



EmiSwap White Paper

(The first project in the EmiDAO ecosystem)

The world's first truly autonomous DAO
designed to disrupt the DeFi industry

VERSION 2.0

21ST OCTOBER, 2020

Summary

EmiDAO is the world's first truly autonomous DAO, which gives the community the opportunity to be owners of a project and have the rights to get a share of a project's profits and make decisions on its future development.

EmiSwap is an automated market maker exchange with an ESW voting token. EmiSwap is the first project in the EmiDAO ecosystem.

EmiSwap takes all the best aspects of AMM Uniswap V2 and AMM Mooniswap with the addition of an ESW token, which gives the right to receive a part of the profits and a vote on the management of the project. The EmiSwap economic model works in a balanced way for all project participants.

After the full launch of EmiDAO, it will be impossible to make changes to smart contracts without conducting a voting procedure among community members and meeting the necessary conditions.

DeFi overview

Introduction

DeFi is a set of financial tools based on decentralized systems and networks, outside the control of companies and governments. Currently, most applications are based on smart contracts of the Ethereum blockchain platform.

Key elements of the DeFi ecosystem:



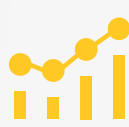
open lending protocols



platforms for issuing tokens and investing



prediction markets



exchanges and exchangers



stable coins

The main idea behind DeFi projects is to allow anyone with Internet access to lend, borrow, and perform financial operations without intermediaries.

DeFi Growth

In 2020, the number of funds voluntarily backed by users in DeFi protocols has increased rapidly. As of October 19, 2020, **over \$11 billion** was held by users through various decentralized protocols.



Illustration 1

The total trading volume on all decentralized exchanges is **constantly growing**, which is clearly reflected in the chart below:

