

TL;DR

This proposal seeks support from Lido DAO to fund Ebunker for the enhancement of eNode Core, a comprehensive one-click setup tool for Ethereum validators and operators, by integrating it with Lido's Community Staking Module (CSM). This feature aims to streamline the onboarding of new, permissionless operators in a user-friendly manner, especially for home-stakers. The project, estimated with a duration of 14 weeks, needs a budget of 48,000.00 DAI, for which we are seeking support from Lido.

Proposer

Allen, Todd, and Jenny on behalf of Ebunker.

About Ebunker

Ebunker, a pioneering non-custodial ETH staking service provider, offers Staking as a Service (StaaS) and Validator as a Service (VaaS). Our innovative approach has led to substantial growth, with over 31,600 Ethereum currently staked in our system. We are a strategic partner of Lido, managing 8,906 nodes, and are actively involved in DVT and SSV testing with Lido. Our strategic partnership with SSV last year further affirms our expertise in node operation, as recognized by leading protocols in the industry. Our significant contribution, aside from staking services, is the development of eNode, a home-use Ethereum validator device that democratizes access to Ethereum's network for individuals.

eNode Core Overview

eNode Core, Ebunker's robust platform for Ethereum network validators and node operators, is currently operational on the innovative eNode Box hardware. It is designed to simplify the complex process of setting up Ethereum validators, making it accessible even to those new to Ethereum network participation.

To date, approximately 100 eNode Boxes have been successfully deployed, primarily to business clients, underscoring our focused approach to market introduction and the building of a solid user base. At the end of March, we will commence retail operations, enabling broader access to the eNode Box via some online platforms.

eNode Core boasts a dynamic range of applications, including Execution Layer Client Apps (Geth, Nethermind, Besu, Erigon), Consensus Client Apps (Prysm, Lighthouse, Teku, Lodestar), MEV-BOOST App, Ethereum Validator Manager App, Ethereum Validator Monitor App, SSV DVT Operator App, and Obol DVT Operator Monitor App, each contributing to a fortified and efficient network operation. The platform is poised for future deployment on standard Linux systems, enhancing its accessibility. Current key features of eNode Core include:

- App Store Module: An ecosystem for applications, featuring an automatic online-upgrade mechanism.
- App Safety Guard Firewall: Ensuring the security of operations within the platform.
- Turn-key Solution with a Graphic UI: A user-friendly and intuitive interface, significantly simplifying the user experience.

These features underscore eNode Core's capacity to provide a comprehensive, secure, and user-friendly environment for Ethereum network participation.

Project Objective and Summary

As a long-term supporter of Lido, Ebunker aims to reinforce its decentralization goals and is committed to accelerating this process by integrating the Community Staking Module (CSM) into eNode Core.

This enhancement of eNode Core can make it more accessible and efficient for community stakers to participate in the decentralized Lido ecosystem. Setting up an Ethereum Validator has traditionally been a lengthy and technically challenging endeavor, with substantial economic and time investments required to establish a complete Ethereum node infrastructure. Addressing this, Ebunker has developed the eNode-Box product, offering a low-cost, low-barrier, and high-efficiency solution for home-stakers to run ETH nodes through an integrated hardware and software package.

The software component, eNode-Core, allows users to quickly set up a full suite of Validators, Lido Operators, SSV Operators, and Obol Operators (to be supported later) using a Graphic UI on the eNode-Box, drastically reducing complexity. Furthermore, the future capability of eNode-Core to run on standard Linux servers will greatly simplify the Ethereum setup task even more.

By facilitating easier access to Ethereum network validation and lowering the entry barriers, eNode Core's integration with Lido CSM is poised to empower a greater number of individuals to become home-stakers, thus contributing to the network's security and pushing forward the vision of a more decentralized ecosystem.

Scope for Integration with Lido

Over the course of 14 weeks, Ebunker will focus on integrating eNode Core with Lido's CSM, including:

Develop new App named Lido-CSM App in eNode-Core platform(User can download and run from eNode-Core App Store)

#### Tier 0 integration:

- Setting up Ethereum validation tools (CL and EL nodes, Validator client, MEV-Boost), already available in CL App, EL App, MEV-Boost App, and System Dashboard.
- Users can seamlessly download and run these apps.
- CL/EL Ethereum Client Dashboard: Displays syncing status of CL/EL.
- eNode system status Dashboard: Shows CPU/Mem/Disk status.
- Current snapshots taken shown below

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- Validator Keys Generator Module:
- This module comprises several web pages.
- Generates Validator keys with a Graphic UI similar to eNode Validator Management App, ensuring users save the mnemonic securely.
- Validator keystore can be generated and saved similarly to Ebunker's VaaS.
- Withdrawal Credential configured with default Lido withdraw CSM Node Operator address.
- Uploads Validator Key directly to the Validator client via API from the App, enabling the node to run directly on the backend.

#### Tier 1 integration: Statistic and Monitor Module

- Web page dashboard displays capabilities once connected to a wallet:

- NO keys and queue info page.
- NO bond and rewards info page.
- Alert page of Penalties and Exit request.
- NO keys and queue info page.
- NO bond and rewards info page.
- Alert page of Penalties and Exit request.
- Interacts with Lido CSM contracts to retrieve required information via read functions.

#### Tier 2 integration: Operator Module

- Web page module requiring connection to a wallet.
- Allows users to manage operators for the connected wallet address, interacting with CSM contracts:
- Adding a new node operator.
- Visualization of Required bond to upload keys.
- Uploading new keys.
- Visualization of the Current bond amounts.
- Claiming rewards.
- Visualization of the Rewards available to claim.
- Setting up a dedicated manager and reward addresses.
- Adding a new node operator.
- Visualization of Required bond to upload keys.
- Uploading new keys.
- Visualization of the Current bond amounts.
- Claiming rewards.
- Visualization of the Rewards available to claim.
- Setting up a dedicated manager and reward addresses.
- All functions interact with CSM contract.
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#### Tier 3 integration

- All functions implemented by the App developed with eNode-Core platform.
- The app is a website, running in the eNode-Box or other Linux systems.
- The app features a completed and dedicated Graphic UI.

#### Maintenance and Support

Community Support: Ebunker is committed to delivering continuous technical support for eNode users, utilizing our Discord channel as a primary platform for assistance and inquiries.

Bugs and Defects: We will proactively engage in the triage, assessment, and resolution of any issues discovered within eNode, ensuring its smooth operation and reliability.

Adaptation to Lido Changes: Ebunker will easily accommodate minor updates from Lido that affect eNode. Any significant modifications will be evaluated individually to determine the best course of action for implementation and support.

#### Funding and Budget

To facilitate the eNode Lido-CSM integration project, we are securing funding from Lido. The proposed budget for this initiative stands at 48,000.00 DAI.

Regarding payment structure, 30% of the total budget, which amounts to 14,400 DAI, will be provided upfront. The remaining 70% of the budget, totaling 33,600 DAI, will be paid upon the successful delivery of the project.

We aim to leverage our advanced technological expertise to significantly enhance the Ethereum staking ecosystem, aligning with the broader objectives of decentralization that Lido advocates for.