

Joint proposal by Hyperlane and Hadron Labs core teams

TL;DR

- Hyperlane features a modular security stack designed to offer custom security and minimize reliance on single points of failure. Hadron Labs from Neutron has recognized this for their aggregation for wstETH for the Cosmos.
- Hyperlane's Aggregation Interchain Security Module (ISM) enables the Lido DAO to seamlessly integrate various bridges for wstETH on BNB like Wormhole and Axelar.
- Our joint proposal aims to solve for the issue of liquidity fragmentation with cross-chain DeFi and the wider adoption of stETH within and outside the Ethereum ecosystem.

Aggregation/Multi-Bridge Architecture is the Standard:

The Hyperlane and Hadron Labs (core developer behind Neutron) teams are deeply committed to the most secure deployment of wstETH on BNB. Our teams have been working extremely close on the most recent launch of Nexus which connected Celestia and rollups. However, less well known has been our collaboration on the related project of bringing wstETH into the Cosmos ([Lido on Cosmos: Initial Deployment](#))

Uniswap concluded that a multi-bridge framework is the most suitable for their cross-chain efforts. Specifically, they want to use the native/canonical bridge when possible or multi-bridge setup if not possible to avoid any single bridge compromise. Aave came to a similar conclusion with a.DI (Aave Delivery Infrastructure).

As per the linked blog post, Hadron Labs is currently developing a multi-bridge solution to unify into a single wstETH denomination in the Cosmos. While they originally considered building custom aggregation logic like Uniswap and Aave, they came across Hyperlane's native aggregation capabilities with their latest v3 protocol upgrade. With it, Hadron Labs is able to use Hyperlane's modular security architecture to support arbitrary verification mechanisms and compose them.

Specifically, Hadron Labs has been working on an aggregation of the following three security modules:

1. Hyperlane validators (the default set on Ethereum and a subset of Neutron validators on Neutron)
2. Wormhole
3. Axelar

[

Untitled

554×698 61.3 KB

](<https://europe1.discourse-cdn.com/business20/uploads/lido/original/2X/6/6758463b7afec15921f8e356d7e40a4db6863143.png>)

Leveraging Hyperlane's AggregationISM, this means that no single bridge provider can compromise the integrity of the wstETH collateral on Ethereum.

Most of the work that Hadron Labs is doing on this aggregation implementation for wstETH for Neutron/Cosmos is immediately transferrable to BNB. Thus, the surface area that has to be implemented and maintained for wstETH (aggregation) bridging to BNB is reduced considerably. It also means that other security mechanisms like Chainlink's CCIP or LayerZero can be added to this aggregation with minimal implementation overhead.

We are united in our interests to enable the Lido DAO and its community to benefit from the deployment of wstETH tokens across BNB while retaining whole ownership over the token issuance and security considerations.