform
- Creation, promotion and development of the eco-system
- Selection and financing of network activities
- Remuneration of participants for active development of the network

3.5. NETWORK DEVELOPMENT FUND

DAO ZHCASH FOUNDATION is an internal network development fund that is intended for:

- Accumulating funds for further development of the network
- Financing of platform services improvement activities
- Platform Infrastructure Development
- Development Team Extensions
- ZHCASH Platform Marketing and Promotion
- Organization of events to expand and popularize the community
- Investments in projects, startups and innovative technologies
- Repurchase of prospective and liquid assets
- Organization of a decentralized venture fund
- Create, develop and build an eco-system
- Building a community

The internal fund is managed by the functionaries of DAO ZHCASH, the development community ZeroHour Development, ZeroLab, partner international consumer societies, cooperatives and is formed at the initial stage of its development through voluntary and donated (donate) donations when new participants join DAO and crowdfunding.

Source of funding:

The fund is formed through crowdfunding and voluntary and donated (donated) donations upon accession of new participants to DAO ZHCASH.

4. ABOUT DAO

4.1. TARGET DAO

The main goal of DAO is the formation of an open community of developers, the withdrawal of the product and the sale of its services for the further development and promotion of the platform, aimed at winning the market for services to create decentralized applications and databases for business, operating on the basis of smart contracts and attracting users around the world. Support and develop and implement standards based on the Solidity programming language.

4.2. GENERAL PROVISIONS

DAO ZHCASH is a decentralized autonomous organization.
This is an organization that works autonomously and decentralized, without any requirements for a centralized party to make decisions.

DAO ZHCASH – these are special functionaries and main validators of the **ZHCHAIN network, whose only obligation is to follow the program rules of decentralized consensus and comply with the DAO charter.**

DAO ZHCASH receives initial programming to configure the rules, and then works autonomously, continuing to perform its functions. DAO ZHCASH uses smart contracts, which are a method of organization, rating and reputation for specific actions. DAO ZHCASH does not have hierarchical structures, financing occurs when validators are formed - the main nodes of the network (supernodes).

Consensus is another important aspect of the ZHCASH DAO, requiring that most stakeholders agree on a solution before moving or withdrawing funds. Even errors cannot be corrected until most stakeholders agree to do so. Voting is thus an important part of the organization. Voting allows consensus to be reached on solutions such as approval of a proposal, selection of a contractor and selection of funding.

DAO ZHCASH and its structural divisions (foundation, corporation, business club, etc.) shall be guided by the principles of maximum possible openness and transparency in accordance with procedures ensuring integrity and fairness.

Open and transparent corporate policy-making mechanisms that facilitate informed decision-making, in consultation with experts, and ensure interaction in policy-making with the entities most affected by the policy.

Impartial and objective making of fair decisions on the basis of published principles and rules of the charter of DAO ZHCASH.

4.3. ZHCASH PLATFORM

The ZHChain network will use developer transaction gas, **ZHC**, to transfer value. The total gas emission is 10 billion ZHC, of which 8.0 billion ZHC is created along with the network (80% distribution occurred for the first quarter of 2023), and 2 billion ZHC will be generated by PoS 3.0 and Offline PoS.

ZHC coins are gas and act as an internal accounting unit, which will be used as a settlement unit for all transactions between network members and payment for the use of platform services, including ensuring the operation of decentralized applications and databases.

The total quantity of ZHCASH is limited to 10 billion. ZHC.

4.4. DAO CONDITIONS

Name	ZHCASH
Ticker symbol	ZHC
Total quantity	10 bln. ZHC
Additional emission	It is impossible
Maximum possible number of supernodes in the network (main validators)	111 nodes

Smart contract DAO ZHCASH MARKER MASTER CONTRACT - provides transparent control and monitoring of platform gas emission and movement.
Contract Address 6854b3209176e64d830f332b1415a4013bfa90a4

Smart contract DAO ZHCASH TESTNET MASTER CONTRACT - provides transparent control and monitoring of nodes of the main validators of the network.
Contract Address b01bccb5f180f7173dce66a03d977c49be5ed22a

All information about the rules and conditions of the DAO is now on the new website of the decentralized autonomous organization **DAOZH.CASH**

4.5. DAO CONCEPT AND POLICY

This organization is called DAO ZHCASH.

The organization is a decentralized autonomous organization and a society of followers of common goals and ideology.

The Decentralized Autonomous Organization (DAO) is an organization that can function completely without the usual people-led governance structure.

