

2022

# Decimal Economics Guide

version 2.0

# Abstract

This document is about project tokenomics, about the formulas on which the emission of coins is based, about the economics of the project. For a general understanding of the project from a financial point of view and a detailed description.

In this document, we do not write investment proposals, but we are talking about the valuation of the company now and in five years, indicating the discount and justification. Without a description of the team, but in detail we analyze the use of financial models and ideas implemented in the Decimal ecosystem. You will see charts of coin prices (real growth under simulated conditions), as well as a graph of declines in value as part of world events.

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# Disclaimer

This document is not a public offer, it does not contain any legal advice and cannot serve as a sufficient basis for making any decisions.

This document has been compiled for informational purposes only. Developers, buyers, investors, and others with an interest in the Decimal ecosystem and software and DEL tokens should consult their legal advisor before proceeding with guidance and action in relation to material published in this document.

The reports, tables, estimates and financial data provided in this document are forward-looking in nature and involve risks of uncertainty in the economic and legal context. In this regard, this kind of information is provided in this document for illustrative purposes only and is not a guarantee of achieving the specified values (indicators) in the future.

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The legal status of cryptographic tokens, digital assets and blockchain technologies is uncertain. Changes in the legal regulation

of digital technology assets may adversely affect DEL tokens, ecosystem services, Decimal software and may lead to a ban on the distribution of tokens and the operation of our services, as well as other negative consequences.

# **Problems**

It is also indisputable that we now live in the conditions of revolutionary changes in the field of communications. The world is becoming more integrated and, as it were, smaller. Social networks, video conferencing in ZOOM, international online stores, remote employees, delivery of goods and services around the world have become our daily routine.

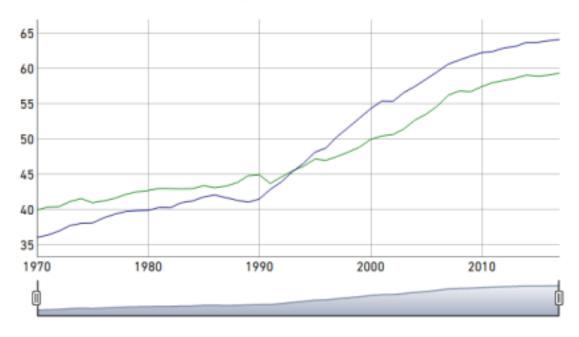






Fig. 1 - KOF Globalization Index.

KOF Globalization Index (1970) = 40

KOF Globalization Index (2017) = 59.36 Cycle

According to publications<sup>1</sup> of the Swiss Institute of Economic Research (KOF) processes<sup>2</sup> of creation of international connections at the level of people, information, ideas, capital and goods has been continuously intensified since 1970, as evidenced by the growth of the KOF Globalization Index<sup>3</sup> based on accumulated data<sup>4</sup> from around the world.

A client / supplier / partner is located in another city / country / hemisphere - this is reality.

With Decimal, you are not constrained by geographic or temporal boundaries. With Decimal, your accumulated rebates or loyalty points move freely between account holders. The accumulation of blockchain coins is available from anywhere in the world. The value of the stored funds within the ecosystem depends only on the value and benefits that the efforts of coin entrepreneurs and the support of the community around their ideas provide.

This is all the experience of our team and the personal experience of its members.

In addition, custom tokens will also solve user identification issues, exclude unnecessary intermediaries in transfers, increase the speed of movement of funds, guarantee a fair vote, etc.

Using Decimal, you can create your own coin on the "Issue Coin" page and keep track of community members. Each will have a wallet installed, which will allow 24/7 access to the balance and manage the coin. Both from a desktop computer and from mobile devices.

Even more opportunities open up when using decentralized

<sup>&</sup>lt;sup>1</sup> https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html

<sup>&</sup>lt;sup>2</sup> https://www.statista.com/statistics/268168/globalization-index-by-country /

<sup>&</sup>lt;sup>3</sup> https://www.hse.ru/org/hse/4432173/mathbase/databases/db\_35

<sup>&</sup>lt;sup>4</sup> https://kof.ethz.ch/en/data.html

applications. Decimal provides a versatile yet flexible solution based on several key ideas:

## • Tokenization

This is the digitization of an entity within a project (currency, score, parameter, ....) that can be moved and disseminated like any other information. Moving entities is reduced to sending a short informational message to all participants in the network. Since the message is very short, it travels very quickly and is very cheap.

The sending speed is 5.5 seconds.

Average transaction fee - 0.9 DEL

(https://status.decimalchain.com/)

## Collateral Mechanism

Each coin within the network is backed by a certain amount of the native DEL coin.

The minimum security amount is 1,000 DEL

The ratio of collateral to coins in circulation is set by the CRR (Constant Reserve Ratio) parameter from 10% to 100%. This parameter cannot be changed during the entire lifetime of the coin. With an increase in the number of coins in circulation, the amount of collateral increases proportionally, and vice versa.

The CRR parameter has a key impact on the price profile of the coin.

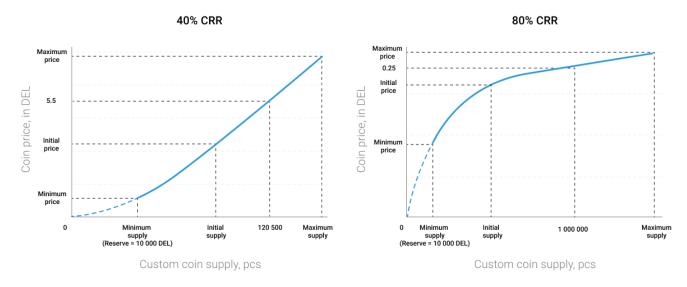
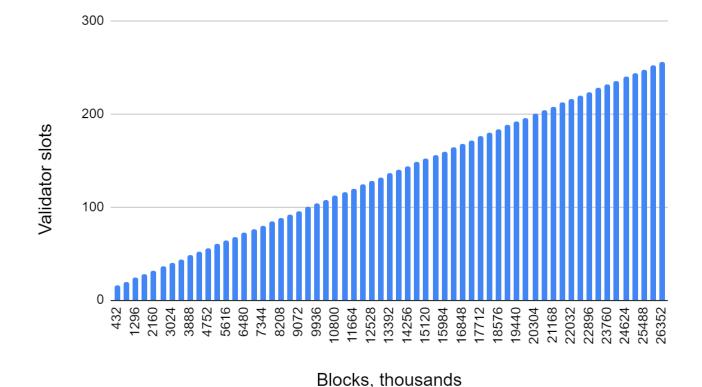


Fig. 2 - coin price profile with different CRRs.

