



# DutchX

For Market Makers

The **DutchX** is an open, decentralized trading protocol for ERC20 tokens using the Dutch auction mechanism to determine a fair value for tokens.

# Exec Summary

Note that  
MGN is not  
active for  
the current  
version

- ❖ Be part of the DutchX from the beginning: create Magnolia Tokens and benefit from zero fees
- ❖ Obtain fees paid by other participants thanks to a redistribution model
- ❖ Magnolia token holders may gain ownership of the DutchX
- ❖ Impact of Magnolia token holders is to increase over time by obtaining voting power on decisions
- ❖ When participating as a bidder: factor into the amount you are willing to pay any cost (fees and gas costs) and benefit from paying this or less



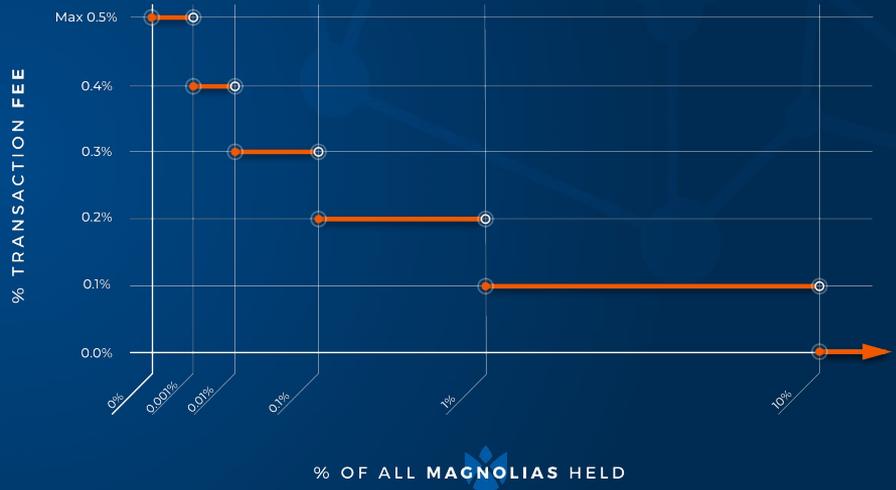
# Benefits of being a Market Maker

## 1. Reduction of own fees

### Fee reduction through Magnolia (down to 0%)

- + Magnolia are generated and credited by trading on the exchange:  
1 Magnolia for every 1 ETH worth of trade of whitelisted tokens
- + Magnolia are locked by default for use; if requested to unlock: tradable after 24h
- + Magnolia are transferable and may generally be suitable for trading on a secondary market

### Fee Reduction Model



# Benefits of being a Market Maker

## 2. Obtaining fees of other participants

### Payment Of Fees

1. Individual fee rate is calculated based on the number of Magnolia tokens held
2. Optional fee payment in OWL (up to half of overall fees,; 1 OWL equals 1 USD; **OWL are generated by locking GNO**)
3. Remainder of fees to be paid in the Token participating in the DutchX

### Recipient of fees

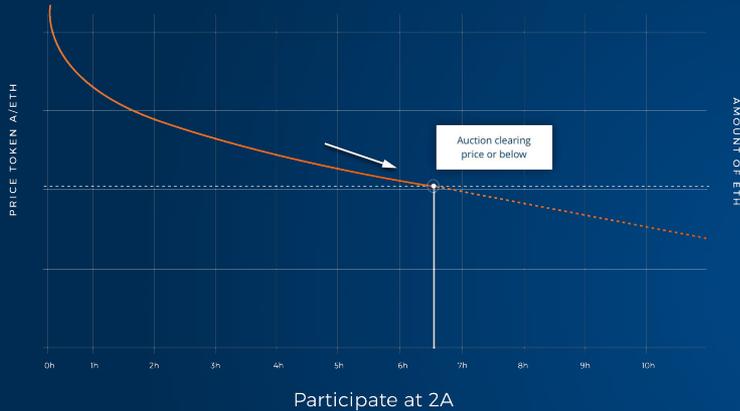
- + Fees do NOT go towards any third party
- + Fees paid in OWL are burned
- + Fees paid in any Token stay in the DutchX ecosystem and will be allocated to the next running auction of the same pairing (as an extra sellVolume)
- + You may, therefore, benefit from fees paid by other participants



