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# I. What is Juna

Juna is an advanced version of an economic system created for a technologically advanced society. It offers all the same capabilities provided by modern economic systems, but without fraud, crises, injustice, and manipulation. Juna represents an alternative economic platform that, while retaining all the familiar aspects of everyday life, eliminates the accumulated relics and barriers of centuries and eliminates the inefficiencies and parasitism of outdated interaction mechanisms.

Juna is the integration of economic laws, a decentralized platform with an open interface, and an ecosystem that users can freely expand. This system is designed to build economic relationships, sell one's labor and talents, create wealth, protect against losses, and provide mutual support. It combines simplicity, fairness, freedom, and flexibility, offering users the tools to realize their potential in a technologically advanced world.

The main goal of Juna is to provide people with access to a technological but at the same time familiar and understandable system for everyday life, where there are no restrictions in forms of expression and activities. The founders of Juna encourage everyone to try using this concept of new connections and tools that they have developed. They also encourage the creation of new platforms, services, communities, businesses, and applications, because as the number of contacts and interactions between people grows, the financial laws of the system become more stable, reliable, and beneficial for all participants.

The founders laid down the fundamental principles of the development of the Juna economy and created simple services for participating in the system, exchanging goods and services, communicating, finding partners, resolving disputes, and conducting transactions and payments. Juna is not isolated from the real world—it integrates with it, providing tools for the interaction of real people who act, create, conflict, and cooperate.

The concept, ecosystem, and services of Juna are neutral and independent of jurisdictions and governments, but they also do not conflict with them. Participants themselves decide what their relationship with the outside world will be like, using built-in or self-created services.

Juna was created using the best practices from various fields. The foundation includes the laws of market economy, ensuring prosperity, rules for fraud protection from the international banking system, the capabilities of instant communication and information exchange from social networks, and legal and financial rules developed over centuries of corporate work. Added to this are freedom, decentralization, speed, and constant development provided by technology. However, the main ingredient is openness to all and the ability to independently create connections and businesses.

Juna is not a decentralized exchange (DEX), but it provides the opportunity to create one on its platform. It is not a bank, but it allows the creation of a bank. Juna is not a social network or marketplace, but it can be used for these purposes.

The main mechanic of Juna is the direct connection of people for investing, earning, spending, and multiplying wealth. The Juna system allows every participant, regardless of their location, to integrate into the global economy. If you are an engineer in Kenya, you can earn by repairing equipment in Alaska. If you are an artist in Indonesia, you can accept orders from Chile. If you are a shop owner in New Zealand, you can build trade relations with local farms and suppliers. If you are a student from Siberia, you can intern and build a career in the IT field in the UAE. If you are a lawyer, you can open a notary agency to sell legal services to other participants and help them comply with the laws of their countries when conducting business. If you are a financier, you can create your own neobank.

The number of people on the planet is growing, and time is passing faster and faster. The emergence of AI exacerbates inequality, social turbulence, and complicates the search for one's place in the world. Juna offers the idea of a new planetary economy that allows everyone to find their place and be in demand, offering their talents and labor on the global market. And perhaps, Juna will become the foundation not only for planetary but also interplanetary economics.

We strive to simplify and make economic interactions between people more reliable. Since the beginning of the 21st century, the world has experienced many technological

revolutions: mobile devices, instant communication, digital sales through social networks, cryptocurrencies, blockchain exchanges, electronic payment systems, P2P services, crowdfunding, programmable bots, global fintech platforms, and growing AI. However, despite this progress, in 2024, it is still difficult for a person to feel safe and confident about the future, just as it was a thousand years ago. The modern world is undergoing a new wave of chaos, which seems to be the most powerful in recent history.

Difficulties in the stable sale of one's labor, experience, talents, and ideas are exacerbated by the intermediaries and restrictions remaining from the old economic system, including the interests of global corporations, the regulated banking system, legal barriers between countries, monopolistic employers, and the ambitions of shortsighted governments.

For a person to live in harmony, they need confidence in their future, which arises if their labor is in demand, if they have tools for their work and selling their labor that no one can take away, and if they themselves decide how to manage their time and resources.

For this, humanity needs a tool that will unite all accumulated technologies, eliminating their shortcomings such as fraud, unreliability, and complexity. We believe this will give a new impetus to global economic growth, involving a huge number of new participants in economic activity.

Juna offers a new model that allows people to independently decide what is fair for them in economic relationships with others and provides a simple tool for conducting economic activities and concluding reliable contracts. The main problem has always been trust between participants, but Juna offers an overlay that expands and improves existing institutions, creating synergy by complicating economic connections and ensuring transparency for all participants.

This approach opens access to a new global level of efficiency and reserves of economic growth that were previously limited by existing economic actors and the need for monopolistic ownership of resources.

Juna is an attempt to link the world of real human actions and the world of digital trust, built on strict mathematical algorithms. The system does not limit participants in their economic actions, but at the same time places full responsibility on them for their operations, providing a predictable, steadily growing, and transparent foundation for any activity, from individual creativity to building new cities.

# II. The Concept


## Objectives and historical context

The Juna project's mission is to change the world for the better by expanding the boundaries of economics and trust, providing people with new opportunities for mutually beneficial cooperation. The project's vision is to create a global, free system of economic relations that adapts to the desires of people, emerging technologies and new challenges. This system is based on a digital distributed trust platform.

Today, a significant part of the world's population is not active participants in economic relations for a number of reasons. These include the lack of stable, fair and humane political systems, a lack of infrastructure for doing business, cultural and social fragmentation, and high demands on skills, reliability and security that many find insurmountable.

In human history, economic transitions such as agricultural, social and industrial revolutions have been associated with the emergence of fundamentally new models of interaction between people. These changes led to an increase in the number of participants in economic relations and the subsequent abrupt growth of the economy, which was accompanied by a transition to a new paradigm. An example is the transition to agriculture, the emergence of cities, states, colonial empires, the emergence of capitalist relations, the free market and the modern information economy, the development of which we see today.

Today, despite access to mobile Internet and smartphones, as well as energy, many people around the world still remain excluded from economic interactions. With the development of technologies such as low-cost global Internet networks, personal electronic devices and clean energy, the coverage of the world's population with these resources will only increase. In this regard, Juna aims to provide a simple and cheap way for people to collaborate with each other, removing existing barriers and ensuring a high level of trust between participants.

The goal of the Juna project is to eliminate restrictions by creating a decentralized platform, which is a set of services, rules and algorithms. This platform will allow economic activity to be carried out in those places and segments where it was previously impossible due to lack of infrastructure or a high barrier to entry.

The project solves two key problems:

1. Creation of a digital, decentralized, free and expandable ecosystem of public services that will involve people who are currently forced to remain outside of active activities into economic relations.

2. Developing a platform for creating added value through distributed collaboration between people, companies, associations, authorities and communities. The platform operates regardless of their location, status, jurisdiction and origin, ensuring highly efficient sharing of any resources.

The Juna token plays two fundamental roles in the system: it serves as a carrier of value and a carrier of interaction. Within the ecosystem, Juna tokens are used to pay for transactions in any blockchain networks that are connected to the Juna ecosystem thanks to the unique mechanisms of the project. The overall welfare of the ecosystem economy directly depends on the number of participants offering their products, services and knowledge. The greater the supply and demand expressed in the J-token, the more stable and prosperous the economic model will be, which serves as the foundation for the operation of all services.

What sets Juna apart from other popular blockchain ecosystems and cryptocurrencies is that the value of the Juna token is determined primarily by its ability to be used within a growing ecosystem of economic interactions, rather than its comparative value with cryptocurrencies and fiat money.

The Juna ecosystem is open to everyone. Each user can create their own services using the infrastructure of smart contracts and Juna validators in any blockchain networks, using the J-token as the basis for their operations. Participants decide for themselves which service and how to use it: they can remain anonymous, undergo KYC (Know Your Customer, mandatory customer verification), invite legal arbitrators to carry out

transactions in various jurisdictions, and work with a high or low level of trust in themselves and others.

Juna aims to solve existing problems of classical economics:

1. **The need for initial capital.** Digital technologies such as Uber, marketplaces, social networks, and e-commerce have lowered this threshold, but a significant number of potential economic agents are still unable to participate in economic relationships, which limits the growth of the global economy.