## Throughput / scalability

Decimal operates on the PoS (Proof-of-Stake) consensus mechanism, or more precisely, on its version pBFT (Practical Byzantine Fault Tolerance), which provides a high verification speed and block confirmations. Moreover, each block after being written to the blockchain is finalized, i.e. it does not require building a chain of several blocks directly behind it. With the increase in the number of users and, accordingly, the number of transactions in the blockchain, we have provided an increase in the number of validators that establish consensus.

At the start of the project, there are 16 slots for validators. Every month the number of slots for the inclusion of new validators will increase by 4.



## Fig. 3 - an increase in the number of validator slots.

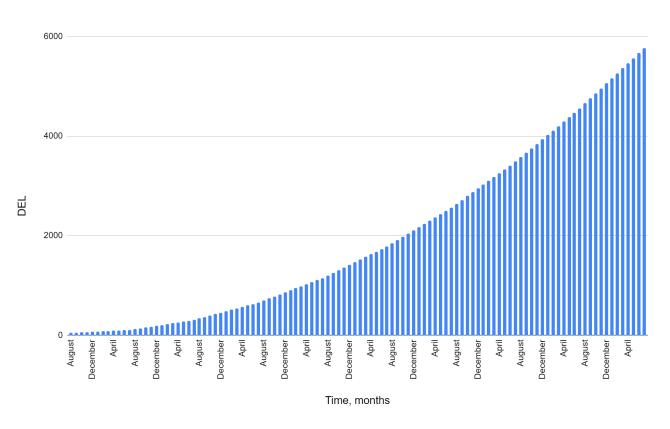
## • Delegation

To involve all network participants in activity, we have implemented delegation of coins. Each participant can delegate any of his coins to one or several validators and receive rewards for this. The rewards received by the validator for the creation and verification of blocks are distributed among all delegators in proportion to their stakes.

The idea is simple - become a validator or delegator, increase your stake and get increased rewards.

On the network, a commission is charged for transactions. Although it is small and very acceptable to the user, it will make a significant contribution to the profitability of the validator. Thanks to PoS consensus, Decimal throughput is very high. One block contains up to 10,000 transactions. A new block is generated approximately every 6 seconds. More transactions - more commissions - more validator rewards.

The calculation and payment of remuneration to both validators and delegators occurs at every 120 block of the chain. The validator's reward is formed with 2 parts:



1. Basic reward for a block

## Pic. 4 - DEL issue for 9 years.

The figure shows a graph of changes in the basic reward for 1 block over 9 years. After 9 years of exponential increase in the size of the reward, it is set to zero, after which the reward for the block will consist of the sum of the commissions of all transactions in the block. The frequency of the increase in the basic reward is approximately 1 month, or more precisely, every 432,000 blocks.

1	block	contains	up	to 10	,000 trans	sactions.
< Block	information					
Height	705460	02				
Timestamp	53 sec	onds ago				
Hash	5FB0C	577591C93C5B469D449FED6E57	3E625B6B0BE825E2324456	5278BF3DC227		
Size	3805 b	ytes				
Supply	DEL 19	0.00000000	Basic re	ward		
Reward						
#Transactior	1 <b>s</b> 2					
#Validators	28					
← Pr	ev block				Next E	olock ->
Transactio	ons					
TxHash	Block	Age		Туре	Amount	
38422B9	<b>F1E3A</b> 7,054,	602 53 seconds ago	dx1la4nv3y85	Send	980.8667230000001	DEL →
FD9A1AC	<b>:D9E8B</b> 7,054,	602 53 seconds ago	dx12s6zyt40n	Delegate	1,269 BTT	$\rightarrow$

Fig. 4 - Decimal blockchain block information.

## **Transaction fee**

In the Decimal blockchain, the transaction fee consists of the sum of a fixed rate for the transaction type and the cost per unit of transaction volume in bytes. Fixed rate: 1 unit = 0.001 DEL

• send (send) - 10 units - 0.01 DEL

• multisend (multisend) - 10+(n-1)x5 units (n - number of recipients) - 15 units (2 recipients)

- sell 100 units 0.1 DEL
- sell 100 units 0.1 DEL
- buy 100 units 0.1 DEL
- declare candidacy 10,000 units (10 DEL)
- edit candidate 10,000 units 10 DEL
- delegate 200 units 0.2 DEL
- unbond (release) 200 units 0.2 DEL
- set online (activation) 100 units 0.1 DEL
- set offline (deactivation) 100 units 0.1 DEL
- create multisig 100 units 0.1 DEL
- create multisig transaction 100 units 0.1 DEL
- sign transaction (sign an offer) 100 units 0.1 DEL
- redeem check 30 units 0.03 DEL
- create coin:
- 3 letters DEL 1,000,000
- 4 letters DEL 100,000
- 5 letters DEL 10,000
- 6 letters DEL 1,000
- 7 to 10 letters DEL 100

The cost of 1 byte of the total transaction volume: 2 units (0.002 DEL)

In essence, a transaction is just an information message. It specifies what, how much, to whom and from whom it is sent, as well as service data.

The transaction volume is total information volume which the transaction consists of:

1) service (signatures, parameters, etc.);

2) user information (length of the ticker of the coin to be sent, length of the ticker of the commission coin, amount to be sent, text message).

Based on our testing experience when developing Decimal, we have the following approximate data on the cost of each transaction:

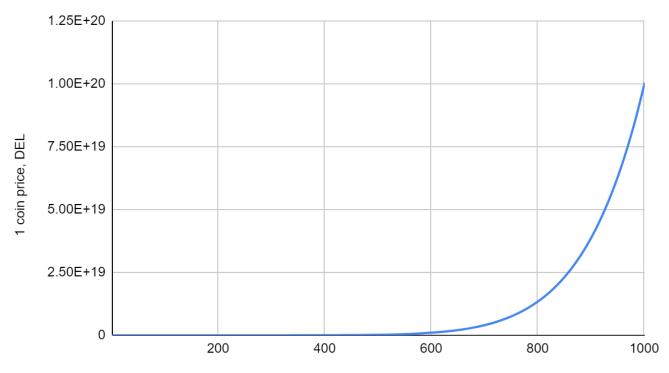
- send ~ 0.41 DEL
- multisend ~ 0.479 DEL (2 recipients) sell (sell) ~ 0.484 DEL
- sell ~ 0.444 DEL
- buy ~ 0.54 DEL
- declare candidacy ~ 10.674 DEL
- edit candidate ~ 10.494 DEL
- delegate ~ 0.564 DEL
- unbond ~ 0.604 DEL
- set online (activation) ~ 0.396 DEL
- set offline (deactivation) ~ 0.394 DEL
- create multisig ~ 0.494 DEL
- create multisig transaction (create offer) ~ 0.542 DEL
- sign transaction (sign an offer) ~ 0.544 DEL
- redeem check ~ 0.03 DEL

## **Custom coin**

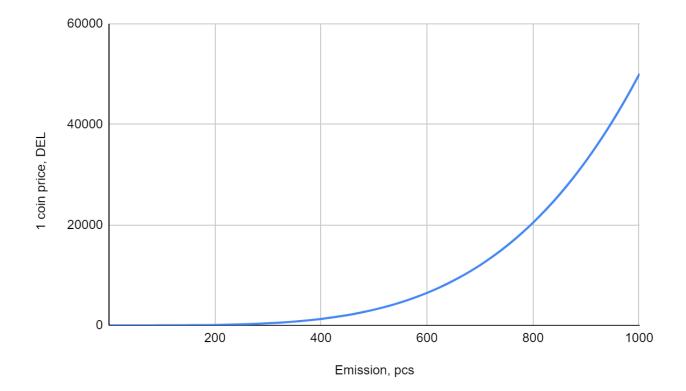
You can always create your own coin. The key parameter of any coin is its Constant Reserve Ratio - CRR.

