DXdao: Governance 2.0

The Governance 2.0 Working Group has spent the last couple of months working on finding a sustainable governance system for DXdao. There's been an underlying tension since summer 2020; DXdao was launched with a purely Reputational-based governance structure, but, last May, DXdao launched a bonding curve and the DXD token to raise funds. DXD holders funded the treasury, but have no say in governance decisions as of now.

The goal of the Gov 2.0 WG was to structure a system that aligns the interests of REP and DXD holders, can build and grow DeFi products and protocols, and maintains the ethos from DXdao's launch and those principles laid out in the DXdao manifesto. In the initial meetings, the working group identified the Solution Requirements for a new system.

This signal proposal is the culmination of those efforts and aims to lay out the structure for a new governance structure. Not everything has been specified and DXdao governance and technical development will be charged with building a fully-functioning system within the bounds outlined in this proposal.

There are three main components of Gov 2.0:

- A new voting power equation
- Good governance incentives
- Migration process to new system

New Voting Power Equation

This is the crux of the Gov 2.0 system as it completely changes who has ultimate power in DXdao. At the moment, proposals are passed purely based on the amount of REP for and REP against. The new system will incorporate DXD into a new calculation for voting power. In this system, both DXD and REP are required to vote or have influence in DXdao.

To calculate a DXdao member's "Voting Power", we must:

- Come up with a "DXD Influence" and "REP Influence" & normalize these scores
- Assign weights and add them together

DXD Influence

Holding DXD does not require governance participation. To have influence and increase one's voting power, the DXD must be staked in pools identified by DXdao governance. Additionally, one can increase their DXD Influence by future commitments to DXD staking.

The inputs to DXD Influence are:

- (X) DXD staked - as LPs in DXdao products or in a governance staking contract
  - Multipliers can be adjusted by governance to (dis)incentivize certain LPs. Only DXD is counted (if LPing)
  - Max: 1,500 DXD (adjustable by governance)
- (X_0) Future months committed
  - proposed equation = $(X_0/6)^B$
  - Staking is committed for X_0 months; Max 36 months (adjustable by governance)
  - B = some power below 1 (adjustable by governance); higher = favors longer-term investors
  - 6 = 'schelling point' of expected commitment. 6 months of future commitment gives an output of 1.

Proposed DXD Influence equation:

- $X * (X_0/6)^{0.75}$
- DXD staked * (Future months/6)^0.75
- Adjustable by governance: B (initially set at 0.75)

REP Influence

REP is earned for contributions to DXdao. Since it is non-transferable and can be slashed, it is more sybil resistant. At the moment, most REP is held by workers and those who participated in the original staking period, but this should be expanded widely and reward a host of positive contributions, such as liquidity provisioning.

Since REP is non-transferable, those with REP may maintain influence even after they've stopped contributing. Gov 2.0 introduces a decay function to address this. Moreover, since the current social consensus on a "max 4% REP" is intended to limit a single member's influence, we can codify this in the voting power equation, which allows REP to scale and be used for non-voting purposes.

REP Influence:

- Y = Reputation issued to address; max: 4%
- $Y0$ = Months since last REP issuance
- Decay function = $1-(Y0/24)^D$
  - D = some power > 1 will give a slower decay in the first year of inactivity, and faster in the second year.
  - Minimum output: 0.05
- Proposed REP Influence equation:
  - $Y * (1-(Y0/24)^{1.5})$
  - Reputation * (1-(Months since last REP issuance/24)^1.5
  - Adjustable by governance: power D (initially set at 1.5), min output (initially 0.05)

The output of DXD Influence and REP Influence will then be normalized to the same scale. The precise method of normalization is left up to technical implementation, but the consensus of the working group is that the scores should be normalized after the DXD/REP Influence calculation and on those primitives that are participating in governance, perhaps periodically adjusted.

Combining REP Influence and DXD Influence

The two normalized scores must then be combined to form a single number for a DXdao's member's Voting Power. Assigning explicit weights to REP Influence and DXD Influence gives transparency into how the votes are calculated. Even though these normalized scores are

added together, the consensus of the working group was that members participating in governance must have both DXD and REP (minimum amounts determined by governance).

To combine normalized influence scores, a % weight should be applied to each. The weights may change over time, so the Gov 2.0 WG is proposing a bounded range along with initial weights.

Proposed bounded range:

- DXD Influence: min 35%, max 65%
- REP Influence: min 35%, max 65%

Initial Voting Power Weights:

- DXD influence: 50%
- REP influence: 50%

Overall Influence Max: the new voting power equation has a REP max and a DXD max, but there is not a consideration for the overall max influence for an address. This is challenging to map out now, because DXD Influence is dependent on the amount of DXD staked in governance. DXdao governance structure aims to prevent accumulation of power in a single address. In implementing this proposal, additional research into a mechanism to create an overall maximum for influence in the voting power equation may be needed to maintain the goal of decentralization.

Good Governance Incentives

Governance takes time and resources. In the current system, holographic consensus provides a financial award to those that 'boost' proposals by staking a token on proposals they expect to pass. A boosted proposal can pass in an expedited time without a majority vote. This is meant to focus voters' attention on only the most important proposals.

While there is an incentive to boost proposals, there is no incentive for members to vote on "good proposals". Currently, some REP holders are constantly monitoring proposals to make sure worker proposals, market curation and other items pass but this is done primarily by full-time contributors and mostly for altruistic reasons.