2. **The complexity of doing business.** Rapid digitalization has not completely removed barriers to economic participation, especially among ordinary people. Existing jurisdictional rules provide trust, but are also complex and nearly insurmountable for many. In the real world, parasitic and useless administrative structures persist. Providing trust in a simpler way will provide the impetus for all these people to become active economic agents.

3. **The division of communities into territories and different jurisdictions, as well as the division of the digital and real worlds.** Conducting transactions between different territories with different laws, regulations and languages remains complex. The task of ensuring an inextricable connection between legally significant events in the real world and actions in the virtual space has not been solved. This limitation is a significant obstacle to trust in complex economic processes occurring in virtual form, especially in the case of blockchain services.

Juna is a blockchain-based platform that allows you to connect the customer and the performer, the artist and the connoisseur, the employee and the employer, the teacher and the student, investors and projects, intellectual property owners and manufacturers, as well as service and product providers with clients. Juna provides a universal public network built on a self-regulating digital ecosystem and financial environment.

The Juna ecosystem offers participants the following opportunities:

- **Juna token exchange.** The token is endowed with the properties of a means of payment and can transfer value between different participants.

- **Implementation of real economic interactions.** Participants can use the Juna platform and smart contract libraries to conduct transactions that make a real difference in the physical world.

- **Creation of chains and connections between contracts.** The platform allows users to create hierarchies and connections between smart contracts, and involve other participants and partners in the joint creation of added value.

- **Use of macroeconomic rules.** The economic model of the system offers stable and predictable conditions for conducting activities, maintaining and generating income.

- **Creation of organizations and projects.** Participants can create projects, manage their development and take advantage of the banking system, protected by reserve rules.

- **Creation of corporate structures.** The platform allows you to create enterprises and joint stock companies in the form of smart contracts, the participants of which can be both users and other enterprises.

- **Use of legal services.** Participants can engage lawyers or law firms to arbitrate within the system and to link the internal smart contract with external legal systems.

Juna pays special attention to the concept of “Legal Gateway”. This is a special participant in the system that connects the digital and real worlds, transferring facts from the real to the digital world, and actions from the digital to the real world, adapting them to the rules and laws of the relevant jurisdiction. This approach eliminates many of the legal and administrative barriers that make doing business in the real world difficult.

## Main features of Juna

Economic Market Ecosystem:

- A monetary circulation system based on a stable and transparent increase in value, which depends on the activity of economic transactions and the amount of accumulated wealth.
- A reserve financial system that stabilizes the distribution of benefits and ensures the stability of the economy against inflation and deflationary factors.
- Economic roles include producers, creators, researchers, investors, intermediaries, traders, consumers, private entrepreneurs, workers and employers, companies, banks, law firms, development funds, marketplaces, auctions, crowdfunding platforms and exchanges.
- Ricardian contracts between participants containing execution algorithms and legal text.
- Possibility of implementing any form of economic relations through the creation of multi-stage contracts and their audit.
- Juna token for mutual settlements within the ecosystem.

- A set of simple mechanisms for regulating the money supply, the discount rate and stimulating economic activity, ensuring the stability of the economic model.
- Macroeconomic parameters are managed by the Council of Financial Governors, which is similar in function to the US Federal Reserve or central banks, but with representation of the participants most interested in the stability of the economy.

Possibilities:

- Conducting transactions, settlements and exchanges of assets and rights.
- Accounts and wallets of individuals and companies.
- The possibility of creating digital companies with accounts, shareholders and managers, the possibility of creating “digital avatars” of companies, and in the future - economic entities of artificial intelligence.
- Freedom of enterprise, exchange, trade, savings, investment, sponsorship and charity, in both real and digital assets.
- There are no restrictions on the choice of economic role - everything is available without restrictions.
- Simplifying the complexities of blockchain for users through a service platform.
- Creation of DAO communities to manage projects, companies, social movements or the ecosystem itself.
- Platform for ideas and projects - participants can launch their projects on the Juna Launchpad platform, raise funds or invest them.
- The ability to create smart contracts, applications and services based on the economic rules of the ecosystem and the J token.

Service platform for concluding transactions:

- Works with any Web3 wallet.
- Using the Juna token to pay for transactions in any Eth networks, automatic gas payment using the user’s Juna tokens.
- Simple p2p transactions with the participation of a third party - an arbitrator.
- Transactions with multiple participants, variable transactions, transactions with multiple arbitrators.
- Real world legal representation through legal gateways.
- Interactivity - the user receives notifications about changes in the contract or events related to the economic context.
- The ability to join the contract and make changes if confirmed by the participants.

- The entry point is a mobile application and a service portal.
- A library of standard J-contracts for the main types of transactions, expandable by users.
- Basic services when starting an ecosystem (portal, mobile wallet, p2p contract service, legal representation service, bank service, trading platform service, complex transaction service, etc.).

Openness and reliability:

- Conducting transactions and smart contracts through the blockchain network.
- Open source of root smart contracts that implement economic algorithms of the ecosystem.
- The service platform runs on top of the blockchain, the user can work on any network (currently only Eth-compatible ones).
- Users can create economic smart contracts themselves, audit them, and give their assessments.
- Private parts of the contract (or annexes to it) are stored in encrypted form and are accessible only to contract participants.
- Algorithmic shift of power in the system towards users through a voting mechanism.

Terms of use:

- The services have no jurisdiction; all rules, algorithms and mechanics are universal and abstract in relation to the legal systems of different countries.
- Ecosystem J provides a basic economic model for the interaction of people, enterprises, and, in the future, economic entities of artificial intelligence.
- The user uses J services at his own discretion and is independently responsible for his actions within the rules of the jurisdictions in which he operates.
- KYC and AML (anti-money laundering) procedures in the system are not mandatory; each user can independently implement them by creating their own service.
- User services and smart contracts that do not use the J ecosystem and the J token as the basis for exchanging value are not considered part of Juna.
- The creators of the system are categorically against inhumane and prohibited types of business, fraud, corruption and violence in all its forms.

# III. The Ecosystem


The Juna ecosystem is a comprehensive platform that includes a variety of services and applications designed to perform a wide range of economic transactions. This system is designed to ensure effective interaction between participants, allowing them to conclude transactions, exchange values and develop joint projects.

## General information

Juna provides members with a wide range of tools to perform basic economic transactions. These tools cover such actions as opening accounts (wallets), exchanging Juna tokens, concluding transactions between participants, engaging third parties as arbitrators for transactions, creating banking structures, holding auctions, trading goods and services on the exchange, raising funds for projects, as well as searching for partners and performers for contracts.

Participants can work through a mobile application or websites, which, thanks to the integration of Web3 and dApp technologies, become universal portals to all ecosystem services. All actions - from concluding and executing transactions, exchanging goods, services and tokens to receiving and repaying loans, placing advertisements and bets - pass through the software platform and are recorded in smart contracts on the blockchain. This provides protection against counterfeiting, fraud and third party interference, ensuring the safety of all transactions.

The deep foundation of the ecosystem is a monetary model focused on a slow but steady increase in the value of the Juna token. This model includes algorithms that maintain a

balance between inflationary and deflationary factors, estimate the volume of goods in the system and the speed of their exchange (expressed in Juna tokens). It is important to emphasize that the Juna token is not intended for speculative trading on exchanges, staking or making money on liquidity pairs. Its main purpose is to be a means of exchange, accumulation and measurement of economic benefits within the Juna ecosystem.

## Blockchain networks

At the time of the creation of the Juna system, there are many different blockchain networks in the world, and the Juna ecosystem is only able to work in those where the concept of payment exists. Juna cannot function in blockchains designed solely for storing information. The most popular networks at the time of the system's creation are the so-called "ether" networks, built on the algorithms of the original Ethereum (ETH) network and supporting the Solidity language for writing smart contracts. In the future, we plan to expand compatibility with other types of networks, such as Tron, EOS, and networks using other programming languages and virtual machines.

The primary operating network for Juna is the Ethereum mainnet, where transaction costs are around 1.2 USD. However, the Juna system can also work on other networks that use Ethereum network algorithms, but with lower transaction costs, less than 1 USD. These networks may be used if jurisdictional conditions require it or if they are popular in a particular territory or industry.

Juna provides the ability to work simultaneously on different networks - cheap for simple low-trust transactions and expensive for complex transactions. This is achieved due to the fact that the API and business application layers are able to work with any network in which Juna ecosystem smart contracts are deployed, and a special bridge mechanism (Transaction Bridge) ensures transactions between networks. Control over the trusted passage of transactions through bridges is carried out by Juna validators.