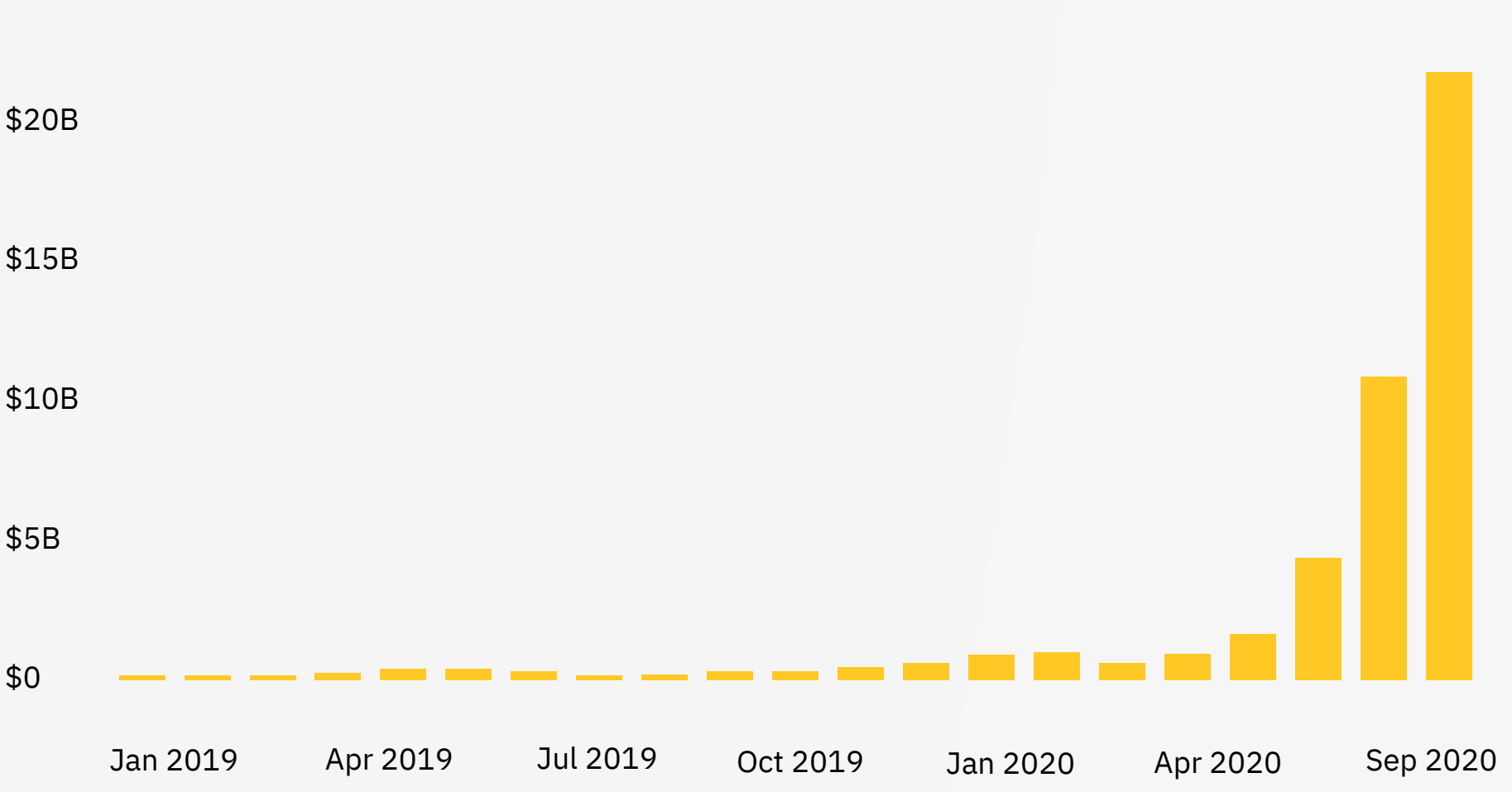


Illustration 2

DeFi potential

DeFi is an emerging market for decentralized finance that shows great promise. We can certainly say that in the future we will have a huge number of innovative financial products and tools.

2020 will be known as the year of DeFi for the cryptocurrency industry. Some of the best talent in this arena are now working on DeFi. As we see the number of users and investors grow, more people will be drawn into the industry, resulting in better products and user experiences.

The main focus will be on creating platforms with the ability to exchange value using different blockchain protocols. DeFi will undoubtedly improve the **financial stability** of the global economy and lead to increased competition and greater diversity in the financial industry as a whole.

This means that the volume of the DeFi market and the number of its users will continue to grow significantly over the next decade.

DeFi issues

Centralization

The centralization problem manifests itself at two main levels:

- Centralization of the distribution of tokens among investors and the project team. At the moment, there are DeFi projects in which **up to 80%** of the project's coins are concentrated in the hands of the creators.
- Centralization of decision-making. In most DeFi projects, the concept of smart contracts is introduced, and rewards are distributed automatically within the blockchain network. However, the project team **has the ability to change the terms** of interaction with the platform and, for example, increase the platform's commissions unilaterally. The problem is that users cannot influence this in any way.

Lack of yield farming

Yield farming is an automatic and dynamic rebalancing of a user's portfolio in order to gain the maximum profit on offer (APY - annual percentage yield). However, **not all DeFi protocols can offer this function** to their users, which can negatively affect the number of users a particular project can attract.

Security

Security has been and remains one of the main vulnerabilities of cryptocurrencies. Many projects try to enter the market as quickly as possible and do not pass the required security audits. This leads to the loss of user funds and a negative image of the project within the community. Here are some historical examples:



**DFORCE LENDING
PLATFORM LENDF.ME**
ESTIMATED FUNDS
LOST: ~\$25M
APRIL 19TH, 2020



BZX FLASH ATTACK
ESTIMATED FUNDS
LOST: ~\$1M
FEBRUARY 15TH, 2020



IMBTC UNISWAP POOL
ESTIMATED FUNDS
LOST: ~\$300K
APRIL 18TH, 2020



**YAM FINANCE
SMART CONTRACT**
THE YAM TOKEN PRICE
HAS DROPPED OVER
99% AFTER THE BUG
DISCOVERY
12ND AUGUST, 2020



**MAKER BLACK
THURSDAY**
ESTIMATED FUNDS
LOST: ~\$9M
MARCH 12, 2020

EmiDAO Concept

EmiDAO Ecosystem

EmiDAO is a truly decentralized, autonomous, open-source organization.

The goal of EmiDAO is to create an ecosystem of projects from the DeFi industry that can meet all current and emerging user needs.

EmiSwap is the first and key project of the EmiDAO ecosystem, which will generate profit from the launch and form the economic value of the ESW token.

