STON.fi

Zero-Trust Cross-Chain DEX

Whitepaper

Version 0.6

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Aug 2023

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1. Summary 3
2. Problem statement 3
3. Solution 4
4. Product 5
4.1 Mission 5
4.2 Value proposition 5
4.3 Description 5
4.4 Principles 6
4.5 How it works 7
4.6 Benefits 8
4.7 Business model 8
4.8 Innovation 11
5. Technology 11
5.1 Trustless swaps with Hashed Timelock Contracts (HTLC) 11
5.2 RFQ Based cross-chain DEX 13
5.2.1 Protocol definition 13
5.2.2 Protocol fees 14
5.3 TON AMM DEX 14
5.4 Staking 15
6. Customers 15
6.1 Target customer segments 15
6.1.1 End-users 15
6.1.2 Professional market makers 16
6.1.3 Liquidity providers 17
6.1.4 Developers 18
7. Market 18
7.1 Industry overview 18
7.2 Market trends 19
7.3 Market size & opportunity 19
8. Competition 20
8.1 Competitive analysis 20
8.2 Differentiation 21
9. Regulatory environment 21
10. Milestones & timeline 22
10.1 Current state 22
10.2 Traction 22
10.3 Roadmap 23
11. Marketing strategy 23
11.1 Go-to-market plan 23
11.2 Promotion strategy 25

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12. Challenges and risks 26
13. STON.fi tokenomics 28
13.1 Initial allocation 28
13.1.1 STON token vesting 29
13.1.2 Distribution 30
13.2 Staking 31
13.2.1 ARKENSTON 31
13.2.1.1 Examples 32
13.2.1.2 Efficient calculation of exponent 33
13.2.2 GEMSTON 33
13.3 Protocol Fees 34
13.4 Deflationary model of STON token 35
14. STON.fi DAO 35
14.1 Principles 35
14.2 DAO Governance 36
14.3 Governance process 36
15. Contacts 37
16. Conclusion 37
Appendix A1: RFQ protocol message flowchart 38

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1. Summary

The STON.fi platform revolutionizes the DeFi ecosystem by addressing critical interoperability issues, enhancing security, and reducing transactional risks and costs. Today, transferring assets across different blockchain networks involves significant challenges, including potential financial loss due to reliance on third-party custodians, delays, security issues, and complex user scenarios.

STON.fi is a Request For Quote (RFQ)-based cross-chain exchange that relies on Hashed Timelock Contracts (HTLC) to atomically execute cross-chain swaps. This approach eliminates the need for additional trusted entities and offers a combination of deep liquidity and price stability usually associated with RFQ-based exchanges, alongside uncompromising security typically found in intrachain DEXs. Since the protocol doesn’t make any trust assumptions for the participants, we define it as a Zero-Trust Cross-Chain DEX.

The platform provides a straightforward, secure, and quick solution for swapping native tokens across multiple blockchains without the need for bridging or wrapping. Additionally, STON.fi will be seamlessly integrated into the Telegram messenger, enabling users to manage and trade assets directly within the messaging app.

2. Problem statement

One of the main problems in the DeFi ecosystem is the lack of interoperability between different blockchain networks. This presents a significant challenge for users looking to move their assets between different networks to access new trading and investment opportunities.

The risk of losing assets during the transfer process is another significant challenge. Moving assets between different blockchain networks require users to entrust their funds to third-party custodians or exchanges, which can be vulnerable to security breaches and hacks. This puts traders' funds at risk, potentially leading to significant financial losses.

The process of converting crypto assets can be costly and time-consuming, making it difficult for users. The complexity of user scenarios may lead to accidental permanent loss of funds. The flow may be interrupted by KYC/AML procedures and delayed without any user control.

Currently, traders use for cross-chain swaps various tools having their pros and cons: Centralized Exchanges (CEXs), Bridges, DeFi Aggregators, etc. A product that solves all mentioned problems will be more secure, reliable, and beneficial for all parties. So, it will bring unique value to the Web3 ecosystem.

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3. Solution

STON.fi addresses the cross-chain swaps problem by introducing the Request for Quote (RFQ)-based DeFi protocol with cross-chain swaps implemented via Hashed Timelock Contracts (HTLC). Such a solution results in eliminating the need for second-layer solutions, intermediaries, or third parties. This approach minimizes user risk associated with security breaches and significantly enhances the transaction speed.

In RFQ-based protocols, the traders express their intention to swap a specific amount of an asset for another one by sending a Request for Quote (RFQ) to Professional Market Makers (PMMs). PMMs respond to RFQ with signed Quotes, specifying swap rate and other conditions. The best Quote is selected by the protocol according to predefined criteria and submitted to the trader.

HTLC-protocols (also known as “Atomic swaps”) allow to exchange crypto assets atomically, i.e. either both parties receive the intended amount of assets or the exchange fails entirely. In the event of misbehavior by any of the participants, the transaction is canceled, and all involved parties receive a full refund of their assets.

Both RFQ and HTLC protocols are described in detail in Chapter 5.

The HTLC based solution has the following main advantages:

- No additional trusted entities: service eliminates the need for protocol intermediaries or trusted third parties, ensuring that the participants have full control and ownership of their funds in used networks.

- No accidental permanent loss of funds: at any moment, the user funds are controlled only by the user and are not blocked in any intermediary protocol.

- Guaranteed rates: the protocol offers guaranteed rates for transactions, ensuring transparency and eliminating any surprises or unexpected fees. Users can confidently calculate and predict the costs associated with their transactions in advance.

- Predictable transaction time (no KYC): by removing the need for Know Your Customer (KYC) procedures, such a solution enables fast and predictable transaction times. Additionally, transaction execution time is always predictable due to the HTLC protocol used. Each transaction has a fixed execution time, depending on the specific blockchain network.

- Simple user scenarios: user-friendly interface and streamlined processes make it easy for users to navigate and engage with the platform.

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4. Product

4.1 Mission

Our mission at STON.fi is to make it easy and fair for everyone to access financial services, no matter where they live. We're building a cross-blockchain decentralized platform that provides a reliable and secure way to trade cryptocurrencies without the restrictions of banks or centralized services. By offering a simple, user-friendly solution, we aim to help people around the world, including those living in unbanked and underbanked regions, take control of their financial future.

The first step towards achieving our mission is enabling people to seamlessly swap any crypto asset for any other. We aim to provide a secure, reliable, swift, and cost-effective means of conducting these cross-chain swaps. This capability forms the bedrock of our platform, facilitating the fluid exchange of value across multiple blockchain ecosystems and laying the foundation for a more inclusive financial landscape.

4.2 Value proposition

STON.fi provides a decentralized cross-blockchain platform that allows users to effortlessly trade and gain yield on their crypto assets across multiple blockchains without the need for bridging or wrapping. Using the RFQ-protocol combined with HTLC smart contracts, leveraging the power of the TON blockchain for speed and security, and integrating seamlessly with Telegram messenger, STON.fi offers a user-friendly and accessible solution that empowers individuals to manage their digital assets while maintaining full control.

4.3 Description

STON.fi, the next-generation cross-blockchain trading platform, is designed for the effortless exchange of crypto assets across multiple blockchains without the need for bridging or wrapping. STON.fi is a Request For Quote (RFQ)-based cross-chain exchange that relies on Hashed Timelock Contracts (HTLC) to atomically execute cross-chain swaps. This approach eliminates the need for additional trusted entities and offers a combination of deep liquidity and price stability usually associated with RFQ-based exchanges, alongside uncompromising security typically found in intrachain DEXs.

We refer to this as a zero-trust cross-chain DEX because it operates on the principles of zero-trust architecture and decentralization. It is designed to provide secure and transparent peer-to-peer trading of digital assets without the need for a central authority or intermediary.

On such a DEX, to convert native tokens on one blockchain into native tokens on a different blockchain, the user only needs to connect the necessary crypto wallets and execute the transaction as if they were converting tokens on the same blockchain, without needing to trust

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any third party, or make any assumptions about the trustworthiness of entities within a system. All transactions and operations are verified and validated using cryptographic protocols and algorithms, without relying on a centralized party to oversee or authenticate the transactions.

