
protocol-guild

unknown

Jun 25, 2022

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- An organization made up of Ethereum core protocol contributors,
- which actively maintains an onchain registry of its membership,
- which allows ecosystem sponsors to directly fund the membership, their work, the Public Good.

The Protocol Guild is operated by over **110 core protocol contributors**, including members from Besu, EF Devops, EF Protocol Support, EF Research, EF Testing, Erigon, Geth, Ipsilon, Lighthouse, Lodestar, Nethermind, Prysm, Quilt, Robust Incentives Group (RIG), Solidity, Status, Teku, and TX/RX.

“And, Ebling, there’s another, greater purpose. Hari Seldon founded two Foundations three centuries ago; one at each end of the Galaxy. You must find that Second Foundation.” Foundation, Isaac Asimov

SPONSOR THE PILOT

We're running a 1 year Pilot ([read more here](#)) to test our assumptions about this mechanism and how to operate it.

Information about the smart contracts and how you can help fund Public Goods and their contributors [here](#).

If you have additional questions about the project, please reach out to [@ProtocolGuild](#) or any of the [members](#).

Donate Now	
Pilot Vesting Contract	Learn more
Split Contract	Learn more

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The Protocol Guild is mechanism that learns and adapts. Be aware that this documentation is regularly updated, including operating guidelines, membership, Public Goods funding context, and more.

2.1 1. Proposal Rationale

How can we give core protocol contributors exposure to the broader success of the projects building on top of Ethereum? This has been a recurrent topic for many years in our community. When the latest discussion resurfaced in [Oct 2021](#), we started researching the existing public goods funding mechanisms

We settled on three main motivations as to why there should be a new mechanism, the individual challenges related to each, and the resulting design objectives we can use to help frame .

2.1.1 1.1 Curation is difficult

Apps / L2s want to sponsor, but curation of the contributor set is difficult. Protocol Contributors are interested token upside, but self-organizing is hard

- There is no existing solution that collects all protocol contributors into one mechanism and consistently updates it. Expecting a single organization to curate and maintain this list themselves is a pretty big ask when they're not already involved in this work
- Design objective: existing contributors should self-curate a list Existing solutions usually favor teams
- a meta-goal is to avoid governance and intermediation, giving as much agency to independent contributors as possible
- Design objective: Avoid intermediation: individuals are the atomic unit

2.1.2 1.2 Incentives are Imbalanced

Financial incentives are skewed towards projects built on top of the protocol

- As a credibly neutral infrastructure with no block reward, Ethereum doesn't offer the same token incentives with the same upside as apps / L2s. However, it still needs to attract and retain talent to continue to evolve the protocol
- As the Ethereum ecosystem continues to grow, competition for talented individuals will only increase. This isn't to fault individuals for rationally weighting financial incentives, or protocols for leveraging the power of tokens - this is just the reality of our current context
- We acknowledge that financial motivations aren't the only or best motivator for people, it's just one tool in our toolset that might be underleveraged

- Design objective: Nudge balance back to the protocol by getting sponsors to send tokens.

2.1.3 1.3 Too much contributor turnover is negative

There's a steep learning curve for contributors to deliver value. It can take a while to be onboarded to a team, understand a client codebase, and start making meaningful contributions.

- Design objective: Protocol Contributors must be active for 6 months before membership

Contributor value grows over time, but there is less incentive for them to stay once they are experts

- Design objective: Assets should vest to reduce churn in the contributor set, to help transfer knowledge between cohorts.
- Design objective: Weight contributor allocations according to time

2.1.4 1.4 Summary

This mechanism will provide autonomous funding and nudge the incentive balance towards the protocol. Sponsors who opt-in will be Ethereum-based applications, protocols, and individuals - this aligns well with our community's existing voluntarist mindset towards public goods funding.

Over the course of this ideation process, we've also realized that these questions also apply to a more general question: what would a mechanism to trustlessly fund protocol contributors look like? We believe the current design of the Protocol Guild described here in this documentation is a strong approach to addressing these questions.

2.2 2. Tradeoffs of Existing Mechanisms

The existing suite of protocol funding mechanisms have so far adequately supported the ecosystem, but come with their own tradeoffs:

- typically not forward looking, eg. they are usually retroactive
- tend to favor projects/teams instead of individuals
- formed around mediating institutions
- do not typically give exposure to the upside of application layer

In the future, there will certainly be ways for these projects to collaborate and interoperate with the Protocol Guild.

2.2.1 2.1 Grants

These are a very common mechanism, seen in Gitcoin, the EF's Ecosystem Support Program (ESP) and Ongoing Development teams, and application ecosystem programs like the Uniswap Grants Program (UGP). They tend to be best at rewarding contributions from the near-past to near-future. While these mechanisms may be well suited to their current applications, there are some limitations to their direct use in something like the Protocol Guild.

For Gitcoin Grants, it can be challenging to ensure accountability for grantees due to the amount of time and expertise it can take to perform diligence. In addition, because Round participants are effectively competing against each other for the same matching funds, it necessitates some amount of self-promotion. This wouldn't work for large groups of individuals doing similar work like core developers, many of whom are more low profile. Collections (a curated set of Gitcoin profiles) could accomplish some of our objectives, but still does not include vesting, and don't resolve the answer the questions of custody and membership management. Finally, any prospective funder from the application

layer has to rely on a mediating institution (eg. the Ethereum Foundation, Gitcoin Grants rounds) to facilitate discovery, processing, and diligence.

2.2.2 2.2 Retroactive Funding Programs

An explicitly historic-looking variant of grants include [Optimism's RPG](#). These can account for past work, but are usually scoped to measure the contributions of teams or projects, usually not individuals. There is no guarantee of consistent funding, as there is a possibility of omission from a subsequent round. In Gitcoin's case, it can take a while for past contributions to be recognized and rewarded due to how discovery and grant promotion cycles work.

2.2.3 2.3 Independent Non-Profits

Some teams may opt to stand up their own non-profit entities, eg. the [Nomic Foundation](#) which stewards ongoing maintenance of Hardhat and other initiatives, announced in Q1 2022. The challenge is that the threshold to create a legal entity can be very high for a small team, and impossible for pseudonymous individual contributors. Additionally, the recurring burden of fundraising inevitably pits them in competition against each other, while further disadvantaging individual contributors.

2.2.4 2.4 Salaries

Salaries *do* target individuals but are limited in that they can only account for the present and near future. Further, they are tied to a single legal organization, and can never be a good proxy for ecosystem value creation.

2.3 3. Smart Contract Architecture

As part of the design process for the Protocol Guild, we researched a number of smart contracts and ultimately settled on the Split and Vesting contracts from [0xSplits](#). Learn more about the project in the [documentation](#).

2.3.1 3.1 0xSplits Contracts

Both the Vesting and Split contract can directly receive ETH and ERC20 tokens. The Vesting contract gradually makes vested tokens transferable to the Split contract. the contract only accepts ETH and ERC-20s: **DO NOT SEND NFTs** (ERC-721s), they will not vest, cannot be split, and will be unrecoverable. Below are recommendations for which types of contributions to send to which contract.

Pilot Vesting Contract

- best for larger entities participating in the Pilot
- funds sent here will vest for 1 year
- [0xSplits interface](#) / Etherscan
- Verify that the full address being sent to is 0xF29F...f1a9. in the future, there may be additional vesting contracts with different durations setup for the next iteration of the project
- Note that there are two steps: depositing and starting the stream

Split Contract

- best for smaller donations outside of the Pilot, or regular periodic contributions
- funds sent to this contract will not vest, and be immediately available for withdrawal by the core contributors listed in the contract
- **0xSplits interface** / Etherscan
- Verify that the full address being sent to is 0x84af...8ea1. While the addresses and weights contained in the contract are mutable, the address of the contract itself will be used in perpetuity and will not change. Outside of the unlikely case that the Split management (multisig) gets compromised, it's reasonable for Sponsors to assume that this address being the canonical one far into the future if you're planning on automatic or recurring contributions. If this changes, we will be sure to communicate this publicly.

The diagram below illustrates a set of 0xSplits contracts and how the Guild intends to operate them.

Out of all the existing mechanisms we explored, 0xSplits fulfills many of our original design objectives.