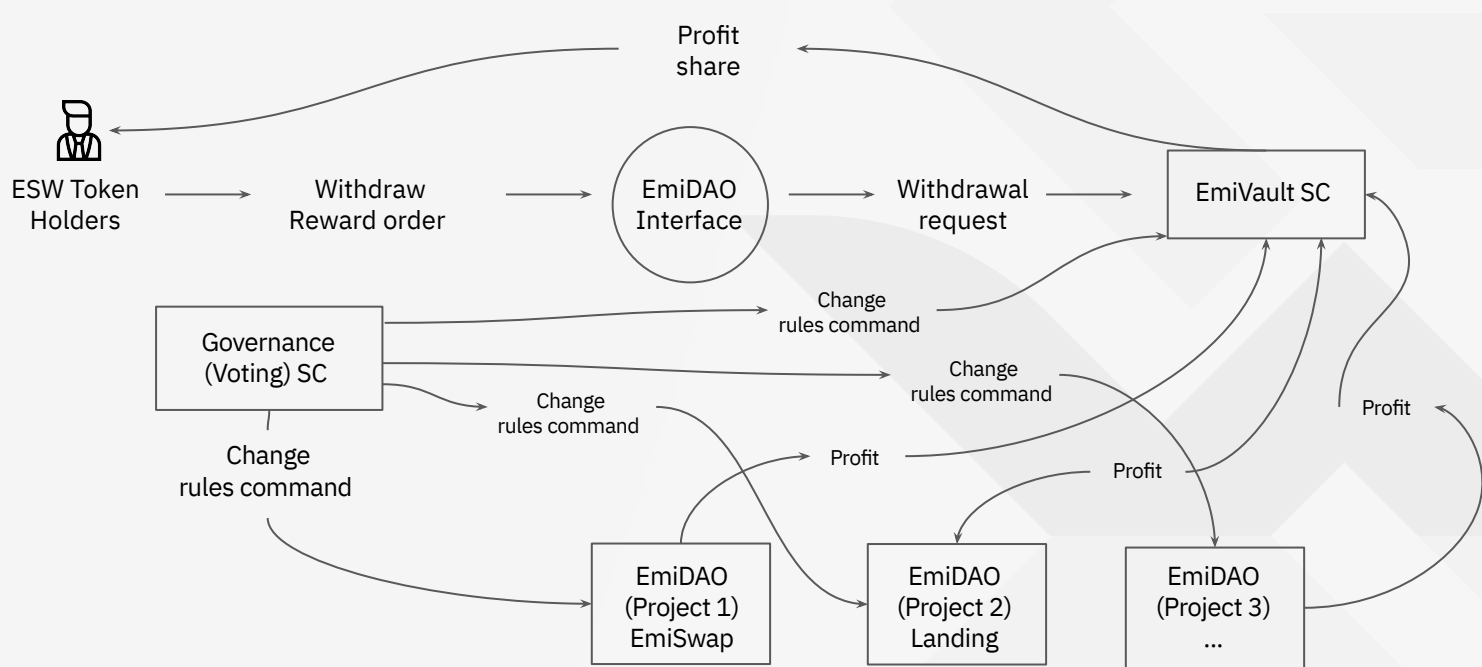
EmiSwap (EmiDAO) is an open-source, decentralized, autonomous organization. The main elements of the ecosystem are now the EmiSwap decentralized exchange and the ecosystem's internal coins - ESW and ESD

EmiDAO Ecosystem Development

Further, the EmiDAO ecosystem will expand in accordance with the needs of its users. Voting will decide on the development of new projects within the ecosystem.

Also, third-party developers will be able to apply for the inclusion of their finished projects in the EmiDAO ecosystem. The project can be added to the ecosystem only after passing the audits of the source code and voting procedure among the holders of the ESW token.

Developers of such projects will be able to get direct access to users of the EmiDAO ecosystem. Holders of the ESW token will be able to receive more profit by expanding the ecosystem and income from new projects.



EmiDAO ecosystem scaling diagram (Illustration 3):

EmiSwap Introduction

EmiSwap is an automated market maker exchange with a voting ESW token.

EmiSwap developers took the AMM Mooniswap protocol as a basis. This protocol has been developed on the basis of AMM Uniswap V2, which the Mooniswap team has enhanced with a solution to protect against “front-running” so liquidity providers will not lose profit from temporary price slippage.

Thus, EmiSwap is an open-source, decentralized platform, a fork of Uniswap V2 and Mooniswap.



ESW

IS A GOVERNANCE TOKEN THAT GIVES HOLDERS A RIGHT TO RECEIVE A SHARE OF PROJECT’S PROFIT PROPORTIONATE TO THE SHARE OF TOKEN OWNERSHIP AND GIVES A RIGHT TO PARTICIPATE IN VOTING ON THE DEVELOPMENT OF THE PROJECT.



ESD

IS AN INTERNAL TOKEN THAT GIVES THE ESW HOLDERS A RIGHT TO RECEIVE ASSETS IN THE BASKET OF THE YIELD POOL DENOMINATED IN DAI PROPORTIONATE TO THE SHARE OF ESW TOKEN OWNERSHIP.