There are some graphs of the coin price below with different CRRs with the same other parameters of the coin (current issue, maximum issue, reserve)

Initial Supply: 1 Coin Maximum Supply: 1001 coins Initial reserve: 10,000 DEL CRR: 10%

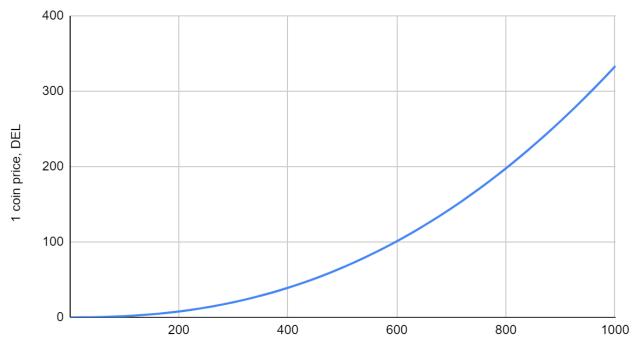


Emission, pcs



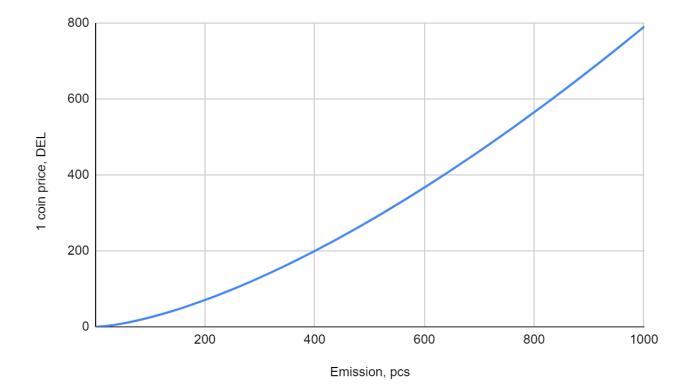
CRR: 20% (price is divided by 1,000,000,000)

CRR: 30% (price is divided by 1,000,000,000)

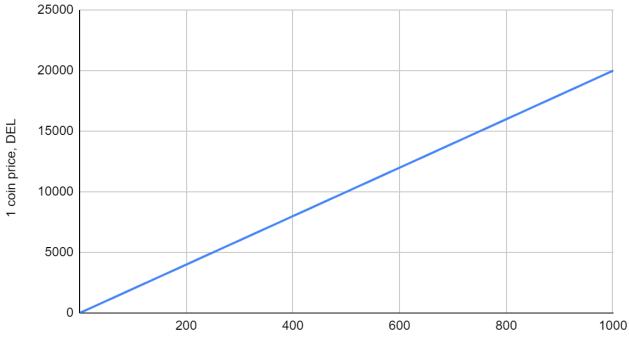


Emission, pcs

CRR: 40% (price is divided by 1,000,000)

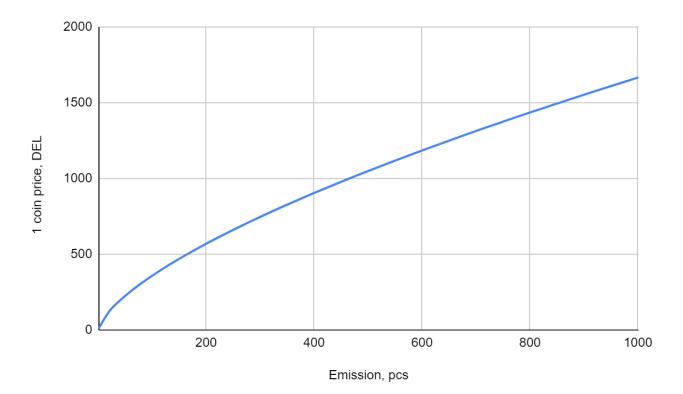


CRR: 50% (price is divided by 1,000)

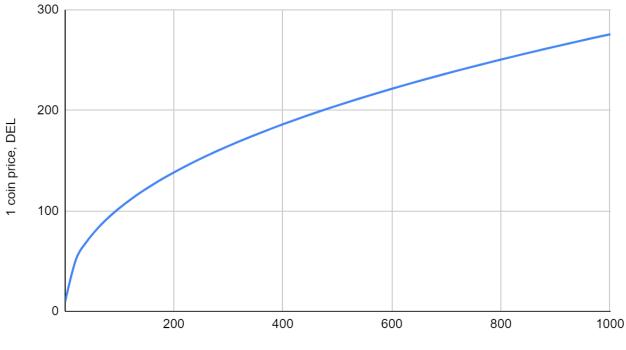


Emission, pcs

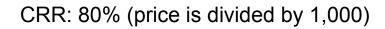
CRR: 60% (price is divided by 1,000)

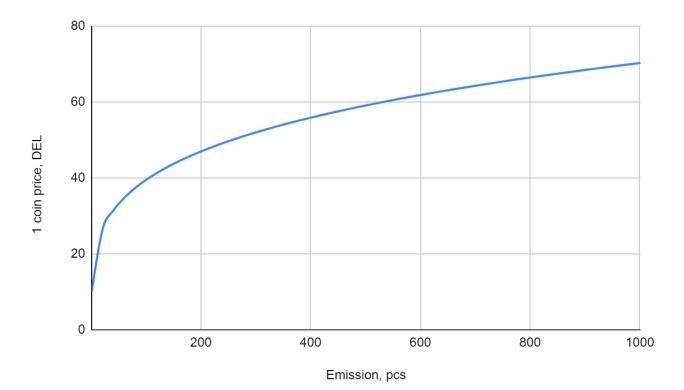


CRR: 70% (price is divided by 1,000)

