# Intro

Hi Lido DAO! As a part of the LEGO initiative, we, MixBytes(), propose a great expansion of the Lido liquid staking ecosystem to Polkadot and Kusama. We've spent months planning and preparing to deliver this expansion as soon as the blockchain infrastructure is implemented. Please read the proposal and vote on it at Snapshot, the voting period will start on the 18th of August and will end on the 25th of August.

# About Kusama and Polkadot blockchains

Polkadot is one of the most anticipated projects in today's crypto space. Polkadot's design is aimed at overcoming all current blockchain limitations by connecting multiple specialized blockchains into one unified network. With more than 12bn USD staked, this project represents a high-value target for the Lido expansion. When we reach our KPIs Lido will more than double its current TVL. Currently, as most of you know, there are no smart contracts platform launched on Polkadot mainnet so if we move fast our project will have a possible first mover advantage in non-custodial liquid staking when the parachain auctions start.

In addition to TVL growth, simple napkin math with 10% as an overall Lido fee shows quite impressive estimated cash flows to the protocol.

% share of staking on Lido

2%

10%

20%

50%

Lido protocol fees, USD

Polkadot

3,493,383

17,466,913

34,933,825

87,334,563

Kusama

336,888

1,684,442

3,368,883

8,422,208

*at current prices

# Proposed architecture

The general idea is the creation of stDOT and stKSM for Polkadot and Kusama accordingly, which will represent liquidly staked versions of DOTs and KSMs. The Proposed mechanism will allow users to stake their tokens and get continued reward and being liquid at same time, so users won't need to wait such a long unstaking period (28 days for Polkadot and 7 days for Kusama).

For this system to be as stable as possible a set of node operators and other parameters such as fee will need to be controlled by Lido governance(LDO holders) on Ethereum blockchain however to speed things up the initial version will be managed via multisig of Lido stakeholders on particular chain(Polkadot for stDOT and Kusama for stKSM). After cross-chain bridges to Ethereum become available for the target chain the system will be upgraded to a full governance model.

Since Polkadot and Kusama are the multichain systems themselves(see architecture), the appropriate relay chains contain only low-level functionality and don't provide the ability to host custom user's code such as Smart Contract our system will be backed by a particular parachain and use XCM (cross-chain messaging protocol) to implement trustless and secure staking scheme across the relay chain and parachain.

Detailed technical specifications are located [here](#). The specification includes details regarding stDOT minting/redeeming mechanics as well as a cross-chain staking scheme using XCM protocol. Please feel free to leave comments.

# Timeline estimates

**Kusama**

Milestones:

- 2021 June - Research finished

- 2021 early July - Technical design is ready, started implementation

- 2021 early September - implemented staking mechanism based on mocked XCM interactions

- 2021 mid-September - switched to real XCM interactions and running on testnet

- 2021 early October - ready to launch

**Polkadot**

Since Polkadot and Kusama have similar designs our solution is ready to launch on Polkadot with minimal changes, so the main stopper is the parachains support for Polkadot.

Milestones:

- Polkadot released parachain support - open date

- Parachain slot auctions finished - open date

- Parachain partner launched(EVM and transfers enabled) - open date (approx. +1 month after slot allocation)

- Lido for DOT ready to launch - up to 1 month after parachain launched

**Moving forward**

A lot of work is expected to be executed as a long-term strategy to grow the user base and make Polkadot/Kusama part of the Lido ecosystem more attractive to users.

Here are just some of the ideas:

- Ethereum Bridge token mechanics implementation is planned ones parachain partner launches eth bridge

- Storage Proofs for Lido oracles

- Direct governance sync with current Lido DAO

# Incentives - UPDATED! Please see edits

We understand that Polkadot/Kusama technology is quite "early" even by blockchain standards and it's constantly changing. During the preparation phase for this project, we had to adapt and change the fundamental architecture several times due to changes in Substrate and XCM. Keeping this in mind we know that it is not going to be a short-haul project for us and our interest should be aligned as closely as possible with Lido in the long term so we propose our incentives divided into two blocks:

- 1-year cliff and 1-year vesting KPI goals and rewards with TVL averaged for or 30 eras for DOT and 120 for KSM or 1 month to prohibit any sort of manipulation:

KSM

DOT

Vested reward

Vested reward

2%

5,000

25,000

5%

10,000

50,000

10%

35,000

175,000

15%

50,000

250,000

20%

100,000

1,000,000

- Reward sharing is based on what value we bring to the Lido DAO aimed at both short terms, to improve and adapt to unforeseen circumstances, and to grow with Lido in the long term development. The proposed revenue share is to be as following:

| | | |
|---|---|---|
| Fee to staker | 10% | A |
| Validator's Fee | 3% | B |
| Net Lido fee | 7% | C=A-B |
| Mixbytes fee | 1.4% | D=C*20% |

# About Mixbytes

MixBytes() is a team of engineers, auditors and analysts, experienced in decentralized systems and blockchain technology. We design and implement customized solutions based on well-known blockchains and frameworks: Ethereum\Polkadot\EOS.

We have extensive experience with Rust in general and Polkadot ecosystem in particular as we helped to develop a lot of Substrate-based projects like Robonomics, Sensorium, Evercity and DistributedSky, including cross-chain messaging (XCM) functionality and successfully delivered on grant funding from Web3 Foundation.

We are also known as a top smart contracts auditing firm with a stellar reputation, trusted by the clients like Aave, Yearn finance, Curve, 1inch, Lido etc.