Benefits

Decentralization

AMM DEX EmiSwap, token distribution scheme, and crowdsale are designed to maintain a high level of decentralization from the very beginning of the project launch. The decentralized developer community Emiswap will receive tokens only when the tokens are distributed among the users of the ecosystem. Thus, a fair ratio of distribution will be observed between all members of the ecosystem - **only 20%** of all issued tokens will be distributed to the decentralized developer community EmiSwap. The EmiSwap decentralized developer community will expand with new members adding to the growth of the project.

Decision making

The EmiSwap developer community advocates for decentralized decision-making mechanics. All changes within the terms of interaction with products within the ecosystem **will be accepted with the participation of the community** through a voting procedure. Only ESW internal token holders will be able to vote.

In this way, several decisions can be confirmed in one vote. Thus, voting will be in the form of multiple voting without the right to transmit.

For example, changing proxy contracts, setting rewards, adding pairs, setting a minimum decision-making level for voting - all this will be part of a single voting cycle.

Briefly, voting will be organized in such a way that voting on each issue is carried out separately, however, several issues can be brought up for discussion within the same voting session. Thus, the owner of the token will have to vote once on each issue. After the completion of the vote, the results will be communicated to all token holders. If the quorum is met, the decision will carry and the necessary changes will be made to the smart contract.

While voting rules may vary depending on the questions posed and / or the level of importance of the question, one thing will remain the same: the voting power is exclusive to the Token Holders, where proof of ownership will constitute voting rights.

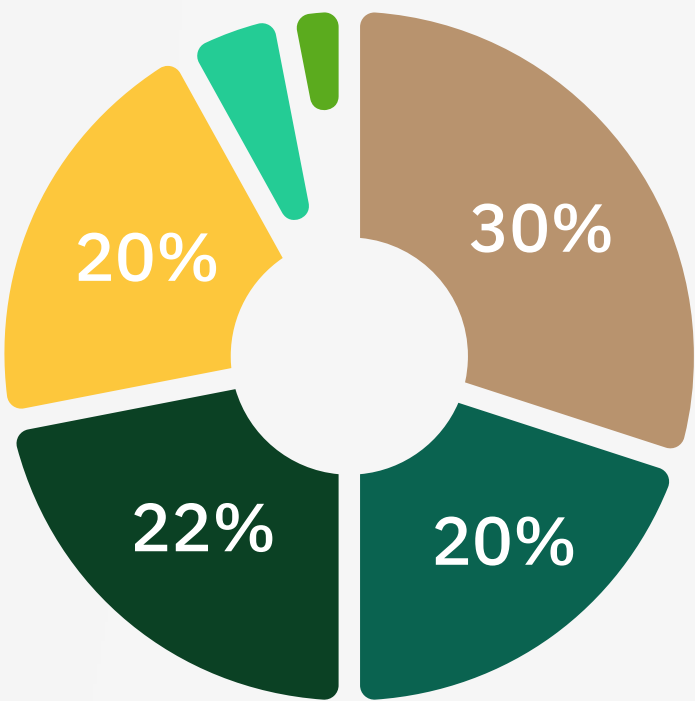
Any changeable project parameters will be subject to voting. This means that the list of things that can be changed will be presented by the decentralized Emiswap developer community as preliminary. After that, it will be revised and changed by voting.

In the case of minor decisions that go beyond the primary list, the quorum may be reduced, and the voting rules may be adjusted, but these minor decisions will still be voted on to preserve the integrity of the DAO. Moreover, a decision on what is a minor issue remains an important decision and will require a full quorum vote to be met.

Distribution of ESW tokens

Total Supply - 200,000,000 ESW

●	30%	Protocol Security and Maintenance	60,000,000 ESW
●	22%	For the Ecosystem Growth and Users Attraction	44,000,000 ESW
●	20%	EmiSwap Decentralized Developers Community	40,00,000 ESW
●	20%	Crowdsale Participants	40,000,000 ESW
●	5%	For Advisors, Ambassadors and Community Extension	10,000,000 ESW
●	3%	Early Liquidity Providers	6,000,000 ESW



Token distribution scheme (Illustration 4):

POINT 1

30% (60,000,000 ESW) for the security of the protocol and its maintenance:

- 0.6 tokens are issued for each token issued for points 2, 4, 5, 6 with similar vesting.

POINT 2

22% (44 million ESW) for ecosystem growth and community building without vesting:

- Tokens are credited at the rate of 3,000 ESW for the total trading volume of EmiSwap in the equivalent of 1 million DAI and are proportionally distributed among liquidity providers in proportion to the pools in which trades were performed.
- For swaps, tokens are credited in the amount of 1.6 ESW per personal turnover in the equivalent of 1,000 DAI.
- These rules cease to apply when 50 million ESW is distributed in total as per clauses 3 and 6, which depends on the total trading volume of EmiSwap (approximately from 6 months to 2 years).

