The next generation of governors will be modular

Hadrien Croubois (Amxx)

OpenZeppelin

~$30B

Value held by DAOs

— Tally

~33M

Wallets own “voting” tokens in their portfolio

— Tally

Explore DAOs

All networks | Filter by name

Name	Proposals	Holders	Voters	
Arbitrum ACTIVE PROPOSAL	62	1.37M	440.14K	Arbitrum
ZKsync ACTIVE PROPOSAL	1	373.35K	282.15K	ZKsync Era
Lil Nouns ACTIVE PROPOSAL	262	2.26K	4.9K	Ethereum
Nouns Dao ACTIVE PROPOSAL	688	388	1.38K	Ethereum
Unlock DAO ACTIVE PROPOSAL	9	547	83	Base
Reflexer Ungovernor ACTIVE PROPOSAL	54	3.78K	63	Ethereum
Darwinia Community DAO ACTIVE PROPOSAL	14	18	17	Darwinia
Optimism	25	1.24M	285.81K	Optimism
Aave	401	85.7K	151.01K	Ethereum
Wormhole	0	127.2K	124.81K	Multichain
Uniswap	66	383.92K	45.88K	Ethereum
ENS	32	65.78K	35.13K	Ethereum
Gitcoin	101	93.25K	19.45K	Ethereum

Growing application = growing governance needs

Deployment, testing

Early stage
Building a community
around your app

Later stage
Once you have a strong user base
that take responsibility

Don’t rush the decentralization of your app’s governance, but prepare for it “early”.

Many options

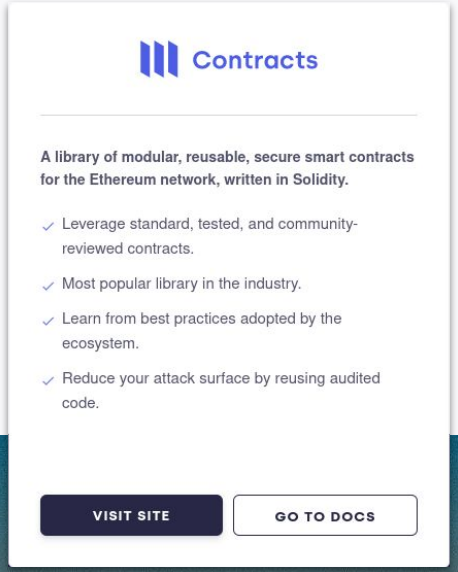
- How can vote?
  "Multisig" vs "Token holders"
- What do you vote on?
  "Manage funds" vs "Arbitrary execution"
- Lifecycle of the proposal?
  - Threshold, Quorum, Durations
  - Voting options
  - Auxiliary contracts (token, timelock, …)
- Lifecycle of the governance?
  - Upgradeability
  - Separation of concerns "vote / execution"

Figuring all that is not easy, and will impact you and your users!

Contracts

@openzeppelin/contracts@5.1.0

@openzeppelin/contracts-upgradeable@5.1.0



There is no silver bullet (yet)

You may want to:

- Have different rules depending on “proposal details”
  - Amount of funds moved
  - Chain that is going to be affected
- Combine community votes with a multisig of “guardians”
  - Community votes can literally be “bought”
- Have a “dynamic” approach to voting

Upgradability is not ideal. Maintaining multiple instances is not practical.

Are DAO just “smart accounts”?

Why not make the governor contract an ERC-4337 / ERC-7579 smart account?

- Governor would refund proposers (with some conditions) using ERC-4337
- Queuing / Execution would also see gas refunded (always?)
- Signature verification is replaced with vote verification
  - Using an ERC-7579 module
  - Voting would happen on the module, not on the governor
  - Many voting modules can be enabled that provide different “voting modes”

This simplifies migrating from the “multisig phase” to the “DAO phase”


Thank you!
Hadrien Croubois
OpenZeppelin
hadrien@openzeppelin.com
@Amxx