DAO ZHCASH can also be defined as an organization system based on smart contracts based on the open blockchain platform ZHCASH with open source, the future direction of which is determined by users by voting.

DAO ZHCASH has its own philosophy, values   and management methods that are transmitted from generation to generation around the world. The main ideology of DAO ZHCASH is to promote collective management of common benefits, including cultural and intangible works, natural resources, economic and industrial production, as well as social processes.

Each DAO participant is a person and the main functionary. The actions of the DAO are based on the Charter, and not on the will of one person, or a small group of people.

Each DAO participant must obey the decision of the majority. DAO interests are above personal interests.

The goals of this organization: under the leadership of its own autonomy, to unite followers, comply with the charters of the DAO, foundation, corporation and any other entities, including corporate ethics and laws, regulations, follow the guidelines of the DAO community, inherit and develop the best traditions. Protect the legitimate interests of DAO participants, actively participate in the construction of a modernized digital state, and make efforts to protect the stability of the DAO community and all its entities.

4.6. DAO TERMS AND CONDITIONS

DAO ZHCASH is a decentralized autonomous organization that will accumulate funds for the further development of the ZHCASH network, platform and financing activities to improve platform services and develop decentralized venture fund projects.

DAO ZHCASH is the initiator and creator of a decentralized venture fund, corporation and business club under the same name ZERO GRAVITY, and DAO functionaries are the main shareholders and beneficiaries of these organizations.

Decentralized venture fund Zero Gravity Foundation is managed (by participants) further by the functionaries of DAO ZHCASH, the development community ZeroHour Development, ZeroLab, partner international consumer societies, cooperatives, whose beneficiaries and representatives are the functionaries of DAO ZHCASH and is formed at the initial stage of its development through voluntary and donated (donates) donations upon accession of new participants to DAO ZHCASH.

Reception to DAO and EXIT from DAO

The candidate is admitted to the DAO strictly on the recommendations of already existing DAO participants. There should be no DAO participants against. Probationary period - at the discretion of the DAO community. Each DAO member has the right to submit proposals or questions to the DAO General Board. A DAO member shall comply with the laws and statutes of DAO, Foundation and ZEROGRAVITY Corporation. DAO participants are obliged to organize and hold forums, exhibitions, lectures, seminars and other events that contribute to the development of the eco ZEROGRAVITY and ZHCHAIN systems.

DAO Exception

For cheating on the ideas and interests of the DAO (fund or corporation) and disclosing internal information. For disobeying DAO laws. For violation of the charter of the DAO, fund and corporation. For slander, for stealing general financial and other resources. Voluntarily. If excluded from DAO, the participant is obliged to return the assets received from DAO for development. Return of voluntary charitable contribution to the fund for the development and development of the network does not occur.
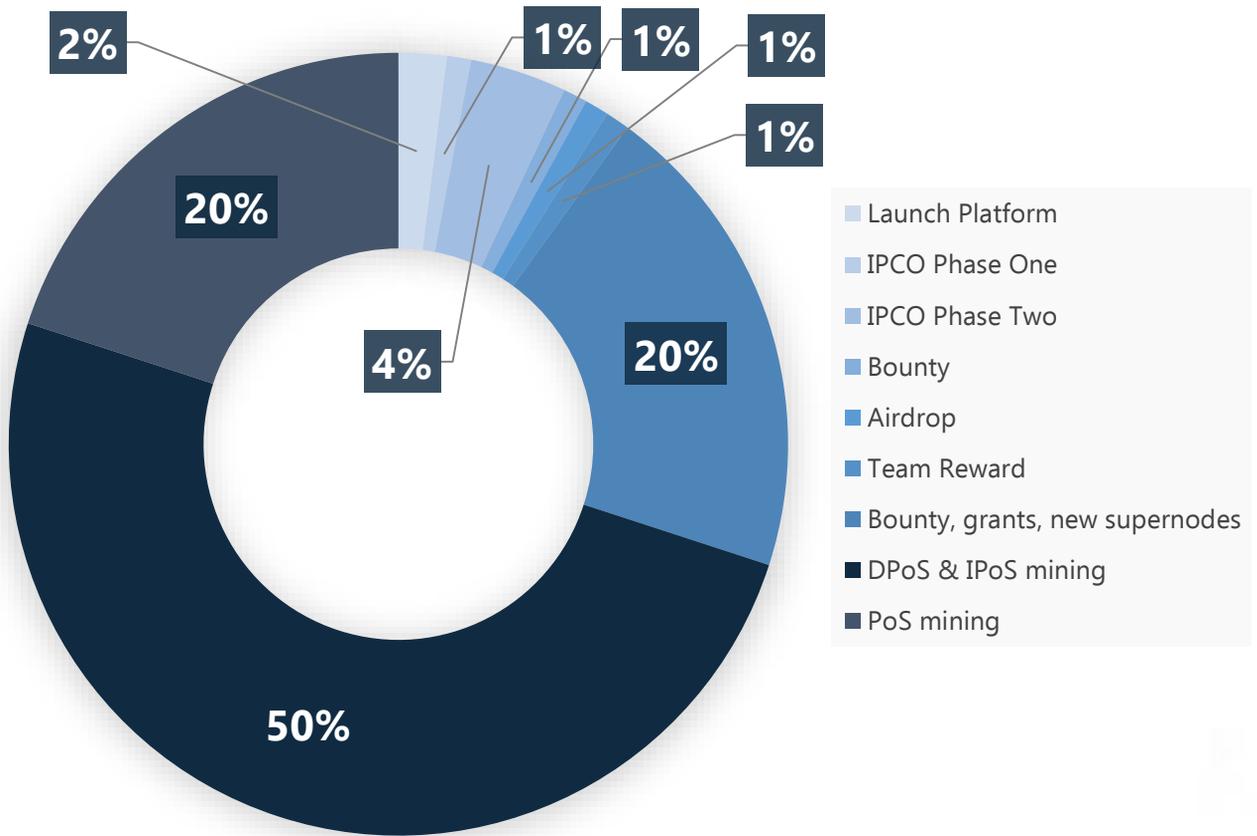
4.7. DISTRIBUTION GAS ZHC IN THE ZHCHAIN