STON.fi will be seamlessly integrated into Telegram messenger, enabling users to manage and trade assets directly within the messaging app. This integration will also open up possibilities for peer-to-peer transfers of digital assets.

STON.fi also offers earning and yield-gaining options:

1. Provide liquidity and earn a share of protocol fees.
2. List and sell your tokens, create liquidity pools, and earn trading fees.

4.4 Principles

- **Zero-Trust protocol**

No trust assumptions can be made on behalf of participants about the trustworthiness of assets, blockchains and other participants of the protocol.

- **Truly decentralized, DAO-governed**

STON.fi will be operated under a DAO governance model, ensuring major decisions are made by the community and empowering stakeholders to shape the protocol's future development.

- **Catering to inexperienced users**

While catering to both inexperienced and experienced users, we focus on democratizing access to financial services for everyone, everywhere, in line with our mission.

- **Developer-friendly and open-sourced when possible**

We offer SDK and open-source code to enable developers to easily integrate our platform with their products and services?

- **Prioritizing reputable projects**

Though we are decentralized and open to everyone, including those who want to list their own tokens, we prioritize working with reputable projects to minimize financial risks for inexperienced users. DAO will make decisions on selecting specific projects.

- **Ecosystem impact**

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Our approach goes beyond developing our product; we also contribute to the growth of the TON blockchain ecosystem and the broader DeFi landscape. We consider this impact while building our product and devising our market and product strategy.

4.5 How it works

A typical user flow for using STON.fi can be described in the following steps, which are similar to those found on any DEX:

1. **Wallets connection**

The user connects two wallets to access their token balances and authorize transactions. Unlike a typical DEX, which requires connecting only one wallet, STON.fi calls for connecting two wallets to enable cross-chain swaps.

2. **Select trading pair**

The user chooses the trading pair they want to exchange, such as swapping Token A for Token B. These tokens may be on different blockchains.

3. **Enter the desired amount**

The user enters the amount of Token A they want to exchange for Token B, or vice versa. STON.fi's protocol calculates the exchange rate and displays the estimated amount of Token B the user will receive.

4. **Review and confirm transaction**

The user reviews the transaction details, including the exchange rate, any associated fees, and the estimated amount of Token B to be received. If satisfied, the user confirms the transaction using their wallet. Unlike a typical DEX that requires fees to be paid in native tokens (e.g., ETH for swaps on the Ethereum blockchain), STON.fi intends to offer gasless transactions when the fee is deducted from the Token A amount. This eliminates the need to hold a native token in the wallet solely for paying gas. However, this feature will be possible only when the necessary infrastructure, such as wallets, supports it.

5. **Transaction processing**

STON.fi processes the transaction through the routing mechanism.

6. **Transaction confirmation**

Once the transaction is complete, the user receives a confirmation and can view their updated token balances in their connected wallet.

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4.6 Benefits

For end-users:

- Seamless cross-blockchain trading without bridging or wrapping.
- Full control over crypto assets during transactions.
- Integration with Telegram messenger for easy access and user-friendly experience.

For professional market makers:

- Access to diverse markets
- Additional liquidity access
- Arbitrage opportunities without the need to maintain open positions in corresponding assets
- Reduced counterparty risks due to a trustless environment
- Increased trading opportunities profiting from spreads

For liquidity providers:

- Earn a share of exchange fees by providing liquidity.
- Additional yield through staking tokens and earning liquidity mining rewards.

For developers:

- Access to SDK and open-source code for easy integration.
- Leverage STON.fi DEX's cross-blockchain capabilities in their own projects.
- Contribute to the development of a decentralized financial ecosystem.
- Potential for increased adoption and visibility of their projects.
- Opportunity to create liquidity pools for own tokens and earn trading commissions.

4.7 Business model

We are including a snapshot of our business model to demonstrate how STON.fi is integrated within the crypto industry and how we engage with various stakeholders.

Key partners:

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- TON, TRON, Polygon, and other blockchain communities
- Professional market makers
- Liquidity providers (retail and institutional)
- Developers building on TON and other blockchains
- Token issuers
- Crypto-focused investment firms, traditional asset management firms, family offices, and other investment vehicles

Key activities:

- Developing and maintaining the cross-chain trading platform
- Integrating multiple blockchains
- Promoting the platform's trading opportunities and potential for yield growth
- Establishing and maintaining relationships with market makers
- Providing SDKs and open-source code for developers
- Expanding the platform's features (e.g., limit order book, margin trading, gasless swaps)
- Fostering partnerships within the TON community and beyond

Key resources:

- Development team and technical expertise
- IT infrastructure
- Liquidity from providers
- Token and tokenomics
- Community support and network effects

Value propositions:

- Seamless cross-blockchain trading without the need for bridging or wrapping
- Fast, secure, and decentralized platform powered by the TON blockchain
- Integration with Telegram messenger for an enhanced user experience
- Multiple earning and yield-gaining options for market makers and liquidity providers

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- Developer-friendly platform with SDKs and open-source code

Customer relationships:

- Community-driven DAO governance model
- Developer support and collaborations
- Transparent communication with end users, market makers, liquidity providers, and developers

Channels:

- STON.fi platform
- Partners
- Telegram integration
- Developer SDKs and open-source code
- Crypto and blockchain community social media

Customer segments:

- End users: crypto enthusiasts, traders, and individuals including those in unbanked or underbanked regions
- Professional market makers
- Liquidity providers: retail and institutional investors
- Developers: creators of blockchain projects, developers building on TON and other blockchains

Cost structure:

- Development and maintenance of the platform
- IT infrastructure
- Marketing
- Security measures and audits
- Payouts to liquidity providers and stakers

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Revenue streams:

- Trading fees generated by the platform

4.8 Innovation

The innovative and distinguishing aspect of STON.fi is addressing the cross-chain swaps problem by implementing the Request For Quote (RFQ) DeFi protocol combined with Hashed Timelock Contracts (HTLC). Such a solution allows the implementation of direct cross-chain swaps and eliminates the need for intermediaries or third parties. This approach minimizes user risk associated with security breaches and significantly enhances the transaction speed.

5. Technology

In this chapter, we explore the technologies, the existence of which make it possible to develop trustless RFQ Based cross-chain DEX.

Section 5.1 reveals trustless swaps using Hashed Timelock Contracts (HTLC). HTLCs provide a robust and secure mechanism for executing cross-chain swaps without relying on intermediaries, offering users the ability to trade directly across different blockchain networks.

In Section 5.2, we introduce the RFQ (Request for Quote) based cross-chain DEX, which presents a novel approach to achieving asset transfers between blockchains. This section provides an overview of the protocol, outlining its key features of enabling cross-chain transactions without slippage.

Section 5.3 describes TON AMM DEX used for market making of **STON** token and as an additional source of liquidity in the TON blockchain.

Section 5.4 explores the concept of staking as a mechanism for incentivizing active participation in protocol governance.

5.1 Trustless swaps with Hashed Timelock Contracts (HTLC)

As mentioned before, STON.fi protocol uses HTLC,also known as Atomic Swaps.

HTLC exhibits two fundamental properties that ensure a secure and reliable exchange of assets:

- Atomicity: if all parties involved in the swap abide by the protocol, the transaction occurs seamlessly. That is, either both parties receive the intended assets, or the exchange fails.

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- Refundability: in the event of any misbehavior by any of the participants, the transaction is canceled, and all parties involved receive a full refund of their assets.

These properties provide a reliable guarantee to users that their assets will remain safe throughout the exchange. It is worth noting that most blockchains rely on digital signatures to track the ownership of the coins. Thus, the proposed protocols for atomic swaps make use of smart contract capabilities.

Let's define $HTLC_c(X, A, B, H, T)$ - Hashed Timelock Contract on Blockchain C that controls deposit X and has following capabilities:

- Hash lock: if the secret pre-image S is exposed, so that $H = Hash(S)$, the deposit locked in the contract is transferred to address B.
- Time lock: if the secret is not exposed before timeout T passed, the deposit can be refunded to address A.

With these properties, the swap is considered trustless, in the sense that the participants don't need to trust their funds to any additional intermediary other than the blockchains on which they have assets.