## Juna Token

The Juna token is an integral element of the system and can be created on the main blockchain network and transferred between networks. Multichain is one of the main advantages of the Juna token ecosystem compared to classical cryptocurrency concepts. The Juna token serves three key roles:

1. **Value Carrier**: The movement of value within one network is carried out both by transfer between wallets and through smart contracts. Moving a token between networks is carried out using special services - Token Bridge. It is important to note that all transactions on any network within the Juna ecosystem are paid for in Juna

tokens, regardless of the native coin and blockchain on which the transaction is performed. If a user transfers tokens between networks within one wallet, only Token Bridge is used, and if the transfer is carried out between different wallets in different networks, Forwarder-Relayer is additionally used.

2. **Interaction carrier**: Participants in the Juna system can receive tokens in any of the available networks for performing services, work, or for the production and supply of goods. The Juna system also supports a sequence of smart contracts, where one contract acts as a joint stock company (SPV), allowing users to agree in advance on the proportions and amount of investments and rewards, and subsequent smart contracts are built in a chain, where the result of one contract is a challenge to another .

3. **Carrier of power**: The Juna token simultaneously serves as one voting voice in the ecosystem, making it an important element of governance and decision-making.

## Juna services at project start

At the initial stage of the Juna ecosystem, a number of key services are provided that provide basic functions and interaction between participants:

**SuperApp** is a mobile application that serves as the main way to access the Juna system. It includes functions of a crypto wallet, signing contracts, creating and managing contracts, access to a storefront of other services, as well as an ecosystem guide. The application is integrated with the Telegram platform, through which you can also interact with the Juna ecosystem. SuperApp is focused on performing simple exchanges of goods, services and tokens between people, small businesses, individual producers and sellers.

**Juna Simple** — a service for a simple one-time exchange of goods and services between participants. This service is based on a smart contract that performs one exchange operation for Juna tokens. Participants enter the subject of the transaction in the form of text, and the system ensures the fulfillment of obligations between the parties. Juna Simple covers 90% of all one-time transactions, from ordering pizza to buying a yacht. If the parties to a transaction do not trust each other, they can involve a third party as an arbitrator.

**Juna Value Chain** is a more advanced tool designed to create chains of economic contracts. In it, users can program complex economic interactions based on pre-prepared templates and contract frames. These chains can include multiple contracts linked to

each other and are executed based on events, such as the actions of participants, external events, or the occurrence of conditions.

**Services Showcase (Juna Omni Portal)** — provides access to the Juna ecosystem through a browser on any device. Participants can use popular wallets such as MetaMask and TrustWallet to work with Juna services. The portal is also a marketplace where users can offer and find products and services, and interact with each other.

**Juna Launchpad and Development Fund** is an initiative aimed at stimulating the development of the ecosystem through supporting new projects. The Development Fund is managed by the founders of Juna, who invite participants to implement projects they have come up with or new parts of the ecosystem with payment in Juna tokens. Participants can also propose their ideas and receive funding for their implementation.

**June DAO** — a system for creating and managing communities, projects and companies. Juna DAO provides tools for managing “spaces” (objects), searching and filtering initiatives, posting proposals, voting and viewing results. This system is used to govern the Juna ecosystem itself and its monetary system through the Board of Governors.

**Juna Enterprise (aka Juna Organisations)** — a platform for creating digital enterprises, analogues of traditional companies and corporations. Participants can create enterprises, holdings and other corporate structures managed through smart contracts. Businesses can operate independently or create subsidiaries and SPVs. Profit is distributed in accordance with the algorithms of the charter and decisions of shareholders and the board of directors.

## SuperApp

The main way to access the Juna system is the Juna SuperApp application, which consists of a crypto wallet, several built-in applications (token and cryptocurrency rates, a list of tokens, a service for sending and receiving a Juna token, a basic Juna Simple contract and others) and a showcase of ecosystem services - a browser dApp with connected Web3 wallet. A dApp browser is needed to access websites with Web3 authorization from a smartphone, in particular to transfer Juna using third-party bridges, withdraw to fiat currencies through exchanges and others. SuperApp is focused primarily on simple transactions for the exchange of goods, services and tokens between people, small businesses, individual producers and sellers, to attract them to the chain of distributed production operations.

A blockchain wallet is a number in hexadecimal, for example 0x1284214b9b9c85549ab5d2b972df0deef66ac2c9. This number is created once by a cryptographic function from a set of numbers and letters known only to the owner of the wallet. When connecting, any software calculates the wallet number using the private key.

As a result, the absence of a private key does not allow access to be restored. Since the private key does not have reverse computability (this is the essence of cryptography), then its loss is irreversible.

SuperApp hides the complex mechanics of blockchain networks, explorers, scans, simplifies the addition of new tokens (a list of real tokens is maintained) and ultimately has the goal of making work with blockchain simple and safe for the untrained user.

## Juna Simple

Juna Simple is the simplest example of using an ecosystem and the main way of one-time exchange of goods and services between participants. The service is based on a simple smart contract that performs one exchange operation for Juna tokens. The user enters the subject of his transaction with another participant in the form of text, which is used in the future. Two participants who have concluded a deal and signed a smart contract in the application see how the obligations between them are fulfilled. The transaction is completed when both participants confirm the fulfillment of their obligations. If the parties do not fully trust each other, they can involve a third party, who will act as an independent arbiter and confirm or reject the fact of fulfilling the order, which is initiated by one of the parties upon execution of the contract.

The service covers 90% of one-time transactions - from ordering pizza to buying a yacht. It should be noted that the service is aimed specifically at simple one-stage transactions that do not require complex acceptance procedures, arbitration and specifications.

Juna Simple can be accessed both from the JunaOmni portal and through a dApp from the SuperApp mobile application.

## Juna Value Chain

Juna Value Chain is a more advanced way to create chains of economic contracts than Juna Simple. Juna Value Chain is a set of tools for programming economic interactions on the blockchain. The user can either create a contract from scratch or use ready-made contract templates and frames to implement a planned economic transaction. The general economic meaning of the transaction is formed from several contracts.

Atoms in contracts are processed by the system, like a computer processes commands, but not on a conveyor basis, but on an event basis. Thus, in a sense, there is a Turing machine inside the system, but it operates not with logical commands, but with economic semantic units.

Atoms are the elementary units of business logic, from simple data storage to distribution of profits from a transaction between shareholders of a digital enterprise.

A contract in ValueChain is executed based on emerging events - this could be the action of a participant, an external event, the occurrence of some condition, etc. This avoids loops or dead-end branches.

## Services Showcase (Juna Omni Portal)

An additional way to access the Juna system is a browser on any computer or device. You need to install a plugin from one of the mass wallets (Juna's own plugin is not included in the original plans), for example MetaMask, TrustWallet with an entrance to the Juna system website (the website address will be specified in the release).

An important link in the entire ecosystem is the marketplace of services. This is a collection of sites/services with smart contracts connected to them, which allow simple interaction of users with each other. .

## Juna Launchpad and Development Fund.

/Founders do not set themselves the task of creating all kinds of services in the ecosystem. On the contrary, they believe that creative freedom is needed when creating new services, sites and ways to use the ecosystem.

To encourage and finance the development of the ecosystem, the founders created a Development Fund, into which 10 million Juna tokens are received at the start of the system, and subsequently a portion of the founders' unfrozen tokens is distributed

The Founders manage this Fund in two ways:

1. They offer participants to implement projects invented by founders or new parts of the ecosystem, with payment in Juna tokens;

2. Consider ideas and applications of participants, and participate in their financing in whole or in part, together with various interested participants (crowdfunding)

In the first stage of development of the Juna ecosystem, the launchpad service is one of the main ways to obtain Juna tokens, and this method encourages enthusiasts who are willing to invest their work in the development of the system.

## June DAO

The ecosystem has a system for creating and managing communities, projects and companies. Service functions:

1. Management of spaces - objects that represent the possibility of posting and validating initiatives related to a specific product of the real and digital world: registered users will be

able to post a product description, links to related resources, set rules for placing initiatives, change and delete spaces

2. Search and filter spaces: Users can search and filter spaces by category

3. Placement of proposals - initiatives put to vote

4. Voting within the posted proposal

5. View voting results

The Juna ecosystem itself and the monetary system (through the Board of Governors) are governed in a similar way.