- Accepts common asset types
 - To preserve the upside potential of donated assets, it's crucial that the split accepts ERC20s in addition to ETH.
- Immutable distribution
 - No individual can redirect assets outside of what is dictated by the split membership and its vesting parameters for each period. The terms of the vesting length, past members and their weights cannot be modified once deployed. However, it should be noted that if the PG multisig were to be compromised, operators could be used to steal the remainder of vest.
- Non-custodial
 - No member should have even temporary discretion over vested or unvested funds - eg. a designated address holds funds before a member manually sends them on to another component.
- Mutable membership
 - It should be possible to add and remove beneficiaries from the split. Managing additions and removals would be the responsibility of the membership. Updates are important because contributors will still join and leave protocol work. If we can't add newcomers to this list, then the recurring cost to redeploy the contract and redirect the split would become an unnecessary expense.
- Includes vesting
 - In order to promote long-term incentive alignment, donated assets should be subject to a standard vesting period. The Pilot will be ~1 year, and subsequent vests will likely last for 4 years. This should be discussed and set by the split beneficiaries, with consideration for the expectations of donating entities. The vesting terms deployed with the contract should not be modifiable by any party.
 - 0xSplits allows PG to deploy the initial contract with optionality over desired launch date, vesting time, etc
 - The same Vesting Contract can be reused for many donations, either from the same org or different ones. The avoids unnecessary gas + time costs to Sponsors. The vesting terms are the same for each donation.
- Multi-claims are straightforward
 - Members are able to claim their allocation from multiple eligibility windows and multiple assets in a single transaction.
- Members decide when to take custody/ withdraw
 - Members should be able to decide when and how they withdraw funds from the mechanism, eg. to suite the tax framework of the jurisdiction they reside within.

- Donations have finality
 - It is not possible to remove donated assets from the Vesting Contract by anyone other than the beneficiaries.

2.3.2 3.2 PG Multisig

While it's possible for the contract to be "set and forget," we plan to fully leverage its mutable capabilities. For longer 4 year vests, there will definitely be changes in the contributor set that we want to account for.

We have deployed a 6/10 Gnosis Safe [here](#) to take on a few key tasks that cannot be handled autonomously. These include updating the membership list over the vest, and possibly deploying new vesting contracts (though this can also be done by unrelated EOAs with no reduction in trust).

Members and sponsors should be aware that if a malicious entity were to compromise enough signers, they could steal any assets that haven't been released (4a in the diagram above) and distributed (4b) to the beneficiary of the Split contract. For this reason we don't disclose the name of signers and will regularly rotate them, expanding the set of signers when possible. Further, release and distribute should probably happen on a regular cadence (quarterly) to limit the impact of a worst case scenario with the Multisig signers.

Beyond that, we're exploring options to make this completely trustless in the future, similar to Moloch's permissionless proposals.

See **4.13 Members as Signers** for the obligations expected of members as signers.

2.4 4. Roles & Expectations

There are five unique roles that the Guild will require to operate, each with their own obligations.

2.4.1 4.1 Members

4.11 Members as slot holders

→ 150-200 individuals who have qualified for placement on the split contract. This is just an estimate, the actual number may be higher or lower. There is no cap or target for number of slots. Slots can be set to any address, including their own, a charity, or another split contract (make sure it can be claimed from).

Qualifications

Members should be committed to Ethereum and its ethos of decentralization. The contributions of qualifying individuals should be:

- fully open source, ie. available for forking, modification and redistribution
- continuous for at least 6 months ahead of inclusion
- released under permissive licenses
- part of the protocol, not built on top of it, eg. a specific client implementation vs. an application
- a benefit to the broader Ethereum community
- dedicated to permissionless, open access to Ethereum

It is possible that eligible individuals may work on a team which has a token, has VC backing or gives equity. Members should expect these guidelines to change over time, to get more explicit in some places and more permissive in others.

Though Ethereum is a highly technical field, it is clear that the work of non-developers around the core protocol is also crucial and should be eligible. This may include people affiliated with the All Core Dev call, those coordinating ecosystem upgrades, and anyone helping to coevolve the protocol alongside the community.

Expectations

Members will notify organizers when their contributing status changes, or when the work that afforded eligibility breaks one of the guidelines above. If you're unsure about whether a new focus is still qualified, please ask the broader membership. At least once per year, members will prove ownership of the supplied address: members can claim vested funds or sign a message with their private key. This limits the impact of compromised wallets or lost keys.

Please note that the membership list will be publicly available in order to maintain transparency and mutual trust with both the broader community and sponsors. However, addresses and their associated weights will not be shared.

Members are strongly encouraged to participate in the Guild beyond the two requirements above. Without deeper member engagement, the Guild will not reach its full potential as a voice for core developers and the protocol broadly. The Guild may have trouble growing the membership or evolving norms if only a small minority are engaged in consensus building. Other modes of participation include:

- suggesting Guild improvements
- refining eligibility requirements
- vetting specific potential members
- managing the discord
- helping with comms
- outreach and awareness to potential/continuing sponsors

4.12 Members as Curators

Qualifications

All members are qualified and expected to participate as curators: members who maintain the list and weights of eligible members.

Expectations

Given the ambitious scope of this mechanism and the significant trust afforded by sponsors and the community, the associated obligations are quite modest: make sure the membership accurately reflects active contributors. This ensures the legitimacy of the mechanism is maintained, and increased, in the eyes of non-member participants. The Guild is a garden which tends itself. Each of its members are peer stewards of a self-regulating plot. When the allocation of nutrients, sunlight or water become imbalanced, it's up to the membership to recognize and adjust. Members should only commit if they are aligned with this expectation.

Self-curation is a crucial component of the project. While other public goods funding mechanisms have used external councils (eg. Optimism's RPG) or the donors (eg. Gitcoin) to curate the beneficiary set, this wouldn't work for our purposes. Any external council would have to be deeply embedded within the core protocol sphere in order to properly curate, to the extreme degree that it would become impractical to do much else. Instead, we will leverage the perspectives and daily interactions of people that are already embedded, the core contributors themselves.

Practically, this means signalling to the broader membership when they, a team member, or an independent contributor they interface with have changed contributing status, eg. joining or leaving core protocol work. Members should have regular contact with new members they propose. Bias or conflicts of interest should be disclosed, if they exist, eg. where one is an advisor to the other's side project.

We believe it is incentive compatible that curators are drawn from the beneficiaries because:

- adding ineligible beneficiaries removes future vested value from existing members, ie. they will more carefully consider potential members and their contributions. An external council would not feel this constraint so directly.
- the mechanism *must* accept all legitimate contributors, which prevents the set from ossifying or getting captured. Potential members which fit established guidelines need to be added to maintain credible neutrality to participants and sponsors. If sponsors think that the set is not inclusive enough, they will not feel obligated to begin or continue their contributions.

Beyond this basic expectation, members should consider mentoring through something like the Core Developer Apprenticeship Program (CDAP) to surface a wide variety of contributor backgrounds, and help them on their journey. As global internet infrastructure, it would be a disappointment if Ethereum forever remained the domain of a small, homogeneous set of developers.

4.13 Members as Signers

Signers are members who act as key holders for the multisig which can update the membership and their weights in the weighting contract. The 6/10 Gnosis Safe can be seen [here](#). These should be well regarded Ethereum community members. They should agree to follow strong security practices, and make themselves available to sign and deploy membership updates at the agreed upon cadence, eg. quarterly. Similarly to curatorship, overlapping signers and beneficiaries allows for more efficient self-governance vs. the overhead that comes with a set of external signers. It should be noted that signers never have custody over vested funds. To learn more about how the multisig and the weighting contract interact, see the section titled **Smart Contract Architecture**.

2.4.2 4.2 Sponsors

“a main promise of DAOs lies in their ability not only to bring many people together, but many organizations - this is when they'll really shine” - *Kei Kreutler*

This group includes any project which depends on the continued maintenance and evolution of Ethereum to be successful, and is interested in supporting said maintenance and evolution.

Ethereum has a rich culture of experimenting with radical new ideas: it's what makes our community one of the most vibrant in the space. We've seen many DeFi, NFT, DAO, and Layer 2 projects build amazing things on top of Ethereum's credibly neutral public infrastructure. To maintain and increase core protocol contributions long into the future, the financial incentives available to core contributors should meaningfully balance the lucrative pull of the app / Layer 2 token space. Giving current and future contributors a stake in the successes of these projects produces a powerful incentive alignment between maintainers and those that depend on their work. To accomplish this, we invite sponsors to contribute:

- governance tokens
- Layer 2 sequencer fees
- recurring protocol fee revenue
- interest bearing tokens
- fractionalized NFTs
- good old fashioned ETH

In order to be effective, we suggest that new projects consider allocating 1% of total project tokens to the Protocol Guild - see **Case Studies** for more explorations on this.

Finally, it should be noted that just as protocol maintenance is an ongoing effort, so too is sponsor support. New Astrodrop contracts will need to be deployed and sponsored periodically to maintain the future incentive to contribute to the protocol.

2.4.3 4.3 The Community

Even when the Guild is live, it will require consistent efforts from the broader community to ensure its long-term success. This includes application developers, users, investors, enthusiasts, and builders of all kinds. They will be instrumental in:

- introducing and maintaining public norms about contributions through regular advocacy for the initiative
- writing governance proposals to get protocols to sponsor the Guild: even if protocols are aware of the split contract and on board with the norms, there may be additional work needed to follow each community's process.
- ensuring the curators are responsibly neutral in their management of the protocol and its quarterly updates. If this is not the case, it is the responsibility of the community to call this out and advocate for change

2.5 5. Initial Pilot - 2022

2.5.1 5.1 Before Launch

To prepare for launch, there are a few tasks we wanted to properly complete:

- perform an informal audit of the 0xSplits contracts by members
- verify the 0xSplits contracts and frontend on testnet
- deploy the 6/10 multisig, the Split contract itself, and the Vesting Module
- onboard as many eligible Members through the process we have bootstrapped
- broadcast the intent of the Protocol Guild to the broader community and potential sponsors, getting a precommitment of funds where possible
- refine and document the operating process, which includes curating and deliberating on potential members, onboarding them

2.5.2 5.2 Pilot Characteristics

As of May 8th 2022, all of the above have been completed. Here's an overview of how the Pilot is structured.