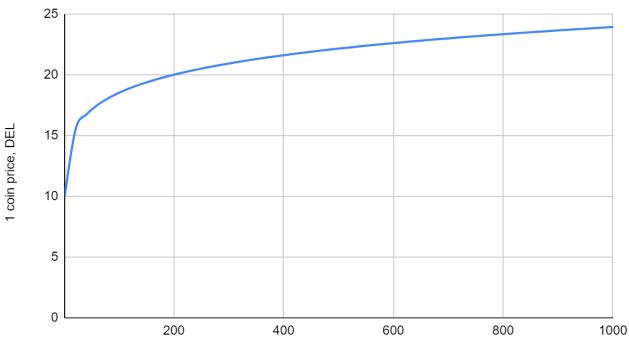


Emission, pcs



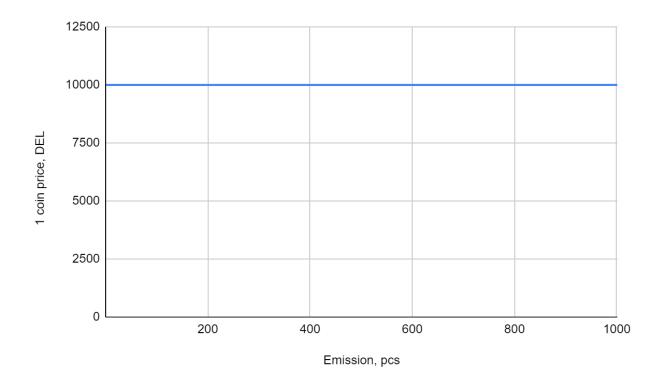


CRR: 90% (price is divided by 1,000)



Emission, pcs

CRR: 100%



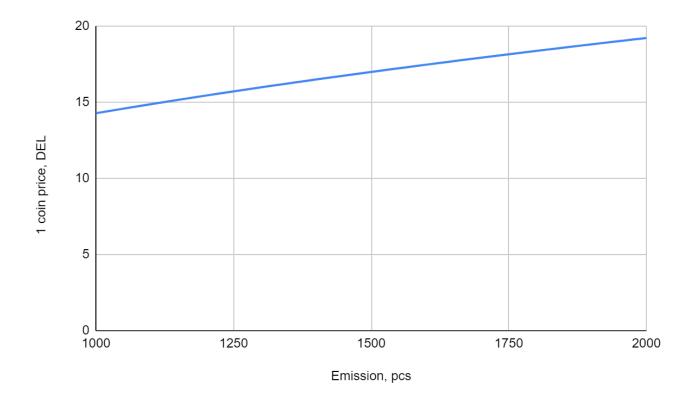
In these examples, the value of 1 coin in DEL is calculated using the following formula

Reserve 
$$\cdot (1 - (1 - \frac{1}{issue})^{\frac{100}{CRR}})$$

CRR changes the slope of a price curve.

The other parameters, on the other hand, affect the numerical values on the axes. For example, like this:

Initial Supply: 1000 coins. Maximum Supply: 2,000 coins Initial reserve: 10,000 DEL CRR: 70%



Thus, by adjusting the parameters of the coin when you create it, you can get the desired graph of price change.

## **DEL coin use cases**

If you create a coin with a CRR of 100%, it will be a stable coin relative to DEL. Its value in the DEL will always be the same, regardless of the supply. Regardless of the number of coins in circulation, its value will always be the same. Buying such a coin for DEL you can always be sure that you can sell it for the same price. Another scenario:

By understanding how a coin behaves in a particular area of the price trajectory, the DEL holder or trader can choose a trading strategy. For example, entering early on a steep rise in the chart and exiting when the rate of growth of the coin's value has fallen to thresholds.

This strategy is for coins with a CRR of 70 to 90% (approx.).

The next scenario.

For long-term DEL coin holders. By choosing a coin with a CRR of 10%, a relatively (relatively!) high initial (and current) price, and a large maximum issue, you can count on the price not changing much at first. Until the coin is issued in sufficient volume. You can hold the coins you buy longer and reach the exponential growth area before the maximum supply is reached.

The scenarios above are some of the simplest options for effective and profitable, in our opinion, use of coins. A closer look at the coins and their parameters will reveal many more interesting points for all tastes.

## Custom coin issue fee

When creating a coin, in addition to the financial parameters, you will need to enter a coin ticker - a short designation/name of the coin that will be displayed in all Decimal services where your coin will be mentioned.

Say we have set different commissions for coin names of different lengths, namely:

- 3 letters DEL 1,000,000
- 4 letters DEL 100,000
- 5 letters DEL 10,000
- 6 letters DEL 1,000
- 7 to 10 letters DEL 100

#### Other Decimal custom coin parameters

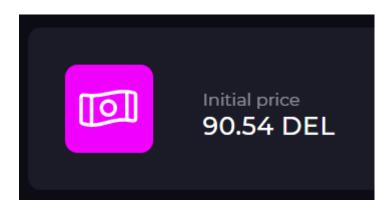
When creating a coin, in addition to CRR you need to specify the following:

• Initial Supply - how many coins the creator will have at the start;

• Maximum Supply - how many coins can be issued in total;

• Initial Reserve<sup>5</sup> - amount of collateral in DELhow many coins the creator will have at the start.

Initial Supply can be any number you want. This parameter greatly affects the initial value of the coin.



The smaller the Initial Supply, all other things being equal, the greater will be the original value of the coin in DEL. The maximum supply cannot be more than 1 quadrillion (that's

<sup>&</sup>lt;sup>5</sup> A coin's reserve, both at creation and throughout its lifetime, cannot be less than 1,000 DEL. If an attempt is made to decrease the reserve (coin sale), Decimal will give a notification that the transaction cannot be performed and the transaction will not be entered into the blockchain.

a number with one and 15 zeros) - 1,000,000,000,000,000 - this amount is more than enough for any project, considering that 1 unit of custom coin can be divided into 10 to the 18th degree fractions.

The minimum DEL fraction - 10<sup>-18</sup> DEL is called UNI.

The initial reserve is the collateral of the custom coin. When a coin is bought/sold, the reserve is either increased or decreased to provide the original proportion in relation to the number of coins issued. The parameter also greatly affects the value of the coin. The higher the reserve, the higher the price of the custom coin, all other things being equal.

You can find instructions on how to create a custom coin on the Help/FAQ page.

Once created, a custom coin appears in the Explorer <u>https://explorer.decimalchain.com/coins</u>

On this page you can always find out:

- Price the current value of the custom coin;
- Creator the crypto address of the coin's creator;
- Issue current issue volume (the number of coins issued);
- Reserve the current reserve of the coin in DEL;
- Delegated percentage of delegated coins from the total issue (+ dollar amount at the current DEL rate);
- CRR constant reserve ratio.

## Audience

For the effective work of the project and implementation of Decimal's ideas, we need a large audience, which is abundant in the crypto-community. These are the users of a number of projects friendly to us, such as Bit.team, Wallbtc, SpaceBot with a total audience of more than 500 thousand users.