The total amount of ZHC gas is limited to 10 billion ZHC, they can be used subject to certain conditions prescribed by smart contracts. From 2019 to 2023, the network has become 90% decentralized:

In 2019, 80% of the potential issue of ZHC (8 billion ZHC) was pre-mine. By the beginning of 2023, the planned distribution of ZHC by 80% took place, PoW mining was canceled by the general vote, free ZHC was redirected to airdrop, bounty, grant programs and encouragement of DApps developers.

- **2% (200 mln. ZHC)** went into the network through the mining of coins in the primary nodes, with the help of which we launched the network, part of the coins was distributed to early investors.

- **1% (100 mln. ZHC)** distributed during IPCO

- **4% (400 mln. ZHC)** distributed during the formation of DAO

- **1% (ZHC 100 million)** is distributed to the platform's Bounty programs

- **1% (ZHC 100 million)** distributed through the Airdrop programs

- **1% (ZHC 100 million)** rewards for the team and the open community of platform developers

- **PoW mining based on the vote of the DAO and the community has been completed, about 200 million ZHC were mined during the mining process.**

- **60% (6 billion ZHC)** DPoS (validator reward) and IPoS (delegator reward)

- **10% distributed as follows: bounties, grant programs for the open developer community and new supernodes.**

20% of the ZHC emission (2,000,000,000 ZHC) is mined by network members (Miners) through the PoS 3.0 (Proof of Stake) consensus and Offline PoS.

Supernodes, Lite wallets (including mobile ones) using the new Offline PoS algorithm, full-fledged software wallets (regular nodes or PoS nodes) that are constantly online can participate in the mining of coins. The PoS yield will be approximately 7-12% per year, and the reward per block is 800 ZHC.

Legend:
- Launch Platform
- IPCO Phase One
- IPCO Phase Two
- Bounty
- Airdrop
- Team Reward
- Bounty, grants, new supernodes
- DPoS & IPoS mining
- PoS mining

From 2019 to 2023, in accordance with the initial plan, 75 supernodes were deployed, the total stake of which for the first quarter of 2023 amounted to about 3 billion ZHC.

The complexity of the IPoS and DPoS algorithms has increased greatly, and there has been a halving of rewards. In 2023 and 2024, it is planned to introduce additional Layer networks of the second level for validators, delegators, developers, businesses and cooperators.

The DAO Council made the final decisions on the number of supernodes in the network. In total, no more than 111 supernodes will be deployed. The distribution of supernodes will end around 2025. Supernode owners are co-owners of a large number of Zero Gravity Foundation technologies, companies and developments.

Supernode owners are the main functionaries of DAO ZHCASH, a decentralized venture fund Zero Gravity, and take part in the distribution of the fund's income.