## Juna Enterprise (Juna Organisations)

Once there is a need not just for a community, but for a commercial long-term partnership between participants, there is a need to create digital enterprises - similar to firms, companies and corporations in the real world.

The Juna ecosystem offers the opportunity to act not only for individuals, but also to create digital enterprises, holdings and other corporate structures. There is a special registration procedure that monitors the registry of such virtual companies. The company has its own balance sheet, algorithmic charter, and governance mechanisms on the part of shareholders, board of directors and management.

Changes in registration data and parameters of corporate and operational management - names, associations with jurisdictions, changes in the charter, termination of activity, change of manager or board of directors - are made by voting by the participants of the enterprise.

Such digital enterprises can either operate independently or create subsidiaries and SPVs with other individual participants and companies. Profits from activities are distributed in accordance with the algorithms of the charter, and depend on the decisions of shareholders and the board of directors (if one is created).

This approach significantly expands the capabilities of system participants and creates a new variety of forms and methods of cooperation.

The founders believe that soon the functions of managers of such digital enterprises will be taken on not only by people, but also by artificial intelligence subjects - non-protein corporate managers.

# JunaLegal - legal gateway (arbitration and legal representation)

All actions in the system can be actions in the real world, and vice versa. Attorney, escrow, notary, advocate, lawyer - these are the roles performed by a legal gateway. Participants can delegate to the legal gateway the functions of communicating with governments, government agencies, courts, and other real-world actors.

From the point of view of the system, the legal gateway plays the role of an oracle - it is endowed with the trust of the participants who chose it, and informs the system about events in the real world - whether a payment has occurred, whether the goods have arrived, whether a document has arrived, whether the transaction has been approved by the state.

The founders assume that legal gateways, for a fee, will take on all the complexities of professional interaction with the jurisdictions in which transactions are concluded between participants in the system. This will allow you to focus on the main thing - creating added value, selling your labor and knowledge, and will be an important difference from the real world, where it is very difficult for people to overcome the barriers and confusion of the official aspect of doing business.

When concluding a contract, participants can invite one or more legal gateways (LegalGate), whose tasks include independent arbitration of the relationships between the participants, as well as interaction with real-world events. For example, a customer and a supplier of goods who are unsure of each other can delegate to an independent party, whom they both trust, to register the fact of delivery in order to avoid fraud. The platform in this case will consider the contract executed and will execute the payment only when the legal gateway confirms the transaction. Thus, the legal gateway eliminates the well-known problem of mistrust and lack of connection between the digital world and the real one.

A legal gateway can be a law firm and/or a qualified participant in the system, which ensures the legality and recording of legally and economically significant events during the execution of a transaction in the jurisdictions where it takes place. Connecting a company/lawyer can be done either programmatically, if the law firm has the necessary smart contract, or “Ricardian”, when the agreement is indicated only within the text description in the smart contract. The lawyer and the user can also have their own smart contract that executes their agreement among themselves. Connection to the contract can be done either directly from the lawyer’s wallet or through the mentioned smart contract for legal services.

The legal gateway in many cases will be an escrow company, which will have to enforce the terms of the contract in a given jurisdiction.

Essentially, the role of a legal gateway is an interface between the digital world of a global blockchain jurisdiction and the real physical world in which legally significant events occur. Parties can create, accept and use smart contracts with any business process, including the participation of a USH for each party, or several USHs acting in relation to the smart contract and blockchain as Oracles (sources of information from the outside world with a high level of trust, see below). This mechanics makes it possible to establish a high level of trust between participants at the level of system ideology.

Typical legal gateway operations:

- KYC verification;
- Verification of the fulfillment of obligations;
- Submitting and obtaining the necessary forms from government authorities, if they are needed to complete transactions between participants;
- Checking the availability of rights of disposal, possession, use, checking encumbrances and restrictions;
- Transaction management, decision to enter or not to enter into a transaction, interaction interface for making decisions in other smart contracts;
- Resolution of disputes between participants who have chosen a certain YUS in the form of an arbitrator;
- Representation of interests in judicial and government bodies of various jurisdictions.

To communicate between users and legal gateways, the Juna Legal service has been created with two types of users:

- From the side of the legal gateway participant (hereinafter referred to as “lawyer”, not meaning the actual qualifications of the participant), this is a dashboard of all transactions in which he participates, their stage, transaction amounts and lawyer’s commission. A separate interface is adding a lawyer to the system. After the lawyer fills out the application, the application goes for pre-moderation, after which the profile is published on the Juna Legal website. An active profile accumulates social rating.
- From the user/business participant side, this is a rating table with filters where you can select a suitable lawyer by:
  - jurisdictions
  - transaction types,
  - social capital,
  - lawyer costs,
  - lawyer's workload.

An important condition for the operation of Juna Legal is integration into other interfaces of the ecosystem, so that interaction with legal gateways is harmonious and

# IV The economy of Juna


## Payments, Trade, Capital and Investments

Blockchain infrastructure inherently provides excellent opportunities for making payments and transactions without the influence of third parties such as banks, government agencies, correspondents and intermediaries. This also has well-known negative sides - the possibility of irrecoverable losses due to errors, the risk of fraud and conflict with government agencies (because their monopoly on controlling financial flows and people's actions is undermined). In most jurisdictions, KYC and AML requirements must be met, and in some, using blockchain is equated to a crime. However, Juna provides all the opportunities for easy token circulation - both by transferring from wallet to wallet and in more complex ways - when conducting transactions.

Transactions in the digital world are tied to real things - property, goods, territory, resources and rights. The Juna ecosystem classifies several main types of transactions.

Transfer of tokens to pay for a product, service, or provide funds for a fee (loan) or free of charge (gift, assistance, charity).

Transfer of a tokenized asset (rights to an asset) from the real world (RWA) - real estate, securities, resources, art objects, property, etc.

Transfer of a common physical resource (energy, computing power, storage or communication capacity) - Distributed Infrastructure (DePIN).

Exchange of intangible resources - machine learning datasets, telemetry, marketing, medical and other data (DataMarket).

The ecosystem will implement opportunities for trading and conducting transactions in all these types of markets.

Each participant in the system has a sum of wealth, which is his capital. Also, a participant, as in real life, can have obligations and rights of claim. Your capital can be used for trading, spent on the purchase of goods and services, invested in a business, directed to the creation of companies, or placed in a bank deposit. Each participant carries out actions independently, at his own peril and risk - as in the real world. If he makes a mistake or gets scammed, he will suffer losses. The ecosystem gives all participants complete freedom of action, except in some cases (for example, it limits and controls banks so that it is not profitable for them to deceive customers). Juna's economy encourages investment - that is why the target borrowing rate is extremely low, so users are motivated not to put tokens on deposit, but to invest them in entrepreneurial activity.

## Monetary Model and Reserve System

The most important part of the ecosystem is not the services, portals, applications and platforms, but the economic model that determines the rules for changing the money supply, banking regulation and ensuring a stable growth of the amount of values in the system.

The Juna ecosystem operates with a monetary model that is close to the model of the real economy, but there are a number of conditions that ensure stability, controlled growth and the exclusion of political and subjective factors that lead to crises, injustice and loss of benefits in the real world.

The founders want the value of the Juna token to depend not on arbitrage, liquidity pools, exchange rates or sensational news, but on the sum of goods in the system - demand, supply and transaction activity between participants. The main property of the Jun token is trust in it, based on the transparency of the rules for its circulation.

For the Juna token to have long-term value, it must be filled with commodity and exchange value slowly and at a predictable rate. This is achievable if the monetary model is transparent and the Reserve System behaves honestly, even if some participants act in bad faith.

In general, the monetary system is designed in such a way that it would be beneficial for the majority of participants to act in good faith, in the interests of the growth of general welfare and the sustainability of the economy of the system and the token.

The parameters of the economy are regulated by standards determined by vote of the Board of Governors of the Reserve System.

The reserve system plays the role of a buffer, which is a source of liquidity for licensed banks, which is dispersed into the economy through them. Also, the RS can play the opposite role - if necessary, take away liquidity by providing banks (and, through them, all participants) with a deposit in the event of acceleration of inflationary processes.

Maintaining prices at the predicted stable level will lead to increased confidence in the system. At the start, the reserve system should hold approximately 5-10% of the annual turnover of transactions between participants.

Tokens appear in circulation for participants at the expense of the development fund and the LaunchPad service - they pay for the development of projects and activities leading to an increase in the mass of the system.