Also, to increase our audience, we offer anyone to organize their own on-chain and/or off-chain service on the basis of Decimal network. Detailed description of the methods in the Decimal API documentation and a stable SDK will ensure a comfortable app development process.

But that's not all. There are a number of other third-party projects with their own audiences ready to connect. Ultimately, we would like to combine them all into a single ecosystem and achieve a synergistic effect.

Plus. We built Decimal on top of the Cosmos SDK. Which means we're compatible with the Cosmos network. Which already has 114 international projects. This is not only an expansion of the "warm" audience of cryptocurrency users, but also additional opportunities for users of our network.

# **DEL coin holder viewpoint**

#### Can a business run without me?

Earning scenarios provided by Decimal blockchain are executed automatically. A new blockchain block is generated every 5-6 seconds. Computer programs are executed on the hardware automatically, according to a pre-approved algorithm. Computer hardware maintenance procedures are typical, so almost any network administrator can handle them. Specific moments related directly to the blockchain are simple and prescribed in the relevant instructions.

A change of equipment ownership will go unnoticed by the blockchain. New blocks will continue to be formed and rewards will be paid.

If a DEL owner formulated and laid down the conditions for the functioning of his project at the start, everything else will be done automatically.

#### Project capitalization in Decimal blockchain

Thanks to the Decimal blockchain, all economic processes are fixed in an open database and exclude alternative interpretations.

Similar to the sale of a car - with a service book, the price of a car is reliably justified. When a company is transferred to a new owner, its value is formed from:

- Stability of the network,
- amount of rewards for the block,

- Number of validators and size of their stake,
- Number of transactions,
- total amount of commission,
- amount of slashes
- frequency of slashes,
- number of custom coins issued,
- number of coins delegated

These are all metrics from which to infer the fairness of a particular value.

#### **Business: Validator**

When selling a business, a buyer has a question about the fairness of the price of that business.

For example, if a validator sells its masternode, which has a lot of slashes on the Explorer page, there are obviously some problems with it and the price of such a selling should be lowered. Conversely, if the validator's hardware and software on it are operating without slashes, all slots are filled and the delegators' stakes are large - the owner has a right to ask a bigger sum for this business.

#### For delegators

Any custom coin can be exchanged for any other custom coin or DEL coin at any time. Through the CRR mechanism, the price of any custom coin is expressed in DEL. The value of a delegated DEL stake is also always single-valued, since it is calculated using formulas. And is displayed in the Explorer.

Stakes	Transactions	Stakes	NFT stakes	Rewards	Slashes
Validator		Coin		Amount	
Big Ten Network dxvaloper18vk40cc3er48fzs5ghqz	xy88uqs6a3lsus8cz9	DEL		2.3362925610167142	
		DEL			
		LICANCABUR SERTIFIKAT		1 6.920029427955013	
		PEGASUS		20	

#### For traders

If you bought a custom Decimal blockchain coin and want to freeze your earnings by selling, you know at any point in time that the current price of the coin is fair. Because the price chart is strictly linked by mathematical formulas for buying/selling to supply and demand, as well as to the initial parameters of the coin (CRR, etc.).

#### **For Coiners**

The parameters of an issued coin are set once when it is created and cannot be changed under any circumstances.

By figuring out the parameters of a coin on <u>https://explorer.decimalchain.com/coins</u>, it is always possible to correctly assess its value, potential use, current stage of development and calculate an adequate fair value.

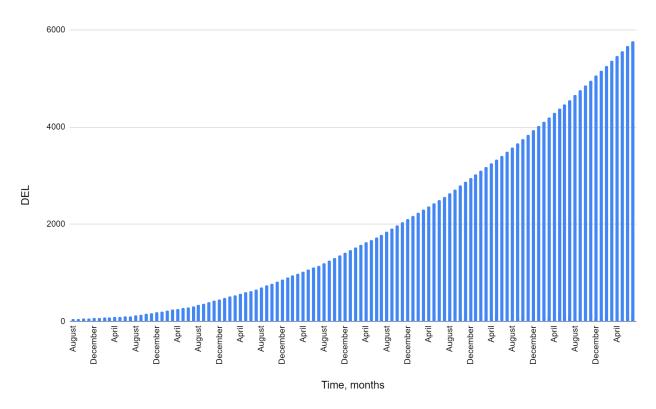
#### Is the reward stable and predictable?

The income, of course, depends directly on the business logic of the user's project in the first place. Nevertheless, in typical Decimal blockchain scenarios such as "run a masternode", "delegate coins", "trade coin" or "issue your own coin", it is possible to ensure predictability and stability of rewards in native DEL coin.

Within the Decimal blockchain, for a validator, the reward expressed in DEL native coin is guaranteed for the first 9 years in which the basic reward for the block will be paid.

For 9 years, the basic reward has been steadily increasing. This is programmed into the network software. Thus you have at least a 9-year horizon for planning and business development.

Decimal's monetary policy is mixed - inflationary with limited issuance. Coin issuance is growing exponentially and in 9 years all tokens of the network will be issued.



## Fig. 5 - DEL supply (9 years).

The total coins amount to be issued: 92,075,616,000 DEL.

The table below shows the reward increasing pattern

throughout the issuance period. The reward increases every 432,000 blocks.

This number of blocks will be generated approximately every 30 days. For simplicity, the periods in the table are called months.

The last reward of 5,769 DEL will be paid for block number 46,656,000.

	3 year			4 year	
Initial supply:	1.718.912.000,00 DEL			4.297.952.000,00 DEL	
Blocks	Monthly total, DEL	Block reward, DEL	Blocks	Monthly total, DEL	Block reward, DEL
10,800,000	146.016.000,00	338,00	15,984,000	301.536.000,00	698,00
11,232,000	158.544.000,00	367,00	16,416,000	319.248.000,00	739,00
11,664,000	171.072.000,00	396,00	16,848,000	336.960.000,00	780,00
12,096,000	183.600.000,00	425,00	17,280,000	354.672.000,00	821,00
12,528,000	196.128.000,00	454,00	17,712,000	372.384.000,00	862,00
12,960,000	208.656.000,00	483,00	18,144,000	390.096.000,00	903,00
13,392,000	221.184.000,00	512,00	18,576,000	407.808.000,00	944,00
13,824,000	233.712.000,00	541,00	19,008,000	425.520.000,00	985,00
14,256,000	246.240.000,00	570,00	19,440,000	443.232.000,00	1.026,00
14,688,000	258.768.000,00	599,00	19,872,000	460.944.000,00	1.067,00
15,120,000	271.296.000,00	628,00	20,304,000	478.656.000,00	1.108,00
15,552,000	283.824.000,00	657,00	20,736,000	496.368.000,00	1.149,00
Total:	2.579.040.000,00			4.787.424.000,00	
Yearly total supply:	4.097.952.000,00			8.885.376.000,00	

