

Lido SDVT - Cluster Management Service Grant Application

Abstract

This grant application proposes a new approach to managing Lido SDVT clusters, addressing the current back-and-forth method of \$SSV token top-ups for cluster runways. The proposal suggests implementing a 1% fee on Lido SDVT staking rewards (in stETH), which will be converted into \$SSV tokens to continuously top up cluster balances. This "managed service" aims to abstract away \$SSV token management for cluster operators, simplifying operations and preventing outages. To overcome a bootstrapping problem where rewards will not be sufficient initially, the grant requests constant access to discretionary bootstrapping capital from the SSV DAO. This capital will ensure all SDVT clusters have a runway maintained according to their commitments and contribution to the network fee collected. While this approach financially entails a small net loss for the DAO, it's partially offset by the collected network fee, creating constant \$SSV buying pressure on the market. Most importantly, it removed the burden of \$SSV management from Cluster operators, allowing them to focus on top performance and stability. The proposal outlines the requirements for the bootstrapping capital and the deployment of an opt-in Splitter Contract, with a clear operational workflow for managing top-ups, swaps, and capital.

Introduction

The SSV Network DAO, in partnership with Lido, has created and participated in various staking programs like Lido CSM, SDVT, and the upcoming SSVLM. Notably, Lido SDVT has significantly contributed to the reputation of SSV and DVT in general.

However, SDVT was never meant to scale indefinitely, and operations around cluster management follow a manual approach. This not only included cluster formation and validator assignment, but in the case of SSV specifically, it also meant managing the SSV Cluster balance and runway projections, including the regular \$SSV token top-ups needed to prevent clusters from getting liquidated.

As described in [DIP-22](#) and its revision [DIP-30](#), the SSV has granted Lido SDVT operators and cluster participants several grants to sponsor the necessary \$SSV tokens to guarantee a minimum runway of 12 months. The primary purpose was to boost SSV/DVT adoption by making it more lucrative for participants and abstracting away the perceived complexity of dealing with a utility token vs. the other DVT provider in SDVT Obol, who didn't have a utility token baked into their product.

[Managing and projecting the required funds to guarantee a 12-month runway for each of the clusters](#) has been a difficult task due to the fluctuation in the SSV network fee. The relatively weak market conditions have led to a much higher burn-down rate than anticipated. In simple words, the given grants will be insufficient to push each cluster cohort over the 12-month period, and the SSV DAO's promise might be left unfulfilled. The dedicated administrator of the SDVT SSV program will use the remaining funds to bring each of the clusters as close to the finish line as possible in a chronological order, but will eventually run out of funds.

In DIP-30, the DAO made it clear not to sponsor another grant, but the SDVT program remains an important focal point for general reputation and perception of SSV among the staking ecosystem, and remains a very competitive playing field for SSV vs. Obol.

To address the general complexity and overhead of dealing with \$SSV tokens from the perspective of cluster participants, and to get out of a “penny-chasing” situation where we have to play cat and mouse with topping up cluster runways, the following grant proposal suggests a paradigm change as follows.

Solution

We suggest taking a 1% fee from the Lido SDVT (90/9/1% split) staking rewards collected in stETH and converting those collected staking rewards into \$SSV tokens used to top-up cluster balances continuously by the SSV SDVT administrator.

To achieve this, a dedicated splitter contract will be deployed. All SDVT cluster cohorts can voluntarily opt in to this contract, which will automatically deduct the 1% network fee.

By abstracting away the need for operators to manage the \$SSV token directly, this approach enables them to fully concentrate on operating their clusters. It also helps prevent reputational damage from outages caused by insufficient runway management and aligns the operational experience with Obol, which also takes a 1% fee through a splitter contract, without requiring token or runway management from its operators.

Coincidentally, the 1% network fee corresponds to the DAO-controlled network fee parameter, which currently stands at 0.75% but will be increased to a full 1% in November 2025, as per the original proposal. With this change implemented, a constant stream of stETH will be collected by the SSV DAO, which will be converted into SSV on the market and used to top up SDVT SSV clusters through the program's administrator.

However, this solution comes with a bootstrapping problem. To be operational efficient, it is suggested that a cluster top-up happens every 3 months or ad-hoc when major changes to the network conditions arise (e.g., a large increase in the network fee) or other circumstances require it. As runways will run short before enough stETH rewards are collected, proper operation would become a penny-chasing endeavor where we end up in an endless loop of collecting rewards and topping up cluster balances in short intervals.

Therefore, this grant requests constant access to bootstrapping capital that the DAO provides from its allocated grants budget. This bootstrapping capital shall be used to bring all the SDVT clusters across the 12-month finish line as originally agreed, regardless of DAO-allocated funds and network fee changes. To cover the gas costs of certain transactions, like the deployment of the splitter contract, the cluster top-up itself, and/or swap fees, a small amount of ETH is required to allow for operational efficiency and independent operation.

