

# DECENTRALIZED BOND

COLLATOLISED P2P LOAN AND DEBT OBLIGATIONS EACH BOND CORRESPONDS TO A SPECIFIC BOND CONTRACT

TURN ANY DIGITAL ASSET AND INDEX INTO A BOND SPLIT AND BUNDLE BONDS FOR TRADING IN THE SECONDARY MARKET

## **ERC3475 BOND AND DEBOND**



## **DeBond pioneer**

Bonds are an important tool that stabilizes the economy. However, there has not been any real DeBond product in the Defi market yet. That is why we have created ERC-3475 to fill in the gap.



## Low access threshold

Traditional bonds & bond derivatives have extremely high entry requirements and are mostly available to governments and large-scale fund managers only. DeBond, in contrast, can be automatically generated by any type of digital asset and Index thus allowing any party to issue bond derivatives.



## No-hassle endorsement

We have a firm control over the collateralized assets through smart contract and decentralized capital (DeCapital). Unlike traditional bonds that rely on the credit endorsement of a single agency, we use the underlying assets controlled by the smart contract and the smart contract to ensure the fulfillment of the agreement..



## **DeBond ecology**

We provide DeBond DEX, wallet and other visualized bond & bond derivative creation tools that meet the ERC-3475 requirements. Institutions and individuals can design their own bonds and use them to raise fund with our visualized programming port.

## **ERC-3475 BOND STANDARDS**







### **ERC-20**

The existing Defi protocols typically offer ERC-20 LP tokens to liquidity providers as a mathematical proof of asset collateralization.

Nevertheless, as a type of homogenized token, ERC-20 can hardly meet the sophisticated financial demands because all of the ERC-20 tokens use the same smart contract under a uniform algorithmic standard.

### **ERC-3475**

Meanwhile, ERC-3475 is a diverse redeemable bond standard with a more complex data structure. Each bond is assigned to a unique algorithm and does not require an additional smart contract. It is possible to create both traditional bonds and financial derivatives like futures and options under the ERC-3475 standard.

### **ADVANTAGE**

Each bond is equivalent to an independent contract that allows the users to customize execution conditions and interest rate.

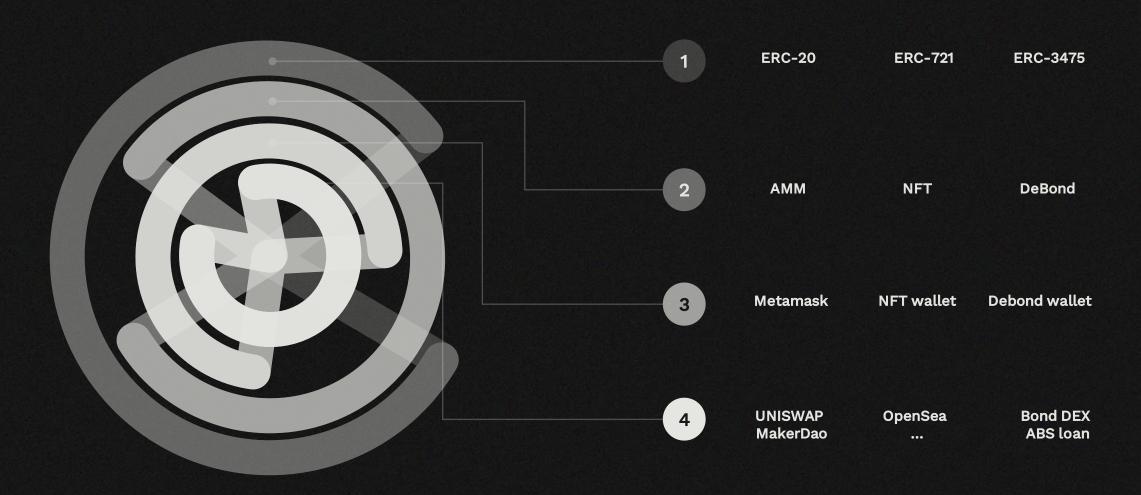
Bonds can be listed and traded on the DeBond Exchange, or split up and bundled for trading in the secondary market as subordinated bonds.

Both fungible tokens and non-fungible tokens (NFT) can be used as collaterals for bond based ERC-3475 derivatives.