POINT 3

20% (40,000,000 ESW) for the EmiSwap decentralized developers Community:

- 0.4 tokens are issued for each token issued for points 2, 4, 5, 6 with the same vesting.

POINT 4

20% (40,000,000 ESW) to Crowdsale Participants:

- Vesting for 1 year with quarter unlock by equal shares.

POINT 5

5% (10,000,000 ESW) to Advisers and Ambassadors:

- 20% without vesting
- 80% with 1 year vesting with quarter unlock by equal shares

POINT 6

3% (6,000,000 ESW) to EmiSwap Early Liquidity Providers and Swappers

- without vesting.

Early Participants Rewards

Liquidity providers

- From the 11th to the 40th day, inclusive of the launch date of the protocol, approximately 40,000 ESW will be distributed among Liquidity Providers in proportion to their trading volume.
- From the 11th to the 100th day, inclusive of the launch date of the protocol, the rewards for Liquidity Providers are 10 times higher than the standard - 30,000 ESW will be distributed among LP proportionally for every \$1 million of total exchange turnover.

Swappers

- From the 11th to the 100th day, inclusive of the launch date of the protocol, Swappers rewards are 10 times higher than the standard - equivalent to 16 ESW per 1,000 DAI of personal turnover.

The distribution rules according to clause 6 cease to be effective at the end of the 100th day from the date of the launch of the protocol or when all allocated 6 million ESW are fully distributed (whichever comes first).

As soon as the distribution rules cease as per clause 6, uncreated tokens will be moved to the appropriate location as per clause 3, in cases where uncredited tokens remain at the end of the 100th day from the date of the protocol launch.

IMPORTANT: All issued ESW tokens will receive a portion of the profit and will be able to participate in voting regardless of the vesting time!

Distribution of Income & Commissions

In the initial configuration of EmiSwap, the trading commission in any pool is **0.3%**. Of this, **0.25%** goes directly to active liquidity providers, and the remaining **0.05%** goes to the EmiVault pool and is further distributed among holders of ESW tokens.

If the user who made the swap is a referral of another user (referrer), then the corresponding user is credited with ESW in the equivalent of **0.01%** of the trading volume as a reward for a level-one referral program. That is, the referral reward is equal to 20% of the income generated by his referral to the EmiVault pool.

To stimulate crowdsale, there is a 3-level referral program. The following percentages are set for referrals:

LEVEL 1	LEVEL 2	LEVEL 3
5% of the purchase amount in ESW equivalent	3% of the purchase amount in ESW equivalent	1% of the purchase amount in ESW equivalent

Crowdsale

During the crowdsale, the initial cost of ESW is **0.11 DAI**. As the value of the ESW token grows and its value on the open market fluctuates, the value of ESW on the crowdsale can be changed.

The maximum sales volume together with referral rewards is **20%** of all tokens **or 40 million ESW**.

Users will be able to buy ESW tokens using the following ERC20 stablecoins: DAI, USDT, USDC, USDB, as well as ETH, EMRX, WETH, WBTC, and renBTC.



Financial Calculations

Project profitability

The profitability of the project depends on the volume of liquidity in the pools and on the volume of trading. Tentative forecasts for the first 6 months predict liquidity to reach **\$150 million**. The daily trading volumes are expected to be 10% of the liquidity volume, i.e. from about **\$15 million per day**.

ESW token holders are allocated **0.05%** of the EmiSwap trading volume. Since the number of tokens is limited, and the volumes of liquidity and trading in DeFi are growing, this may lead to an increase in profit by 1 token and, accordingly, an increase in the value of tokens.

Crowdsale Participants Profitability

Based on the trends in the DeFi market, the planned trading volumes, the profit distribution model of EmiSwap, the number of ESW tokens in circulation, and tentative forecasts, the profitability of participants who take part in the early crowdsale in the first month may correspond to the following calculations:

Month	ESW Price, DAI	Trading Volumes per Day, DAI	Overall Income for all ESW per month, DAI	Cumulative Income for all ESW per month, DAI	Overall Income per one ESW per month, DAI	Cumulative Income per one ESW in all periods, %	ESW price Growth in all periods, %	Cumulative Total for Income and ESW price Growth in all periods, %
1	0.11	1,000,000	15,000	15,000	0.0016	1.44%	0%	1.44%
3	0.15	3,600,000	54,000	84,000	0.0065	11.07%	32.25%	43.32%
6	0.22	14,688,000	220,320	367,200	0.0177	48.20%	101.14%	149.34%
9	0.34	40,303,872	604,558	1,036,385	0.0314	120.29%	205.90%	326.20%
12	0.51	81,736,252	1,226,044	2,247,747	0.0452	231.99%	365.24%	597.23%
15	0.78	141,240,244	2,118,604	3,884,107	0.0566	374.73%	607.57%	982.30%
18	1.18	171,289,106	2,569,337	5,016,324	0.0582	535.33%	976.13%	1511.45%
21	1.80	198,288,551	2,957,328	5,807,022	0.0578	692.75%	1536.65%	2229.40%
24	2.74	229,543,784	3,443,157	6,722,354	0.0601	854.11%	2389.15%	3243.26%

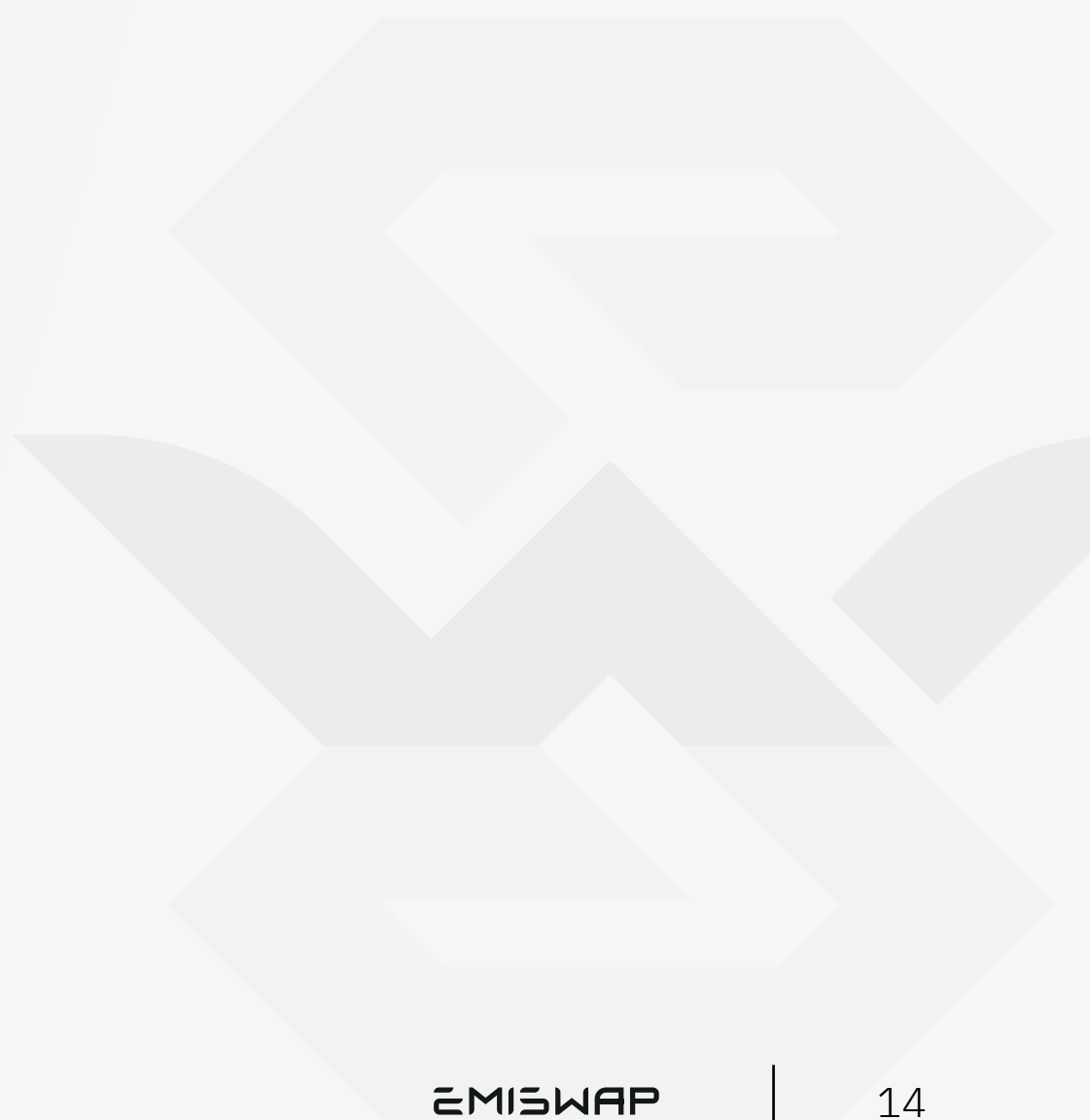
Illustration 5.