For 2023 and 2024, the developers are planning a large scaling of ZHChain and the fund. There is an introduction and transition to the digital model of the DAO concept, which will become available to ordinary network users.

The network is rapidly developing and gaining momentum in the planetary market!

4.8. PROGRAMS REWARDS

One of the key goals of the bonus program is not only to market the project, but also to create a strong platform community.

The project bonus program is the opportunity to receive ZHCASH coins without making direct investments, which consists of 2 campaigns:

1. Bounty and Airdrop campaigns from 2023 - to reward participants who are allocated 5 billion BOUNTY tokens + 5 billion will be generated in the process.

2. ENERGY tokens are tokens expressing the property right to the intellectual property (IP) of the program code of the ZHCash network, issued in the amount of 10,000,000,000 ENERGY and distributed in the process of a new staking model among delegators, validators and simply network participants using the IPoS algorithms (Invest Proof of Stake) and DPoS (Delegate Proof of Stake), who believed in the sound concept of the new ZHChain technology. Index ENERGY tokens will be used to earn rewards for validators, delegators and partners for using and developing the ZHChain network. ZHChain ENERGY Token (ENERGY) is a token issued in the ZRC20 format. In addition, in the future, after the launch of ENERGY, we will be able to use ZHCHAIN ENERGY TOKEN to exchange for other cryptocurrencies and organize external liquidity pools in other blockchain networks. The emission of ENERGY will be limited and its volume will be 10 billion tokens distributed among the participants of the staking program. ENERGY is a unit of measure for ZHCash. ENERGY tokens will be generated during the staking model, in which each stakeholder (validator, delegator, partner) gets the right to participate in the distribution of tokens. Tokens can be used to purchase intellectual property (IP) rights that are part of the ZHCash programming code. During the distribution process, the tokens will be converted into the main gas of the ZHC platform, which can be converted into assets on the ZHCash platform and used to make transactions on the platform.

3. A grant program for developers of decentralized applications, smart contracts, mobile applications, services and projects based on the ZHCASH platform.

In any of these options, we offer attractive conditions for active users that help in the development of our project.

6. ROAD MAP

2023 Q1

Global halving of rewards for miners and validators using DPoS and IPoS algorithms

2023 Q2

Implementation of support for all versions of Solidity (ABI interface) in QT wallet.

2023 Q2

The release of new release candidate versions of QT wallets. Release and testing Lite versions of lightweight wallets for all operating systems and mobile devices with support for PoS mining.

2023 Q2

Launch of a new Offline PoS mining algorithm for all versions of Lite wallets. Now PoS mining will be available on mobile devices.

2023 Q2

Integration of ZHChain into MetaMask, creation and launch of a bridge and a unified Web 3 authorization system.

2023 Q1-Q4

Development of a group of DApps applications. Association of ZHChain developers. Implementation of DApps and smart contracts in various business sectors and states.

2023 Q2-Q3

Restructuring and transition to full decentralization of the blockchain network. Expanding the functionality of the main management console. Creation of a favorable environment and tools for working with the platform. Launch and support of cases of decentralized applications and databases.

2023 Q1-Q4

Development and implementation of projects based on the platform: launches and implementation of the development of decentralized applications in various business sectors, digitalization of the real estate sector, release of a digital rights system and other smart contracts. Active cooperation, integration with companies and organizations of both real and virtual sectors of the economy.

2023 Q2-Q4

Development, testing and transition to a new version of the web console, which will introduce many tools, expand the smart contract constructor and integrate a full-fledged exchange.

2021 Q3-Q4

Development of applications in the DApps visual designer console. Launch Personal Console version 3.0. Development of smart and intelligent contracts for financial, legal and brokerage sectors.

2021 Q2-Q4

Implementation of Layer 2 technologies..

2022 Q2-Q4

Launch of NFT Global Network. Global network of NFT marketplaces in various industries, including NFT coverage in the real sector. Implementation of NFT in various areas of business and economy.

2023 Q2-Q4

Integration of ZHChain into various NFT platforms with ERC721 smart contract constructs (NFT tokens) and decentralized data storage based on IPFS.

2023 Q1-Q4

Integrate decentralized databases and applications into the real economy and business sector.

2023 Q1-Q4

Development and Implementation of Decentralized Finance (DEFI).

2023 Q3-Q4

Develop, test and launch a hybrid decentralized (DEX) exchange.

2023 Q1-Q4

Development and implementation of crosschain technologies and integration with blockchain-compliant platforms.

2023 Q4

Integration and implementation of ZHChain in various DEX exchanges and wallets supporting Web 3, a single Wallet Connect system.