## **DEBOND ECOLOGY**



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## **DEBOND EXCHANGE**

- Bonds and other derivatives can be sold on this market, using Dutch method.
- After a bond is put onto the market, its original price is reduced until somebody offers to buy it.
- The DeBond Exchange supports all auctions that comply with the ERC-3475 standards.



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## **DEBOND WALLET**

- DeBond wallet is an extension to the regular ERC-20 wallet, allowing for the centralized display of all ERC-3475 assets of an user.
- There is no need for the users to download additional software or regenerate private keys. They can access their ERC-3475 bonds by linking their existing wallet via metamask.



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## **DEBOND APPLICATION SCENARIOS**



## **DEBOND CYCLE**

Token flow slows down & the number More tokens are created; price DeBond purchaser drops; increasingly goes up while interest rates difficult to redeem DeBonds as price decreases. New investors and goes down in the secondary market. capital flock in to purchase DeBonds. **EXPANSION** RECESSION The oversale of bonds allows Free fall of token prices; multiple RECOVERY the bond market to recover; **CRISIS** tokens dropping to near zero. market confidence is restored given the increase in the price of DBIT. **SPECULATION BUBBLE** 

Over-collateralization of LP brings in speculators who collect low-cost bonds. Since DBIT is the only currency of the Bond DEX, the demand for it will increase.

Dangerous expansion of the market & abnormally large quantity of transactions.

## **RISK ATTITUDE**

The paper interest rate can be modified by the governance contract.

In terms of the interest calculation method, there are 2 classes of debond:

FLOATING RATE BOND

- High risk
- High interest rate
- Subprime bond
- No fixed mature date
- Low priority for creditors
- May loss principal

0 F 2

FIXED RATE BOND

- Low risk
- Low interest rate
- Prime bond
- Fixed mature date
- Predetermined interest rate
- High priority for creditors
- Principal is much safer

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## **BOND CLASSES**

| Bonds type             | Number of nonces | Annual nominal paper IR* | Priority for creditors |
|------------------------|------------------|--------------------------|------------------------|
| Floating rate 0.5 year | 1,5              | Floating <16%            | 10th                   |
| Floating rate 1 year   | 1,6              | Floating <18%            | 8th                    |
| Floating rate 2 years  | 1,7              | Floating <20%            | 6th                    |
| Floating rate 3 years  | 1,8              | Floating <22%            | 4th                    |
| Floating rate 5 years  | 1,9              | Floating <26%            | 2nd                    |
| Fixed rate 0.5 year    | 1,5              | Fixed 0-8%               | 9th                    |
| Fixed rate 1 year      | 1,6              | Fixed 0-10%              | 7th                    |
| Fixed rate 2 years     | 1,7              | Fixed 0-12%              | 5th                    |
| Fixed rate 3 years     | 1,8              | Fixed 0-14%              | 3rd                    |
| Fixed rate 5 years     | 1,9              | Fixed 0-18%              | 1st                    |

Any information about the interest rate listed here is only a presomption.. For more information please read our whitepaper, section 4.4.4 Interest Rate.

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## **DEBOND'S FUTURE**

- The ERC (BEP) 3475 standard and the Debond Exchange that we created have opened up a whole new market full of unlimited potential for investors and speculators.
- In 2020, USD-denominated bonds represent 132.5% of the country's nominal GDP (\$20.93 trillion) of December 2020. The total DEFI locked position is worth \$52.1 billion. Considering that the DEFI bond market is about 1.3 times larger than that of TVL.
- The DEFI bond market is expected to be USD 69 billion.



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## **DEBOND'S BARRIERS TO COMPETITION**

## LIQUIDITY BARRIERS

Prompted by high interest rates at the early stage, users can convert LP tokens directly into bonds redeemable at maturity. This means that we can absorb three-party liquidity to form a solid market base.

## **ROBUST INFRASTRUCTURE**

beyond the ERC3475 bond standards, infrastructure such as DeBond Wallet, Exchange and ecology are fully open to everyone, thus no need to start from scratch for any institution wishing to enter the bond market.

## ZERO TRANSACTION FEES

The profit of our bond ecology lies in the reuse of collateralized assets. We have implemented a no-fee policy for our bond exchange, which reduces arbitrage costs for speculators in the secondary market.

