

Constitutional / Non-Constitutional

Constitutional

Abstract

We propose to implement an ARB staking mechanism that uses 50% of future surplus sequencer fees to improve the economic security of the DAO and incentivize more active participation in governance. ARB holders who stake and delegate their governance power to an active governance participant (either themselves or another entity) will receive surplus sequencer fees proportional to their share of total ARB staked.

Motivation

The Arbitrum DAO has accumulated over [\\$50M of ETH](#) in surplus fees from Arbitrum One and Nova. Meanwhile, only about 10% of the circulating supply of ARB (roughly \$324 million of ARB) is actively used in governance (see “delegated tokens” on Tally’s [delegation page](#)). The number of unique voters participating in the DAO has been [steadily declining](#) since DAO launch. As a result, it is becoming economically attractive to attack the DAO treasury. The upside of attacking the DAO treasury is increasing (more ETH in the treasury), while the cost of attacking the DAO is not increasing proportionally to defend against attacks. A more developed version of this dynamic exists in the ENS and Compound DAOs, both of which are actively fighting off governance attacks (ENS [documented here](#)).

ARB Staking can improve the Arbitrum DAO’s security by incentivizing ARB holders to be actively engaged in governance. Instead of accumulating ETH into an onchain treasury that inevitably becomes a honeypot for governance attacks, ETH is used to reward ARB token holders who are contributing to the long-term health of Arbitrum.

Rationale

This proposal contributes to Arbitrum [Community Values](#) by making the Arbitrum DAO more sustainable and secure. ARB staking addresses an emerging economic vulnerability in the Arbitrum DAO by perpetually incentivizing ARB token holders to engage in effective governance.

Specifications and Steps to Implement

Rewards

We propose that 50% of surplus sequencer fees be allocated to ARB stakers. The existing DAO treasury of ETH from surplus sequencer fees would be unchanged, only future fees would be affected.

If we assume a 1:1 conversion of the current [delegated ARB](#) (~324M) to staked ARB and assume 12K ETH (roughly the historical annual rate) in annual [surplus fees](#) accumulated, then at an ARB price of \$1 and an ETH price of \$3800 this would equal to roughly a 7% annual reward rate.

- Annual surplus fees in USD: 12,000 ETH * 50% * \$3,800/ETH = \$22,800,000
- Staked ARB in USD: 324,000,000 ARB * \$1/ARB = \$324,000,000
- Annual Reward Rate: \$22,800,000 / \$324,000,000 = 0.07 or 7%

We expect all of the variables involved in the reward rate to evolve significantly over time. In particular, we think it’s important to consider the following items because they may have a material impact on rewards:

- Currently, there is no direct incentive to delegate ARB tokens. ARB staking introduces a direct incentive to stake and delegate. As a result, it’s reasonable to assume that the amount of staked and delegated ARB will significantly increase over time.
- In conjunction with the recent EIP 4844 upgrade, Arbitrum recently dramatically [underpriced its gas fee](#). As a result, the amount of surplus ETH accumulating in the DAO treasury over time has decreased significantly. We believe this situation is temporary and is likely to be addressed by increasing the gas fee in the near future, but it’s worth noting that at this time the rate of surplus fee accumulation is significantly lower than the historical norm.

Arbitrum staking specification

Our implementation of Arbitrum Staking builds on top of [Unistaker](#). In addition to customizing Unistaker for Arbitrum’s [governance architecture](#) and [fee collection mechanism](#), we add features designed to improve governance outcomes:

- We require that tokens be delegated to an active delegate.

- We direct 1% of surplus fees proportionally to delegates, with both fee streams going to the token holder if they are delegated to themselves and active.

We define an active delegate as a delegate with a Karma Score over 80. We use an oracle to represent Karma Score within the staking system. Receiving an accurate Karma score requires delegates to [sign a message](#) and post it on the forum as a way to prove that the forum user is truly the owner of the delegation address. Karma Score is calculated according to the following formula:

$$((100) * ((\text{Forum Activity Score} * 1) + (\text{Off-chain Votes \%} * 3) + (\text{On-chain Votes \%} * 5))) / (\text{Sum of Weights times Max Score Setting} * 1)$$

Our staking implementation directs 1% of surplus fees to delegates to sustain the ongoing growth and development of Arbitrum, a large portion of which is driven by the DAO. In its current form, ARB staking is not meant to replace the [delegate incentives program](#), but rather to complement it with a smaller source of incentives that are programmatically tied to ongoing network operations. In the future, we believe it could make sense to integrate the delegate incentives program with ARB staking so that, instead of getting delegate incentive funds from the ARB treasury, they come directly from DAO revenue.

Tally will build ARB staking into our existing [Arbitrum DAO platform](#), so that users can easily stake and delegate in one place.

Integration with future Arbitrum staking systems

We anticipate that additional Arbitrum staking systems will be developed over time, perhaps to incentivize decentralized block production in BoLD or to create an efficient MEV market in Time Boost. We view multiple staking systems as complementary. Each system would ask the staker to do different work for Arbitrum, take different risks, and pay out different rewards. Having multiple systems lets ARB holders pick between different risk/reward payoffs and specialize in different types of work to secure the system.

Liquid staked ARB

Tally is building a governance-compatible LST to enable staked positions to participate in governance while being liquid. By staking ARB on the Tally Protocol, users will receive a liquid staked ARB token that auto-compounds rewards, is restakeable, and is compatible with DeFi. Tally's ARB LST automates the process of accessing rewards for token holders by automatically claiming staking rewards and redepositing them back into the staking contract. We plan to work closely with Arbitrum ecosystem DeFi protocols and restaking systems to enhance composability and utility of the Tally ARB LST. The ARB LST will be an exchange token, which means the staking rewards will accumulate by increasing the exchange rate of the token (rather than by increasing the account balance).

Estimated Timeline

Post proposal on forum for feedback: June

Post temp check proposal on Snapshot: July

Begin smart contract development (if temp check passes): July

Submit smart contracts for audit: August

Submit onchain proposal on Tally including full ARB Staking implementation and retro funding: September

Overall Cost

This proposal will not be submitted onchain until ARB Staking is completed and audited. At that time, we will request a retroactive payment of 100,000 ARB to help cover the costs of development.

Disclaimer

This proposal should not be relied on as legal, tax, or investment advice. Any projections included here are based on our best estimates and presented for informational purposes only.