Background

The discussion about Aave on Starknet here.

Introduction

A proposal to start bootstrapping the Aave ecosystem over Starkware has received good support from the Aave community, as it allows to expand to a new and promising environment, following the lead of Aave v3 with rollups.

This bootstrapping was proposed to be executed in 2 phases: an initial one getting in touch with the new technology, while still building something valuable for the Aave and Starknet communities; and a second one, more ambitious, most probably porting Aave v3 to Starknet.

As the facilitator of the project, I outline on this document the details of Phase I, including scope, time estimation, team members and budget allocation request from the Aave DAO.

Phase I. Scope

The project. aTokens bridge

As explained on the initial post, the target of the initial Phase is simplicity, while adding value for the communities.

One of the options was to create some kind of pooling model, for people to deposit and withdraw from Aave Ethereum without ever touching Ethereum and its (current) high gas cost. Since that initial proposal, the idea has been refined together with the built team.

Phase I will pursue the same goals as the original pooling idea, but this will be done by building wrappers and smart contracts around the canonical Starknet bridges, for the aTokens of Aave Ethereum. Following similar idea as pioneered by Aavegotchi with maTokens, together with some extra bridging infrastructure on both the Ethereum and Starknet sides, this model will allow to:

- Build the basic blocks for products to integrate easily with Aave from Starknet. Including smart contracts and interaction libraries.
- Solve some interesting and useful challenges, like cross-chain liquidity mining.
- · Boost Starknet's user base, by providing Aave facilities.
- · Keep simplicity.

In terms of user flow, the system will provide smart contracts infrastructure to:

- Users entering on Starknet via CEXes or on-ramp services to deposit on Aave Ethereum, just by buying an aToken equivalent on Starknet.
- Same for withdrawals, by selling the aToken equivalent on Starknet.
- New opportunities to liquidity providers to build on top of that, potentially monetising the movement of liquidity between Ethereum and Starknet.

Timeline

The project is estimated to take a total of 2 to 3 months, with the variability depending on the implementation of the most experimental aspects, like the cross-chain liquidity mining.

As part of the facilitator role, I will post bi-weekly updates on the state of the project, informing the community on the progress on all aspects.

A more detailed timeline is the following:

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The project start will be marked by the execution of the on-chain proposal requesting the initial funds of the project.

Team

Since the initial proposal, multiple teams showed interest on participating on the project. Considering the final scope, the team will be formed by:

- 1 facilitator of the project, part-time.
- 1 frontend/backend developer, part-time.
- 3 Cairo/Solidity developers, full-time.
- 1 Solidity developer part-time (depending on availability and need).
- Total: 3 full time and 2-3 part time.

The team is balanced to have expertise on the Aave ecosystem and Starknet.

Budget breakdown

- Salaries
- . Covering the full scope of the project, estimated for 3 months and to not be modified unless the final timeline is too short (>1.5 month less) or too long (>1.5 month long).
 - Gas cost
- . For deployments of contracts, plus all managerial efforts concerning mainly the payments from the Aave DAO.
 - Audit
- . We plan to engage 2 audit firms, both with EVM/Solidity expertise and at least one with Starknet/Cairo experience.
 - · Bug bounty
- . Maximum to be spent, but most probably over-estimated if no important issues are found.
 - Buffer
- . 10% of the total budget.

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new-budget

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Payments

For the Starkware part, the payments will be managed as coordinated between the Starknet team, the facilitator and the team members.

For the Aave part, 2 payments are proposed, to be requested via proposals on the Aave governance:

- At the start of the project, 100'000\$ to cover mainly fixed expenses.
- Before starting audits (beginning Month 3), \$92'500.

Any reconciliation of budget (e.g. return unused funds) will be done at the end of the project, with the bug bounty being kept by the team during 1 year, and then returned to the governance if not used.

Given the nature of the development, the payment will be done on stable assets from the Aave treasury.

Deliverables

- Smart contracts (Ethereum/Starknet) for wrapping and bridging of aTokens, fully open source and with a permissive license like MIT.
- Full documentation of the codebase, architecture and model in general.
- · Public audits.
- Continuous update to the community about the project.

Next steps

- Create a Snapshot proposal to ratify the project.
- If passed, create on-chain proposal to request the initial funds.
- Start the project development.