The purpose of the functioning of the Juna monetary system is to ensure relatively stable growth of the total volume of benefits reflected in the ecosystem by managing the value of the Juna token, algorithmic regulation of the issue of new tokens, mechanisms for redistributing tokens and compensating for inflationary and deflationary processes.

The founders understand that a monetary system implemented algorithmically cannot have complex feedback mechanisms, such as the Central Bank, the fiscal system, employment statistics, consumption, production, imports and exports, but this circumstance also allows us to largely eliminate the subjective political influence of different states , human biases and regulatory errors. If you like, the proposed system is a basic capitalist model, on the basis of which users can independently create additional initiatives, zones of regulation and ways of redistributing benefits. A common feature for all subsequent systems will be the stabilization of economic growth based on an increase in the intensity of economic interactions and the complication of connections.

The general principle of operation of the monetary system is the algorithmic controlled growth of the money supply, depending on economic activity in the system. Activity is determined by counting the number of Juna tokens passed through participant interactions per unit of time. At some intervals, the ecosystem algorithms produce new

tokens, the number of which depends on the intensity of the flow of tokens between users, and send them to the Reserve System and the Development Fund.

Reserve System funds are available to users in the form of loans from licensed banks.

The second factor influencing the size of the money supply is the gradual unfreezing of the founders' funds, which go partly to their wallet, and partly to the Reserve System and the Development Fund.

The system rewards founders, releases their tokens to flow into the economy (development and financing of projects), which partially results in a natural increase in the total number of tokens to support the growth of the system with a stable token value.

The rules for the operation of this monetary system are prescribed in the relevant smart contracts, which ensures verifiability. Determination of the main parameters by voting ensures long-term trust in the system and changes in the event of significant changes in the global economy. An oracle that automatically calculates the total flow of money in the system allows you to accurately assess economic indicators and make forecasts. This allows you to set all the necessary interest rates, and as a result, provide long-term loans to small businesses.

Initially, 35 million Juna tokens are allocated, of which 15 million goes to the founders and 10 million each goes to the reserve system (RS, for financing banks) and to the kickstarter/launchpad for direct financing of projects necessary for the system.

It is assumed that not all funds from RS and Kickstarter flow into useful activities. The same applies to user wallets. In most economic systems, currency is not only a means of transmitting value, but also a store of value. Therefore, when modeling the operation of the system, the parameters of "inertia" (turnover) were set at 50% per year - it is assumed that only half of the tokens are involved in the transfer of value. At the same time, it is important to understand that tokens can go through the system 2-3 times, that is, actual activity may be even less.

Any system is subject to speculative fluctuations. Regardless of whether there is intrinsic value in the system (tokens backed by goods or services under already concluded contracts), short-term attempts to make money on the token exchange rate by increasing volatility are always possible.

When calculating token flow, Juna as an ecosystem only relies on long-term statistical indicators such as the total quarterly or annual transaction volume conducted through smart contracts and Relayer/Forwarder, since these entities are the least vulnerable to manipulation. Firstly, friction (the cost of executing transactions) increases the time of creating and executing a contract (it consists of downloading the contract, launching it into the network and several signatures that require the computing power of the

blockchain network), and secondly, contracts have context. It is not beneficial for the user to make many fast transactions due to the friction that exists in the blockchain. High-speed exchange transactions in the blockchain as a whole at this stage of development are not economically profitable, and as a result, short-term volatility is unlikely for these reasons.

Sticking to monetary rule the creators laid down the principles in which economic growth and money supply growth are interconnected, and laid down inflation equal to the average growth of the world economy. As the system develops, the inflation rate can be changed by vote, but it is fixed for the first three years of development to ensure the inflow of funds.

The growth of the money supply is achieved through additional issuance of tokens. The money supply grows at 2.5% and the increase in the money supply comes as a reward to the Reserve System, and through it seeps into the banks and the ecosystem.

At the beginning of the system's operation (the first two to three years), the main way to fill the system with liquidity is to provide orders with financing in Juna at the expense of funders and the consortium that created the system.

The voting feature of the Juna system prevents complete centralization of control over the system. The founder's initial capital should decrease at moments when the token acquires high economic significance. This allows you to redistribute voices in the system between active participants and increase confidence in the system due to the increasing circle of people capable of making decisions regarding the development of the system. The transition of power from the founders to the community, according to the founders' calculations, will occur in 2-3 years.

The key rate in the ecosystem is determined by a vote of the Board of Governors and is the percentage at which a licensed bank can borrow from the Reserve System up to its limit.

There are various monetary theories that determine the following parameters: price growth, money supply growth, loan interest, deposit interest, key rate, demand and supply of money.

The interest rate on the loan and deposit depends on the key rate. If the key rate is high, it is profitable to keep money on deposit and unprofitable to take out loans. If the key rate is low, loans become profitable, and storing money becomes pointless.

The purpose of the Juna system is to stimulate business, so the key rate should be very low so that loans for projects can be issued at a low rate, and participants are interested in investing in new projects rather than holding funds on deposits. As the economy grows, the key rate usually increases, which motivates to preserve assets without investing, so

the Juna system has an internal oracle that quickly (faster than the best government machines) collects information about the macroeconomic situation to adjust the key rate. The developers defined the Technical Layer algorithm as such an oracle, which indirectly takes into account capital turnover through the Forwarder/Relayer mechanism.

Since Juna is a system of economic relationships, the value of business development is higher than the value of passive capital; as a result, the key rate is low and does not require regular revision.

The key rate is defined as 0.25% per year at the start of the system. The mechanics of managing the monetary system are essentially reminiscent of an entropy algorithm. The system is based on a macroeconomic model for managing the money supply, refinancing rates, banking regulations, based on the state of the economy, user behavior and general business activity in the system. This allows us to reduce the degree of uncertainty in the system caused by the opportunistic behavior of participants, changes in the equilibrium of markets and external shocks that may come from outside the system.

General control over the macro parameters of the economy is exercised by the Board of Governors of the Reserve System, which, by voting, can change the level of rates, reserve ratios, thresholds and other variables.

## Banks, loans, deposits

The banking subsystem is the foundation of the Juna monetary model. Users can independently make payments to each other, launch transactions and contracts of any complexity, but they act chaotically and opportunistically.

The banking subsystem redistributes finances in the ecosystem, serves as a source of liquidity for projects and a way to preserve and increase the welfare of users.

A licensed Bank in the Juna system is an entity that has access to a special form of smart contracts that has the right to interact with the reserve system.

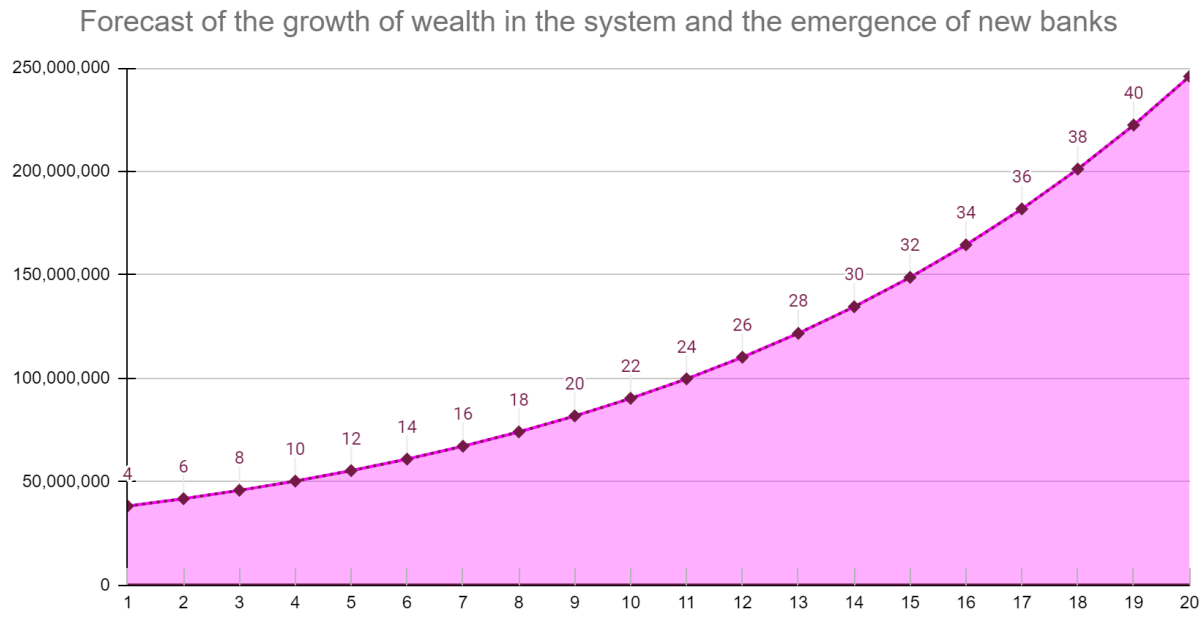
A licensed bank differs in its rights and responsibilities from a regular participant or contract that can provide borrowed liquidity in the system.