- Sponsoring assets will vest for one year (365 days) from stream initialization. Sponsoring streams may overlap with the next iteration of the vesting contract by a few months.
- We are targeting between ~\$10-20mm in sponsorships. If you're interested in being part of this initial cohort of sponsors, you can send permissionlessly to the [vesting contract 0xF29...1a9](#) here. If you or your project have questions, please reach out on [Twitter](#), telegram [@statefulworks](#), or to any of the existing members.
- We will plan to update [membership](#) and [weights](#) ideally once per quarter, barring any special cases.
- The beneficiary split has been launched with 111 beneficiary addresses - see the contract through the [0xsplits interface](#). The initial set of Pilot beneficiaries include:

- Diviners (Researchers / Spec Writers / Client Tinkerers): responsible for divining the future needs of the protocol
- Framers (Client Maintainers): In dialogue with the previous set, responsible for manifesting the best fit frameworks to hold these needs in balance with each other
- Guides (Ecosystem relations, client tinkerers): in dialogue with both previous sets and responsible for guiding both of their paths of divination and manifestation
- the donations.0xSplits.eth address, which represents the 0xSplits team and some of their Public Goods dependencies

2.5.3 5.3 Documenting Outcomes

Throughout the pilot, special attention should be given to evaluating outcomes related to the above characteristics. The information gathered should be archived in the docs as a cohesive report for the edification of future members and operational adjustments. The report should include the following topics:

Timing

- Was one year the right length for a Pilot?
- what should the typical vesting period be in regular operation?
- What's the earliest the next iteration would launch ahead of the Pilot vest concluding?

Funding

- Were funding targets hit ahead of launch?
- Was the initial raise too low / high?
- Was there a healthy number and variety of sponsors?

Operating

- What sort of operating procedures worked? Which ones didn't?
- What role did voting play in decision making, if any?
- What were the best practices that emerged with regard to voting, onboarding, curation?
- Should the weighting be modified eg. more granular, more subjective measures?

Membership

- Did the Guild start with an accurate representation of protocol contributors?
- What areas in the ecosystem should eligibility be expanded to over the pilot?
- What were the notable membership changes/ disputes, if any?
- What is the general state of the membership?
- Has the presence of the Protocol Guild lead to negative or positive affects to relationships, the progress of regular projects?

- What frequency has someone's decision to join or remain in core protocol work cited the Guild as a compelling benefit?
- Have any Guild members participated in mentorship programs to support diverse array of future contributors?

2.6 6. Guidelines for Regular Operation

What follows is an outline for how we plan to start, recommendations, and guidelines for regular operation scenarios.

The Guild should transition to Regular Operation before the end of the Initial Pilot but only after the summary report has made meaningful progress in assessing the Guild's evolving characteristics. Activities during Regular Operation should map directly to the obligations described in **3. Roles & Expectations**. Some things will change regularly, like the current set of sponsors at a specific time, or the membership over time.

2.6.1 6.1 Comms

- broadcasting to the community and prospective sponsors when vests are set to start and end

2.6.2 6.2 Parameter Setting

- length of each new vesting period
- how much of a raise to target for each vesting pool
- number of months contributing needed ahead of inclusion
- number of multisig signers, whether it should be proportional to number of members
- how often signers should be required to prove address control
- how frequently membership will be updated

2.6.3 6.3 Weighting

Antifragility and non-gameability emerge from simple frameworks. This limits the time spent deciding appropriate categories, the methods for collecting and verifying as well as the time spent weighting contributors. Additionally, this should limit cases of ambiguity gaming that might come up in complicated weighting schemes. Based on member feedback, we've settled on these guidelines: $\text{SQRT}(\text{eligibleMonths} - \text{monthsOnBreak}) * \text{timeWeighting}$

- historic contributions are considered in weightings
- `timeWeighting` can be either 1.0 for full-time or .5 for part-time contributors
- existing contributors get "diluted" as newcomers come in
- continuing contributors get additional weight per month they are active. This means historic contributors don't maintain their split weighting if they leave protocol development
- anyone who stops contributing is removed from the split via periodic Curation Reviews

2.6.4 6.4 Proposing and discussing new members

If current members believe that the set should be expanded to include another contributor, they should propose them well enough in advance of a Membership Update. This would mean at least a week. The process would look something like this:

1. an existing member (akin to an EIP champion) should send this info in the `proposed-members` channel.
 - Name / Identifier
 - Team / Project
 - Discord handle
 - Link to relevant work, eg. github, research
 - Summary of their work and eligibility
2. Discussion should be open for at least a few days to give members time to review and contribute to the discussion. This can be either with reacts on the proposal / , ideally along with some written thoughts on why you think the proposed member fits the eligibility or not. Deliberations should strive to end in rough consensus, resorting to formal voting procedures only in rare extreme situations.
3. Once a positive consensus has been reached, the person can be contacted with the typical onboarding flow.

If you are an existing core contributor that is not included, please contact an existing member to have them propose your work for consideration.

We are exploring tools and methods to make this process more transparent, potentially through a forum for discussion and to maintain a public record of decisions.

2.6.5 6.5 Onboarding new members

Eligible and confirmed members should be given an onboarding form link to be added to the split contract at the next quarterly update. They should also be added to the Stateful Works discord and given the proper `Guild Member / Team` roles.

When introducing the concept to potential members or onboarding accepted ones, it should be noted that the submitted address should refer to an individual's personal wallet and *not* their employer's. If teams were the atomic unit, all team members would have to agree on whether to accept or decline membership, likely decreasing the number of participants.

2.6.6 6.6 Guild Contact

It may be the case that there should be a Guild Contact for each team. The backstop is each team/project, who only need to confirm when a contributor has been added or removed. One member of each team/project (eg. Lighthouse) should agree to be the point of contact responsible for ensuring other members are aware of any significant developments like:

- explaining membership obligations to new team members
- collecting addresses and signatures for inclusion in the eligible set
- migration to a new smart contract
- a change to the weighting scheme

2.7 7. Anticipated Concerns

While we can't conceive of every scenario, we've tried to think critically about deficiencies when they've presented themselves. If you see a devious edge case, an organizational pitfall- please join the [Stateful Works Discord](#) to discuss, and hopefully add it here!

2.7.1 7.1 Related to Operation

What happens in the case of stolen/exploited funds being sent to the mechanism?

- We think this is unlikely, as to the best of our knowledge it has not happened to any other public goods organization or individual. While the membership will ultimately decide how to handle each scenario individually, each should be carefully considered. It might play out something like this: Contract receives funds. Membership collectively decides to claim/burn the specific token in the contract. The affected parties should deploy a recovery contract with a snapshot at each exploit and restore the funds via said contract.

Shouldn't one-off contributions be considered for membership?

- Every mechanism has its limit. The Protocol Guild may meet its at the edges of contribution, where someone has meaningfully contributed to a project, but does not work on it consistently, or produces something This remains an open question, and might be considered for a future weighting scheme if there are no major issues.

Why are weightings not more granular?

- While it's true that some people are objectively more productive in their work / valuable to the protocol, adding a weighting scheme to a membership this large would introduce complexity with each membership update. There would also be unknown, probably negative social dynamics related how to value the contributions of your peers.
- It's worth a note of caution against heading too far down the path of data and hyper-specificity when it comes to evaluating contributions. We suspect that at least a few possible futures would end up including a public facing component, which privilege people who have previously been working on the protocol.
- They have had additional time to form themselves into the shape the political and social structures are looking to latch onto. Metrics, rubrics breed subtle exploits, entrench power
- Ideally, under any weighting scheme, the margin between contributor profile should not be overly large relative to the others.

How can members as curators or signers abuse their position of trust?

- Fundamentally, this is a political tool. In negative outcomes, whoever maintains the member eligibility can influence research areas and interest people have in certain sections of the protocol. Want to get the merge done? Add more client implementers at the expense of other ecosystem categories. This kind of manipulation is unlikely to actually happen as it would harm the mechanism's legitimacy.
- Or worse, the existing signers decide not to honor the agreed upon outcomes from weighting deliberations, go slightly rogue. In this case, we can imagine some contributors deciding to ride it out until the vesting has completed. In other situations, a significant portion of the membership would collectively abandon the stream in solidarity. Or, they could claim and send the wrapped tokens to the burn address as a gesture of protest.

How can this be gamed?

- As the mechanism scales, it's inevitable that the amount of attention given by a core group of Guild members will eventually fall, become less thorough. At a sufficiently high number of members, unscrupulous developers might invent phantom co-workers and redirect the split shares to themselves. This is one area where the mechanism relies on mutual trust to avoid abuse.