Let's review in more detail how it works:

Consider Alice, a user of blockchain C who desires to exchange X tokens with Bob, a user of blockchain D, for Y tokens. We assume that a common cryptographic hash function Hash, is available on both blockchains. Alice controls wallet A_c on blockchain C and wallet A_d on blockchain D. Similarly, Bob controls wallets B_c and B_d on respective blockchains. Furthermore, Alice and Bob must agree on the timelocks T_1 and T_2, so that $T_1 < T_2$., which are functions of the blockchains involved, block times, and confirmation times. For the sake of brevity and clarity, we omit the signing of transactions in the description.

Setup:

1. Alice generates a secret pre-image S and calculates $H=Hash(S)$.
2. She deploys the contract $HTLC_c(X, A_c, B_c, H, T_2)$, funds it with deposit X and sends the address of the deployed contract to Bob.
3. Bob reads the contract's properties and verifies that $HTLC_c$ is properly constructed.
4. If it is valid, then Bob generates $HTLC_d(Y, B_d, A_d, H, T_1)$ on blockchain D with the same hash lock h but with the time lock T_1, funds it with deposit Y, and sends its address to Alice.
5. Alice verifies that the $HTLC_d$ is properly constructed.

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6. If it's valid, Alice supplies the secret s to the contract $HTLC_d$ and receives the deposit Y.

7. Bob monitors the blockchain D and once he sees the exposed secret S, he supplies it to $HTLC_c$ and receives deposit X.

Refunds:

- If Bob on Step 3 decides that $HTLC_c$ is invalid, he doesn't deploy the contract and Alice gets the refund of deposit X after T_2 passes.
- If Alice on Step 5 decides that $HTLC_d$ is invalid, she doesn't expose the secret S. In that case Bob gets the refund after T_1 passes, and Alice gets the refund after T_2 passes.

5.2 RFQ Based cross-chain DEX

To enable the implementation of decentralized exchanges based on the Request for Quote (RFQ), three key actors are involved:

- Traders
- Professional Market Makers (PMMs)
- The Protocol

5.2.1 Protocol definition

Let's define the process of a trade. The Trader wants to sell the amount x of asset X on the source blockchain C and get asset Y in the target blockchain D in return. The Trader has preconfigured crypto wallets A_c and A_d on these blockchains.

The trading process involves the following steps:

1. The trader initiates the trade request through the user interface (UI). This request is sent to the Protocol in the form of RFQ and contains information about blockchains, assets and wallet addresses.

2. The Protocol forwards the RFQ to the PMMs together with expiration timeouts T_1, T_2 and other blockchain-specific protocol settings.

3. The PMM receives the RFQ and either replies with the Quote or passes on the request. The Quote contains the amount y of asset Y they are willing to offer in return for the asset X, alongside with the addresses of wallets B_c and B_d operated by the PMM.

4. The protocol selects the best Quote based on the amount y of asset Y and other configurable conditions and communicates the Quote to the Trader together with expiration timeouts T_1, T_2.

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5. If the Trader accepts the quote, they generate secret pre-image S and calculate $H = SHA256(S)$. After that, they create a transaction that deposits amount x of asset X into the $HTLC_c(x, A_c, B_c, H, T_2)$.

6. The Protocol monitors the blockchain C, and once it sees the transaction initializing $HTLC_c$, it sends the deposit notification to the PMM.

7. The PMM creates a transaction that deposits the amount y of asset Y into the $HTLC_d(y, B_d, A_d, H, T_1)$.

8. The Protocol monitors the blockchain D, and once it sees the transaction initializing $HTLC_d$, it sends the deposit notification to the Trader.

9. The Trader generates a transaction on blockchain D that exposes the secret pre-image S and claims the deposit y.

10. The Protocol notifies the PMM that the secret S has been exposed.

11. The PMM generates a transaction on blockchain C that exposes the secret pre-image S and claims the deposit x.

The message flowchart for trade is presented in Appendix A1.

5.2.2 Protocol fees

The protocol fees for the trades are deducted from Trader's deposit and collected on HTLC contracts on source blockchain. The PMMs receive fee settings for specific trade together with RFQ and calculate quotes taking fees into account.

The blockchain fees are paid by the participant that generates the corresponding transaction.

5.3 TON AMM DEX

We have implemented AMM DEX mechanics on the blockchain TON to provide an opportunity to trade tokens, the liquidity of which cannot be provided by PMMs, and to implement **STON** token liquidity pool and staking.

In AMM DEX, users provide liquidity to the platform by depositing cryptocurrencies into liquidity pools, which are then used to facilitate trades between tokens.

The price of tokens is determined by the ratio of tokens in the pool, rather than by order books or bid/ask spreads. This allows for peer-to-peer trading of cryptocurrencies without the need for a central authority or order book.

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The STON.fi AMM DEX protocol is a set of main smart contracts on the TON blockchain. Read more about AMM architecture on our documentation portal.

5.4 Staking

Staking is a mechanism that enables users to actively participate in protocol governance (DAO) and contribute to the overall functioning of the protocol.

Protocol governance refers to the decision-making process involved in managing the protocol through governance tokens. These governance tokens are distributed among staking participants, providing them with the power to make decisions and proposals.

Participants gain the opportunity to engage in protocol governance while earning rewards in the form of additional tokens.

To stake tokens and participate in protocol governance, users lock up their tokens by depositing them into a smart contract. This smart contract acts as an automated system that ensures the integrity of the staking program.

The smart contract determines the distribution of rewards among participants and the time step over which these rewards will be disbursed. Rewards are distributed depending on the total tokens staked by each participant and also consider the duration of the staking period.

When tokens are staked, the staking contract mints governance tokens and sends them to the user.

At the end of the staking period, smart contract allows the user to unstake tokens. Upon unstaking the governance tokens becomes inactive.

6. Customers

6.1 Target customer segments

6.1.1 End-users

- **General description:**

Individuals who are interested in managing and trading their crypto assets across multiple blockchains in a decentralized, secure, and user-friendly environment. These users may have varying levels of experience with cryptocurrencies, from beginners to experts.

- **Location:**

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Worldwide, including those living in unbanked or underbanked regions, where access to traditional banking systems is limited or unavailable, driving the need for alternative financial solutions like cryptocurrencies.

- **Use cases:**
    - Trading cryptocurrencies.
    - Sending money to peers in the form of cryptocurrencies or directly within a messenger app.
- **Needs and goals:**
    - Explore and obtain additional sources of income, such as holding, trading, and arbitraging cryptocurrencies.
    - Feel connected and be part of technological innovations, including those that democratize access to the financial system.
- **Behavioral patterns:**
    - The target users predominantly rely on mobile devices rather than desktop computers or laptops, which influences their behavior patterns and preferences. They extensively use messaging apps.

6.1.2 Professional market makers

- **General description:**

Professional traders, investment firms, or financial institutions standing ready to buy or sell assets at quoted prices.

- **Needs and goals:**
    - Access broad markets to diversify their operations and manage risks.
    - Find profit opportunities from the spread between buying and selling prices of assets.
    - Develop reliable trading infrastructure to execute trades quickly and manage their positions effectively.
    - Access additional liquidity for better arbitrage opportunities.
    - Lower counterparty risks to enhance their operational security.

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6.1.3 Liquidity providers

General description:

Both retail and institutional participants who seek to earn additional profits on their crypto assets beyond holding and capitalizing on their price growth. These are individuals and businesses focused on expanding their presence within the decentralized finance (DeFi) space.

Retail liquidity providers:

- Largely similar to the end-user profile, but typically possessing higher amounts of crypto assets.
- Individuals with varying levels of experience in cryptocurrencies, interested in exploring additional income sources by providing liquidity to the platform.
- Willing to diversify their crypto holdings and engage in multiple blockchain ecosystems.
- Appreciate the user-friendly experience and seamless integration with Telegram messenger, which caters to their mobile-first behavior patterns.
- Motivated by earning opportunities such as getting a share of exchange fees and liquidity mining rewards.