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## DECENTRALIZED BOND INDEX TOKEN

CONSTANTLY
RISING INDEX WITH
SHORT-TERM
FLUCTUATION

ERC20 TOKENS
PEGGED TO THE
BOND INDEX

TOKENS CAN BE USED FOR BOND INTEREST PAYMENT AND SECONDARY MARKET TRANSACTION

LOW PRICE FLUCTUATION

 DBIT (Decentralized Bonds Index Token) is a type of ERC20 token pegged to the bond index. It is mainly used for bond interest payment and secondary market transaction. DBIT can also take part in the on-chain incubation projects, so as to obtain the project tokens to diversify the asset portfolios of the collateral pool.

The price of DBIT represents the confidence of investors over the current bond market.

The price of DBIT is guaranteed by all of the collaterals in the bond market.

The reserve of hybrid collaterals and the fact that the token is pegged to the index can guarantee the floor price of DBIT.

As an index token, the price of DBIT will continue to rise along with the development of DEFI.

It is part of the index system that reflects the overall trend of the bond market.

DBIT is a currency used for bond interest payment and secondary market transaction.

## THE MINTING OF DBIT

### • TOKEN MINTING RULE

Upon receiving the collaterals, the bank contract will mint DBITs for the LP contract, according to the Halvening Model and the price set by the oracle machine. The bond holders will receive the exact amount of DBITs when the bond is redeemed.

### THE HALVENING MODEL

Contract-controlled price (P) = 1.05  $^{\circ}$  (( Total supply of DBIT/100000 log $\phi$ )) (For every 100,000 DBITs created, the token creation costs have to be recalculated.)

• P=1.05 ln(T/100000)

ALICE
Pledge of digital assets

Check if the pledge is single token based

NO

BANK
CONTRACT

send pledged asset to the asset and

YES NO Time passed

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## PERMANENT POOL OF LIQUIDITY



While engaging in a zerosum game with other pools of funds, the DeBond pool will gradually absorb their liquidity.



The huge amount of permanent liquidity provided by DeBond not only guarantees the value of the DeBond products, but also constitutes effective barriers to competition.

- Users need to sign a contract to pledge their assets and obtain DeBond. The contract sets out the repayment time, conditions and rewards.
- The algorithm adopted by the contract can prevent free fall of liquidity. Therefore, the pool of funds will always be on the rise in the long term.

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## SECURITISED P2P LOAN

PEER TO PEER LENDING PLATFORM

TRADABLE SECURITISED LOAN

USING SMART CONTRACT TO ENSURE REPAYMENT ON-CHAIN AND OFF-CHAIN COLLATERALS

## **SECURITISED P2P LENDING**

## LOW DEFAULT RISK

Using smart contracts and pledged digital assets. The loan itself has a lower default risk than traditional p2p lending. The loan with higher risk will have a higher interest rate and lower mortgage rate. Creditors can also sell some part of the securitised loan to willing buyers to minimise the default risk..

## **SPECULATABLE**

Securitised loans can be divided and assigned to others in the form of bonds, turning the loan into a type of speculative investment. The fluctuation of the bond price in the secondary market can therefore create a new speculative market.

### PLEDGED ASSET

Multiple on-chain and off-chain assets can be used as a collateral for a loan. In some cases, the securitised loan bond can be issued without any collateral. But in this case the actual usage of the loan will be strictly limited by a smart contract.

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## SECURITISED P2P LOAN

### PEER TO PEER LENDING

The creditor of a securitized loan is no longer a smart contract, The debitor has to first pledge his/her digital assets (ERC-20, ERC-721, ERC-3475 etc.) to a smart contract, which then issues the loan bond representing the securitised loan. Based on the creditor's settings of the amount of the loan, repayment method, interest rate, due date, etc.

### SECURITISED LOAN

These bonds are going to be placed on the secondary market and traded using the Dutch auction method. If a prospective debtor believes that the bond is set up in a rational manner, he/she will purchase the bond. Upon the completion of the transaction, the creditor receives the loan and the debtor obtains the bond of the collateralized assets.