What happens if a large percent of infrastructure contributors decide not to participate? Or, what if sufficient number of contributors join and then decide to leave the split?

- The mechanism’s legitimacy is predicated on broad participation. If enough contributors decline, this may not be an appropriate tool for incenting work on public goods. In the latter case, the vesting would still continue but it may be difficult to solicit additional donations.

How will members handle conflicts about list inclusion, eg. when someone starts doing well-intentioned but poorly executed work?

- Eligibility criteria should be given special care, as much as the contract or the outreach to donating entities. These should be communicated publicly and frequently with change history, eg. Github. Any decisions which sidestep transparent processes undermines the mechanism’s legitimacy.

What other failure modes have not been explored in-depth yet?

- the membership is updated to only include addresses controlled by the attackers.
- More cleverly, they only dilute the existing membership a little bit, or adjusting the weights just enough to favor certain set of contributors.
- Members selling early access to their shares to capitalize early into a stream, or taking a loan against them and committing to stay at least as long as their agreements dictate. Web3 “permissionless vibes” maximalist might

What happens when enough signers get compromised?

- This would damage the trust donating entities put into the members, as well as any future efforts to restart something similar.

What are the tax implications of participation?

- We are not tax lawyers, each participant should seek experts for their jurisdiction.

What’s use case you can anticipate wanting in the future that Astrodrop can’t facilitate today?

- lending markets built into the vesting stream available for lending
- programmatically dripping membership
- extensions that let users automate a custom functions like “claim and sell to DAI”
- anyone who donates would eventually be airdropped a social token which unlocks a token-gated core dev discord /jk

What are some ways that curation can fail?

- There are edge cases which should be considered. For example, where the marginal legitimacy lost by excluding a given contributor is too low to get curators to push for their inclusion.
- The initial set of curators fails to expand beyond outside of their social graphs, but accumulates enough members to accomplish a state of “good enough” legitimacy.
- The social norms that build up around the mechanism are sufficiently powerful to draw in continued donations even though it just barely hits the “good enough” threshold.

2.7.2 7.2 Related to the Broader Community

Will this replace existing salaries?

- No, this should be a bonus on top of current pay: employers/ DAOs should pretend as though it doesn’t exist. Given that an employer won’t be able to tell whether they have submitted their address or that of a charity. It would not be ethical to compel charity disclosures.

What if this ends up being a significant amount?

- If this mechanism *doesn't* accrue significant funds, then it's not really working properly. Vested donations should be significant enough to inspire new contributors to join core development. However, there should be deeper incentive analyses and the thresholds at which they get funky.

Why doesn't people just ask for some multiple of their current salary?

- As discussed in “2. Broader Context,” traditional orgs will never be able to match the upside that comes from working on a novel tokenized application or L2.

Aren't donated assets a form of bribe?

- No. this would be a very inefficient form of bribing, as the large membership distribution dilutes any targeted intent. It would be much more effective to bribe individuals, which can already happen today without a split contract. It could even be argued that this mechanism makes bribes *less* effective because bribes are most effective in situations of relative wealth inequality. By raising the holdings of core developers, they are less likely to be swayed by individual financial offers. Of course, this is completely opt-in and protocol contributors are welcome to redirect their share to another public good organization. Only when there are relatively few donating entities could the mechanism arguably edge towards bribe territory, as it's very clear where benefits come from. Or, if the relative amount donated by one entity dwarfs that given by others.

What about including past protocol contributors?

- Not advisable, this would complicate inclusion decisions. The split is supposed to incentivise current and future contributors.

Will this compete with Bitcoin or other similar efforts?

- We feel that this mechanism is differentiated enough (ie. forward looking, core protocol focused, vested, biases towards native tokens as opposed to USD) that the overlap may appear larger than it actually is. However, there may be some donating entities that feel like they are already “doing their part” with donations to one initiative and may not feel obligated to contribute to the other. We believe that it's healthy to have a number of autonomous & differentiated funding approaches towards Public Goods.

2.7.3 7.3 Culture / Big Questions

How long should the Protocol Guild exist?

- It's unclear when, but at some point it should probably cease to exist. It may be that is no longer be an effective draw to retain talent, become corrupted or otherwise coopted, or hopefully that the protocol has completed its evolutionary course. However, members present in the lead up to that possible future should be attentive to the signs of negative outcomes. The inertia to maintain itself will be self-animating, an egregore harnessed by the mystic capabilities of core Ethereum development. Inasmuch, the egregore desires to continue living and will therefore recognize attempts to curtail its growth. Members would do well to remember that this has been the case from the beginning, and remind new cohorts of developers of this reality as they are onboarded.

Why hasn't anyone built this before?

- It's unlikely that one project from the ecosystem would take up the coordination efforts to collect and maintain a list of contributors. If it did happen, the project would eventually find themselves with an immense amount of power as the gatekeeping curator.
- the tech did not exist until now (astrodrop)
- core devs are largely focused on other things to coordinate

Broadly, how will this design fail?

- Believing that voluntaryism and donation-based funding scales sufficiently to the levels this mechanism needs in order to be effective.
- Assuming that developers even want to “self-govern” an asset stream, including its responsibilities and pressures.

Will long-term vesting lead to stagnation in core development roles?

- In the sense of gatekeeping/groupthink/capture, we sincerely hope not. There's certainly a possibility that previously effective people may get stuck in a position if the incentive is significant enough. However, this is no different from any other job with performance requirements, crypto or otherwise. If someone is not performing adequately, they will be removed from their job and then from the list. If anything, the infusion of new perspectives as the set grows will be a healthy process.
- With the conclusion of each vest, everyone starts again at 0 convincing the public that they are the legitimate heir to the Protocol Guild name and legacy. Competition for scarce political purchase means there will be alliances, intrigue, rebalances. Any one can copy this blueprint and create their own competing versions. We anticipate that even the initial cohort now will unavoidably have its own political undercurrents! A blooming society actively evolve their systems periodically to avoid settling into patterns too soon. So we should continue - see the approaching Leviathan peeking over the horizon, pull ourselves towards well considered implementations, norms, visions. Subtle frameworks like this interface between the social and the economic resources a group traffics in. They are dense confluences of swirling power - what we're doing is preempting inevitability.

2.8 8. Case studies

NOTE: What follows are a theoretical high-impact scenarios. This is not a claim that funding will meet these amounts, only an exploration of possibilities.

2.8.1 8.1 Vested assets in DAO treasuries

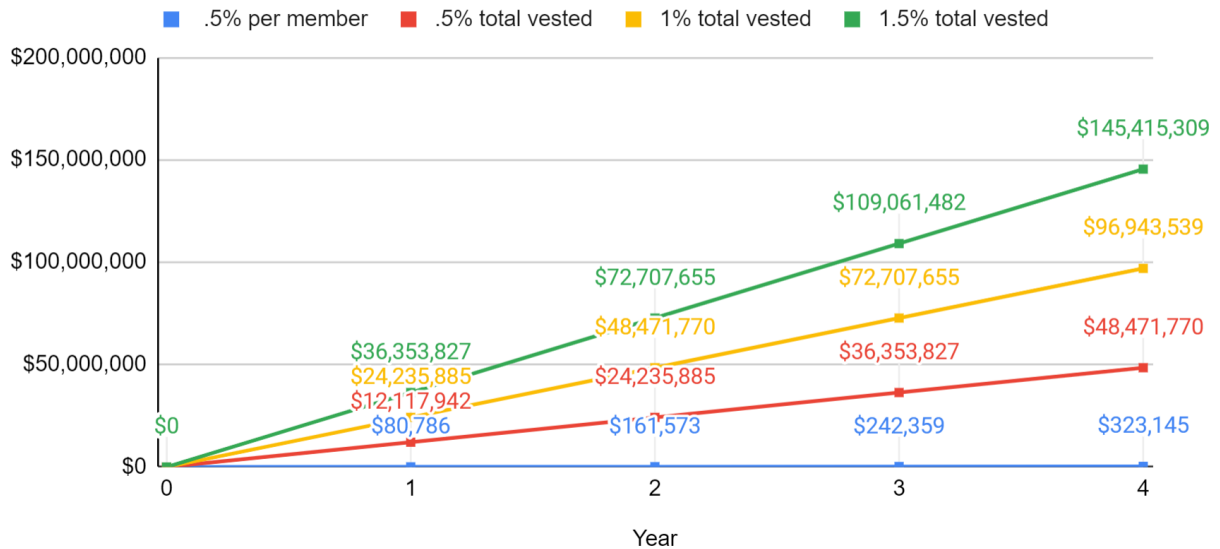
Projects which previously launched a token could donate a portion of the tokens currently controlled by governance. Here's a rough sample of what this might look like in practice, using the top 20 projects by unvested DAO holdings. (data taken on Nov. 11 from Open-Orgs.info by David Mihal). This is not meant to be a comprehensive survey. see the data behind these charts [here](#).