Institutional liquidity providers:

- **Dedicated liquidity providers:**
    - Businesses specializing in providing liquidity to various platforms, aiming to earn yield on their assets.
    - Focused on identifying and participating in platforms with high growth potential to maximize returns.
- **Crypto-focused investment firms:**
    - Interested in diversifying their asset portfolios across multiple blockchain ecosystems.
    - Seeking additional drivers for growing their assets by providing liquidity.
    - Keen on forming partnerships within the growing TON community.
- **Traditional asset management firms, family offices, and other investment firms:**
    - Managing substantial portfolios and interested in diversifying their investments into the crypto industry.

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6.1.4 Developers

They primarily focus on building their own projects on TON and other blockchains. Developers require funding to support their projects' growth and development, and actively explore additional or alternative sources of funding beyond traditional methods like venture capital. Thus, they are interested in creating and launching their own tokens as a means of raising funds for their projects.

7. Market

7.1 Industry overview

Decentralized finance (DeFi) has become increasingly popular in recent years. According to the DeFiLlama aggregator, as of May 1, 2023, the TVL volume amounts to $49.88 billion, which is almost 100 times higher than three years ago. This growth is a clear indication of the increasing demand for DeFi services.

The range of financial instruments available in DeFi is expanding every year, and in 2023 it includes not only decentralized exchanges but also lending protocols, bridges, CDPs (collateralized debt protocols), liquid staking protocols, insurance, liquidity aggregators, launchpads, NFT marketplaces, derivative protocols, and decentralized storage. This variety of protocols is a reflection of the crypto community's interest in decentralized services that work in a trustless format.

As a result of this demand, the DeFi market is constantly evolving. New protocols are being developed and existing ones are being improved to meet the expectations of users. For example, there is now a growing interest in decentralized cross-chain exchanges. While THORSwap was the pioneer in this area, it created its own blockchain to implement swaps between blockchains. Interswap, on the other hand, is developing its solution based on Layer Zero, an omnichain interoperability protocol for the cross-chain applications. STON.fi is also developing cross-chain exchange functionality based on its own infrastructure on TON blockchain.

However, it should be noted that the cross-chain exchange segment in DeFi still has a huge growth potential with a number of protocols remaining small. Currently, multiple companies are working on cross-chain functionality, including Circle and Hashflow. This is a clear indication of the growing demand for decentralized cross-chain solutions. It is likely that we will see more projects in this area in the near future.

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7.2 Market trends

After the FTX crash in 2022, a significant number of crypto traders started looking for decentralized solutions to trade with. This was seen as a natural response considering the high level of trust and transparency offered by decentralized exchanges. In addition, many users were concerned of the risks of hacks and loss of funds on centralized exchanges. As a result, DEX trading gained significant momentum, and trading volumes on decentralized platforms began to show stable growth.

Despite the initial skepticism, decentralized exchanges are becoming closer to centralized ones in terms of functionality and user experience (UX). More and more DEX platforms are offering features usually found in CEXes, such as limit orders, margin, and futures trading.

- There is also an increasing level of regulation of cryptocurrencies by regulatory bodies such as the SEC and CFTC, especially centralized exchanges and stablecoins. This is pushing users towards DeFi, as it offers more flexibility and freedom in trading, borrowing, and lending. DeFi is also gaining popularity as it is seen as a more secure and transparent way to transact value without intermediaries.

The following trends can also be noted in DeFi:

- Emergence of Cross-Chain DeFi: DeFi protocols are increasingly exploring cross-chain solutions that allow users to move their assets between different blockchain networks. This is important because it increases liquidity and reduces the risk of being locked into a single blockchain.
- Growth of NFTs: Non-fungible tokens (NFTs) have exploded in popularity in recent years, and this trend is expected to continue. DeFi protocols are increasingly integrating NFTs into their platforms, allowing users to use them as collateral, earn interest on them, and more.
- Increasing Focus on Security: As DeFi continues to grow, security has become an increasingly important concern. DeFi projects are investing heavily in security measures such as audits, bug bounties, and insurance to protect users' funds from hacks and exploits.

7.3 Market size & opportunity

We define TAM (Total Addressable Market) as the total fees earned by all types of crypto exchanges because it is the main source of revenue for trading platforms.

The daily average trading volume on crypto markets according to Coinmarketcap is around $45 billion, the yearly amount is approximately $16.5 trillion. The average commission is 0.3% (The average fee, cents to a few dollars.). Therefore, the TAM can be estimated as $49.5 billion.

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We define SAM (Serviceable Available Market) as the total fees earned by cross-chain protocols.

Annual volume of cross-chain operations is estimated at $1-4 trillion. The average market fee in this case is 1%. With this calculation, the SAM amounts to $10-40 billion. By 2027, according to forecasts, the volume of the cross-chain transactions market will reach $4-12 trillion, which corresponds to a SAM of $40-120 billion.

8. Competition

8.1 Competitive analysis

In considering the competitive landscape for our product, it's essential to view competition in a broad sense. Users have various options to perform cross-chain token swaps, both centralized platforms and decentralized. Here is a list of alternative solutions that users might consider when looking to exchange tokens between different blockchains:

- **Centralized exchanges (CEXs)**

Users can trade tokens on centralized platforms like Binance, Coinbase, Kraken, and others. Although these platforms support various blockchains, users need to trust the centralized entity with their funds and personal information.

- **Bridges and wrapped tokens**

Users can convert native tokens into wrapped tokens on another blockchain. This requires trusting a custodian to hold the original tokens and using bridge services to facilitate the swap

- **Cross-chain DEXs**

Platforms like THORSwap, Hashflow, or Symbiosis have their own unique features and ecosystems, offering users a variety of options for their cross-chain trading needs. The primary drawback of these protocols is the introduction of trusted entities, like oracles for cross-chain messaging. These trusted entities are the main vector of attacks on these protocols making them vulnerable to hacks.

- **DeFi Aggregators**

Projects like OpenOcean allow to perform cross-chain swaps using third-party DeFi protocols, inheriting trust assumptions of underlying protocols. While allowing the user to choose an optimal swap route in terms of price, they usually don’t provide the user with a clear estimation of security risks and price slippage risks.

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- **Multi-chain wallets**

Wallets like Exodus or Atomic Wallet support multiple blockchains and offer built-in exchange features. Users can easily swap tokens between different networks, but they may not always get the best exchange rates or the lowest fees.

8.2 Differentiation

Differentiation from substituting solutions:

Category	How STON.fi is different
Centralized exchanges (CEXs)	• Atomic transactions • Trustless • Guaranteed rates
Bridges	• No long-term exposure of bridged assets to security risks • Trustless • Wide range of assets
Cross-chain DEXs	• Trustless • Wide range of assets
DeFi Aggregators	• Trustless • No price slippage
Multi-chain wallets	• Trustless • Lower fees

Table 1. STON.fi differentiation

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9. Regulatory environment

Neither the company nor the owners can access the user's assets. The token swap protocols of STON.fi are ownerless and non-custodial. Therefore, AML and KYC regulations do not apply.

Behind the STON.fi protocols, there's a Decentralized Autonomous Organisation (DAO), the members of which vote for the protocol's strategy (the principles of its work, fee rates, etc.) and manage the Treasury (e.g., issue grants) in a decentralized way.

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10. Milestones & timeline

10.1 Current state

At the current state, STON.fi is an AMM DEX built on the TON blockchain.

In creating the DEX we achieved the following main features:

- Made it possible to directly swap Toncoin for any token on the TON blockchain.
- Liquidity providing.
- Integrated all the most popular wallets from the TON ecosystem.
- Created a Software Development Kit (SDK) that enables any project or product to easily integrate DEX functionality into their application.
- Started a bug bounty program.
- Published the source code of DEX core smart contracts.
- Launched **STON** token.

Our current focus is on developing the cross-chain RFQ-based DEX.

Cross-chain technology will enable our protocol to provide seamless cross-network operations between the TON and TRON networks initially, allowing for the transfer of assets and data between the two networks.

We aim to create a seamless and interconnected decentralized finance landscape that will be governed by our **STON** token.

10.2 Traction

Since STON.fi launched in November 2022, we have made significant progress in various fields:

- Made a lot of partnerships and integrations with other projects from the TON ecosystem.
- Built a large and active community around our product. Over 80,000 community members actively participate in discussions, provide feedback, and support the growth of our protocol.
- Started an incentives program. About 40,000 people participated through our Telegram bot in our activities.