BOND

DEX

The loan

agreement is

auctioned on

**BOND DEX** 

ALICE

Pledges her asset and draft loan agreement

ALICE

Has pledgeable asset and needs loan

loan agreement and are willing to borrow money to Alice

BOB

Creditor take the

BOB

ALICE

Receives the loan

and use the loan

to invest in the

market

Creditor receives the bond of the pledged asset

BOB

The processeur of the securitised loan bond receives repayment with interest

Borrower honours the loan agreement

DFX

BOND

The securitised loan bond can be split and bundled for sell

> Borrower breaks the loan agreement

BOB

After the repayment time, creditor can redeem the asset in question.

ALICE

Redeem her pledged asset's bond get her pledged asset back

## **BONDED LENDING**

No collateral liquidation risk

Debt can be divided, bundled and assigned in the form of bond

NFTs and other types of digital assets are accepted as collaterals

Personalized options available to each bond contract

Higher utilization rate for collateralized assets

Customized interest rate, loan volume, repayment method and time

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## **BONDED LENDING APP**



- Collateral, interest rate, loan volume, repayment method and time customization:
- unlike traditional lending contracts, bonded loans allow the borrowers to personalize the interest rate, loan amount, and the time and amount of each payment.
- Bonds with reasonable settings will then be selected and purchased by the lenders in the secondary market.

## OTHER DERIVATIVES

OPEN SOURCE SYSTEM, ALLOWING ANY DEVELOPERS TO PARTICIPATE

ENHANCING THE DIVERSITY OF DEBOND ECOSYSTEM HEDGING AGAINST INVESTMENT RISK. ON-CHAIN AND OFF-CHAIN DERIVATIVES CREATE OPTIONS
BASED ON
CONDITIONS OR
EVENT

## **FORWARDS FUTURES OPTIONS BINARY OPTIONS** WARRANTS **SWAPS**

## **DERIVATIVES USE CASES**

## **HEDGING**

Hedge or to mitigate investment risk, by entering into a derivative contract whose value moves in the opposite direction of their position and cancels part of the potential lost.

## **OPTION**

Create options with the value of the derivative is linked to a predetermined condition or event (e.g., the underlying asset reaching a specific price level).

## **LEVERAGING**

Provide leverage, such that a small movement in the underlying value can cause a large difference in the value of the derivative.

## **SPECULATION**

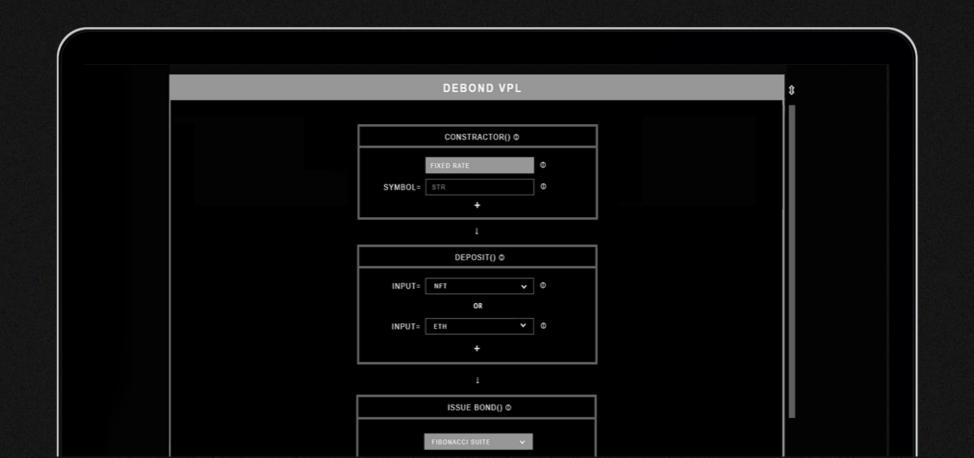
Make profit from speculating the market movements. (e.g. moves in a given direction, stays in or out of a specified range, reaches a certain level)

## **ARBITRAGING**

Allowing a riskless profit by simultaneously entering into transactions into two or more markets.

## **VISUALIZED DERIVATIVES GENERATOR**

ERC-3475 provides node-based programming scripts, which enable people unfamiliar with the solidity code to create customized derivative products with a few clicks. By editing the parameters and nodes, everyone can create new derivatives or even new economic models with a few clicks.