This commitment will result in a small net loss for the SSV DAO, but is partially offset by collecting a 1% network fee from SDVT participants over time, who will be requested to opt in immediately to this new solution, regardless of their remaining runway (TBD if this is acceptable), ultimately collecting a 1% network fee even before it is increased from 0.75% as per the DAOs voted timeline. It remains the decision of the cluster owners to accept this service and opt in or continue to manage the cluster balance manually on their own.

Another upside to this approach is the constant \$SSV buying pressure this pipeline creates, as the more stETH rewards are collected in SDVT, the more \$SSV will be “bought” by swapping on the market. Although not considered substantial, it nonetheless helps create buying pressure.

Therefore, this grant proposal requests the commitment of the grants committee to use its budget to help manage this program effectively by providing discretionary bootstrapping capital as requested by the program's administrator.

Solution Components

Splitter Deployment

An opt-in Splitter Contract using the existing and audited splitter factory of Lido shall be deployed to collect a 1% network fee in stETH, along with an operational workflow to manage top-ups, swaps, and capital efficiently.

These splitter contracts have no owner and are an immutable, static configuration. They are deployed by the SSV SDVT administrator for convenience, but anyone could deploy them and check that they are correct. If a cluster wanted to change its members, a new splitter contract would need to be deployed.

The UI used to deploy the splitter contracts is located at <https://simple-dvt-split.vercel.app>. The specific option used for this proposal is the **Wrapper contract - Cluster type - SSV with fee**.

The code for that UI and all deployed factory addresses can be found here:

<https://github.com/lidofinance/simple-dvt-split>

Bootstrapping Workflow

The following is a rough description of the expected process to be followed to request bootstrapping capital from the GC budget whenever required. Note that this process is subject to change and illustrates the general idea, but might be adjusted for operational requirements:

1. Request the required bootstrap capital from the GC quarterly through a signed message from the administrator, covering projected expenses and any amount of bootstrapping capital for the next quarter, if no other funds are available. *Additional requests for bootstrapping capital can be made at any time in case of changes in the burndown rate, according to changes in the network fee, or other circumstances that might deplete the runway before the start of the next cycle.*
2. Claim the collected stETH rewards quarterly or on-demand to the [SSV DAO-controlled SDVT msgsig safe](#).
3. Swap the collected stETH at the earliest convenience and most favorable conditions using any DEX into \$SSV. Swaps are facilitated directly from the same 2/3 SDVT m-sig safe wallet through CoWSwap conversions or any other decentralized exchange that offers favorable liquidity and sensible costs.
4. Top-up the clusters relatively to their rewards with \$SSV using the swapped funds.
5. Request another round of projected bootstrapping capital as a delta between the additional funds needed (if any) and the funds acquired through the swap.
6. In case available funds exceed the projected demand substantially, funds shall be swept from the SDVT msgsig safe to the DAO treasury every quarter.

Proposal Details

Project Plan

The following is a rough milestone structure, some of which are retroactive, as they've already been executed in anticipation of this solution.

#	Milestone	Deliverables	Est. Effort
1	<i>Splitter Contract (Retroactive)</i>	<i>Deployment and opt-in of all SDVT Clusters</i>	<i>2 weeks</i>
2	<i>Cluster Opt-In (Retroactive)</i>	<i>Lido Communication and facilitation</i>	<i>4 weeks</i>
3	<i>Operationalization</i>	<i>Establish the proposed workflow and execute the first quarterly round</i>	<i>N/A</i>

Administration

The Administrator of the SDVT program, as defined in DIP-22, continues working on the program until the program is actively revoked by the SSD DAO or ended by Lido. The agreed compensation model tiers remain unchanged.

The administrator shall have the discretion to propose related transactions within the scope and context of SDVT and in the best interests of the SSV DAO and the program, not exceeding the financial means anticipated by this proposal, yet having maximum flexibility to operate the program at a reasonable level.

Payments

Bootstrap Capital Projection

The total number of Lido Simple DVT validators is 4480.

Total Validators	4480
Blocks per day	7200
Days runway	90
Current Network Fee	0.00000088126
SSV requested	2558
SSV current price (USD)	7.41
Total value (USD)	\$18,957

For avoidance of doubt, this is an estimate under the current conditions, which changes constantly, that's why the nature of the grant is a flexible "*card blanche*" approach within the scope of the proposal.

Terms

Grants are paid 100% in SSV or ETH tokens.

Milestone Allocation

Milestone	Amount
<i>Splitter contract deployment</i>	<i>~\$300 in ETH for gas</i> <i>This is a rough upper estimate. The exact amount can be estimated once all the splitters have been deployed for the new compensation split.</i>
<i>Initial bootstrap capital</i>	<i>\$ 10k - 40k USD</i> <i>Estimate of remaining SSV for all clusters to receive the runway under the assumption of a -50% x 200% increased network fee (from-to range), and disclaimer that the effective demand can be even higher under very weak conditions and is subject to the request of the administrator, as requested in a signed message</i>
<i>Quarterly operational expenses</i>	<i>2.5k SSV based on current conditions</i> <i>** Calculate an estimate including the 3-month runway</i>

Open Source

No open-source license applied, but the splitter contract and the overall approach can be borrowed by similar future activities.