	5 year			6 year	
Initial supply:	9.085.376.000,00 DEL			16.827.680.000,00 DEL	
Blocks	Monthly total, DEL	Block reward, DEL	Blocks	Monthly total, DEL	Block reward, DEL
21,168,000	519.264.000,00	1.202,00	26,352,000	799.200.000,00	1.850,00
21,600,000	542.160.000,00	1.255,00	26,784,000	827.280.000,00	1.915,00
22,032,000	565.056.000,00	1.308,00	27,216,000	855.360.000,00	1.980,00
22,464,000	587.952.000,00	1.361,00	27,648,000	883.440.000,00	2.045,00
22,896,000	610.848.000,00	1.414,00	28,080,000	911.520.000,00	2.110,00
23,328,000	633.744.000,00	1.467,00	28,512,000	939.600.000,00	2.175,00
23,760,000	656.640.000,00	1.520,00	28,944,000	967.680.000,00	2.240,00
24,192,000	679.536.000,00	1.573,00	29,376,000	995.760.000,00	2.305,00
24,624,000	702.432.000,00	1.626,00	29,808,000	1.023.840.000,00	2.370,00
25,056,000	725.328.000,00	1.679,00	30,240,000	1.051.920.000,00	2.435,00
25,488,000	748.224.000,00	1.732,00	30,672,000	1.080.000.000,00	2.500,00
25,920,000	771.120.000,00	1.785,00	31,104,000	1.108.080.000,00	2.565,00
Total:	7.742.304.000,00			11.443.680.000,00	
Yearly total supply:	16.627.680.000,00			28.071.360.000,00	

	7 year			8 year	
Initial supply:	20000000			601,760,000.00	
Blocks	Monthly total, DEL	Block reward, DEL	Blocks	Monthly total, DEL	Block reward, DEL
31,536,000	1.141.344.000,00	2.642,00	36,720,000	1.545.696.000,00	3.578,00
31,968,000	1.174.608.000,00	2.719,00	37,152,000	1.584.144.000,00	3.667,00
32,400,000	1.207.872.000,00	2.796,00	37,584,000	1.622.592.000,00	3.756,00
32,832,000	1.241.136.000,00	2.873,00	38,016,000	1.661.040.000,00	3.845,00
33,264,000	1.274.400.000,00	2.950,00	38,448,000	1.699.488.000,00	3.934,00
33,696,000	1.307.664.000,00	3.027,00	38,880,000	1.737.936.000,00	4.023,00
34,128,000	1.340.928.000,00	3.104,00	39,312,000	1.776.384.000,00	4.112,00
34,560,000	1.374.192.000,00	3.181,00	39,744,000	1.814.832.000,00	4.201,00
34,992,000	1.407.456.000,00	3.258,00	40,176,000	1.853.280.000,00	4.290,00
35,424,000	1.440.720.000,00	3.335,00	40,608,000	1.891.728.000,00	4.379,00
35,856,000	1.473.984.000,00	3.412,00	41,040,000	1.930.176.000,00	4.468,00
36,288,000	1.507.248.000,00	3.489,00	41,472,000	1.968.624.000,00	4.557,00
Total:	15.891.552.000,00			21.085.920.000,00	
Yearly total supply:	43.962.912.000,00			65.048.832.000,00	

	9 year			
Initial supply:	65,248,832,000.00			
Blocks	Monthly total, DEL	Block reward		
41,904,000	2,012,256,000.00	4,658.00		
42,336,000	2,055,888,000.00	4,759.00		
42,768,000	2,099,520,000.00	4,860.00		
43,200,000	2,143,152,000.00	4,961.00		
43,632,000	2,186,784,000.00	5,062.00		
44,064,000	2,230,416,000.00	5,163.00		
44,496,000	2,274,048,000.00	5,264.00		
44,928,000	2,317,680,000.00	5,365.00		
45,360,000	2,361,312,000.00	5,466.00		
45,792,000	2,404,944,000.00	5,567.00		
46,224,000	2,448,576,000.00	5,668.00		
46,656,000	2,492,208,000.00	5,769.00		
Total:	27,026,784,000.00			
Yearly total supply:	92,075,616,000.00			

In order for delegates to estimate their potential rewards, the Decimal team will develop special calculators in which, based on historical data and a number of parameters (number of validators, stakesize,...), they will receive calculations of rewards.

Custom coin trading can already be emulated now at <a href="https://calculator.decimalchain.com">https://calculator.decimalchain.com</a>

to calculate the coin price and expected profit (from speculative transactions) at the corresponding issue of a custom coin. Similarly, the user can orient on the income in DEL and when issuing his own custom coin.

There remains one more important question. Part of users with rewards expressed in DEL will want to convert/spend it.

This conversion will be done by Liquidity Providers in Decimal ecosystem. In these services it will be possible to convert DEL both in crypto and fiat assets. A significant budget will be allocated for the development of the Liquidity Providers network.

#### Estimated value of future cash flows

1 block of Decimal's blockchain holds up to 10,000 transactions. The average fee per transaction is about 0.5 DEL<sup>6</sup>.

10,000 \* 0.5 DEL = 5,000 DEL.

5,000 DEL is the amount from 1 block that will be shared between validators and delegators.

A new block is generated every 5.5 seconds<sup>7</sup>.

There are 86,400 seconds in a day.

Consequently, 15,709 new blocks are generated in a day.

Maximum possible reward

15,709 blocks \* 5,000 DEL = 78,545,000 DEL

At a cost of 1 DEL = \$0.25

78,545,000 DEL \* \$0.25 = \$19,636,250 per day

DEL exchange rate depends on the degree of business development. Assuming the DEL value decreases by a factor of 10

78,545,000 DEL \* \$0.025 = \$1,963,625 per day

At 100 times. 78,545,000 DEL \* \$0.0025 = \$196,362.5 per day If blocks are loaded at half capacity 5,000 \* 0.5 DEL = 2,500 DEL - reward per block 2,500 DEL \*

<sup>&</sup>lt;sup>6</sup> Commission amount varies in one direction or another. The actual data are always on Status https://status.decimalchain.com

<sup>&</sup>lt;sup>7</sup> Again, the value changes, the current data is always on Status

15,709 blocks = 39,272,500 DEL - daily reward

1 DEL = \$0.25

39,272,500 DEL \* \$0.25 = \$9,818,125 - daily reward in dollars 1 DEL = \$0.025

39,272,500 DEL \* \$0.025 = \$981,812.5

1 DEL = \$0.0025

39,272,500 DEL \* \$0.0025 = \$98,181.25

Assuming blocks are loaded to a quarter of the capacity

2,500 \* 0.5 DEL = 1,250 DEL - reward for 1 block 1,250 DEL \*

15,709 blocks = 19,636,250 DEL - daily reward

1 DEL = \$0.25

19,636,250 DEL \* \$0.25 = \$4,909,062.5 - daily reward in dollars

1 DEL = \$0.025

39,272,500 DEL \* \$0.025 = \$490,906.25

1 DEL = \$0.0025

39,272,500 DEL \* \$0.0025 = \$49,090.625

As you can see, even with the dramatic fall in the DEL exchange rate and the absence of basic rewards, the daily rewards amount remains significant.