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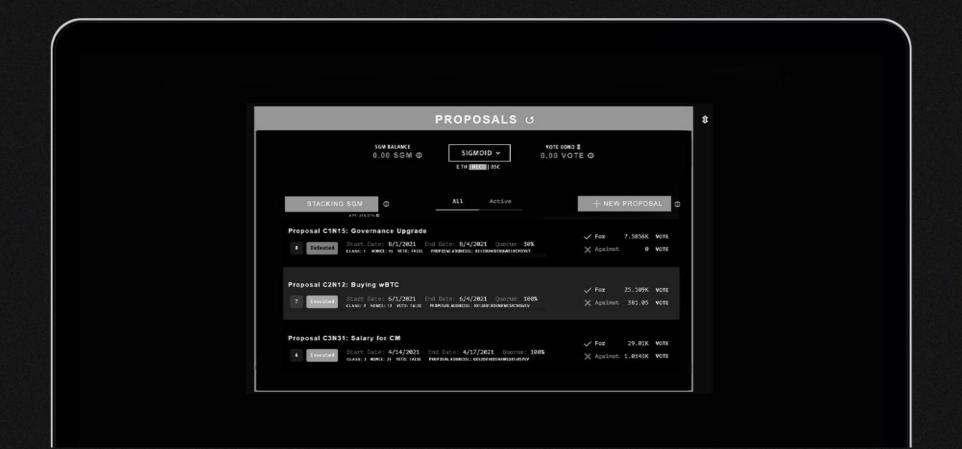
## COMMUNITY GOVERNANCE

UPGRADED SNAPSHOT GOVERNANCE PLATFORM

PLATFORM-WIDE GOVERNANCE TOKEN - DBGT GENUINE DECENTRALIZED GOVERNANCE DAO-CONTROLLED DECENTRALIZED INVESTMENT FUND -DECAPITAL

## DBGT DECENTRALIZED GOVERNANCE PLATFORM

Unlike SnapShot, which only provides polling services, the DBGT platform offers all-round decentralized governance. When a proposal is created to bid on pledged assets or use the fund from DeCapital, it has to be converted into a smart contract. Any DeCapital revision, update and withdrawal has to be voted for by the community members and executed on the chain. The platform uses DBGT as the universal governance token.



## **DECAPITAL**

In order to increase the utilization efficiency of the collaterals in the bond ecology, we allow the DBGT holders to discuss and determine the way the assets are used through decentralized governance



## FINANCING AND VALUATION

## Financing &Valuation

The original shares of the project are 1,000,000 DBGTs, which are sold in the Seed round, Private round A & B and public offering.

After the project is officially listed on the exchanges, investors can subscribe for additional DBGTs.

Despite the dilution of the original shares, the quantity of the tokens remains the same while the price increases.

Tokens from the seed and private rounds will be unlocked continuously as new tokens are issued.



## **SEED & PRIVATE A ROUND**

100,000 DBGTs for sale, which are expected to provide USD 1,700,000 in financing for project development, team building and marketing.



## PRIVATE B ROUND & PUBLIC OFFERING

150,000 DBGTs released for Private B round and public offering. All financing from these rounds will be used to increase liquidity, project development, team building and marketing.



## PROJECT LAUNCH, SERIES A

Upon listing, new governance tokens are to be purchased by pledging other digital assets. The cost of minting is USD 100 for each DBGT, which will increase along with the halvening of tokens.

## **SEED ROUND FINANCING**

Maximum supply\* of token: 1,000,000 DBGT Initial supply of token at TGE: 20,000 DBGT

Initial TGE market cap: TBA

|   | Round               | Token<br>Number | Price  | Initial Shares<br>Proportion | Financing<br>Target | Token Unlocking Rule  |
|---|---------------------|-----------------|--------|------------------------------|---------------------|---|
|   | Seed Round<br>(ICO) | 40000           | \$12.5 | 4%                           | \$500,000           | Tokens are unlocked during the first 9 months after listing through TVL; the locked portion will be linearly released in the next 9 months. |
| • | Private A<br>(ICO)  | 60000           | \$20   | 6%                           | \$1,200,000         | Tokens are unlocked during the first 9 months after listing through TVL; the locked portion will be linearly released in the next 6 months. |
|   | Private B<br>(ICO)  | 130000          | \$35   | 13%                          | \$4,550,000         | Tokens are unlocked during the first 6 months after listing through TVL; the locked portion will be linearly released in the next 6 months. |
|   | Public Offering     | 20000           | ТВА    | 2%                           | ТВА                 | TBA   |