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10.3 Roadmap

Q2 2023

- **STON token launch**.
- **Integrated swaps in wallet**. Swaps with STON.fi available in the major wallet in TON ecosystem.

Q3 2023

- **Cross-chain swap TON <-> TRC20 USDT.** Swaps between TON and TRON USDT will be available on DEX without bridges and wrapped tokens.

Q4 2023

- **EVM chains: Ethereum, BNB, Polygon, etc.** Integrate more networks in the cross-chain protocol.
- **DAO launch.** Launch DAO governance platform.
- **Referral system.** Launch a referral program for user acquisition.

2024

- **Telegram Web Application.** Develop a native bot in Telegram with user-friendly UI to provide all Telegram users with the full cross-chain utility of a STON.fi DEX.

11. Marketing strategy

11.1 Go-to-market plan

STON.fi is currently operating as a TON-based DEX, allowing users to trade TON-based assets and add them to liquidity pools. Our upcoming plans include introducing TON-TRON cross-chain swaps, which will expand our reach to additional customer segments interested in exchanging TON and TRON-based assets. Following this, we aim to further extend our platform by integrating other blockchains.

2023 go-to-market plan overview: focusing on the TRON blockchain

1. Market and customer research

- Conduct further thorough research on the TON and TRON blockchain ecosystems and their respective user bases.

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- Identify target customer segments, such as end users, liquidity providers, and developers, as well as their specific needs, preferences, and potential use cases focused on TON-TRON cross-chain swaps.

2. Product development and testing

- Continue to develop the product, focusing on seamless integration of TON-TRON cross-chain swaps.
- Conduct extensive testing of the cross-chain swaps feature to ensure security, reliability, and user-friendliness.
- Develop and introduce a cross-chain SDK for developers.

3. Marketing

- Develop and implement a comprehensive marketing strategy and a promotion plan targeting TON and TRON blockchain users.
- Leverage social media, content marketing, and public relations to build awareness and generate buzz around the upcoming cross-chain swap feature.
- Collaborate with influencers and thought leaders in the TON and TRON ecosystems to promote the STON.fi DEX.

4. Partnerships and integrations

- Continue to establish strategic partnerships with key players in the TON and TRON ecosystems, such as token issuers, infrastructure and applications developers, wallet providers, and other DeFi projects.
- Work closely with developers to support the integration of the STON.fi DEX into their projects, leveraging the SDK and open-source code.

5. Launch and onboarding

- Roll out the TON-TRON cross-chain swaps feature and provide support materials to educate users on its benefits and usage.
- Offer incentives, such as limited-time promotions or rewards, to encourage users to try the cross-chain swaps feature and provide liquidity.

6. Post-launch support and improvement

- Collect feedback from users and monitor the performance of the new cross-chain swaps feature to identify areas for improvement.
- Provide customer support to address any issues or concerns that users may have.
- Continue to develop the platform's features and improve user experience based on user feedback and market trends.

7. Community building and transition to DAO governance

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- Continue to develop an engaged community around the STON.fi platform.
- Launch DAO and encourage users and community to participate in decision-making processes through the DAO governance model.
- Organize offline and online events to educate users on the platform's features and empower them to contribute to its future development.

8. Ongoing marketing and growth initiatives

- Continue to promote STON.fi through various channels, targeting new customer segments and expanding its reach within the DeFi space.
- Monitor the competitive landscape and adapt marketing strategies to maintain and grow the platform's user base and market share.

9. Expansion to additional blockchains

- After successfully implementing and introducing to the market the TON-TRON cross-chain swaps, begin working on integrating additional blockchains, such as Polygon and other EVM-compatible networks.
- Promote the expanded cross-chain trading capabilities to attract users and liquidity providers from these new ecosystems.

11.2 Promotion strategy

The promotion strategy includes now and will include in the future the following key elements:

- **Content marketing**

Create informative and engaging content to educate users about DeFi, DEXs, and the benefits of using STON.fi's cross-blockchain trading solution, as well as content targeting specific segments like end-users, liquidity providers, and developers. This includes blog posts, articles, interactive long reads, and tutorials.

- **Social media marketing and community management**

Leverage social media platforms like Telegram, Twitter, Reddit, and Discord to engage with the community, share updates, and provide customer support. Participate in discussions and answer questions to establish STON.fi as a thought leader in the industry.

- **Influencer marketing**

Partner with prominent crypto influencers to review and endorse STON.fi, increasing brand visibility and credibility among the target audience.

- **PR and media outreach**

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Share important product updates with prominent crypto media outlets to gain coverage and reach a broader audience.

- **Event sponsorship and participation**

Attend and sponsor industry offline and online events, conferences, webinars, and hackathons to engage with the community and demonstrate STON.fi's expertise in the field.

- **Strategic partnerships**

Form partnerships with reputable projects within the TON and other blockchain ecosystems to further drive adoption and integrate STON.fi into their platforms.

- **Referral and incentive programs**

Implement referral programs and incentives for users who bring new participants to the platform, creating a network effect and promoting organic growth.

- **Search engine optimization**

Optimize the STON.fi website for search engine visibility to reach potential users actively searching for blockchain trading solutions.

- **Search engine marketing and targeted advertising**

Research and, when possible due to regulation, run targeted paid advertising campaigns.

12. Challenges and risks

- **Regulatory challenges**

As a decentralized financial product, STON.fi may face regulatory restrictions in different jurisdictions.

- **Competition**

The DeFi and DEX space is highly competitive, with many established and emerging players.

- **Security risks**

As with any financial product, especially in the crypto space, there are potential security risks, such as hacks or exploits.

- **User adoption**

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It may be a challenge to convince users to try and adopt STON.fi, especially those who are new to the DeFi space or already using other platforms.

- **Technical challenges**

Implementing cross-chain functionality and integration with different blockchains, such as TRON, Polygon, and others, can be technically challenging, and any issues or delays could impact user experience and adoption.

- **Market volatility**

The cryptocurrency market volatility can create uncertainty for users and affect the value of assets traded on the platform.

- **Governance risks**

As a DAO-governed platform, decision-making and platform development could be slower or less efficient than a centralized model, and there is a risk of disagreements within the community affecting the platform's growth and direction.

How we are going to address these challenges and risks:

Challenges and risks	**Ways to mitigate**
Regulatory challenges	**Regulatory compliance** Stay informed about regulatory changes and work closely with legal experts to ensure compliance in different jurisdictions.
Competition	**Competitive differentiation** Continuously improve the platform's features, user experience, and cross-chain capabilities to stay ahead of the competition. Focus on unique selling points, such as seamless integration with Telegram and an emphasis on serving unbanked and underbanked users.
Security risks	**Robust security measures** Implement and maintain strict security measures to protect users' assets. Regularly conduct external audits and penetration tests.
User adoption	**Marketing and education efforts** Develop targeted marketing campaigns to attract new users and raise awareness of STON.fi's features and benefits. Provide educational resources to help users understand the platform and the advantages it offers over competitors.
Technical challenges	**Technical expertise** Continue building a strong technical team to address the challenges of implementing cross-chain functionality and integrating with various blockchains. Continuously improve the platform's performance and scalability to ensure a seamless user experience.

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Challenges and risks	Ways to mitigate
Market volatility	**Risk management** Develop strategies to mitigate the impact of market volatility on the platform and its users. Offer educational resources to help users understand and manage the risks associated with trading cryptocurrencies.
Governance risks	**Efficient governance** Establish clear governance processes and mechanisms to ensure efficient decision-making within the DAO. Encourage active participation from the community. Address potential disagreements by promoting open communication and transparency in decision-making processes.

Table 2. Challenges and risks

13. STON.fi tokenomics

The protocol introduces the utility token **STON** on TON Blockchain integrated into the core mechanics of the protocol. **STON** token also allows its holders to participate in the protocol governance and vote through long-term staking.