An unlicensed bank can be organized at any time by any user. However, you do not need to obtain any permissions to start working. All financial transactions are carried out by such a user and his counterparties at his own peril and risk. These are ordinary operations for issuing loans from one user to another in the form of a smart contract, written or oral agreement.

A licensed bank is a bank that is subject to banking regulations and has the right to borrow from the Reserve System and place deposits with it. The owner of the bank is

interested in maintaining its stability, preventing fraud and the economic growth of the system as a whole, because he invested his tokens in purchasing a license and receives profit from banking operations. But he is forced to obey the rules of the reserve system, which limits his appetite for risk or possible fraud. At the same time, the owner of the bank is responsible for his actions - if he mismanages the bank, and the bank ceases to comply with established standards, then the bank first falls under the supervision procedure of the Board of Governors of the Reserve System, and if it cannot restore its capital, then a procedure is initiated against it bankruptcy.

The number of banks in the ecosystem is limited; it grows according to a certain law, depending on the increase in the money supply in circulation.




In order to obtain a license, you need to win an auction in the system for the right to own this license. Such an auction can be announced if a threshold is reached at which the emergence of a new bank is possible.

Rules for reserving and risk control when borrowing from the Reserve System are determined by vote of the Board of Governors of the Reserve System.

The founders proceed from the consideration that the participant who spent Juna tokens on the acquisition of a banking license is not interested in unfair actions in relation to the ecosystem and other participants, but intends to make a profit through retail, project and corporate lending and financial services.

Such a bank can conduct any interaction with users - both within the Juna ecosystem and outside it. The bank and its client, at their discretion, may or may not include in the

contract conditions, references or references to their interactions outside the ecosystem. Responsibility for all actions, both in the ecosystem and outside it, lies with the owners of the Bank's wallet and the client's wallet.

The bank can also conduct classic retail banking activities - place participants' deposits and issue them at a higher interest rate to other participants, observing the rules of reserving and risk control.

The bank has its own balance, which is algorithmically calculated and controlled during bank transactions. Capital adequacy (Tier 1), funds adequacy and bank reserve ratios are used as the most important indicators. Below is a description of the main parameters of the reserve and banking system. When a bank issues a loan or accepts a participant's deposit, the Reserve System reviews the bank's ability to perform these transactions.

| **Parameter** | **Description** |
|---|---|
| Reserve system | The system pool of tokens, replenished by a given emission of tokens and partially - unfreezing of initial funds |
| System Interest Rate | How much does the mass of tokens increase per year due to the emission of the system (from tokens in circulation) and what interest rate does RS want for borrowers |
| System Deposit Rate | How much does the mass of tokens increase per year due to the emission of the system (from tokens in circulation) and what interest rate does RS offers for deposits |
| System Banks | Special ventures that can interact with RS by depositing and borrowing tokens. |
| System Bank count | Count of active System Banks, which depend on size of economy and increase after |
| System Bank Appear Factor | Empirical factor to calculate when a new System Bank will appear |
| System Bank Appear Rule | Bank count increases according to the logarithmic law, with the base SBAF and the value equal to the ratio between the tokens in circulation for the current period and for the previous period |
| Client | Any member, wallet or smart contract who interact with System Bank |
| Client Deposits | Balance sheet parameter: A deposit, which Client give to System Bank, with commercial interest, for increase wealth or as collateral |
| Loans | Balance sheet parameter: A loans that the Clients takes from System Bank, at a commercial |

| | |
|---|---|
| | interest for any cases |
| Collateral | Balance sheet parameter: Amount of tokens, which Client give to System Bank as collateral for borrowing a loan |
| Interest-bearing Deposits | Deposits of bank funds in RS (with SYSDR interest), other banks or financial services |
| Borrowed funds | Balance sheet parameter: A System Bank's loan from RS with interest rate if SYSIR, and from non-RS entities with commercial interest |
| Securities* | Balance sheet parameter: Special NFTs, or tokens, represent the value of shares in virtual companies, NFTs of art, rights, and patents. |
| Bank Own funds (Tier I) | Balance sheet parameter: How many own free tokens System Bank have |
| Reserve requirement ratio | How many tokens from client deposits can the Bank use to issue new loans |
| Required reserves | A System Bank's deposit with RS, with interest rate of SYSDR, represent required reserves in Bank balance sheet |
| Reserve system loan ratio | Ratio represented which amount tokens might be borrowed from RS, depend of actual size of RS |
| Reserve system loan limit | Sum of all Bank can borrow must be less than SYSLR of token mass, available in RS |
| System Bank loan limit | A Bank limit in the RS for infrastructured loans |
| Reserve system coverage ratio | Ratio represented which amount tokens might be deposited in RS, depend of actual size of RS |
| Reserve system coverage limit | Sum of all Bank required reserves must be less than SYSCR of token mass, available in RS |
| Bank coverage limit | A Bank limit in the RS for deposit coverage |
| Reserve system insurance ratio | How many tokens will be returned to client in case of Bank bankruptcy - this amount of tokens will be deposited by Bank in reserve system, obligatory or extra |
| Reserve system insurance limit | Having connected the banking mechanism of reservation to the Reserve System, the need for additional insurance of Clients' deposits has actually disappeared |

| | |
|---|---|
| Bank Multipicator | A special factor depending on the quality of bank management, leverage and police risks. Has an upper value, but the bank itself can lower it |
| Common Equity Tier1 ratio | In our case, capital adequacy depends only on BOWN. No tier 2 capital, only tier 1 capital. |
| Common Equity Ratio Threshold | This is the minimum capital adequacy ratio. If the Bank does not support this level, the license will be revoked after 30 days. |
| Bank excess reserves | Free mass of tokens for issuing a loan |
| Moneymaker multiplicator | Indicates the possibility of creating new money through bank loans with regulatory restrictions. |
| Moneymaker leverage | How many tokens Bank can issue as credit (potential) |
| Client Loan Threshold Rule | Verification rule when concluding a loan agreement |
| Maximum deposit amount | How many tokens can a bank accept as a deposit without violating its stability |
| Client Deposit Threshold Rule | Verification rule when concluding a deposit agreement |

## Ways to get Juna tokens

The Juna system was created to transfer classical economic relations to the digital world, create new opportunities, connections and options for interaction between people, corporations and automatic services, and allows you to earn money through your labor or receive income on investments. If someone can do something of value for someone else, one party receives the value and the other party receives a reward. In addition, activities to maintain, develop and provide computing power for the system are also rewarded.

The ecosystem allows you to receive rewards for work in the interests of other participants or the Juna system:

- Receiving remuneration for your work by concluding and executing contracts through ecosystem services that are valuable to other participants who are willing to pay for it;

- Free receipt of funds from other participants

- Royalties for the use of contracts and services created by the user;
- Moderation of smart contracts and services
- Exchange fees between Juna tokens, other tokens and fiat currencies
- Purchasing Juna token from other participants through an exchange or p2p
- Getting a loan from banks
- Receiving an accelerator fund for creating a new part of the ecosystem
- Performing the functions of a Validator: providing the ecosystem with computing resources to conduct transactions. The functions of the Validator are performed by the participant who, based on the winning auction, owns a license for the Validator, its equipment and software. The number of Validators is limited and increases as the load on the ecosystem increases according to a certain law. Income will come from:
  - Juna token transfer between networks
  - transfer of a transaction under a smart contract between networks

## Input/output of fiat and crypto funds

The main way to exchange Juna for fiat and cryptocurrencies is through exchanges, DeFi networks, as well as any other legal method used in the jurisdictions where the exchange transaction takes place. Users independently create such services, use external systems and exchanges, while the founders indicate that the main role of the Juna token is not to be a trading tool, but a way to create economic ties between people.