Name	Unvested Treasury	Vested Treasury
Uniswap	\$11,032,128,273	\$4,467,296,235
Lido	\$1,013,369,806	\$1,013,369,806
Aave	\$710,995,680	\$710,995,680
Olympus DAO	\$695,596,511	\$695,596,511
Synthetix	\$459,754,748	\$459,754,748
ENS	\$4,814,784,391	\$398,406,844
MakerDAO	\$315,896,435	\$315,896,435
Badger	\$281,435,598	\$281,435,598
Gitcoin	\$643,282,372	\$212,022,218
Yearn	\$162,664,196	\$162,664,196
SushiSwap	\$143,079,883	\$143,079,883
Alchemix	\$124,448,531	\$124,448,531
Balancer	\$113,243,653	\$113,243,653
DXdao	\$112,487,482	\$112,487,482
API3	\$109,938,536	\$109,938,536
BarnBridge	\$108,304,172	\$108,304,172
Nouns DAO	\$67,661,963	\$67,661,963
Index Coop	\$65,258,192	\$65,258,192
mStable	\$51,208,814	\$51,208,814
Nexus Mutual	\$43,478,269	\$43,478,269
Compound	\$1,019,076,566	\$37,806,182

	.5% Donation	1% Donation	1.5% Donation
SUM	\$48,471,770	\$96,943,539	\$145,415,309

Already we can see the significant benefit these donations would have. For these scenarios, we include 150 members on the split contract plus a 4 year vesting period.

Starting today



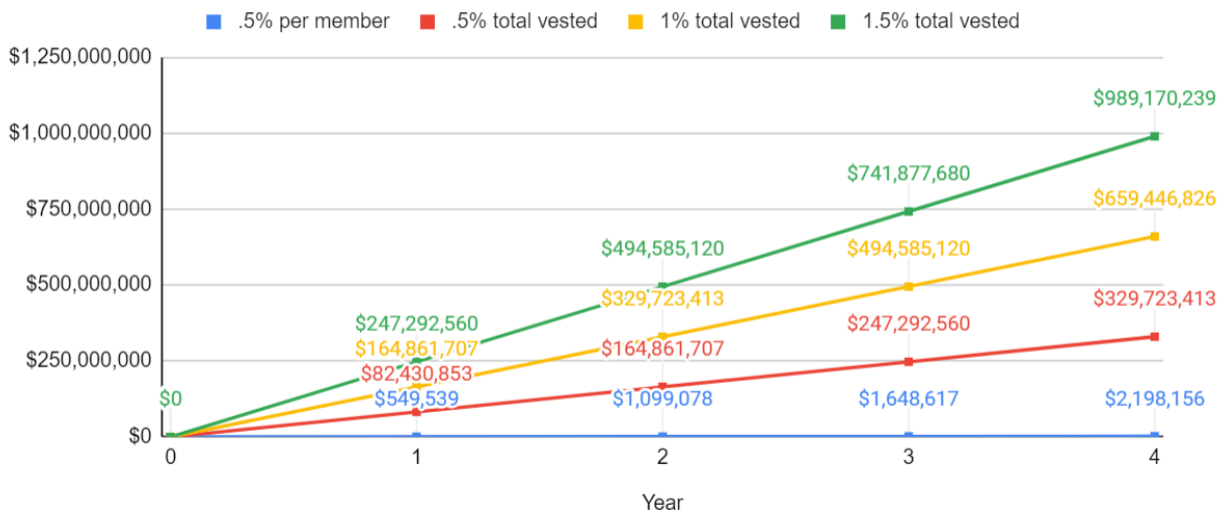
2.8.2 8.2 Donations at launch

This funding mechanism really starts to show its promise when considering if projects start to include this as part of launch parameters. The chart below takes the same 20 projects and distributes a portion of what the max supply would have been at launch. Of course, this is just an illustration - they didn't all launch and contribute to the split at the same time.

Name	Max Supply at Launch	Price, Nov. 11
Uniswap	1,000,000,000	\$25.71
Lido	1,000,000,000	\$4.27
Aave	16,000,000	\$312.93
Olympus DAO	5,041,746	\$878.69
Synthetix	237,694,162	\$9.99
ENS	100,000,000	\$58.09
MakerDAO	1,005,577	\$3,025.46
Badger	21,000,000	\$32.40
Gitcoin	100,000,000	\$9.36
Yearn	36,666	\$33,903.79
SushiSwap	250,000,000	\$11.23
Alchemix	2,393,060	\$453.89
Balancer	100,000,000	\$24.74
DXdao	148,976	\$777.09
API3	106,940,994	\$5.56
BarnBridge	10,000,000	\$35.06
Index Coop	10,000,000	\$28.64
mStable	100,000,000	\$1.13
Nexus Mutual	6,898,110	\$181.95
Compound	10,000,000	\$335.91

	.5% Donation	1% Donation	1.5% Donation
SUM	\$329,723,413	\$659,446,826	\$989,170,239

Starting from project launch



We believe \$2M-6.5M vested over 4 years to potential contributors will be a step in the right direction. The beauty of the mechanism is that there is no application to participate as a sponsor: any entity can just send funds to the split contract, and the rest will happen without their involvement.

2.9 9. Membership

2.9.1 Member List

For transparency purposes, we are disclosing each Guild member's team, the name/identifier, and a link to their work. This set will evolve over time as members leave core development or change teams.

	Team	Member + Link to work
1	EF DevOps	Parithosh Jayanthi
2	EF DevOps	Rafael Matias
3	EF Geth	Guillaume Ballet
4	EF Geth	Jared Wasinger
5	EF Geth	Marius Van der wijden
6	EF Geth	Peter Szilagyi
7	EF Ipsilon	Andrei Maiboroda
8	EF Ipsilon	Jose Hugo de la cruz Romero
9	EF Ipsilon	Paweł Bylica
10	EF JavaScript	Andrew Day
11	EF JavaScript	Ryan Ghods
12	EF JavaScript	Scotty Poi
13	EF Portal	Jason Carver
14	EF Portal	Mike Ferris
15	EF Portal	Ognyan Genev
16	EF Portal	Piper Merriam
17	EF Protocol Support	Danny Ryan
18	EF Protocol Support	Tim Beiko
19	EF Protocol Support	Trenton Van Epps
20	EF Research	Aditya Asgaonkar
21	EF Research	Alex Stokes
22	EF Research	Antonio Sanso
23	EF Research	Carl Beekhuizen
24	EF Research	Dankrad Feist
25	EF Research	David Theodore
26	EF Research	Dmitry Khovratovich
27	EF Research	Francesco d'Amato
28	EF Research	George Kadianakis
29	EF Research	Hsiao Wei Wang
30	EF Research	Justin Drake
31	EF Research	Mark Simkin
32	EF Research	Proto
33	EF Research	Zhenfei Zhang
34	EF Robust Incentives Group (RIG)	Barnabé Monnot
35	EF Robust Incentives Group (RIG)	Caspar Schwarz-Schilling
36	EF Security	Fredrik Svantes
37	EF Security	Tyler Holmes
38	EF Security	Yoav Weiss
39	EF Testing	Mario Vega
40	Erigon	Andrey Ashikhmin
41	Erigon	Artem Vorotnikov
42	Erigon	Enrique Avila Asapche

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Table 1 – continued from previous page

	Team	Member + Link to work
43	Erigon	Giulio rebuffo
44	Erigon	Michelangelo Riccobene
45	Erigon	Tullio Canepa
46	Ethereum Cat Herders	Pooja Ranjan
47	Hyperledger Besu	Daniel Lehrner
48	Hyperledger Besu	Danno Ferrin
49	Hyperledger Besu	Gary Schulte
50	Hyperledger Besu	Jiri Peinlich
51	Hyperledger Besu	Justin Florentine
52	Hyperledger Besu	Karim Taam
53	Independent	Peter Davies
54	Lighthouse	Adrian Manning
55	Lighthouse	Diva Martínez
56	Lighthouse	Mac Ladson
57	Lighthouse	Mark Mackey
58	Lighthouse	Mehdi Zerouali
59	Lighthouse	Michael Sproul
60	Lighthouse	Paul Hauner
61	Lighthouse	Pawan Dhananjay Ravi
62	Lighthouse	Sean Anderson
63	Lodestar	Cayman Nava
64	Lodestar	dapplion
65	Lodestar	Gajinder Singh
66	Lodestar	Phil Ngo
67	Lodestar	Tuyen Nguyen
68	Nethermind	Daniel Caleda
69	Nethermind	Kristof Gazso
70	Nethermind	Łukasz Rozmej
71	Nethermind	Marcin Sobczak
72	Nethermind	Marek Moraczyński
73	Nethermind	Mateusz Jędrzejewski
74	Nethermind	Sarah Liu
75	Nethermind	Tomasz Stanzeck
76	0xSplits	donations.0xSplits.eth
77	Prysmatic	James He
78	Prysmatic	Kasey Kirkham
79	Prysmatic	Nishant Das
80	Prysmatic	potuz
81	Prysmatic	Preston Van Loon
82	Prysmatic	Radosław Kapka
83	Prysmatic	Raul Jordan
84	Prysmatic	Terence Tsao
85	Quilt	Ansgar Dietrichs
86	Quilt	Matt Garnett
87	Quilt	Sam Wilson
88	Quilt	Somu Bhargava
89	Solidity	Alex Beregszaszi
90	Solidity	Harikrishnan Mulackal
91	Solidity	Johnson Ugwuru

