We previously introduced Commit-Boost to the Lido Community, details can be foundhere.

Summary

Commit-Boost is an effort to help reduce risks for Lido Operators and broadly the Ethereum Community while unlocking multiple use cases for new validator services. A community of teams / individuals across Ethereum is developing Commit-Boost as a not-for-profit public good supported via grant funding. As part of this, we are excited to propose a Boulder grant in the amount of $95,000 to the Lido Community / Council Members for their consideration.

To help give a holistic view of expected costs, we provided a full budget, but understand the amount requested in this grant does not cover the full amount. To help with these additional costs, we have received / applied for grants from other organizations across Ethereum. We also acknowledge that there will be ongoing costs associated with the team in Commit-Boost that this grant will not cover. We plan to apply for another grant from the Lido Community to help cover these costs but want to show strong execution and stewarding of an initial grant. We appreciate the opportunity to be considered for this and believe it aligns with the ethos and mission of the Lido Ecosystem Grants Organization mission.

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Estimated Summary of Budget and Milestones

699×294 40.1 KB

](https://europe1.discourse-cdn.com/flex013/uploads/lido/original/2X/b/bfe2f38ea6b870ce30076f821070af9f765f1e6b.png)

Introduction

As outlined in ReGoose around validator services, most are starting to agree on a common denominator: in the future, beacon proposers will be presented with a broader set of options of what they may “commit" to–be it inclusions lists or preconfs or other types of commitments such as long-dated blockspace futures–compared to just an external or local payload they see today. While this is an exciting area of innovation and opportunity for Lido’s Community, many teams building commitments are creating new sidecars driving fragmentation and risks for Ethereum and the Lido operator set. With this in mind, and to reduce these risks, a group across the Ethereum / Lido Community is working on a new sidecar called Commit-Boost focused on standardizing the last mile of communication between validators and validator services. We expect the first use cases of Commit-Boost to be for PBS (i.e., MEV-boost), Inclusion Lists, and Preconfirmations.

Commit-Boost Design Principles

Commit-Boost is a community-driven, open-source project developing an unopinionated validator platform to enable safe interactions with commitments. We believe many of the core design features align with the core principles of the Lido community and a project that directly aligns with the mission of LEGO. Some of its features include:

- Unification: Core devs will be able to interact and work with one standard during Ethereum forks / upgrades / when and if things go wrong
- Backward compatibility + more: Commit-Boost is not only backward compatible with MEV-Boost, but will improve the life of Lido operators who only run MEV-Boost through increased reporting, telemetry / other off-the-shelf tools validators can employ
- Opt-in without running more sidecars: Commit-Boost will allow proposers who want to opt into other commitments to do so without having to run multiple sidecars
- Tools and features to help reduce risks for Lido’s operator set: In the spirit of ReGOOSE, Commit-Boost is specifically designed with off-the-shelf monitoring and proactive tools to identify risks, limit the impact of bugs, and proactively alert teams of issues that may develop from validator services
- Robust support: Commit-Boost software is supported by a not-for-profit entity. This team will be focused on security and robustness through policies and procedures with follow-the-sun type models where there is support 24/7 if / when things go wrong. This team will also be focused on testing and adjustments needed during hard forks and have a team to interact with to help during adoption, improvements, and sustainment
- Additional revenue: As part of the open innovation that Commit-Boost enables, potential validator services will continue to come online, to capture new revenue opportunities when making commitments
- For the Community: This team and effort will not be VC-backed. There is no monetization plan. The entity will not sell itself and will not start any monetizable side businesses. As an example, the team is actively working on a grant application to the Lido Community, among other organizations across Ethereum

What Does Success Look Like and How Does this Benefit the Lido Community

- Commit-Boost is used to increase the decentralization and safety / security of Ethereum’s validator set and provide some autonomy back to proposers to express the ethos of Ethereum in their block

- Develop a product that reduces current and emerging risks for Ethereum and Lido Operators by running one sidecar, but allows teams to opt into many commitments / validator services creating new revenue opportunities
- Robust support and sustainment of Commit-Boost software that improves the lives of validators during upgrades, when things go wrong, and as new features are proposed

Details Around Deliverables

There are three main activities we will undertake with this initial grant; development, adoption, and sustainment. The grant will specifically help cover development and adoption as well as lay the foundation for sustainment. Below are some key deliverables, but details can also be found in the Commit-Boost repo.