The price of the ESW token in these calculations is indicative and will be determined on the open market, it can be either higher or lower than the calculated one.

We accept this model of calculating the yield higher as less attractive, because the growth rate of trading volumes of decentralized exchanges since the launch of the protocols, the mechanics of which are much less attractive for liquidity providers and swaps, are now much higher, even with significant market corrections. The monthly trading volume of all DEXs in August 2020 exceeded \$11 billion; in September 2020 it exceeded \$22 billion.

In the tentative calculation of profitability, we incorporated the initial data of the trading turnover for the first month of EmiSwap operation, which was approximately 6 times lower according to the current market situation.

In the neutral version, the profitability model of EmiSwap crowdsale participants in the first month may correspond to the following calculations:



Frequently Asked Questions

Why is it profitable to supply liquidity to EmiSwap from the beginning?

In the first 10 days after the launch of the EmiSwap protocol, liquidity providers can practically get acquainted with the project, add liquidity to pools, and start making a profit of 0.25% from trading operations.

In addition, from the 11th to the 40th day inclusive of the launch date of the protocol, we will additionally issue 6150 ESW for every 1000 blocks and distribute them among the liquidity providers.

This means that with the same volumes of liquidity in the first days, the liquidity provider will receive many more ESW governance tokens, which gives rights to the share of project's profits because every day there will be more and more liquidity providers with the same distribution of tokens per block.

Lastly, there is the "10X" rule - up to 90 days ESW allocation for liquidity providers is 10 times larger than the standard one (see "Rules for allocation to early liquidity providers and EmiSwap swappers" above).

Why is it profitable to do exchange operations on EmiSwap from the beginning?

In the first 10 days after the launch of the EmiSwap protocol, users can perform swaps, get acquainted with the project in practice, and profitably exchange assets, one for another.

In addition, from the 11th to the 100th day inclusive of the launch date of the protocol, ESW allocation for swaps is **10 times larger** than the standard one (see "Rules for allocation to early liquidity providers and EmiSwap swappers" above).

This means that with the same personal turnover in the first days, the swapper will receive many more ESW tokens.

IMPORTANT: The EmiSwap early liquidity provider and swapper allocation pool is capped at 6,000,000 ESW. The distribution speed of tokens depends on the total trading volume, which will grow every day. Therefore, the “10X” rule can cease to operate at any time and it is beneficial to participate from the onset!

Why is it profitable to purchase ESW tokens on crowdsale?

The maximum profitability can be obtained if the maximum possible number of ESW tokens is obtained for each invested DAI, and the maximum amount of profit share is accrued for each ESW token.

The most profitable ESW tokens can be obtained at the start of a crowdsale at a cost of **0.11 DAI per ESW**. Furthermore, the cost of ESW on the crowdsale will increase according to market demand.

A share of the project's profit is distributed only to ESW tokens issued at the moment of profit distribution. More profit will be distributed to those ESW tokens that were issued earlier.

The amount token holders are entitled to will be accrued more on ESW tokens that were issued earlier, since the share of profits is accrued only on ESW issued at the time of profit's share accrual.

Therefore, ESW tokens purchased on a crowdsale in the early days will give their owners the highest possible profitability!

Why will the market push the value of the ESW token up?

Since ESW tokens give rights to get a share of the project's profit, their value and market demand, in addition to speculative expectations, will determine the ratio of the amount of accrued profit share per token to the value of the token.

With an increase in the trading volumes of the DeFi market in general and AMM EmiSwap in particular, the amount of profit share per ESW token will grow. The number of tokens is limited by a maximum emission of **200,000,000 ESW**.

These two factors will stimulate the market to increase the value of the ESW token.

Security

EmiSwap is an open-source, decentralized platform. All development will be public. Third-party developers will have the opportunity to review the code, recommend platform fixes and modifications, participate in platform development, and become members of the EmiSwap decentralized developer community.

It is planned to make a full release of the platform after conducting security audits of smart contracts and the platform core. Audit proposals were submitted by the following companies - Trail of Bits, PeckShield, OpenZeppelin, Consensys, Certik, Quantstamp, Pixelplex and Firstbridge, and Hacken. Audit updates will be posted through the official EmiSwap social media channels.

The operability of the protocol has been tested in test networks and operability has been confirmed. However, the release version should be perceived as Beta.

Partnerships

The EmiSwap decentralized developer community understands the full potential of the DeFi industry and aims to be involved in the long-term development of the project, which is impossible without building partnership agreements, integrating with services and applications, as well as introducing the internal ecosystem token onto third-party platforms.