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Table 1 – continued from previous page

	Team	Member + Link to work
92	Solidity	Kaan Uzdogan
93	Solidity	Kamil Sliwak
94	Solidity	Leonardo de Sa Alt
95	Status	Dustin Brody
96	Status	Etan Kissling
97	Status	Eugene Kabanov
98	Status	Jacek Sieka
99	Status	Jamie Lokier
100	Status	Kim De Mey
101	Status	Konrad Staniec
102	Status	Mamy Ratsimbazafy
103	Status	Ştefan Talpalaru
104	Status	Zahary Karadzhev
105	Teku	Adrian Sutton
106	Teku	Ben Edgington
107	Teku	Enrico Del Fante
108	Teku	Paul Harris
109	TXRX	Alex Vlasov
110	TXRX	Anton Nashatyrev
111	TXRX	Mikhail Kalinin

2.9.2 Addresses and Weights

For member privacy, the order of weights here does not correspond to the names above. These addresses and weights will change over time as members change from fulltime to part-time (or vice-versa), or as new members start contributing to core development.

Read more about how weighting is determined in [6.3 Weighting](#)

	Address	Weight as a percent
1	0xe8FEE6186cbcF0790644D59f04c5C085FBA68Bb	0.3347
2	0xC9187b5C81d63b289811A4fcb9AC7ADb7103639e	0.3578
3	0x6bb11EBDF00ebDFbe707005B506A24Fd57d5Bd66	0.3578
4	0xF23090AB5773200bE3dAD33f42C7Eb20a14C4a61	0.3795
5	0xab8b3647EF7FF66D2f38ee5eaEf2b158c4eb52A2	0.4
6	0x2D56Cd519540bE541A3261E22e95d6507F5504Ca	0.4
7	0xfbbECa029104953F039537a111D07A6aC0549c3c	0.4382
8	0x9b796F2de75772f1634D78A3AB23A03778D3702a	0.4382
9	0x5869C17c8934Ce9f674e88c7d4f8F94DCE193FCB	0.4733
10	0x8360470F1793C91c953be453fcA52CC63dfCb367	0.4733
11	0x4Bfa4639Cc1f4554122aBB930Aa897CDAe90d13b	0.4733
12	0x046Fb65722E7b2455012BFEBf6177F1D2e9738D9	0.4733
13	0xEd46bFFd4b8237a9c7E08f55F0B410544f989813	0.506
14	0x22D6637330aF1de97a1F67D03A73b99A1E6D2263	0.506
15	0x8ce466bD577396786C76Da8629314fccc5bE2A5f	0.506
16	0xEB8E7c90014565EE8126110630eFa2d9CD6eBE4	0.506
17	0x975D1040E93316917BD67dD32a02e1929F8aF8D3	0.506
18	0x3d5D2AC4fEcF16bb1651A445d5B17f977A823546	0.506
19	0x0906Eb682C6d12EdBE5e0A43E60068E1A7F8bea3	0.5367

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Table 2 – continued from previous page

	Address	Weight as a percent
20	0xc66EFCcB88b3b7BdE6fC476d8cF139DD38075Ad7	0.5367
21	0x00cDD7Fc085c86D000c0D54b3CA6fE83A8a806e5	0.5367
22	0xFBFd6Fa9F73Ac6A058E01259034C28001BEf8247	0.5367
23	0xe2A296b3d3AD4212b6030442e70419ff7B82FEE4	0.5367
24	0x2A89178555a3e7d19218f28DF0B0Ec732E889e18	0.5657
25	0x661b81d462D80786c442774F452464A8C627a20E	0.5657
26	0x2fb858991668840ce34F331402E0b3C66db078AF	0.5657
27	0xf0869c68b91013bf214db68d503c65f9ba44097c	0.5657
28	0x980a85ba6c2683e3509752dd3b4eB50165C0e65F	0.5657
29	0x78ac9c2545850bEDbC076EB30ce7A6f0D74b395E	0.5657
30	0xB7745Bde70e429bBd5Eb57dfa5ca70B84239477a	0.5657
31	0xeFD79Dc8c08762156a2B204743e3fC9507f07f4E	0.5934
32	0x153afFb96Fcb60085Ee307996Bdd2df0183A3682	0.5934
33	0x50122A5509F628e901F9c0238F0168833753239b	0.6197
34	0x10c8597a5063A1648FfE13f54E996ba9bB3217B5	0.6197
35	0x0760E844e6f368ce73F1eEB917d37Db19375De3B	0.6197
36	0xf0443945aD3BE9645382FC2537317dA97FEff3A9	0.6197
37	0x77b34f5E620e8Cfd1839b245beAADd27ae3A25FB	0.6325
38	0x0B916095200313900104bAcfc288462682C38700	0.645
39	0x84f678A3e7BA8Fc817c32Ff10884D6FB20976114	0.645
40	0x2bf7b04F143602692bBDc3EcbeA68C2c65278eee	0.6694
41	0x6f91b7e11d955897aa7394d5b4fc82559fab27b9	0.6694
42	0xCb8DC3beC7B659022aE0d3E9de17322F31e4AA7C	0.6929
43	0x4d5083dd10f2a46f26f5583c6679f9f8d30ae850	0.6929
44	0xE35b6f8E759Ac242585E2F41Ac29A2baAf4c4e96	0.7156
45	0xC152fd31F285f6c0B3807070280595e7Ea713a7f	0.7376
46	0xbC349D1BEeE33c61F0395d1667E70056B4C869B9	0.759
47	0x644177F8D79117c2b9C7596527642B3c2D05888E	0.7798
48	0xb721c2e6640D963e99b37B6437ABAF6914A25A5e	0.7798
49	0xF8843981e7846945960f53243cA2Fd42a579f719	0.8013
50	0xa1D76553266fA8Ed3D143794a462aaFAdfC34f74	0.8198
51	0x925F5d6cCdB04F56fBa1cdcAd92E4eBb0d421411	0.8391
52	0x49Aa00072a7BA8a5639C43Fe9F6536820E6F5d57	0.8391
53	0xC6cA7c3427AD6B7a06fbED6D18C394E540E31814	0.8764
54	0x46cD90445349e64F895c403c23839e79eb4065e4	0.8945
55	0xFf9977FB117a22254a8eB6c6CE8d3Dd671FA70DC	0.9122
56	0x65a63ceE206bFA6B2a3287479D28c8902B4055E9	0.9122
57	0x88dF07c605d13915B8E7D07dc8efD538dC0C5620	0.9296
58	0xE4b99f9580B90d88C3e6dC3E0B853D8D3b0B8B55	0.9296
59	0x9d6d3b09F8AC8615805bd82e53B80D956F451CFa	0.9296
60	0x92699d64C65c435D4a60E2ceEaEb931dB8B1cA09	0.9467
61	0x35bc6a44AcFb79b5A47C1cbe2fD3C560a093a2B1	0.9467
62	0xa29576F07eAaD050AeACbc89AC0518B62fe2F88E	0.9634
63	0xe05875F287C028901798aC2Dc8C22Ba908b8eF36	0.9634
64	0x00d3baf1080b1cfb5897225a21ecdcc25a1f4456	0.9961
65	0x799681f9b9d7c55ed59f5a0f235cAb132Cde0a2B	0.9961
66	0xb7A593EC62dc447eef23ea0e0B4d5144ac75ABC5	0.9961
67	0x1e caea79D739BC222D6dB2d6bf63F869a329a702	1.0277
68	0xD4a3030b5f5e8DD4860d370C17E8576aE9951a2D	1.0277

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Table 2 – continued from previous page