The **STON** token has a deflationary model, so token supply is limited to initial minting and **STON** minter smart contract guarantees that minting of additional tokens in the future is prohibited. The **STON** tokens will be burned over time, reducing total supply. The additional utility of **STON** token, such as fees reduction for token holders is determined via DAO governance process. More details on token redistribution over time can be found in Section 13.3.

13.1 Initial allocation

The initial supply of **STON** is 100M tokens. It is distributed among all key areas with a main focus on providing tokens to the community via DAO:

- **DAO Allocation**: 50% of **STON** tokens. Includes DAO-governed treasury, incentives program, marketing activities, and operations.
- **Team & Advisors**: 19% of **STON** tokens. Distributed to founders, team, and advisors.
- **Investors**: 31% of **STON** tokens. Distributed to pre-seed investors and private round investors.

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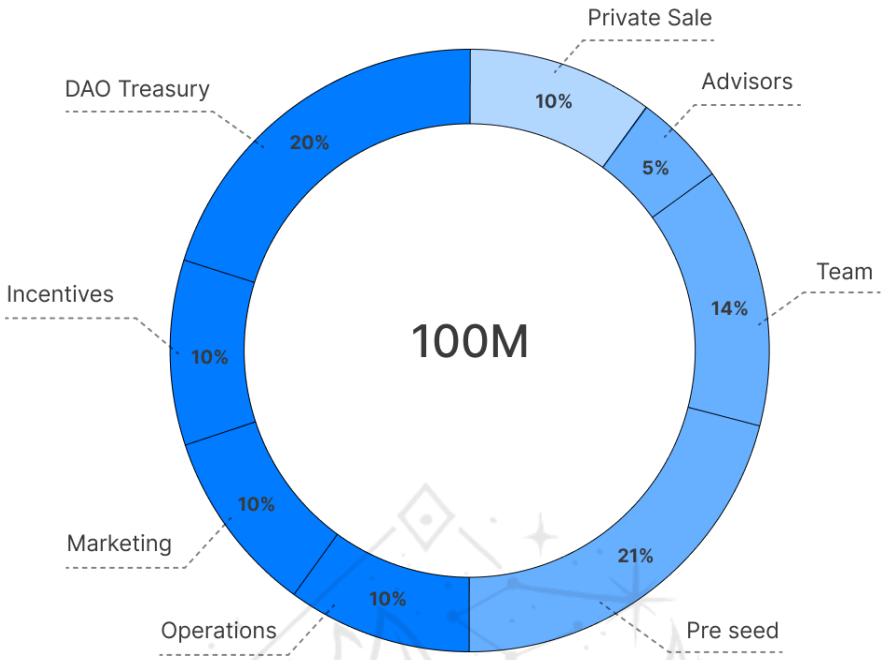


Figure 1. **STON** token distribution chart

13.1.1 STON token vesting

A lock-up is a period of time, when an individual receiving the tokens is not allowed to sell or transfer them. At the end of the lock-up period, the share of tokens specified in the “Initial unlock” column is immediately vested. The remaining tokens are linearly unlocked over the vesting period that starts immediately after the lock-up period.

Category	Tokens	Percent	Lock-up	Initial unlock	Vesting
DAO Treasury	20,000,000	20%	0	100%	staked
Incentives	10,000,000	10%	0	0	60
Marketing	10,000,000	10%	0	20%	36
Operations	10,000,000	10%	0	40%	60
Pre-seed	21,000,000	21%	12	0	24
Team	14,000,000	14%	24	0	24
Private Sale	10,000,000	10%	12	0	24
Advisors	5,000,000	5%	12	0	24

Table 3. **STON** vesting

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The emission chart of **STON** token:

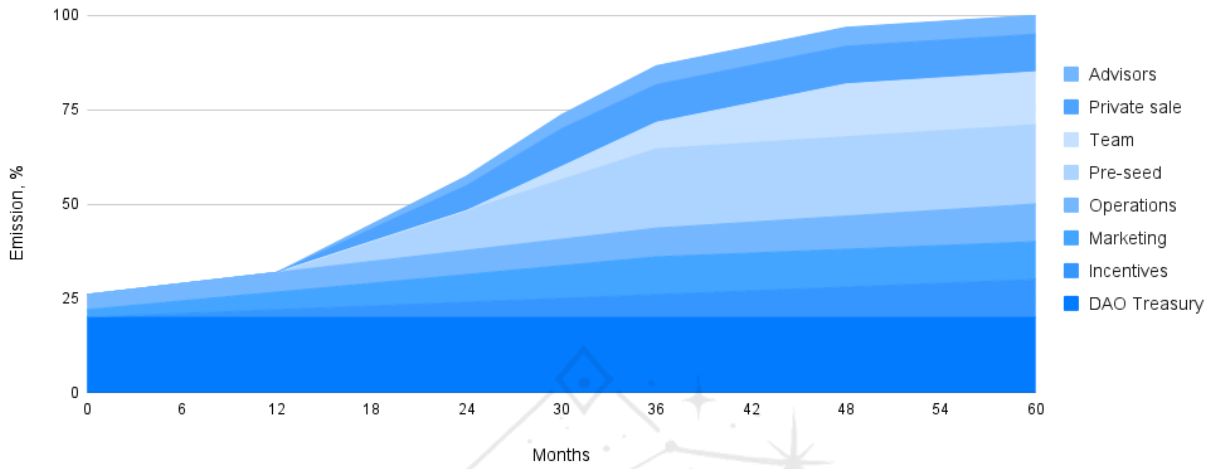


Figure 2. **STON** emission chart

13.1.2 Distribution

- DAO Treasury — **20M** tokens, staked. This is the share provided to cover the initiatives to modernize the protocol. The share is staked for a period of 24 months, after which it can be partially unstaked and used at DAO discretion.
- Incentives — **10M** tokens, linear vesting over 5 years. DAO-controlled token pool that can be used to boost protocol usage. Might include referral incentives, liquidity mining, fee compensation and other mechanics at DAO discretion.
- Marketing — **10M** tokens, **2M** tokens immediately available, 8M tokens are vested over 3 years. Token reserve for marketing activities operated by DAO. Includes airdrops, marketing campaigns, etc.
- Operations — **10M** tokens, **4M** tokens immediately available, 6M tokens are vested over 5 years. Funding of operational activities for protocol development and maintenance. Includes liquidity provision to CEXs and DEXs.
- Pre seed — **21M** tokens, 12-months lock-up and linear vesting over 2 years. The share of STON.fi pre-seed investors.
- Team — **14M** tokens, 2-year lock-up and linear vesting over 3 years. The share of STON.fi founders, employees and future employees.
- Private sale — **10M** tokens, 1-year lock-up and linear vesting over 2 years. The share of STON.fi private round investors.

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- Advisors — **5M** tokens, 1-year lock-up and linear vesting over 2 years. The share of STON.fi current and future advisors.

13.2 Staking

In addition to the primary **STON** token, the protocol introduces two special tokens:

- **ARKENSTON**: Soul-bound non-fungible governance token.
- **GEMSTON**: Treadable fungible engagement token.

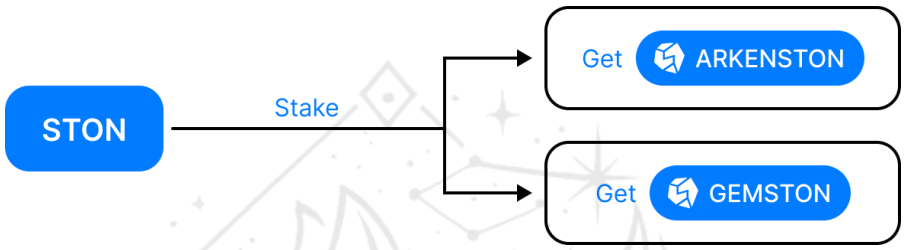


Figure 3. **STON** token staking

When staking **STON** tokens, they are locked for a period from 3 up to 24 months. Upon staking, the **ARKENSTON** soul-bound NFT that allows to participate in DAO is minted on staker's wallet. The staking reward in the form of **GEMSTON** tokens is also minted and immediately funded to staker's wallet.

The voting power granted by **ARKENSTON** and the amount of **GEMSTON** tokens depend on the amount of STON staked and the duration of lock-up period.