# **Terms of Entry**

## **Cost of Entry**

#### Masternode (Validator)

Masternode is a hardware and software suite that acts as a validator on the network. The hardware is connected to the Internet and directly to other validators to provide the main task of establishing consensus.

Validator hardware requirements:

4GB RAM - amount of RAM;

1 TB SSD - size and type of the hard drive;

x64 2.0 GHz 4 vCPUs - CPU characteristics.

Hardware price as of the end of June 2020 in Russia

4GB RAM

around 2000 rubles

https://clck.ru/PRLqa

1 TB SSD

on average 10 rubles per 1 GB SSD, i.e. 10 000 rubles

https://clck.ru/PRLvd

x64 2.0 GHz 4 vCPUs

from 10 000 rubles

https://clck.ru/PRNhe

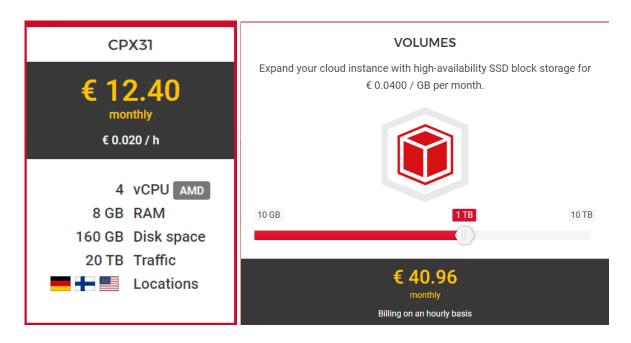
Total 22 000 rubles

+ You will need the cost of the motherboard.

An alternative option - rent cloud server capacities in the data center.

For example, Hetzner:

https://www.hetzner.com/cloud?country=us



55 Euro per month (approx.).

# The number of DELs for the stake/ Reward distribution model among validators

Decimal is launched with 4 validators. The initial supply will be 200,000,000 DEL, of which 160,000,000 will be distributed in equal shares to the first validators in the network, i.e. 40,000,000 DEL to each validator. This is the initial stake of the validators. By participating in consensus-building, validators will share the reward for each block they sign in proportion to their stake. Initially, equally. Over time, users will begin to delegate their funds to different validators. Their stakes will change, and so will the proportion of the division of the reward. The bigger the stake, the more reward the validator will get.

The calculation and payment of rewards to both validators and delegates takes place on each 120 block of the chain. Accordingly, it is in the interest of the new validator to join with as much stake as possible. Based on a DEL cost of 25 cents on the dollar at the start, in order to equal the first 4 validators, you would need

\$0.25 \* 40,000,000 DEL = \$10,000,000

The stake can be lower, of course, but you should keep in mind that this will affect the amount of the reward.

Also keep in mind that Decimal has 2 types of slashes:

1. If a validator is active but does not sign 12 of 24 last blocks, he will lose 1% of his stake;

2. If a validator signs 2 block candidates of equal height in consensus procedure, he will be fined 5% of his stake (this is a serious violation, which can cause blockchain fork, which may severely harm the whole network).

#### What are the terms of delegation for validators?

Information about the conditions of interaction with validators is displayed on the Explorer Decimal page

https://explorer.decimalchain.com/validators

1 - number of missed blocks

2 - percentage of commission charged by the validator for its services

3 - total stake expressed in DEL

4 - minimal possible size of stake(in DEL) 5 - number of occupied delegation slots

10 In this case the amount of penalty is irrevocably destroyed ("burned").

6 - validator's vote strength

M	Main Node dxvaloperleu9juhlsa4svhdhh4w2mknqtarnemvf3x93qll	[]	17	5%	179,814,664	•	261	180 millions
t	Turing dxvaloperlr9hdv2p89yyeloxcmvgpud6wgg2xplri0nz3rf0q	[]	508	8%	156,571,135	•	24	157 millions
	BitTeam dxvaloperlq7uy7u0ewgsgwgzwmmkqddy6nujj60rm6dr3y	נכ	327	10 %	147,493,536		64	147 millions
5	<b>Spacebot</b> dxvaloperirhw7ts2qyykqasc5sxjw32tvkr85pzrn5edf6v	[]	94	15 %	69,996,726			70 millions
Decised Fre	DecimalPro dwaloperl4zc56aasyzqfw8naxscevs54nrs47zanpctmk3	[]		4%	6,728,054			7 millions
۲	GalaxyOnline.io dwaloper172gppj19r4arp7zzyywgk07pp0z8rcjat3206m	[]		6%	5,959,156			6 millions
۲	PRIDE dxvaloperljq7vzrwqysrsf2dyxhjrf9csq7h7jy3c0tgxha	[]		6%	4,725,103			5 millions
	Legion dxvaloperluv4n8q3gj0n3l4puq4nh66cg4scmnywsq6av7m		66	8%	4,387,775		139	4 millions

#### **Decimal Network Liquidity Providers**

DEL for sales/distribution

#### Where can I buy DEL?

In general, there are many types of liquidity providers. These include bidders who fill the quote "stack" with their limit orders. These are banks or payment systems that facilitate the circulation and exchange of different currencies between each other. It is also third-party projects that accept a variety of currencies, such as for the purchase of gift cards.

Decimal liquidity providers are all those services or organizations that in one way or another facilitate the circulation, movement or exchange of DEL coins.

#### 1) https://bit.team/

This is a P2P exchange where you can buy or sell Decimal native DEL blockchain's token, as well as BITCOIN, (USDT) ETHEREUM, LITECOIN, TETHER and other cryptocurrencies. Profitable rate and commission only 0.2%. Bit.Team exchange supports deposit and withdrawal of BTC, VISA, WebMoney, QIWI, AdvCash, Yandex, Perfect Money, PayPal, OKpay, Sberbank, Alfa Bank, Tinkoff, VTB etc.