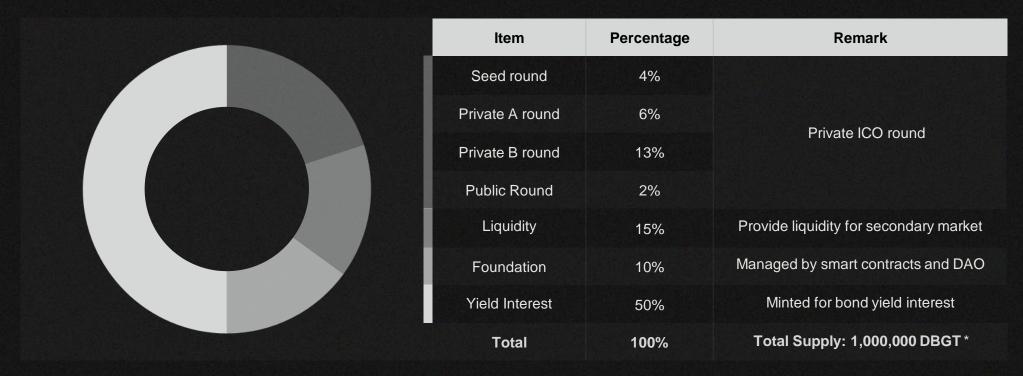
<sup>\*</sup>MaximumSupply can be revised if all the tokens are minted.

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<sup>\*\*</sup>Traditional seed round consists of ICO seed round, ICO private A, ICO private B and public offering



## **DISTRIBUTION OF TOKENS**



<sup>\*</sup>When the total supply is close to the limit. There will be a possibility to extend the limit through DAO

## THE MINTING OF DBGT

### • TOKEN MINTING RULE

Upon receiving the collaterals, the bank contract will mint DBGTs for the LP contract, according to the Halvening model and the price set by the oracle machine. The bond holders will receive the exact amount of DBGTs when the bond is redeemed.

### . THE HALVENING MODEL

DBIT to DBGT's Contract-controlled price (P) = 100+(Total supply of DBGT \* 10,000 / maximum supply of DBGT) ^2 / 100,000 (For every 100,000 DBGTs created, the token creation costs have to be recalculated).