The staking contract allows to restake already staked **STON** to prolong staking period. The voting power of **ARKENSTON** will be updated to match the new lock-up period. The user will also receive **GEMSTON** for the extension of staking period.

13.2.1 ARKENSTON

ARKENSTON is a governance token that grants its holder the right to participate in the decision-making process of the STON.fi protocol.

The **ARKENSTON** tokens are funded to staker's wallet in the form of soul-bound NFT on TON Blockchain, so these tokens can't be transferred to another wallet. The **ARKENSTON** tokens represent voting power and allow token holders to propose, discuss, and vote on changes to the protocol's parameters, such as fee structures, new features, upgrades, or changes to the underlying smart contracts. By holding governance tokens, users can actively shape the direction and governance of the protocol.

The voting power of **ARKENSTON** is calculated according to the following equation:

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$$Voting\ Power\ =\ X\ *\ b^{(T_c - T_0 + t)}$$

where X is the amount of staked **STON**, t is lock-up duration in seconds, T_c is the current timestamp in seconds, T_0 is the origin timestamp in seconds, b is exponent base ($b > 1$) and $Voting\ Power$ is the amount of funded **ARKENSTON**. In the user's interface, the voting power is expressed as the share of total voting power.

The above mechanic allows users who stake at later dates to receive more voting power thus relative voting power of older stakes effectively decays exponentially as new stakes are introduced in the system.

In the context of a DAO, exponential decay refers to a mechanism that gradually reduces the influence or voting power of individual participants over time.

Exponential decay is introduced to ensure that the decision-making process remains dynamic and responsive to changing circumstances, while also preventing abuse of the decision-making system by ensuring that the voters participating in DAO have long-term exposure to the value of STON token.

The staking contract allows to incentivize holders of **ARKENSTON** tokens in an arbitrary token proportionally to the voting power of **ARKENSTON**. These mechanics might be enabled in the future at STON.fi DAO discretion.

The exponent base b is calculated such that the voting power of a stake decreases 4 times each year and can be found by solving the following equation.

$$ln(b)\ =\ ln(4)\ /\ (3600\ *\ 24\ *\ 365\ +\ 6\ *\ 3600)$$

The exponent base b is equal to:

$$b \sim 1.000000043929018416$$

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13.2.1.1 Examples

Let's consider $T_0 = 0$ and 3 users staking 100 **STON** at different T_c for different t (month is equal to 2629800 seconds in this example):

- User1 stakes at $T_c = 0$ for $t = 24\ months$ and receives 1576 voting power
- User2 stakes at $T_c = 12\ months$ for $t = 12\ months$ and receives 1576 voting power
- User3 stakes at $T_c = 24\ months$ for $t = 5\ months$ and receives 2803 voting power

As we can see, users with the later stake date receive exponentially more voting power thus decreasing the relative voting power of previous stakes.

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13.2.1.2 Efficient calculation of exponent

The exponentiation algorithm operates on binary-represented integer numbers and thus uses 2^k - ary exponentiation algorithm is implemented according to the following formula:

$$b^x = \prod_{i=0}^{30} \left(sgn\left(\sum_{n=0}^{\left[log_2(x)\right]} 2^n \left(\left[\frac{x}{2^n} \right] mod2 \right) \left(\left[\frac{2^i}{2^n} \right] mod2 \right) \right) * b(i) \right),$$

$$b(i) = \left(\frac{b(i-1) * b(i-1)}{10^{18}} \right)$$

The value of the $b(0)$ is calculated from b by multiplying it by 10^{18} and turning it into an integer.

$$b(0) = b * 10^{18} = 1000000043929018416$$

Due to the finite size of the array of exponentiation the described above function will work correctly for values of exponent less than 68 years.

13.2.2 GEMSTON

GEMSTON is an engagement token used to incentivize active participation in the STON.fi protocol.

The **GEMSTON** tokens are funded to staker's wallet in the form of fungible tokens on TON Blockchain and can be freely transferred, traded, or held at staker's discretion.

The number of **GEMSTON** that are rewarded is calculated according to the following equation:

$$Y = X * min(t, T) / T$$

where X is the amount of staked **STON**, t is lock-up duration in seconds, T is number of seconds in the 2-year period and Y is the amount of funded **GEMSTON**. So, the longer the lock-up period, the more rewards and voting power are provided:

Lock period	**GEMSTON** per **STON**
3 months	0.125
6 months	0.25
12 months	0.5
24 months	1

Table 4. **STON** token rewards amount depending on lockup duration

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The supply of **GEMSTON** tokens is theoretically unlimited and STON.fi DAO is motivated to introduce various mechanics that permanently remove **GEMSTON** tokens from circulation and increase demand for these tokens.

We deliberately don't provide detailed description of possible use cases for **GEMSTON** tokens with a goal to engage the community in open discussion of **GEMSTON** utility.

13.3 Protocol Fees

Protocol fees are deducted from all trades on the STON.fi DEX. Specific mechanics depend on protocol type (RFQ or AMM) and the blockchains of trade.

STON.fi protocol implements a means to automatically convert all collected fees to **STON** tokens on TON Blockchain and redistribute them according to DAO decisions. The architecture of fee distribution smart contracts is demonstrated below:

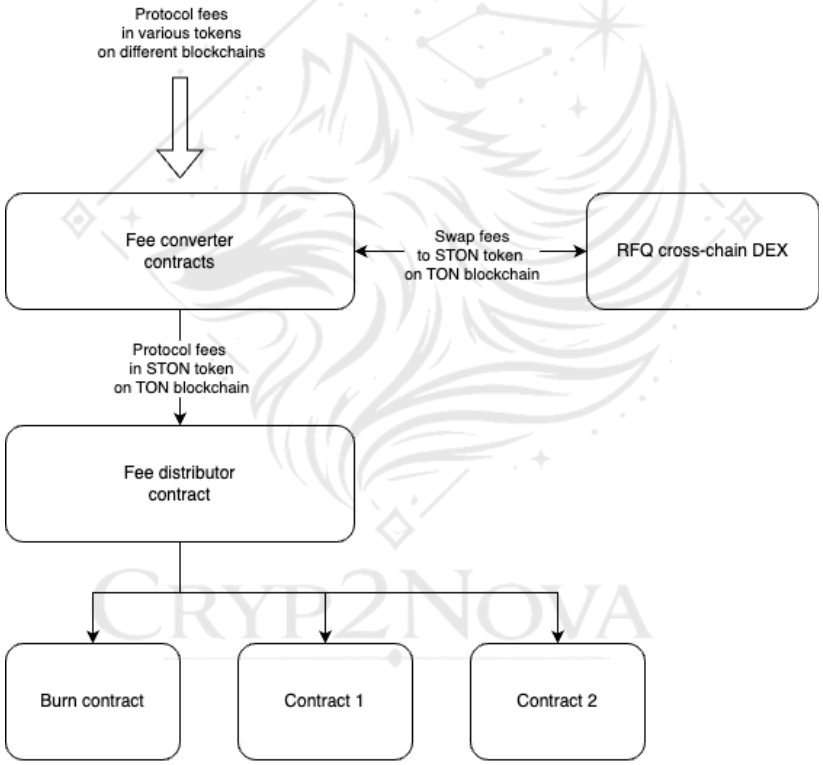


Figure 4. Fee distribution chart

The following smart contracts are used for fee distribution:

- Fee converter: receives protocol fees in various tokens and converts them to the **STON** token using RFQ DEX and liquidity pools on STON.fi AMM DEX.
- Fee distributor: collects all fees in the form of **STON** token on TON Blockchain and distributes them to one or multiple destinations in accordance with DAO-controlled parameters.

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- Burn contract: burns all incoming **STON** tokens thus reducing supply and increasing demand for these tokens.
- Other destinations: The Fee Distributor contract might transfer part of the fees to other smart contracts at DAO discretion effectively allowing to extend the protocol with various mechanics like staking rewards, liquidity mining, etc.

13.4 Deflationary model of STON token

STON token has a deflationary model, which refers to an economic model where the supply of tokens gradually decreases over time. This reduction in supply is achieved via buyback and burning of tokens.

