

## Proposal

Stargate is a fully composable liquidity transport protocol that lives at the heart of DeFi. Users can utilize Stargate to transfer value between various supported blockchains taking advantage of guaranteed finality for their transfers, low fees and deep liquidity. Developers can enable omnichain experiences within their products by utilizing Stargate's deep liquidity and easy composability.

Stargate operates using only native assets across each of the eight chains it supports (Ethereum, Avalanche, Optimism, Arbitrum, BNB Chain, Polygon, Fantom and Metis). Users will always receive native assets when interacting with Stargate, getting rid of the need for wrapped assets or IOUs of value. Stargate has helped facilitate over \$4,500,000,000 of value transferred by over 1,000,000 transactions within the first year since launch.

Portals are an ideal fit for Stargate as it combines one of the most used and liquid third party bridges that has a strong track record of moving value with one of the most respected protocols and communities of users in Aave. Stargate would enable Aave users to reliably and safely access assets on a variety of chains in a secure and trusted manner.

Stargate would like to request a credit line for USDC, USDT and ETH to help Aave users access these assets in a multi-chain world.

## Technical Specifications

Stargate operates with deep pools of capital on each chain it resides on. Currently there is over \$325,000,000 of value within Stargate that facilitates hundreds of millions of dollars of monthly volume and tens of thousands of monthly users. Over its lifetime, Stargate has helped over 1,000,000 users move over \$4,500,000,000 of value and growing.

These pools of capital allow users and developers to move value between supported chains in a predictable and reliable way. When this is combined with Stargate's [Instant Guaranteed Finality](#) it means that a transfer always completes on the destination chain with the intended amount. There is never a case where you get wrapped tokens or some notional representation of value. This is incredibly important for Portals as it guarantees that all unbacked aTokens will be repaid in a predictable and guaranteed way.

To support portals, a user would simply have to deposit a supported asset (USDC, USDT or ETH) and select the destination chain where they want to receive the asset from Aave. Stargate would then use a LayerZero message to release the asset on the destination chain from Aave, giving it to the requesting user. At the same time the underlying native asset would be simultaneously bridged via Stargate's traditional, battle tested liquidity transfer mechanism based on the pools of capital within the protocol. When this transfer completes, the native assets would be used to repay the outstanding debt from the Aave aTokens Stargate was lent to facilitate the transfer.

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Stargate is built on top of LayerZero. LayerZero is a lightweight universal messaging interface that allows developers to seamlessly interact with contracts across dozens of blockchains. LayerZero Endpoints rely on an innovative architecture leveraging Ultra Light Nodes and independent Oracles and Relayers to securely relay messages between chains.

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Communication flow in a single LayerZero cross-chain transaction.

In a single call, paying only source gas, users and protocols can send a message (or a bundle of messages) to contracts on any supported chain. Stargate uses this messaging to facilitate the movement of value (stable coins, ETH and other assets) between the eight chains it supports. These chains are Ethereum, Optimism, Arbitrum, BNB Chain, Fantom, Polygon, Avalanche and Metis.

- Can anyone provide liquidity to the protocol?

Yes

- Is liquidity incentivized?

Partially, Stargate owns a portion of the liquidity within the protocol, providing predictable, evergreen underlying liquidity to the protocol and incentivizes the remaining liquidity

- Is there a fee model for participants?

Stargate currently charges 6 basis points per transfer plus the cost of the gas associated with sending the transaction through the LayerZero network

- Does the entity is or is planning to provide available liquidity into Aave protocol?

Stargate currently is exploring research ideas around depositing idle liquidity into Aave

- Link to analytics dashboard of protocol (Liquidity, assets, networks, volume)
- [stargate.finance/overview](https://stargate.finance/overview)
- <https://stgscan.io> (community built and maintained)
- If applicable, link to the user-focused dapp of the entity.

<https://stargate.finance/>

- Link to technical documentation

<https://stargateprotocol.gitbook.io/stargate/>

## Credit Line Request

Stargate would like to request credit lines for the blockchains where both it and Aave exist. These are Ethereum, Optimism, Arbitrum, Avalanche, Polygon and Fantom. We understand Portals will start primarily between ETH and the layer 2 ecosystems (Arbitrum and Optimism) so would like to request credit lines there first, with the ability to scale to the other chains as Aave scales Portals. This way Stargate can grow with Aave as a partner.

Network

Asset

Current Liquidity (USD)

Current 30D volume (USD)

Requested credit Line

Fee Model

Fee requested

All

USDC

90.2M

242M

1M per chain

Fixed

6 bps

All

USDT

54.3M

100M

1M per chain

Fixed

6 bps

All

ETH

22.7M

68M

1M per chain

Fixed

6 bps

## Incentives

An incentive program may be approved by the Stargate DAO after the proposal is approved. The Stargate Foundation will recommend that the Stargate DAO give 2 bps of every transaction to the Aave DAO to help align economic incentives and create a deeper partnership between the two communities.

## Audits & Security

- List of relevant security audits of the network

Stargate both internally and externally audits all code that is shipped for the protocol. Stargate works with external auditors like Zellic, Ottersec, and Ackee to ensure user funds are always safe.

A list of audits can be found here: <https://github.com/stargate-protocol/stargate/tree/main/audit>

Stargate also utilizes [LayerZero's PreCrime solution](#) to ensure that it never loses a single unit of user funds. Pre-Crime takes an outbound transaction and makes sure that it's legitimate by running it against a set of application-defined invariants before the delivery of each message. Pre-Crime first forks every chain locally then it runs the state transaction locally to make sure the resulting state meets the list of defined invariants the application sets. Once this is confirmed Pre-Crime then provides an attestation that this is a legitimate transfer and the message is delivered.

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- Has the Entity experienced outages, downtime, or exploits/hacks? on which Networks?

No