•  $P = 100 + (T * 10,000/M)^2/100,000$ 

YES

ALICE
Pledge of digital assets

Pledge NO

BANK

CONTRACT

Bond can be redeemed to DBGT

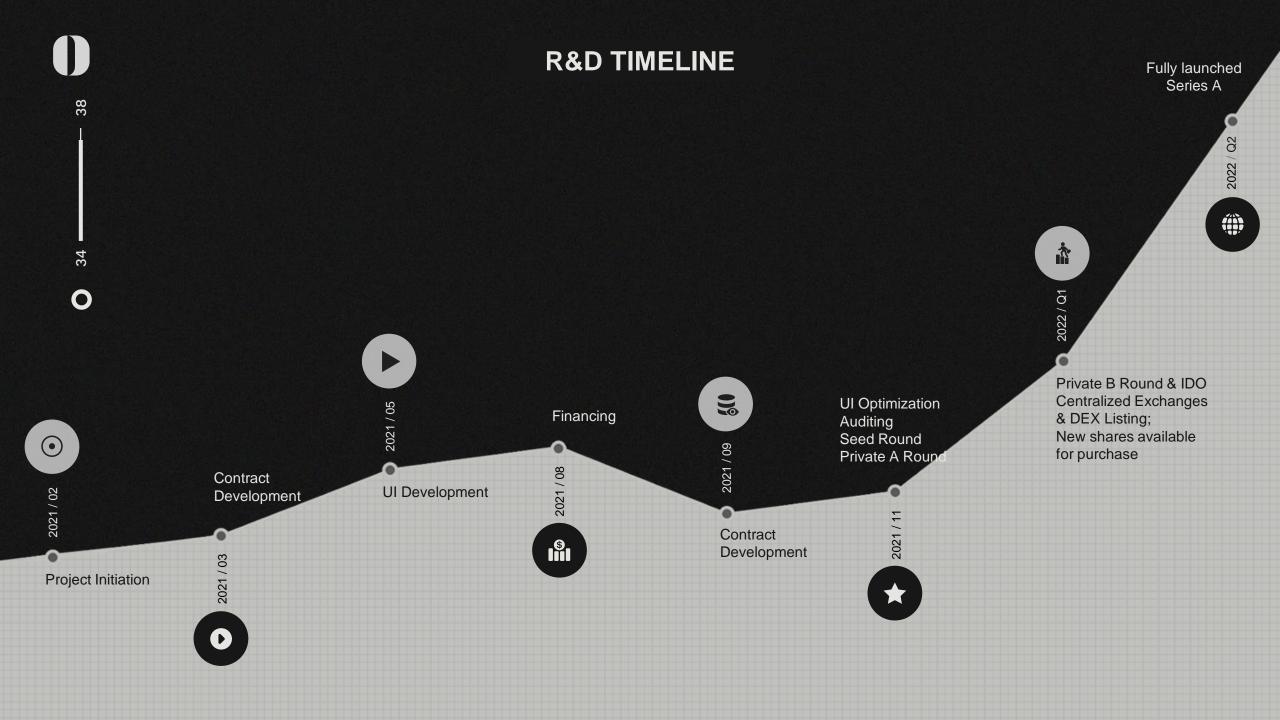
YES

NO

Check if all the redemption conditions on the bond are completed

Time passed

Bond can be separated packed and sell on the BOND DEX 2021-0





## **OUR CORPORATION**

Our project is run by an Estonia-registered limited company, which is licensed to operate digital currency and other relevant businesses.

## SigmoidLab OÜ

Limited liability company (Limited liability company)
Roseni tn 13, 10111, Tallinn linn, Harju maakond, Republic of Estonia

## Linkedin page

We're a global community of academics, consultants, developers and marketing experts with deep understanding in cryptography, decentralized systems and smart contracts.

Our team consists of 12 members from France, Ukraine, India, Malaysia and United States. Members who has involved with the development of lota, Polygon, Swaphelper, Bithumb, Grap.finance, Maker DAO, Alpha wallet, etc..

## I EAM MEMBERS

## Yohji S

Co-founder & Product Manager Quantitative Sociology Research analyst, PSL Founder and Developer of Swaphelper Developer of Grap.Finance

## Sang-Bai W

Co-founder & Research Engineer Math and Economic Model R&D

BS in Physics, Peking University
MS in Applied Mathematics, ENS
Financial mathematics PhD, École Polytechnique

### Erfan I

Co-founder & COO

MSc in Digital Management, ICN Business School FinTech & Blockchain Consultant, Angel Investor Advisor of Hotbit Investor of Mintable Investor of Globe Derivative Exchange

### Stas S

**Chief Solidity Engineer** 

Chief blockchain solution developer & architect of SKSO (for Russian Railways).

Chief Internet expert at Sochi 2014. (2014 Winter Olympics) Development of a cryptocurrency backed by Swiss Francs, Head of distributed ledger technology, Avoncourt

## Oleksandr K, Ph.D.

Chief Infrastructure Architect

Cloud Infrastructure & Blockchain Architecture Consultant, Unicsoft AWS Partner, AWS Certified Solutions Architect, Solution developer for Maker DAO, Alpha Wallet, AWS, etc.

### Andrew L

Project Manager Head Of Project Management, Drudesk Project manager, Devels.Com

### Yurii K

Innovation Manager

Worked as a product manager of Bithumb, one of the most popular crypto exchange engines in the world, including B2B, B2C, PaSS, mobile products, also DEX Fintech.

## Olga K

**Head of Delivery** 

Deputy Director, Innovation Development Hub | ID HUB Delivered solution to Maker DAO, Alpha Wallet, etc..

## Marina D

QA Developer
Test Engineer, Miratech



## **COMMUNITY**











60,000 TG members.70,000 Twitter followers Over 10,000 of the 60,000 wallet addresses in the Airdop list have been validated to be previous DEFI users

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