

For Market Makers

The **GNOSIS DUTCH EXCHANGE** is a decentralized exchange for ERC20 tokens using the Dutch auction mechanism to determine a fair value for tokens.

Exec Summary

- Be part of the DutchX from the beginning: create Magnolia Tokens and benefit from zero liquidity contribution
- Obtain liquidity contributions of other participants thanks to a redistribution model
- Magnolia token holders will gain ownership of the DutchX
- Impact of Magnolia token holders will increase over time by obtaining voting power on decisions
- When participating as a bidder: to your willingness to pay, factor in any cost (liquidity contributions and gas costs) and benefit from paying this or less

This slide deck assumes that you already have some knowledge about the Dutch Exchange. If not, read up on it in our series of blog posts available here and on a slide deck here.



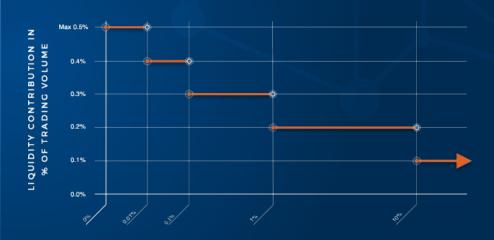
Benefits of being a Market Maker

1. Reduction of own liquidity contributions

Liquidity contribution reduction through Magnolias (up to 0.1%)

- + Magnolias are generated and credited by trading on the exchange:
 1 Magnolia for every 1 ETH worth of trade of whitelisted tokens
- + Magnolias are locked by default for use; if requested to unlock: tradable after 24h
- + Revenue from selling Magnolia is possible

Liquidity Contribution Model



% OF ALL MAGNOLIA HELD



Benefits of being a Market Maker

2. Obtaining liquidity contributions Of Other Participants

Payment Of liquidity contributions

- Individual liquidity contribution rate is calculated based on the number of Magnolia tokens held
- Optional liquidity contribution payment in OWL (maximal up to half; 1 OWL equals 1 USD; OWL are generated by locking GNO)
- 3. Remainder of liquidity contributions to be paid in the participating Token

Beneficiary of liquidity contributions

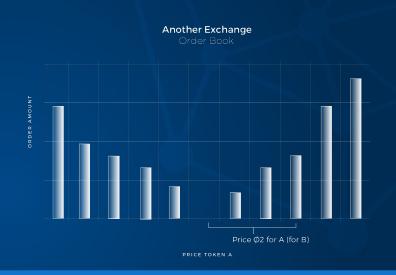
- + liquidity contributions do NOT go towards
 Gnosis
- + liquidity contributions paid in OWL are burned
- + liquidity contributions paid in any Token stay in the DutchX ecosystem and will be attributed to the next running auction of the same pairing
- + You may, therefore, obtain liquidity contributions of other participants (true for all following strategies)



Strategy of Market Makers

1. Arbitrage with other Exchanges





Participation as a bidder:

- + Economic incentive to participate at highest willingness to pay
- + If the auction only clears later, price will be lower

Arbitrage strategy:

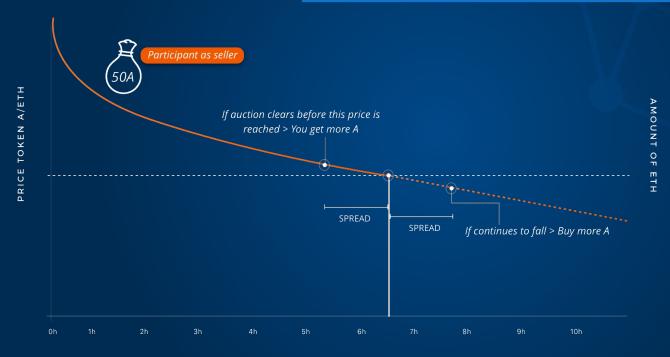
- + Become a bidder (using Token A as bidToken) when you can buy Token A at another exchange for a lower price
- + This will provide liquidity to the market
- + Contact us to partner on writing trading bots for specific exchanges and/or token pairings



Strategy of Market Makers

2. True Market Making

Strategy: Actively making a market and market price by providing sell and buy liquidity





Strategy of Market Makers

3. Generating Magnolias

Strategy: Taking part in the DutchX as both seller and bidder

- + To follow a safe strategy to generate magnolia, market maker would fund auction as a seller
- + When the price is right, the market maker would participate as a bidder in the same auctions (i.e. funding auctions and buying back)
- + Downside: Funds are "locked" during the time the auction runs
- + Upside: Benefit from other participants' liquidity contributions
- + To leverage this effect, market maker can take part in opposite auctions with the same strategy
- + Magnolias are tradable



Decentralized vs. Centralized Exchanges

What is the difference between a decentralized exchange and the Gnosis Dutch Exchange?

- + No account needed
- + On-chain settlement (block time)
- + Slow (not useful for high frequency traders)
- + Note: as a seller, you need to wait for the auction to clear to obtain your bidToken
- + Note: as a bidder, you may claim and withdraw the token you are buying immediately and in increments until the auction clears
- + See next slide for gas costs



DutchX Gas Costs

Bidder	gas	USD (4Gwei)
Allowance of token (once)	45,500	\$0.18
Deposit (can be once)	87,500	\$0.35
Post BidOrder	142,500	\$0.57
Claim	43,000	\$0.17
Withdraw	54,000	\$0.18
Sum	372,500	\$1.46
Only marginal functions	185,500	\$0.74
(assumption ETH at 1000USD)		

- Maximal(!) gas costs due according to function are displayed here (see table)
- Gas costs may be reduced by storing on the blockchain when prices are low and by freeing storage when needed: more info on https://gastoken.io/



Further Information and Contact

- C Immediate liquidity as a bidder (immediate claim and withdraw; unlimited times until auction closes)
- Smart Contract Code on Github
- Link to the Rinkeby Testnet Etherscan and all the addresses used Link
- First token pairings are likely ETH-OMG / OMG-ETH and ETH-RDN / RDN-ETH but this list will expand quickly (get in touch for requests)
- We are currently writing liquidity bots (seller and buyer) for our markets, these are work in progress—refer to the Github Repo
- Currently work in progress: Trading APIs please get in touch to information you may need!
- Get in touch at chris@gnosis.pm to:
 - + Partner up / onboard to the mechanism
 - + Let us know about trading pairs and exchanges you are interested in
 - + Let us help you write trading bots and API requirements