2023 Q1-Q4

Creation and launch of the Zero Gravity Multiverse.

7. PROJECT RISKS

Legal risks in relation to securities regulation

There is a risk that in some jurisdictions the ZHC gas of the ZHCASH platform may be considered a security or that in the future it may be considered a security. DAO ZHCASH does not guarantee that ZHC gas of ZHCASH platform is not a security in all jurisdictions.

The ZHCASH open source platform user must be independently liable for the legal or financial consequences that ZHCASH coins (developer platform gas) are or will be considered securities in their respective jurisdiction.

Each participant is obliged to check whether the acquisition and disposal of ZHCASH is legal in its jurisdiction, and, accepting these conditions, each participant undertakes not to use the ZHCASH cryptocurrency if their use is not legal in the relevant jurisdiction.

The legal capacity of the ZHCASH DAO to provide ZHCASH in certain jurisdictions may be revoked and excluded by future regulation or legal acts and requirements. In case it is revealed that, with a high degree of probability, ZHCASH is not legal in a certain jurisdiction, DAO ZHCASH will be either :

1. cease to operate in that jurisdiction
2. adapt ZHCASH platform so that it is possible and advisable to comply with regulation

Risk of kidnapping and hacking

Hackers or other groups or organizations may attempt to obstruct and interfere with the use of a member's wallet, ZHCASH site or platform in any way, including, but not limited to, network (DDoS) attacks, Sybil attacks, spoofing, smurfing, malicious hacker and code attacks, or consensus attacks.

Member agrees that DAO ZHCASH and no one shall be liable or liable for any damages incurred by Member as a result of the foregoing.

Risk of security vulnerabilities, defects and deficiencies

There is a risk that the ZHCASH site and platform may inadvertently contain flaws, defects, or errors in the source code that interfere with the use or result in the loss of ZHCASH gas.

Advances in cryptographic systems or advances in technology, such as the development of quantum computers, can pose risks to the cryptographic assets created by users or directly by the ZHCASH platform itself, which can lead to the theft or loss of such assets.

As with other decentralized platforms, the ZHCASH platform blockchain can be subject to mining attacks, including, among other things, double-spend attacks, most mining power attacks, selfsh-mining attacks, and race condition attacks. Any successful attacks pose a risk to the ZHCASH platform, the expected proper execution and consistency of the ZHCASH platform, and the expected proper execution and sequence of calculations and calculations of the platform as a whole.

Low liquidity risk

Despite the fact that online services are currently available that allow the exchange of cryptographic tokens among themselves, as well as some of them allow the exchange of cryptographic tokens for fiat means, there is no guarantee that the ZHCASH platform will be presented and registered on exchanges or the platform gas will be available for exchange for other cryptographic tokens and/or fiat means. There is also absolutely no guarantee as to the possibility (scope) of such potential exchange.

It is possible that DAO ZHCASH or the ZHCASH platform will not be used by a large number of people, enterprises and other organizations and that there will be limited public interest in creating and developing the functionality of the ZHCASH platform. This lack of interest may affect the development of the platform and its activities.

The ZHC gas cost of the ZHCASH platform may vary, and participants may suffer losses due to depreciation of the ZHC acquired gas of the ZHCASH platform. In addition, there may be different reasons that may lead to undesirable fluctuations in ZHC gas costs of the ZHCASH platform.

Unforeseen risks

Blockchain technology is a new, untried and not proven practice technology. In addition to the risks outlined herein, there are risks that the ZHCASH platform cannot foresee, so it is unreasonable to believe that such risks could have been foreseen. Risks may arise as unforeseen risks in the future.

Details of potential platform risks provided
in the document "Risks of the ZHCASH platform," as well as on the platform sites.

8. DISCLAIMER

This document is intended to provide potential ZHC gas owners of the ZHCASH platform with information on the platform and initiator, technologies, business model, ZHCASH platform and DAO ZHCASH procedure.

The information set out below is not exhaustive and does not imply any contractual relationship. The sole purpose of this document is to provide relevant and sufficient information to potential users of the ZHCASH platform so that they can familiarize themselves with the platform in order to further acquire ZHC gas of the ZHCASH platform for the development of decentralized applications, databases and smart contracts, as well as their further work.

This document is not an official offer to sell or purchase securities in any jurisdiction where it is unlawful to make such offers. To a certain extent, ZHC gas of the ZHCASH platform can be classified as securities, since it gives ZHC gas holders the right to profit from the activities of the ZHCASH platform. Thus, transactions with this instrument may be subject to certain restrictions under securities laws in a number of countries.