STON tokens buyback is a process of converting all protocol fees to **STON** tokens from the open market. Part of these bought-back tokens is burned, effectively reducing the circulating supply and making remaining tokens more valuable.

The combination of token buybacks and burning aims to achieve a deflationary effect by reducing total supply of tokens over time and thus increasing demand.

14. STON.fi DAO

The DAO Governance allows DAO members to create and vote on proposals related to the STON.fi protocol updates, adding new networks, fee models, and asset additions/removals.

The STON.fi protocol becomes more flexible and responsive to market demands. Additionally, incorporating governance ensures that changes are made transparently and democratically.

14.1 Principles

As with any organization that is 'built to last', the DAO sets forth a set of inalienable principles that guide overall strategy along with the individual activities of members.

- Transparency: provides open communication channels to ensure all stakeholders can access information and participate in decision-making processes.
- Decentralization: aims to distribute decision-making power across its members, avoiding centralization of power and control.
- Accountability: holds its members and decision-makers accountable for their actions, with processes for addressing violations or conflicts of interest.
- Flexibility: aims to adapt and evolve as the DEX protocol and its ecosystem change.

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- Efficiency: aims to structure to make decisions in a timely and efficient manner.
- Sustainability: aims to ensure the long-term sustainability and growth of the STON.fi protocol and its ecosystem.

14.2 DAO Governance

Members of the organization will decide on the development of STON.fi. The organization aims to promote the growth and development of the platform and its community.

The governance process will be voted on by **STON** token stakers. STON.fi Development LLC will be responsible for the direct development of the project with token compensation from the DAO.

DAO members may vote for the following changes:

- **Asset Listing/Delisting.** To list a new asset, users need to make a special proposal. If the proposal gets enough votes, the token will be added to the protocol
- **Support new blockchain.** A community can add a new blockchain to the protocol by voting. The new blockchain needs software that connects it to STON.fi protocol, and STON.fi Development LLC is responsible for developing this software.
- **Protocol Updates.** Community members can propose new protocol features through voting. If the proposal is approved, STON.fi Development LLC will be responsible for developing and implementing the new features.

14.3 Governance process

This section describes our perspective on how the governance process operates. Please note that the final implementation may vary in subsequent versions of this document.

Furthermore, it is important to consider that the governance process may undergo modifications based on user proposals.

1. **Request for proposal (RFP).** The governance process usually starts with a request for proposal (RFP). The RFP outlines a proposal for a change or improvement. The request can range from a small change to a major strategic shift.

2. **Check the Request by voting members.** Once the RFP is received to the DAO platform, it is reviewed by voting members and evaluates the proposal and determines if it aligns with the organization's mission, vision, and values.

3. **Governance Proposal.** If the proposal is approved, the DAO members create a governance proposal. This proposal includes a detailed plan for implementation, the

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expected outcomes, and the resources required.

4. **Voting period.** The proposal is presented to all DAO members for voting on the DAO platform. There are two kinds of votes, for or against. The voting period typically lasts for a specified period, such as two weeks or a month.

5. **Voting result.** After the voting period, the result will be announced. If the proposal receives the required number of votes, it will be accepted. If it does not receive enough votes, it is rejected.

6. **Implementation of proposal.** After the proposal is accepted, the organization or community can implement the changes.

15. Contacts

- Viacheslav Baranov (CEO, co-founder, linkedin)
- Mike Fedorov (CBO, co-founder, linkedin)
- Stanislav Bazylevich (COO, co-founder, linkedin)
- Andrey Fedorov (CMO, linkedin)

16. Conclusion

In this whitepaper, we have covered the business strategy and technical details of implementing and bringing to market a new version of STON.fi—zero-trust cross-chain DEX.

Our approach addresses critical issues of most existing cross-chain solutions by eliminating interoperability issues, enhancing security, and reducing transactional risks and costs. This is achieved by implementing an RFQ-based cross-chain exchange that relies on Hashed Timelock Contracts (HTLC) to atomically execute cross-chain swaps. This approach eliminates the need for additional trusted entities and offers a combination of deep liquidity and price stability, usually associated with RFQ-based exchanges, alongside the uncompromising security typically found in intrachain DEXs.

Details on further development of the platform and additional information are published on the website ston.fi and on the documentation portal at docs.ston.fi.

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Appendix A1: RFQ protocol message flowchart

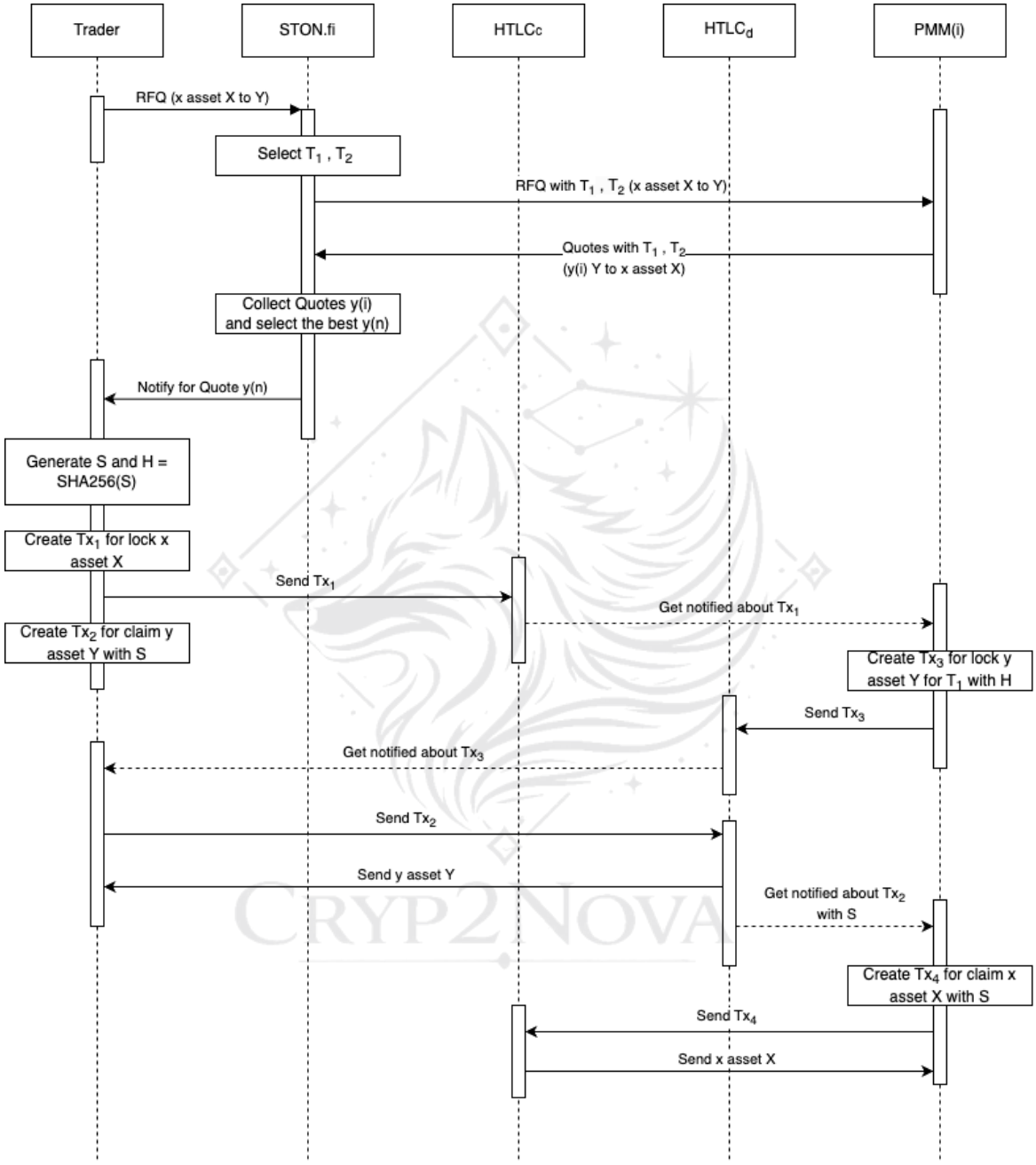


Figure A1.1. RFQ protocol message flowchart

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