Development:

This is focused on various key deliverables around Commit-Boost sidecar + PBS module ready for audit features including:

- CBC1 (Q4): Core Commit-Boost functionality for backward compatibility ready for audit
- CBC2 (Q4): PBS module extensions (i.e., miss slot / get_header) ready for audit
- CBC3 (Q4): Transparency and metrics implemented for PBS module (i.e., Grafana dashboards), and extendable to other modules and ready for audit
- CBC4 (Q4): Research, design and develop as well as get code audit ready to enable containerization of modules
- CBC5 (Q4): Work with module creators / the broader ecosystem to finalize module APIs and get code audit ready
- CBC6 (Q4): Support more flexibility as part of Commit-Boost core functionality such as binaries with code ready for audit
- CBE1 (Q4): Research and potential development around the best path forward for providing signatures not related to PBS. We already support BLS, but need to gather feedback and work towards whether we should support domains or proxy BLS signatures as well as ECDSA. While it is a bit unknown at this time, the grant can also get this part of the code base to audit
- CBE2 (Q4-Q1): We have a simple implementation of our proxy signer, but we need to evaluate and spec proxy signature for multiple validator set-ups / work with client / remote signer teams (this will be impacted by CBE1). While it is a bit unknown at this time, the grant can also get this part of the code base to audit

Budget estimates for Development is $135,000 broken out across Development and Research for $50,000 and Audits estimated at $85,000.

Adoption

- CBA1 (Q4 – Q1): There are a few key events such as Edge City, Devcon, ETHconomics, and ETH Denver that could really benefit the team to have budget to attend
- CBA2 (2025): There are a few key subscriptions that the team needs to increase broader support for the community / outreach. One example includes a professional Zoom account to record community calls
- CBA3 (throughout development): Enhance documentation with changes / updated code
- CBA4 (Q4 - Q1): One headcount focused on driving BD / coordination / adoption and helping push the overall commitment space forward

Budget estimates for Adoption is estimated at $65k.

Sustainment

- CBS1 (Q4): We need to have some legal analysis performed to help decide on the best entity set-up given the structure of Commit-Boost. The output of this analysis is the decision on how best to move forward
- CBS2 (Q4): Set-up entity based on the above analysis
- CBS3 (Q4 – Q1): While we can't list all items out, get the entity to be functioning with proper disclosures, contract templates for employees, bank accounts, multi-sigs, and many other functions required to run the entity

Budget estimates to lay the foundation for Sustainment is $15k.

What is the Plan for Commit-Boost the Entity

We have written about this before, but please see below for the current plan / path we are headed down:

- Set-up similar to a client team, but not-for-profit US-based entity with no VC backing or plans to sell / start side businesses for monetization, and no token
- There will be a global team of a few devs + some business development-type personnel that focus on education and transparency, sustainment / development, and research:
- Education and Transparency: This effort will keep the broader ethereum community educated on the latest through open-source repo and governance calls / governance process
- Sustainment / Development: 24/7 follow-the-sun coverage and highly engaged with client teams around upgrades / early in getting testnet support
- Research Focus: Still a tbd and this is mainly for retention of devs / making sure they are staying plugged into the latest, but helping with open-source research across Ethereum
- Education and Transparency: This effort will keep the broader ethereum community educated on the latest through open-source repo and governance calls / governance process
- Sustainment / Development: 24/7 follow-the-sun coverage and highly engaged with client teams around upgrades / early in getting testnet support
- Research Focus: Still a tbd and this is mainly for retention of devs / making sure they are staying plugged into the latest, but helping with open-source research across Ethereum

More Details on Education and Governance Around Commit-Boost

- Initially, will run a Commit-Boost, ACDC-like call frequently to engage with stakeholders and drive consensus on upgrades / help coordinate around hard forks (more details on call #0

here)

- We have also been speaking with others across the ecosystem to figure out the best way to do governance given calls can attract certain types of people (i.e., tougher for non-english speaking etc), but the point is to be open and driven by the community
- While still a work in progress, if a board is required to oversee the Commit-Boost entity their focus will be on entity corporate governance and not on Commit-Boost software or direction and these members will be experts from across the Ethereum community
- We welcome Lido's ideas around what they have learned over the years

Conclusion

We appreciate Lido Community's consideration of this proposal. Please let us know if anything is unclear or more details are needed.

Other Resources to Learn More:

- Non-Technical Document on Commit-Boost
- Commit-Boost Docs
- Commit-Boost Repo
- Commit-Boost ChatGPT
- First post on ETHResearch
- Second post on ETHResearch
- First community call and notes
- Talk at zuBerlin
- Inclusion List Shape
- zuBerlin Devnet
- Helder Testnet