## Initial conditions at system startup

The system developers, who invested their labor and financial resources, value their work at 100,000,000 Juna tokens. The creation of these primary tokens will be the starting condition for the system to begin operating. Thus, each new participant in the system who creates an account agrees with this and understands that this is an honest and transparent mechanism for monetizing the founders’ contributions.

To avoid possible abuse by the initiators, most of the coins are frozen, and until they are defrosted using a special algorithm, these coins cannot be used. At the first stage of system development, we assume that it may be unstable and susceptible to various types of attacks. To counteract this, a mechanism for monitoring its stability is built into the system. The schedule for the release of founders' tokens is programmed in such a way that, depending on the growth of economic activity in the ecosystem, gradually, without creating depreciation, the tokens are sent to the founders, to the reserve system and the

kickstarter fund. The algorithm also ensures the transfer of power from the founder to users over a period of 2-3 years, depending on economic activity in the ecosystem.

Initial distribution of Juna tokens:

- 100 million JUNA with the condition of unfreezing according to an algorithm depending on economic activity in the system, will eventually go to the creators of the ecosystem. At the moment the system starts, they receive 15 million tokens, the rest are unfrozen, according to ecosystem growth forecasts, within 10-15 years
- 10 million JUNA - goes to the Development Fund
- 10 million JUNA - goes to the Reserve System.

# V. Rules for managing the Juna ecosystem

## Power

Juna's founders laid down the fundamental principles that define the governance and decision-making structure of the ecosystem. These principles ensure long-term stability and growth of the system, and also prevent the concentration of power and wealth in the hands of a limited number of individuals. Here are the basic management principles:

Long-term stability and growth: All decisions in the system must be made in such a way that participants are interested in sustainable development and increasing the overall well-being of the ecosystem.

Decision-Making Competence: In every matter, decisions must be made by those involved who have the appropriate knowledge and experience.

Encouraging diversity and competition: Decision-making should promote diversity and competition, which prevents excessive concentration of power and resources in one hand.

Preventing usurpation of power: Decision-making mechanisms should be organized in such a way as to exclude the possibility of usurpation of power by one group of participants.

Based on these principles, in the Juna ecosystem power is distributed among three main mechanisms:

General voting: Any participant in the system can propose their initiatives for voting. System participants vote with their Juna tokens for a certain time.

Board of Governors of the Reserve System: This body makes decisions related to the reserve system and money supply management.

Development Consortium: This body is responsible for technical solutions and development of the ecosystem, including launching and supporting new projects through the Launchpad platform.

## General voting

Public voting is a classic way of making decisions in the Juna ecosystem. Each participant in the system can propose their initiatives for voting. Participants' votes are expressed through Juna tokens, which creates a direct link between a participant's economic activity and their influence on decision making.

Voting takes place over a period of time and the results are recorded on the blockchain, ensuring transparency and protection from manipulation. This mechanics allows each participant to actively influence the development of the system by making proposals and supporting initiatives that suit their interests.

## Board of Governors of the Reserve System

The Reserve Board plays a key role in managing money supply and liquidity in the Juna ecosystem. This body consists of competent specialists who make decisions that affect the sustainability of the system’s economy. The board sets key parameters such as interest rates, reserve rules and liquidity management. Council decisions are made by vote of its members and are aimed at maintaining the stability and predictability of Juna's economic model.

## Development Consortium

The development consortium is responsible for the technical component of the ecosystem and its further development. This body consists of 33% of the founders' votes and 66% of the votes, which belong to 22 experts chosen through a general vote of the participants. The consortium makes decisions on the launch and approval of new projects, determines policies for the development of the system and coordinates the work of Launchpad.

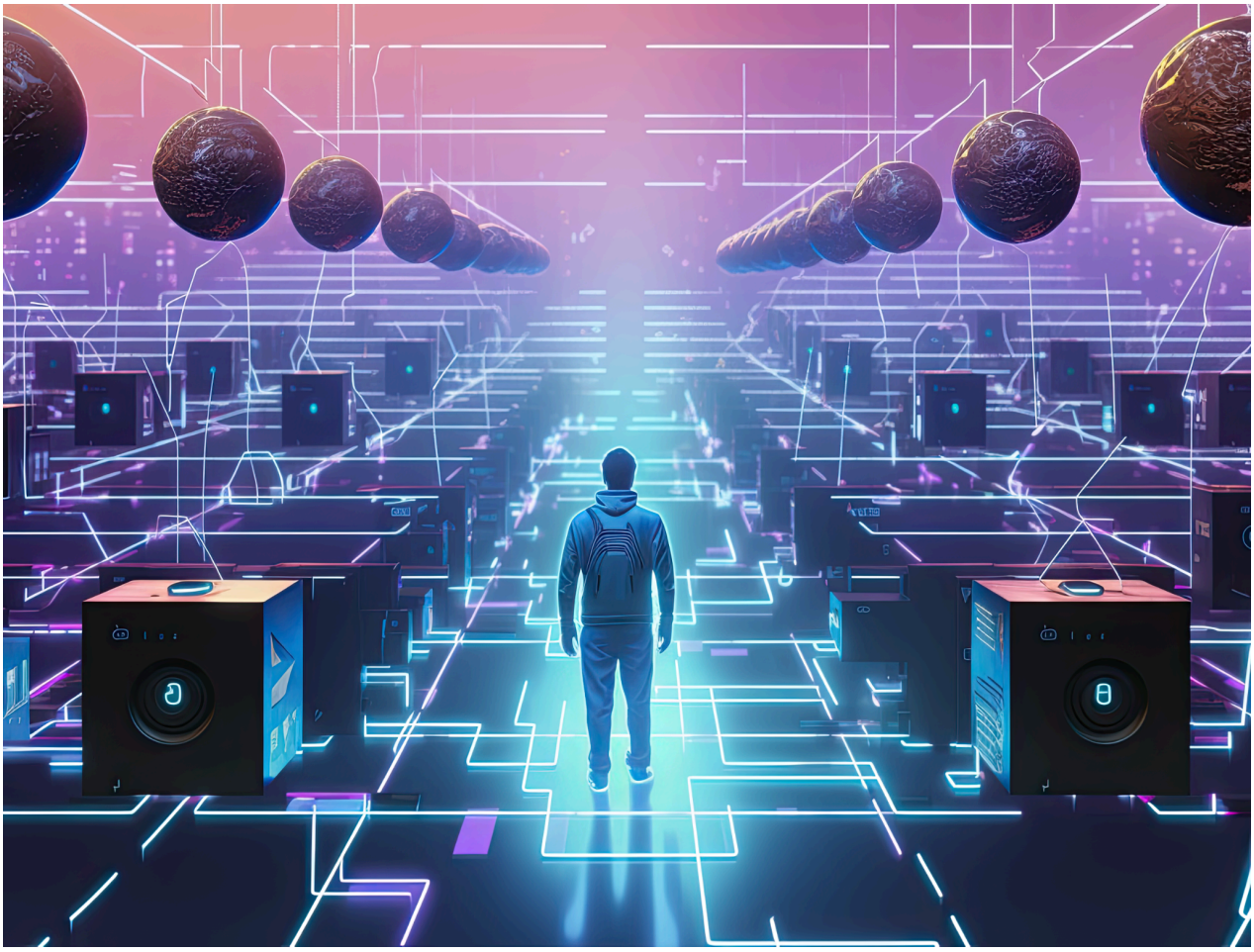
## Power system, community, support, development and monitoring of the network

Management of the Juna ecosystem is built on the principles of decentralization and the gradual transfer of power from the founders to active participants in the system. At the initial stage, founders retain control over key elements of the ecosystem, but as it develops, authority is transferred to a wider range of specialists and system participants.

A feature of Juna governance is the need for a balance between professionalism in decision-making and public control to prevent usurpation of power. To solve this problem, a power sharing system was developed, which includes founders, a general vote of users, a Board of Governors of the reserve system and a Development Consortium. Over time, the functions of founders will be transferred to a larger number of competent specialists with professional and moral qualities, which will ensure sustainable and equitable development of the ecosystem.

The founders remain responsible for maintaining secondary sites and ecosystem mechanics that enable user interaction and service functions, including the technical layer (API) of the system.

# VI. Juna Ecosystem Architecture



The Juna architecture is a complex multi-layered system that provides integration of various services, interfaces and network interactions necessary for the functioning of the ecosystem. The architecture is built in such a way as to ensure maximum flexibility, security and scalability of the system.