	Address	Weight as a percent
69	0x10ab73AA48D686b7FD9ec9D50418a14DD23f6631	1.0277
70	0x6e22a5e30088c8389dc725bbead5f0675334299f	1.0432
71	0x71c15691e243bE88220957C784053EF0E084440B	1.0584
72	0x24113fFB07189D1e6E169025A424B58C29522972	1.0882
73	0x6B29132ea388a308578c1d3Be068D0e4fc9915a2	1.1028
74	0x50d5e44700c10873875b4E75C4c9396562D83bE1	1.1028
75	0x873a45B49289b868E81547c6226357E7117e6070	1.1173
76	0xd20BebA9eFA30fB34aF93AF5c91C9a4d6854eAC4	1.1173
77	0x4B3105E9EC2B6069c1362388D429625a026f43e0	1.1173
78	0x366A06CbA45BC45996A7B6a1B6F22e8c9283b6Ea	1.1455
79	0x05618d6EFFe2E522F07B1dB692d47A68bfD6fFEa	1.1732
80	0xa87922d0074bCd82Ac82816633CcE68472548955	1.1732
81	0x86F34D8b98171281AB8bFe65C7e2718E4f002e35	1.1867
82	0xf5441a1b900a1D93e4c06CB9c3fDbA39F01469f0	1.2001
83	0x7e59Df833869E2997d05e163D6004f3344A052FA	1.2001
84	0x0000006916a87b82333f4245046623b23794c65c	1.2001
85	0xAb96014a7c078f09418Cf899Bf197CadFf023C16	1.2265
86	0x1de6938d9f9ebd43D0Cc56f0CeF1657D954c9A94	1.2265
87	0xCA186e78bf657d4C5694CA5CA448D3766d2b55Bb	1.2523
88	0x00a2d2d22f456125d64beda5a6f37273a13d9de0	1.2523
89	0x57c5D54F7293CDE1FC129e4159cB07F48752ea61	1.2776
90	0x3212974a4e53e5238f6ea193b36412db9ad61c26	1.2776
91	0x6fFd2248Ab7E80ef51D7Eb4CB60964C830125567	1.2776
92	0x3eD7bf997b7A91e9e8aB9eE2F7ce983bd37D6392	1.2901
93	0x5973D1af5c13168bdC85c6e78309272815995Ffb	1.2901
94	0x376D5C3a16E9d015e8C584bB2d278E25F0ccb27B	1.2901
95	0xf71E9C766Cdf169eDFbE2749490943C1DC6b8A55	1.2901
96	0x9F60E4aF6020cc6a791B2d1Ce9902d25A72bA824	1.2901
97	0x6C1C4f642ab5611A46ee6F3ED95Bbf2E3Caf4D1c	1.3024
98	0x3B16821A5dBBFF86E4a88eA0621EC6be016cd79A	1.3147
99	0xF51fc4c6Ab075482b61F5C1d4E72fADaFf8815F3	1.3147
100	0xBc11295936Aa79d594139de1B2e12629414F3BDB	1.3268
101	0xe019836A41CB707F79b991f60e241918097aC16e	1.3388
102	0x8cbf722adfb071a12aae158a12a68397578017c	1.3388
103	0x299cB850bD75C07ef89978Bdc52e062Cc4fA0250	1.3507
104	0xBFbeaB0896E29d0Db26ad60278d3Ab3C482BB199	1.3507
105	0xdF6C53Df56f3992FC44195518A2d8B16306Af9ff	1.3742
106	0xbB3F2F946E8eE2912830e365cF241293636cb057	1.3742
107	0x497f0D190C513f51eAC234628200a5E62271a7A5	1.4424
108	0xE9F19B6C72219f9B12C9c367405a90Ac9aFb2241	1.5699
109	0x974B9cb3c122561e3bf6234651E0b82B88Fb9015	1.6397
110	0x9Bee5b17Eb847744b6a81Ee935409739F91c722c	1.6783
111	0x6591e7D655f248f6930195385C36b8D5Af679B8B	1.6783

2.9.3 Quotes

We've asked members to share why they think the Protocol Guild is important for Ethereum: here are a few of their responses:

Adrian Manning (Lighthouse) - "Lighthouse is the Rust implementation of Ethereum Beacon Chain, a key component in Ethereum's transition to PoS. Although Lighthouse is one of a few major production Eth2 clients, it's imperative that more than 1 production client is used in the space to avoid the chain collapsing if bugs/vulnerabilities are found in a single client. Protocol Guild supports the teams working on minority clients, which is an important initiative." **Alex Stokes (EF Research)** - "The Protocol Guild is an experiment in public goods funding that aims to align the incentives of core protocol contributors with the continued stewardship of the ecosystem by allowing these contributors to share in the value created by their hard work. This mechanism is important for the future of Ethereum as it ensures continuity of protocol direction, maintenance, and growth amongst a set of dedicated individuals who deeply care about realizing the collective vision that inspires everyone who interacts with our community." **Alex Vlasov (TXRX)** - "Ethereum - and blockchains, in general - unveils tremendous opportunities and one of them is building a more fair world. Protocol Guild serves several purposes: 1. It's an instrument for public goods funding, which is often underrated. 2. It's a research and an exploration of innovative social mechanisms. 3. It aims to support Ethereum Protocol contributors." **Ansgar Dietrichs (Quilt)** - "I strongly believe that not enshrining a contributor funding mechanism into the base chain was the correct choice for Ethereum (crucial for its credible neutrality). But in order to keep attracting top level talent to the core dev space, we need to experiment with out-of-protocol ways of funding. Protocol Guild is a very exciting project in that regard and hopefully a first step towards a sustainable funding structure." **Anton Nashatyrev (TXRX)** - "I would really love to see Guild as an instrument for long term incentivisation of people who just want to develop Ethereum and don't want to worry about buying food for themselves tomorrow." **Carl Beekhuizen (EF Research)** - "As researchers we spend a lot of time worrying about incentive compatibility. This guild nudges us towards a better incentive landscape for those working on the protocol." **Core Contributor** - "A huge ecosystem is building up upon the base Ethereum protocol. If we want this base layer to remain independent and maintained like a true public good, incentive alignment is a key factor. Let's make the Protocol Guild an inspiring and successful experiment!" **Core Contributor** - "Decentralized Apps. Decentralized Ecosystem. Decentralized Funding." **Core Contributor** - "Decentralized eco-systems are hard to build, and client diversity is harder but super important for a robust social *code* consensus on a protocol. That requires *on-par* commitment, perseverance, continuous innovation, learning and contributions. And not to mention community support!" **Core Contributor** - "Establishing financial incentives for core developers will be an important facet of retaining talent to produce high quality protocol-level work." **Core Contributor** - "Ethereum is public infrastructure for the world. Building infrastructure is hard, because everyone wants to enjoy it, but no one wants to be the chump left paying the bill, which often induces zero-sum thinking and protecting one's own interests rather than contributing. Protocol Guild ensures stability for those who choose to contribute and creates an environment of positive-sum thinking, powered entirely by the Ethereum ecosystem and the value it brings to the world." **Core Contributor** - "I believe this experiment will result in a great precedent on how to keep the core values of the Ethereum protocol alive and relevant." **Core Contributor** - "I may be the type of contributor that PG was formed to support, as I'm switching from a funded single-client team to working on Eth as an individual for a while, in the finest open source tradition. I know innards of several clients, and have measured significant performance improvements in storage size, sync and execution using new algorithms that I'd like to complete, to improve Eth performance for everyone. I also do multi-client testing, running a fleet, and could contribute to multiple clients or the support infrastructure, depending how the landscape works out. But time and funding are a real challenge. Realistically I will do this for a while, then reduce hours to accommodate a "day job". I get many approaches about blockchain work, but it tends to be from entities not interested in Eth's common core: defi companies, proprietary services, closed source traders etc. and of course non-blockchain work. So PG's sections on incentive imbalance, contributor continuity, funding trade-offs and open source caught my eye and seem very relevant. If the amounts are enough it could make a practical difference to people like me being able to keep contributing and get better at it." **Core Contributor** - "I think the success of the Protocol Guild can be the precursor to how we can fund not just Ethereum but FOSS/public goods." **Core Contributor** - "Incentive alignment is one of the core issues that impact the long term health of a software/network. I think the Protocol Guild helps solve a part of the incentive alignment problem by allowing members to gain exposure to the network they are developing. I feel like it will go a long way in helping keep and onboard new core developers, as well as ensure everyone has skin in the game." **Core Contributor** - "It is important that we allow those that contribute to the core protocol the opportunity to be financially rewarded on a similar scale as those that choose to operate in the private sector. Without such a