# Strategy of Market Makers

## 1. Arbitrage with various exchanges and trading platforms

 DutchX



Another Exchange  
Order Book



### Participation as a bidder:

- + Economic incentive to participate at one's own highest willingness to pay
- + If the auction clears at a lower price point (i.e. later), price will be lower

### Arbitrage strategy:

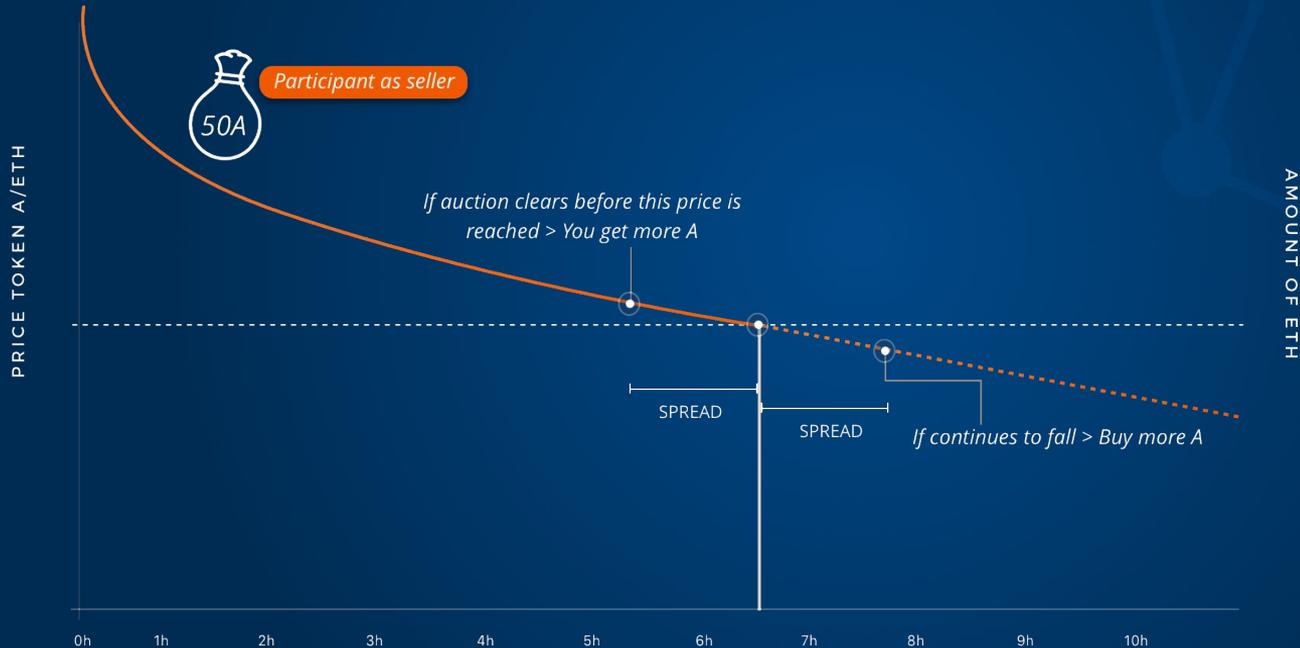
- + Become a bidder (using Token A as bidToken) when you can buy Token A elsewhere for a lower price
- + This will provide liquidity to the market



# Strategy of Token Market Makers

## 2. "True" market making

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



Buy back the 50A if price is right



# Decentralized vs. Centralized Exchanges

What is the difference between a decentralized exchange or trading platform and the DutchX?

- + No account needed
- + On-chain settlement (block time)
- + Slow (may not be exploited by 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 a gas indication (network fee)



# DutchX Gas Costs

Bidder	gas
Allowance of token (once)	45k
Deposit (can be once)	49k
Post BidOrder	148k
Claim	50k
Withdraw	48k
Sum (including marginal functions)	340k
Gas for marginal functions only	198k

- + Maximal(!) gas costs due according to function are displayed here
- + 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/>



# Liquidity bots

These minimal liquidity bots are designed to interact with the DutchX protocol in the following manner. These could be re-used and re-parameterized if needed.