At the moment, the EmiSwap developer community is in communication with other parties regarding partnerships with teams of decentralized projects for various integrations.

In the future, the EmiSwap developer community plans to actively expand the number of our strategic partners, to work together to improve our products and increase the number of ecosystem users.

Decentralized Developers Community

The members of the decentralized community of Emiswap developers are professionals with extensive experience in the development and management of decentralized blockchain projects.

The developer community is focused on creating a product that will fully meet the needs of the market and will be available for use by the entire blockchain community. We admit the possibility of the key developers community to change in future in line with the growth of the project. Members of the developer community who will develop and maintain the project have the same voting and participation rights in the project as other members of the project community.

EmiSwap (EmiDAO) is an open-source decentralized autonomous organization, so anyone can participate in the project development and maintenance.

VYACHESLAV DUTKA



CHIEF TECHNICAL OFFICER

Development experience - over 20 years.
Knowledge of programming languages - Go, TypeScript / JavaScript, C #, SQL / PLSQL / PSQL. For a long time, he was engaged in the development of ERM and CRM systems for large business structures. More than 4 years' experience in developing open-source products.

ALEKSEY BELOBROV



BACKEND DEVELOPER

More than 8 years' experience in development. Knowledge of programming languages - Ruby, JavaScript, C ++ / C #, Go, Python, Java, Ruby, JavaScript. Participated in fintech projects: atominvest, and fundico. Experience in creating highly loaded systems - runmates, and kmmp rzd search engines. <https://www.rzd.ru>

MAKSIM KISELEV



SOLIDITY DEVELOPER

Development experience - over 20 years.
Knowledge of programming languages - JavaScript, Solidity, Python, C.
<https://demi.money> - decentralized microcredit platform, open-source code
<https://moonraceteam.github.io/moonrace> - MoonRace decentralized game
<https://riddlehash.com/#/> - is a decentralized RiddleHASH game.

ALEKSANDER LEONCHIK



BACKEND DEVELOPER

More than 7 years' experience in development. Knowledge of programming languages - Ruby, JS, (PHP, Python, Go). Participated in the creation of the Disciplina cryptocurrency, the creation of a personal account for the ICO.

DENIS GUMURZHI



BACKEND DEVELOPER

More than 5 years' experience in development. Knowledge of programming languages - TypeScript / Javascript. Participated in projects to create a cashback platform with a multifunctional referral system (Syrex / CashAndBack), in a B2B platform for managing sales, distribution and trade marketing (Mobishop).

VLADIMIR ROMANOV



DEVOPS

More than 8 years' experience in development. Knowledge of programming languages - C / C ++, Python, C # and any other imperative

ARARAT TONOYAN



SMART CONTRACTS DEVELOPER

Опыт в разработке более 5 лет. Знание языков программирования - Solidity, Typescript / Javascript, Node.js, Python. С начала 2017 года, Арарат занимается разработкой исключительно блокчейн проектов, включая создания смарт контрактов, архитектурных решений, тестирование, аудит и интеграцию со сторонними приложениями.

PAVEL KORNEEV



REACT DEVELOPER

More than 10 years' experience in development. Knowledge of programming languages - Javascript, Typescript. Participated in the following Blockchain.ru, Cointelegraph.com, Currency.com.

PAVEL FEBENCHUKOV

QA ENGINEER

Development experience over 14 years. Knowledge of programming languages - C ++, C #. Lead QA engineer on pay4y.com project.

ELLINA KOLISNICHENKO

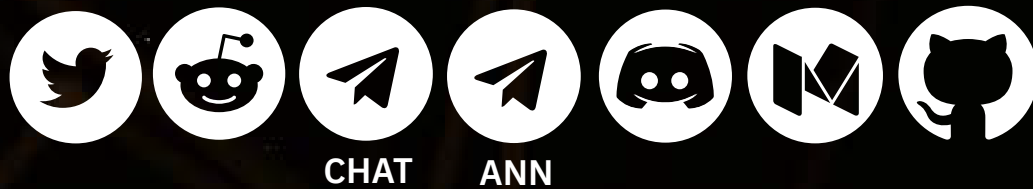


TECHNICAL LEAD

Опыт в разработке более 10 лет. Знание языков программирования - Typescript, Javascript, Node.js + Express, React.js, AngularJS, React Native, PHP. Долгое время Эллина занималась созданием сайтов на PHP (Yii, Laravel, WordPress). С начала 2016 года она работает над React.js + Node.js проектами в рамках сферы блокчейн.

Welcome to EmiSwap community!

Follow our updates on social media
and become a part of true DAO!



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