Operating Rules of the Simple DVT Module for Lido x Obol Node Operators

The following document explains the rules of participation in the Lido Simple DVT Module (SDVTM) as a Node Operator (NO) participating in a Distributed Validator Technology (DVT) cluster utilizing Obol based DVT.

All participants intending to move forward to mainnet and participate within these clusters must sign a message agreeing to the outlined rules that will be publicly shared in the Simple DVT Module Proposal thread.

Simple DVT Obol Cluster Configuration & Setup

The proposed cluster configurations for Cohort 1 & 2 of the Simple DVT Module are outlined in this document. Upon being added to mainnet communication channels, NOs must explicitly agree to follow and comply with the present operating rules and publicly state that they will work together with the other members of their cluster.

All clusters will be recognized via the Lido Simple DVT Node Operator Registry as a Node Operator through the use of Safe Multisigs comprised of each cluster's operator members. Cluster participants must agree between themselves that they will not attempt to exploit or abuse the Lido SDVT NO registry, and will not purposefully attempt to cause any harm related to theft, poor node performance, or any other disruptive behavior (including attempts at slashing, adversely affecting fellow cluster participants, not properly and timely completing multisig transactions, etc).

Each participant is solely responsible for the security and storage of their private keys related to their addresses and nodes, loss of which may result in removal from participation and inability to claim potential rewards.

Simple DVT Obol Cluster Economics

The Simple DVT Module is running with the following automated programmatic reward share distribution (rewards are in the form of (w)stETH):

- 10% total to the module from staking rewards as explained below, split:
    - 2% Lido middleware usage fee
    - 8% to the Simple DVT module participants - to be shared between NOs and DVT Technology Infra provider

The 8% rewards to the Simple DVT module participants are then further shared, through the use of 0xsplits based splitter contracts, to achieve the below split:

- 1% to Obol
- 7% to participating clusters

As each cluster will consist of a 5/7 threshold, each cluster operator will receive 1% (1% = 7%/7 participants) of the aggregate protocol's staking rewards generated proportional to each validator they contribute to running using the Lido protocol in Obol clusters of the Simple DVT module. These rewards are distributed to the module in stETH daily following the accounting oracle report.

Rewards will be distributed via an Obol based wrapper and 0xsplits based splitter contract as this will automate the 1% reward distribution to Obol and simplify the process for participating Node Operators.

The process will follow the format used in testnet: A wrapper contract is created via the ObolLidoSplit factory and this contract is specified as each cluster's reward address. This contract is responsible for wrapping stETH rewards to wstETH and gives the DVT provider (Obol) their reward share. This contract can be called by anyone, and will transfer wstETH to a split contract created via another factory (the main 0xsplit contract), from where each individual cluster participant can claim.

Node Operators participating in the Simple DVT Module must be aware that their nodes may operate unprofitably for an undetermined amount of time. As this is the first rollout of DVT within the Lido software protocol, the pacing of validator additions will be conservative. Currently, it is expected that each cluster will start with 5 validators, and pending performance reviews cluster key limits will be raised gradually (e.g. 5 -> 10 -> 20 -> 40, etc).

Node Operators are not guaranteed to reach profitable levels, and NOs must understand that they may make a loss even once the module reaches max capacity, as the primary purpose for this module is to increase the operator set and battle-test DVT.

No cluster is guaranteed to run a specific number of validators. At a minimum of every 30 days for the first 3 months of a cluster's lifespan in the module, a performance update will be shared regarding cluster performance on the Lido Research forums. At the end of this period, a representative of the Simple DVT Module Committee may propose to increase the key limits for a given cluster. The Simple DVT Module currently has a 0.5% share limit. As of 11/3/24 based on the currently active number of validators related to the Lido protocol 305,488, this represents a maximum possible 1527 validators (subject to change) that are intended to be split equally between Obol and SSV clusters.

If SDVTM validator performance is deemed acceptable by the LNOSG and DAO, a proposal may be shared to the Lido DAO to increase the share limit of the SDVTM with the goal of improving NO cluster participant economics. This will take place no sooner than Q3 2024.

Simple DVT Obol Participant Performance

Node Operators participating in Obol clusters of the Lido Simple DVT Module must agree to run a performant Obol Charon node, Execution Layer, and Consensus Layer clients. Node

Operators must ensure minimal downtime and if faced with performance issues, work to resolve them as quickly and efficiently as possible.

All Node Operators must remain responsive throughout their time utilizing the Lido Simple DVT Module to run validators and will be expected to respond to questions, updates, or other queries within a 5 day maximum time limit. If a Node Operator is unresponsive after 5 days without prior warning, they may be removed from participation in the cluster.

All participants must confirm an email address, Discord handle, and telegram handle that will be used as a backup to reach out to Node Operators regarding downtime or other updates. Node Operators may optionally share a phone number that can also be used.

The SDVTM is intended to have a three-year life span. All NOs agreeing to participate in the module should understand that by agreeing to participate, they are expected to performantly operate a node for as long as they are a participant in a SDVTM cluster. While NOs joining the module are expected to remain as active members of their cluster for the full duration of the cluster's lifespan, in the event that a cluster participant must leave, they should provide at least 14 days notice while a replacement member of the cluster is found and confirmed, and participate in the process required to exit the validators of their cluster.

In the event of a slashing, Node Operators are not liable unless they are performed on purpose or in any way maliciously to the protocol or their cluster. As this is a maturing technology in a test phase, in the event of a software bug or other technical related problems users of the middleware would be compensated in accordance with the snapshot vote.

Node Operators intending to participate in the Lido Simple DVT Module utilizing Obol based DVT must sign a message (see the instructions here) agreeing to the rules outlined above as well as post a message on X and the Lido Research forum thread. The address used should be the same address used as your Individual Manager Address on mainnet.

Note: For <Participant/Organization Name> please use the name listed here: https://docs.google.com/spreadsheets/d/1ZxMcGVWz_4Nq6cpiaeMd-W1zblLaqfYD76ivZy4Hkh4/edit

If you agree with these rules and would like to move forward, sign a message (use Etherscan unless using a Multisig) using the format:

"I <Participant/Organization Name> agree to the rules outlined in the Operating Rules of the Simple DVT Module for Lido x Obol Node Operators in the <cluster name> cluster. <I/org name> understand the economic terms that are programatically set, agree to utilize the outlined splitter contracts, and understand operating a node may not be profitable. <I/org name> agree to remain responsive or provide notice in periods where I may be less responsive, will run a performant Obol Charon client, Execution Layer client, and Consensus Layer client(s), and resolve any performance issues related to my node as quickly and efficiently as possible. <I/org name> understand I am responsible for the security and storage of private keys related to my addresses and nodes."

And then post a tweet to X in the following format:

"I <Participant/Organization Name> agree to the rules outlined in the Operating Rules of the Simple DVT Module for @LidoFinance x @ObolNetwork Node Operators in the <cluster name> cluster as seen by my verified signature: <link to Etherscan/or if using multisig hash>

Once complete, fill out this form: https://forms.gle/hV9iDaZkJR8rfdqR8