Governance takes time; it should be rewarded and incentivized. Gov 2.0 WG identified three governance incentives in a new system:

- Rewards to DXD staked in governance
- Retroactive governance 'bonuses' - on quarterly, half-year or annual basis, reflect on "good proposals" and reward the proposer AND those who voted in support
- Incentivized Representatives - selected DXdao members (not full-time contributors) who are rewarded for voting on proposals. These are selected by DXdao governance and their voting record will be reviewed to ensure they are not voting blindly for rewards.

The ideal form of reward is vested DXD. DXdao governance may also decide to allocate product fees in lieu of (or on top of) DXD rewards.

Migration process to a new system

REP holders currently control DXdao governance decisions by vote on the Ethereum blockchain. This includes control of the $35m DXdao treasury and the 100k DXD pre-mint. Since the launch of the bonding curve in May 2020, DXD holders have funded the treasury with purchases from the curve, but they currently have no governance voting rights. REP and DXD holders currently function as separate groups, but in order to align stakeholder interests and promote further decentralization, both groups will be migrated into the same voting system, which includes an allocation of REP and DXD to balance the alignment of interests. To kickstart the migration process and cede control of the treasury:

DXD Distribution

10,000 DXD from the pre-mint will be proportionally distributed to REP holders, with a 3-year vesting cliff.

Base Distribution

- REP holders that have voted once before the Snapshot will receive 3 DXD.
- The Snapshot will occur six (6) months from the Signal Proposal's passage.
- At maximum, 2,000 DXD will be allocated in the Base Distribution.
- If more than 633 addresses qualify for Base Distribution at the time of the Snapshot, then 2,000 DXD will be distributed evenly amongst all qualifying addresses.

Proportional Distribution

- The following REP holders are eligible for a Proportional DXD distribution.

- ○ REP holders that have voted at least three (3) times before the passage of the Governance 2.0 Signal Proposal;
  - ■ The snapshot of REP holders that have voted at least three (3) times will occur within twenty-four (24) hours of the Signal Proposal's passage on the DXdao Alchemy.io mainnet.
  - *OR*
  - ○ New REP Holder addresses that submit a passing proposal on mainnet, xDAI, or any other authorized DXdao governance base. "New REP Holder addresses" include any ETH address that receives REP for the first time from August 1, 2020 onward.
    - ■ The Snapshot of New REP Holders will occur at least six (6) months from the Governance 2.0 Signal Proposal's passage.
- ● Proportional Distribution Calculation
  - ○ Qualifying REP holders will receive vested DXD proportional to their Mainnet REP % at the time of the Snapshot (DXD Amt = Mainnet REP % x (10,000 DXD - total Base Distribution)).
  - ○ Example:
    - ■ Qualifying REP holder has 1.5% REP on mainnet at time of Snapshot.
    - ■ 200 REP addresses on mainnet qualify for the Base Distribution.
    - ■ 200 REP x 3 DXD = 600 DXD
    - ■ 10,000 DXD - 600 DXD = 9,400 DXD
    - ■ .015 x 9,400 = 141 DXD
- ● REP holders can claim either Base Distribution or Proportional Distribution, but not both.

Timing

- ● The DXD distribution will occur before REP inflation is allocated to DXD holders, as described in the below "REP Inflation Allocation" section.

Six (6)-Month Claim Period

- ● DXD must be proactively claimed within 6 months of the Governance 2.0 DXD Distribution. After six (6) months from the Governance 2.0 DXD Distribution, unclaimed DXD will be returned to DXdao's treasury.

Vesting Schedule

- ● DXD will be vested for three (3) years from when the Gov 2.0 system is implemented. The vesting contract should retain the ability to revoke DXD distribution to addresses

that don't act in accordance with DXdao's Contributor Guidelines and overall best interests.

DXD Governance Usage

- This allocated DXD may be used prior to the 3-year vesting cliff in the Governance 2.0 staking equation, outlined above.

REP Inflation Allocation

REP will be inflated by 5% and distributed in the following manner:

- 4% to DXD holders, proportional to the address's percentage of DXD circulating supply. This snapshot should take place at the time of Governance 2.0 signal proposal passage, but distribution will happen at Governance 2.0 system implementation. The snapshot should account for DXD in liquidity pools by using the amount of DXD in the pool at the time of snapshot.
- 1% to addresses that bought DXD from the bonding curve. REP awards are the amount of DXD bought from the curve from an address divided by the total amount of DXD bought from the curve. This distribution will at Governance 2.0 system implementation.

In addition to the proposed 5% inflation to DXD holders, some REP may be awarded to DXD holders that participat in the DXD ERC20 Guild.

Additional REP inflation may be airdropped to addresses that have shown governance capabilities in other projects on Ethereum.

Implementation

This Governance 2.0 Signal Proposal encompasses the general structure and design of the new DXdao Governance system that sustainably intertwines REP and DXD into a single voting power equation. The implementation of the Governance 2.0 Signal Proposal will foreseeably require additional technical assessment in order to properly execute its details. This technical assessment will inevitably include unknown considerations that are outside of the scope of the Governance 2.0 Signal Proposal.

Additionally, unforeseen events and/or realizations may come to the attention of the DXdao community, which may require further consideration in the execution of the Governance 2.0 Signal Proposal. DXdao reserves the right to reasonably make changes to this proposal, with

community input and consensus, where new material information or events are discovered or occur. This flexibility allows the DXdao community to account for unforeseen developments. The implementation process should still abide by the text and spirit of this proposal to the extent possible