

Gnosis aims to provide an open source platform for the creation of prediction markets.

Using Gnosis, individuals will be able to create prediction markets for events, allowing users to buy shares of the outcome they see as most likely. The project plans to build additional services on top of the core platform to make it easier for users to interact with different markets. Third-party developers will also be able to introduce their own services.

Project Overview

Name	Gnosis
Issuer	Gnosis Limited
Category	Utility token
Sector	Prediction markets
Sale Start	04/27/2017
Sale End	04/27/2017

Token Overview

Name	Gnosis
Symbol	GNO
Type	ERC20 token
Initial Distribution	417,000
Current Supply	1,104,590
Max Supply	10,000,000
Emission Type	Fixed

Resource Links

- [Website](#)
- [GitHub](#)
- [Twitter](#)
- [Slack](#)
- [Reddit](#)
- [Medium](#)
- [Whitepaper](#)

Project Background

Gnosis is building a platform that will allow users to create decentralized prediction markets on top of the Ethereum blockchain. An alpha version of Gnosis, called Olympia, was released in Dec. 2017, allowing developers to create test prediction markets. In addition, the team is building a decentralized exchange for Ethereum ERC20 tokens using a Dutch auction model, and a multi-signature wallet called Gnosis Safe.

Central to the project's value proposition is the idea that prediction markets can provide more informed forecasts of future events. Prediction markets work by allowing users to "bet" on the correct outcome of a future event, such as the result of an election or even the weather on a specific day. These markets rely on the idea that by creating the potential for a financial gain or loss, only those with the best information or knowledge will put up their predictions, potentially forming a more efficient method of gauging sentiment compared to traditional techniques like polling.

In the Gnosis prediction market, users can pose a question, such as "Which candidate will win the 2020 election?" The creator of the market can define a set of possible outcomes, like "Candidate A," "Candidate B," or "Other." At the start, these options are split into shares, with all shares summing to \$1.00, or a 100% probability of there being some result in the election.

Tokens are issued by a smart contract with each token representing an option to buy a share. Users are able to purchase these tokens based on the outcome they see as most likely. Buying or selling tokens will cause a change in market price, and therefore the implied probability of an event occurring. For example, if shares for candidate A are trading at \$0.75 the market is signaling a 75% chance that candidate A is elected.

Shares are traded up until an outcome is known, leading to varying share prices, and varying probabilities. At the market's conclusion, shares tied to the correct outcome are worth \$1.00, based on a 100% probability the event occurred, and the remaining shares become worthless. Participants that hold options on the winning shares make a profit of \$1.00 minus purchase price multiplied by the number of tokens purchased.

Technology

Gnosis consists of three layers, Gnosis Core, Gnosis Services, and Gnosis Apps, all built on Ethereum.

Gnosis Core provides the foundational smart contracts that power Gnosis. These include an event contract and a market contract. The event contract is responsible for managing collateral used to purchase share tokens, and creating the outcome tokens for an event. The market contract is linked to the event contract and manages the prediction market by providing market making capabilities, including fee collection. While the core services are free and open source users are currently required to pay a small fee of up to 0.5% for the creation of event tokens, in addition to Ethereum gas fees.

In order to verify the outcome of an event Gnosis relies on oracle services which can be provided by Gnosis or third-parties. Oracles are a trusted source of information that can provide data, like the results of an election or the weather on a certain day, directly to a smart contract on the blockchain.

Built on top of the first layer are Gnosis Services and Gnosis Apps, which are designed to create tools and interfaces for users. The services layer plans to offer tools like chatbots which are integrated as features into applications built on Gnosis. The service and application layers will allow developers, including Gnosis, to charge fees for services like selling information from the market or advertising.

Applications will be built using Gnosis Apps, which creates the front-end for prediction markets. These can be built to serve a specific use case or customer segment. While Gnosis plans to develop its own in-house apps third-party developers can create custom interfaces for their specific needs.

Gnosis uses a two-token model where Gnosis (GNO) tokens are staked on the network to create new OWL tokens. Each OWL can be used to pay for \$1.00 worth of fees related to creating new outcome tokens on the network. When a user stakes their Gnosis tokens they send them to a smart contract with a pre-determined lock-up period. The longer the lock-up period the more OWL tokens a user can receive. The outstanding supply of OWL tokens is algorithmically managed to a target of 20 times the total monthly usage of OWL during the past three months.

While these tokens are used to pay for network fees they are not retained by Gnosis and are instead burned as part of the supply control process.¹

Users will be able to access a variety of prediction markets, track results, and manage their token balances through the Gnosis Management Interface. The team released a beta version of this platform though it remains unclear when the full version will be released.

Distribution

Gnosis completed a token sale in April 2017 raising 250,000 ETH which was worth \$12.5 million at the time. The sale was conducted as a Dutch auction which had a limit of \$12.5 million raised or nine million GNO sold, whichever came first. Due to high demand, the sale was over in a matter of minutes with 417,000, or 4.2% of the total 10 million GNO supply sold.²

The remaining 95.8% of tokens were retained by Gnosis to help develop the platform by supporting the development of applications on the platform, compensating Gnosis employees, and potentially conducting future token sales. Of the tokens held by Gnosis, 99%, were subject to a smart contract enforced one year lock-up period.³

¹ Source: <https://blog.gnosis.pm/wiz-turns-owl-813555100010>

² Source: <https://cyber.fund/system/Gnosis>

³ Source: <https://blog.gnosis.pm/tagged/token-sale>

Analyst: Mason Nystrom (@masonnystrom)

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Team

Martin Köppelmann

CEO and co-founder

- Creator of bitcoin prediction market Fairlay
- Previously CEO and founder of MKSG Software Ltd.

Stefan George

CTO and co-founder

- Co-founder of Linknovate
- Previously a decentralized engineer at ConsenSys

Dr. Friederike Ernst

COO

- Received a Ph.D. from Free University of Berlin
- Previous positions at Columbia University and Stanford SLAC

Advisors

Robin Hanson

Creator of the Futarchy

Joseph Lubin

Founder of ConsenSys

Jeremy Miller

Chief of staff at ConsenSys

Jason Trost

Founder and CEO of Smarkets

James Slazas

CEO of Healthcare Inside/Med A-Z

Investors

(Public sale only)

Additional Resources

- [YouTube: How Gnosis Works](#)
- [Hacker Noon: What is Gnosis\(GNO\)?](#)
- [Gnosis FAQ](#)

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