mechanism, the choice to work on the core protocol is also a choice to forfeit monetary rewards offered elsewhere, which in many cases, will lead to continual attrition of talent into the private sector.” **Core Contributor** - “It seems like really great way to incentivise work on core ethereum protocols.” **Core Contributor** - “It should help to bring and keep talents in the Ethereum core dev group.” **Core Contributor** - “It’s great to see the incentive problem trying to be solved for existing and also new core contributors.” **Core Contributor** - “It’s sad that those who develop open technologies have historically profited far less than those who build on top of open technologies. I think that the Protocol Guild is the start of something very important to Ethereum.” **Core Contributor** - “Let’s make base layer r&d long term sexy!” **Core Contributor** - “maybe the log4j exploit might not have happened with more funding, let’s try to make the same not happening on Ethereum.” **Core Contributor** - “Motivating talent towards Ethereum development is critical to stay competitive in this dynamic industry.” **Core Contributor** - “Protocol contributors enable the creation of value. Rewarding them proportionally to the value created can sustain their work and attract additional talent. Token contributions from successful projects is a great way to achieve that.” **Core Contributor** - “Protocol Guild is a great way to reward Ethereum core developers for the infrastructure work that they are doing.” **Core Contributor** - “Protocol Guild is a platform for the community to acknowledge and appreciate the talent and dedication that keeps Ethereum going.” **Core Contributor** - “prysm implements the ethereum beacon chain proof of stake protocol. The beacon chain is important because eliminating proof of work is a moral imperative. Multiple implementations of the beacon chain do and should exist for the resilience of the network. prysm is written in go, which is a language designed to minimize the complexity of strongly typed, highly concurrent source code. This means that prysm can be performant, have good support for safety and correctness, while also being built from source code that is easier to read and audit than other system languages. More eyes on the implementation should lead to greater understanding of how the system works and more confidence in the network.” **Core Contributor** - “The Ethereum ecosystem is capable of delivering enormous value. But a huge disparity has arisen between the rewards available to those who build the Ethereum protocol and those who build *on* the Ethereum protocol. The whole community should be concerned about this: unless the foundations are continually maintained and improved, the entire building is at risk. Almost uniquely, our own technology gives us the tools to align all our incentives. The Protocol Guild is a creative approach to recognising and rewarding the foundation-builders - essential if we want to continue to deliver on Ethereum’s promise long into the future.” **Core Contributor** - “The Ethereum Foundation, however successful beyond what might have been reasonably expected of it, still comprises a single point of failure. The protocol guild can help ensure the values the foundation has helped shepherd can sustainably adapt in a decentralized fashion consistent with Ethereum’s core principles.” **Core Contributor** - “The Guild will help retain existing and attract new talented contributors to the Ethereum revolution.” **Core Contributor** - “The Protocol Guild will help ensure Ethereum provides the world with the decentralized future it needs.” **Core Contributor** - “The whole is greater than the sum of the parts. But without the parts there is no whole. This project addresses the parts without diminishing the whole.” **Danny Ryan (EF Protocol Support)** - “Public goods are hard.” **Dmitry Khovratovich (EF Research)** - “We work on a number of projects: VDFs, zero knowledge protocols, validator secure selection, – which all make Ethereum 2.0 faster, secure, and simple. We are taking the best from the most advanced cryptographic schemes today, and sometimes invent new ones.” **Fredrik Svantes (EF Security)** - “Funding public goods/FOSS, especially on an individual level, is hard. Protocol Guild helps make this easier for individuals from across the world to partake in the future of Ethereum without also having to be part of a larger organization. By creating this sustainable effort, the Protocol Guild is helping to further provide long term health of the protocol layer, which is crucial for the applications running on top of it, by rewarding those who help build it.” **Gary Schulte (Hyperledger Besu)** - “Narrowing the incentive gap between Ethereum core-protocol work and the more lucrative application space is an important effort worth putting time and resources into. ” **Jason Carver (EF Portal)** - “We should explore many approaches for supporting collaboration. It’s a valuable and hard problem to generate and maintain public goods.” **Jiri Peinlich (Hyperledger Besu)** - “We should be among the first who try new ways of organizing enabled by the decentralized paradigm. This example will hopefully inspire other groups to self organize and self govern. ” **Justin Florentine (Hyperledger Besu)** - “Funding public goods is a hard problem, I look forward to making some mistakes along the way so others can learn from us. Someone’s gotta try!” **Kaan Uzdogan (Solidity)** - “The misaligned incentives in FOSS are well known and already causing problems. Particularly in the Ethereum space, the financial incentives to move away from protocol building to a for-profit project are high and we can’t rely on core developers’ altruism forever. Protocol Guild is a valuable experiment both for the sustainability of Ethereum infrastructure, as well as the broader open source ecosystem. ” **Kamil Sliwak (Solidity)** - “I appreciate the idea behind Protocol Guild not only because it attempts to incentivize the work on the core protocols (which is very much needed), but also because of how it does it. I think there’s a very real need on the side of potential funders to know that their donations are addressing a real need and are reaching the right people. The group of protocol developers is

a constantly moving target so by curating membership, Protocol Guild will make it easy to contribute towards it as a whole. I think that for the donor it will be more fulfilling than having to hand-pick individual developers or projects. The space does not suffer from the lack of funds and what is needed is really just a sensible way of channeling the available resources to where they can do the most good.” **Mamy Ratsimbazafy (Status)** - “So that the value created by Ethereum isn’t just captured by those who build on top but also benefits those that build the foundations. We don’t want a situation like <https://xkcd.com/2347/>.” **Mark Mackey (Lighthouse)** - “Every core developer I’ve talked to is well aware that they can earn significantly more working in other fields or even just at the application layer. I personally couldn’t even afford to join this effort until I was able to subsidize myself. This is strange for an industry acutely aware of incentive structures. If we care about the long-term health of the base layer, it is important we mitigate this so we can attract and retain talent.” **Michael Sproul (Lighthouse)** - “I love that Protocol Guild centers individual contributors ahead of organisations, and in doing so grants autonomy to all of the people working on Ethereum’s base layer. We have an opportunity to prove the viability of an alternative funding model for public goods, which I hope will inspire many more experiments in radical economic coordination.” **Nishant Das (Prismatic)** - “The Protocol Guild helps keep core developers focused on protocol work rather than jumping to the application layer where the upside is significantly more. Having a sustainable source of funding for public goods such as protocol work is valuable. ” **Phil Ngo (Lodestar)** - “Protocol developers and researchers create the base foundation for which Ethereum stands upon. The amount of responsibility bestowed upon them is not necessarily incentivized monetarily nor does value generated on Ethereum trickle down to the base layer for protocol development. The protocol guild is a valuable experiment to incentivize great minds to contribute to the long-term future of Ethereum while having their basic needs met.” **Pooja Ranjan (Ethereum Cat Herders)** - “Incentivizing contributors is a great way to keep them motivated for ongoing work. Many of us started as volunteers and I am expecting more to join in the future. Protocol Guild is a well planned initiative to incentivize community contributors to the Ethereum protocol development work.” **potuz (Prismatic)** - “End user applications stand on the shoulders of core development. In a world with multiple competing personal and institutional interests, this project helps keeping those interests as far away from core Ethereum development as possible.” **Preston Van Loon (Prismatic)** - “Client software powers the Ethereum network! Crafting mechanisms to support the teams working on it long into the future is an important project.” **Proto (EF Research)** - “Protocol development is critical to the security, usability and long-term viability of the ethereum network. The protocol is a public good with insufficient funding, something that can change if there is a good platform for application-layer projects to contribute to.” **Raul Jordan (Prismatic)** - “The Ethereum Foundation has a philosophy of subtraction. That is, it aims to be irrelevant over time as grassroots teams take over development, research, and community. We started working on a consensus client because of the immense potential we see in introducing new engineers to build public goods for Ethereum, just as we did. We believe being an independent team that has built a popular client helps inspire others to do the same and grow the ethos of Ethereum’s decentralized development. hopefully the Protocol Guild will also inspire more contributors to join us in maintaining the core protocol.” **Tim Beiko (EF Protocol Support)** - “Aligning the incentives of the people supporting the Ethereum protocol with the success of the applications built on top of it allows these motivated contributors to keep doing what they do best, building Ethereum, while also being rewarded with some of the value they help create. ” **Tomasz Stanzeck (Nethermind)** - “Protocol Guild is a well planned and honestly designed experiment for protocol development.” **Trenton Van Epps (EF Protocol Support)** - “The Protocol Guild is Ethereum itself beginning to comprehend its agency - I’m happy to be part of such an important initiative. Long-term maintenance of foundational internet infrastructure should accrue material social, cultural and financial benefits to contributors.” **Zahary Karadzhev (Status)** - “This project can empower many individual contributors to start working on Ethereum without the backing of a large corporate sponsor.”

2.10 10. Resources

2.10.1 Links

- [Pilot Vesting Contract](#)
- [Protocol Guild twitter](#)
- [Discord](#)

- Stateful Works Mirror publication
- Gnosis Safe multisig

2.10.2 Media

Title	Event	Date
Funding Ethereum with the Protocol Guild	Funding the Commons	June 24 2022
Funding Ethereum Core Development and the Protocol Guild	I Pledge Allegiance podcast	June 20 2022
The Protocol Guild	The Daily Gwei #481	May 13 2022
The Protocol Guild (Watch or Listen)	Green Pill Podcast #10	April 25 2022
Funding Ethereum Public Goods with the Protocol Guild	ETHDay (Devconnect)	April 18 2022
Overview of the Protocol Guild	Schelling Point (ETHDenver)	Feb 17 2022
Announcement post	Mirror	Dec 31 2021

STATEFUL WORKS

- join the [Stateful Works Discord](#) for discussion

We create cultural artifacts for Ethereum - read more at stateful.mirror.xyz.

- **the Beacon Book**

- a digital & physical book with embedded NFTs, made in collaboration w/ 46 Beacon Chain contributors
- over 110 ETH went to project contributors
- [Read and Mint](#)
- [Graphics and Narratives](#)
- [Crowdfunding 100 physical Beacon Books](#)

- **1559 NFT Series**

- NFTs where proceeds went to EIP-1559 contributors, over 278 ETH
- [Launch Post](#)
- [Wrap up post](#)