BITTEAM	Buy Sell RA	TES NFT		٩ ٩	😫 Sign Up	Log in
	Buy			Sell		
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Sum		Choose your currency		Payment meth	od	
		Ø RUB		All systems	5	*
		Buy BTC online	(58838.00 RUB)			
Rating 🌻	Seller	Payment method		Price 🗘	Limits ≑	
<b>PRO</b> 2324	maxpayne08 •	Sberbank, Sovkombank, VTB24	4, Tinkoff	4860000.00 RUB	999.00 - 5244.00 RUB	Buy
70	puma 🔍	Sberbank, Alfa-Bank		4865000.00 RUB	1000.00 - 13922.00 RUB	Buy
212	iskobaro 🖲	Sberbank		5000000.00 RUB	5000.00 - 10040.00 RUB	Buy

2) <u>https://c3.exchange/trades?currencyPairId=DEL\_USDT</u>

C3.exchange is a platform allowing to manage, invest and trade crypto-assets.

It is the first crypto exchange for trading digital and fiat assets with professional tools for trading (PAMM accounts).

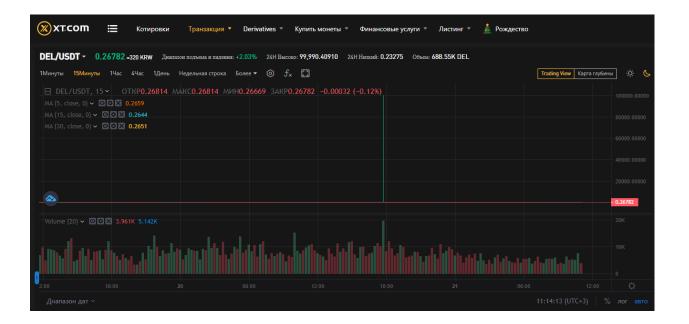
The exchange works with several jurisdictions, covering CIS countries, Asia, Europe and Middle East, which will allow working with all financial market participants.

Commissions on C3.Exchange can be paid both in cryptocurrency and the platform's native token. You can buy and sell DEL here in the currency pairs DEL/USDT, DEL/BTC and DEL/ETH.

				-1-	DEL_USDT	1h ≬¢	ේ <sub>ම</sub> Compa	are $\sim$ Indica	ators $\leftarrow$ $\rightarrow$		Ę	ŝ 5	, í
USDT	BTC ETH	C3		~		DT. 60 - c	0.1900000	H0.1900000	L0.19000000 C0.19	000000 0.0000000 (	0.00%)		
Currency	Price	Volume	24 hours	;;;	Volume (20)						,		0.205000
втс	11738.0846112	11507.1934	-1.23 %										
ЕТН	390.99206761	1652.9597	-1.00 %	. <i>D</i>							1 1		0.200000
DEL	0.19	894.3807	-5.00 %										
LTC	57.7257825	102.1568	-0.28%	K									0.195000
PZM	0.005	1.0634	+0.00 %	° <u></u>									
				•								- L	0 100000
C3	0.89999999	0.9524	+0.00 %							-	-		0.190000
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								0.24000000	8400.0000 7500.0000			6.0000 5.0000	
		0.1		Price				USDT	0.23000000	7500.0000		1/2	5.0000

#### 1) https://www.xt.com/

XT.COM is a P2P exchange and sale platform for cryptocurrency, including derivatives and margin trading. There is an exchange for fiat money. The peculiarity of the crypto exchange is that it issues its own cryptocurrency and provides users with software for mining. Bitcoin, Ethereum, Litecoin, Tether, Tron, Ripple and other cryptocurrencies are traded on the site, over 120 instruments in total. Deposit/withdrawal is possible from/to bank cards and accounts. Standard referral program and special bonuses for blockchain participants are offered.



### 2) https://coinsbit.io/

Coinsbit Exchange is a cryptocurrency exchange platform for buying and selling cryptocurrencies. Bitcoin, Ripple, Litecoin, Bitcoin Cash, Ethereum Classic and other cryptocurrencies are traded there.

Of defi coins, Swipe, Loopeng, Republic, SushiToken, Compound, etc. are available. There are Stablecoins. Coinsbit features crypto-fiat pairs with eight world currencies, including the US dollar and the Russian ruble. There are classic and advanced trading, trading via Metamask and OTC.

Passive income options include staking in blockchain projects and the ability to provide P2P loans.



# 2) https://p2pb2b.io/

Crypto exchange P2PB2B appeared in 2018. The main feature of this exchange is its speed of up to 10,000 transactions per second and 1,000,000,000 TCP connections.

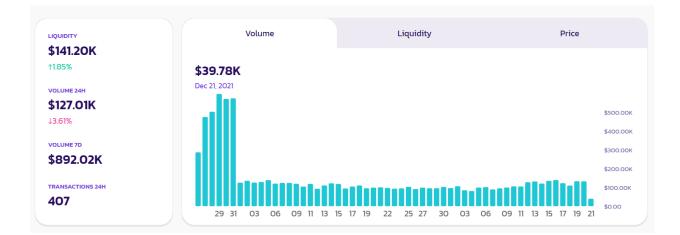
The service of this company is considered one of the fastest in the world. p2pb2b has an advanced interface that allows you to use more than 10 analytical tools simultaneously. One of the peculiarities of this exchange is that traders are required to specify personal data when registering.



# 3) Pancakeswap

It is a non-custodial platform based on Binance Smart Chain (BSC) for exchange, profitable farming using BEP-20 tokens. The platform has its own CAKE token and is analogous to Uniswap and SushiSwap. But unlike these Ethereum exchanges, PancakeSwap has faster transactions and lower fees because BSC is a more centralized counterpart to Ethereum.

To trade with this liquidity provider it is convenient to use the support tool <u>dextools</u>.



# 4) <u>Uniswap</u>

Uniswap is a decentralized financial protocol used to exchange cryptocurrencies. Uniswap is also the name of the company that originally developed the protocol. The protocol facilitates automatic transactions between cryptocurrency tokens in the Ethereum blockchain through the use of smart contracts. As of October 2020, Uniswap was considered the largest decentralized exchange and the fourth largest cryptocurrency exchange overall in terms of daily trading volume.

To trade with this liquidity provider, it is convenient to use an auxiliary tool <u>dextools</u>.



Please note that the Decimal blockchain is at the very beginning of its development. The Decimal team is working hard to increase DEL liquidity and in the very near future we will provide new opportunities for our users, namely new buy/sell venues and other services of the Decimal ecosystem that will facilitate the availability and turnover of DEL.

#### How much does 1 DEL cost?

1 DEL price for a wide range of customers at the sales start is 15 Russian rubles or 0.20 USD (at the exchange rate of 73.78 rubles per 1 USD on August 10, 2020).

# **Contact information**

We are always glad to see you on our resources, to communicate and exchange opinions.

Home page: <a href="https://decimalchain.com/">https://decimalchain.com/</a>

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Social media pages: https://vk.com/decimalchain https://vk.com/decimal\_community https://www.facebook.com/decimalchain https://www.instagram.com/decimal\_chain/ https://twitter.com/DecimalChain https://bitbucket.org/decimalteam