Although ZHC is primarily a gas (the main energy and technical unit for developers and application work) for the ZHCASH platform and is not as such a cryptocurrency or token, however, the initial placement of ZHCASH and other assets (platform tokens) comply with the requirements of these rules and restrict access by allowing participation only of citizens, green card holders and residents of the United States or SINGAPORE belonging to the category of "accredited investors," in accordance with Rule 506 (4) specified in Regulation D of the Securities Act.

Some of the regulations, estimates and financial data contained herein are forward-looking statements or information. Such forward-looking statements or information relate to known and unknown risks and uncertainties that may cause actual events or results to differ materially from the estimates or results implied or expressed in such forward-looking statements.

This document, as well as the accompanying and related asset disposal documents, contains presumptive statements under Section 27A of the Securities Act and Section 21E of the Stock Exchange Act that fall under the Safe Harbor Rules of the Private Securities Litigation Reform Act of 1995.

These assumptions, including, but not limited to, statements regarding the intended use of ZHC gas proceeds from ZHCASH platform, are based on current expectations, estimates and projections regarding our industry, beliefs and assumptions of platform management and DAO ZHCASH.

Such statements are not a guarantee of future performance, the occurrence of alleged circumstances and are subject to difficult to foreseeable risks, are uncertain and cannot be foreseen. Therefore, actual results may differ materially from those expressed or assumed in any statements due to a variety of factors, including, but not limited to, our ability to implement a minimum ZHC gas sale of the ZHCASH platform, contingencies and costs associated with the implementation of the ZHCASH platform, changes in the financial condition or business strategy of DAO ZHCASH, which affect the process of realization of ZHC gas and ZHCASH platform, as well as other circumstances.

DAO ZHCASH and the developers do not undertake to update any forward-looking statements, whether as a result of new information, future events or otherwise, unless DAO ZHCASH is required by law to do so.

Where ZHC gas of ZHCASH platform proposed for implementation, acts as securities under the United States Securities Act of 1933, it is intended to be sold only to persons outside the United States of America, Non-citizens of the United States of America who are not permanently and temporarily resident, and not in the territory of the United States of America, in accordance with the provisions of Regulations S of the United States Securities Act of 1933, as amended.

This ZHCASH platform and the ZHC platform gas, as an integral part thereof, will not be registered under the Securities Act, and accordingly cannot be offered or sold in the United States of America or Singapore without registration or exemption from registration requirements, and buyers must not assume that they will be able to resell their coins. Neither the Securities and Exchange Commission nor any other public authority has ruled on the legal valuation or given its consent to the issuance of tokens, the terms of sale of tokens or the accuracy or completeness of any related materials.

The purchase and sale of ZHC gas of the ZHCASH platform includes risks, and buyers and sellers themselves are responsible for the risk of losing funds from all transactions. Buyers and sellers must determine for themselves whether to make a purchase or a sale based solely on their own independent assessment and analysis.

All information on the ZHCASH platform sites and in this document (as well as any subsequent changes) and all communications from DAO ZHCASH may in no way be considered as a guarantee of profit or income.

Participants agree to receive emails or Telegram messages from the platform team and DAO ZHCASH. Personal information may not be required without your consent. Do not respond to suspicious messages related to ZHC gas sales of ZHCASH platform. They can be sent to attackers or third parties for profit;

Participants understand and agree that the terms of the ZHCASH platform launch may be changed for any reason.

Detailed terms and conditions of the contract are specified in the "ZHCASH Platform Agreement" posted on the main sites of the ZHCASH and DAO ZHCASH platform.

9. SITE MAP AND CONTACTS

INFRASTRUCTURE ZHCASH

ZHCASH.NET	**The main information hub of the network**
DAOZH.CASH	**DAO ZHCASH website**
ZH.CASH	**Main site of the platform**
ZHCASH.ORG	**Web console, launchpad, Nft & token market**
WALLET.ZH.CASH	**Web Wallet**
ZEROSCAN.NET	**Network explorers & block explorers catalog**
ZHCASH.NETWORK	**Rating and monitoring of supernodes**
ZEROGRAVITY.FOUNDATION	**Decentralized Venture Fund**

PARTNER PROGRAM

Dynamic decentralized affiliate program with income from invited delegates in the main web console **ZHCASH.ORG**

MEDIA

t.me/zhcashnewsru

twitter.com/zer0hourcash

github.com/zerohourcash

SUPPORT