## General information

The founders of Juna created the core of the ecosystem, which includes basic services and open development rules. This approach allows any user, independently or for a fee, to create public or private services, add-ons, extensions and products that can be integrated into the ecosystem. One of the key components of the ecosystem is the crowdsourcing/accelerator service (Kickstarter/LaunchPad). The service serves as a showcase for ideas and startups for investment and fundraising, as well as an open

platform where founders and other participants can order and finance the creation of the products they need.

## Layers of Architecture

From an architectural point of view, Juna consists of four key layers, each of which performs specific functions and provides interaction between various elements of the system:

1. **Validators layer**:
    - Validators verify transactions and control integrity when transferring information between blockchain networks.
    - Provide transfer of tokens between different networks, while maintaining control over the overall emission of tokens.
    - Validators are owned by various ecosystem participants, which ensures decentralized network governance.
2. **Smart contract layer**:
    - Smart contracts ensure automatic fulfillment of the terms of transactions between participants.
    - Root smart contracts control the core algorithms of the system, such as voting, a reserve system, and mechanisms for interacting with validators.
3. **Technical layer (API)**:
    - The technical layer provides interfaces for user interaction with services and smart contracts of the ecosystem.
    - The APIs are open to developers who can create new applications and services that integrate into the Juna ecosystem.
    - This layer also includes transaction payment mechanisms such as Relayer/Forwarder, which automatically convert Juna tokens to pay for transactions across different blockchain networks.
4. **Interfaces and Applications Layer**:
    - Users interact with the ecosystem through various interfaces such as mobile applications (SuperApp) and web portals.

- Applications include functions for creating and managing smart contracts, interacting with other participants, and using legal gateway services (Juna Legal).

## Payment for operations and the Relayer/Forwarder mechanism

A feature of the Juna system is the ability to pay for transactions on any network with Juna tokens, and not with the native coins of this network. This makes it easier for users as they do not need to purchase ETH, Tron, BNB and other coins to pay for transactions on various networks. The Relayer/Forwarder mechanism automatically converts Juna tokens and pays for transactions in the network's native coins, ensuring their execution. This not only lowers the barrier to entry, but also provides a stable income for developers supporting the technical layer.

## Root smart contracts and primary network

Root smart contracts are the foundation of the Juna ecosystem. They manage the basic mechanisms of the system, such as organizing voting, parameters of the monetary system and interaction with validators. These smart contracts are deployed on the primary network, which is the most trusted and decentralized network in the Juna ecosystem. The Ethereum network was chosen as the main network, where all the main smart contracts associated with the business logic of the project are initially located. A secondary (operational) network is any other blockchain that is not the primary network, but is used to perform transactions and interact with users.

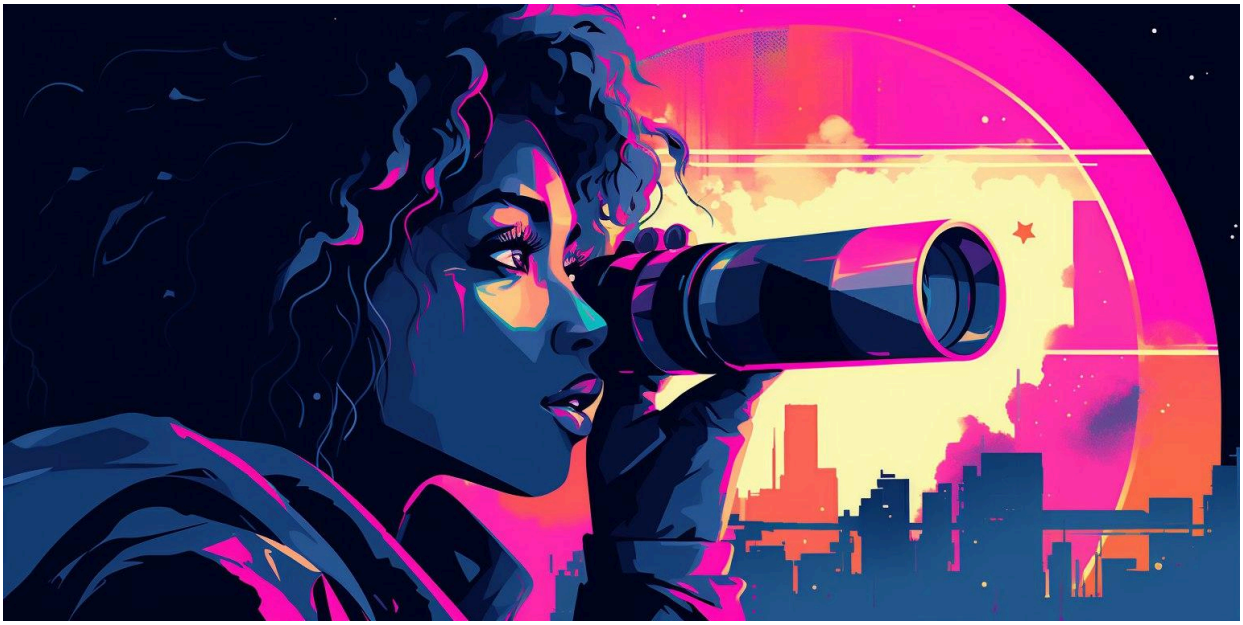
## Conclusion and execution of transactions

All transactions in the Juna ecosystem are concluded and executed using smart contracts. These contracts ensure automatic fulfillment of the conditions established by the parties to the transaction. The system supports various types of transactions, including p2p transactions, transactions with multiple participants and transactions involving arbitrators. Smart contracts also provide legal support through integration with Juna Legal, allowing participants to interact with real legal systems.

## Juna Message Broker

Juna Message Broker is an infrastructure service that allows you to receive and process events from both the Juna Value Chain and connected blockchains via an API. This service ensures that events are routed and delivered to the appropriate participants according to set parameters. Message Broker's work eliminates one of the key disadvantages of blockchains - limited visibility and passivity, making the exchange of information more structured and convenient.

# VII. The Future of the Juna Ecosystem



## Creating value chains with many participants and shared trust

One of the ultimate goals of the ecosystem is the emergence of a distributed production service (Juna ValueChain), which allows, within the same infrastructure: websites and smart contracts, to separate, combine and link into chains entities associated with the production of goods and the provision of services. Existing examples of Value Chain are ERP systems of large industries, for example, automobile factories, within which supply chains of production tools, materials and components of future cars are created, the cost of the car, markup and localization for a specific market are calculated.

Due to its transparency and versatility, Juna allows it to become the foundation and set of basic smart contracts for creating any complex value chain management systems on top of it.

Value Chain will include a designer of complex contracts with flexible business logic, with the ability to join participants through the Juna ecosystem. The result of the Value Chain will be:

- a set of sites with Web3 authorization (using a private and public key instead of logins, emails, passwords, phone numbers and SMS confirmations) and systems for confirming transactions in the physical world (Juna Legal) and a set of smart contracts in various networks that perform a pre-designated redistribution of value in tokens Juna and other cryptocurrencies and tokens.
- API for interacting with smart contracts with payment in JUNA tokens

- Aggregator of individual services in chains according to ERP principles:
- Interface for constructing complex chains of simple economic transactions (smart contracts)
- Interface for trusted application addition and management
- Integration of all services with legal smart contracts and legal gateways
- Interface for executing complex chains and monitoring the status of all participants

## Long term goals

We want the threshold for entry into active economic activity to be lowered to the level of the individual capabilities of each person: someone can participate with their money or means of production, someone with their skills or experience, talents or free time.

The decentralization and transparency of the blockchain create the conditions for the creation of a new economic model “from person to person”, with a highly efficient division of the use of productive, information and natural resources. The main place of its application can be considered the distribution of production, both tangible and intangible, the ability to completely decentralize its organization and sales of finished products. At the same time, it becomes possible to involve a large number of people in active activities who have not even thought about opening their own business or the possibility of participating in joint business activities.

The founders do not set themselves the task of fiat monetizing the Juna token, the ecosystem or the number of participants.

We believe that by creating a platform that provides reliable, stable, predictable and simple interaction between economically interested participants, we will provide an incentive and prospect for a new increase in well-being, quality of life and building a better future for humanity in a difficult time, when instead growing resource, political and social restrictions on development push people into conflict and fragmentation.