Hello,

I am proposing to onboard agEUR on Aave V3 on the Optimism and Arbitrum markets.

# Summary

## About Angle Protocol

Angle is a decentralized stablecoin protocol designed to be both over-collateralized and capital-efficient.

The protocol has launched agEUR, a Euro stablecoin, which has become the biggest decentralized Euro stablecoin.

The TVL in the Angle Protocol is $81m with 47m agEUR in circulation.

While for some months, agEUR could only be issued on the Ethereum mainnet, it can now be issued natively on Polygon, Optimism, and Arbitrum where users can borrow agEUR against different collateral assets (wETH, wBTC, USDC, OP) in an over-collateralized way (à la Maker).

Borrowing agEUR is not the only way by which agEUR can be minted. The biggest share of agEUR liquidity comes from what we refer to as our Core module. In the Core module, agEUR can be issued at oracle value from USDC, DAI and FRAX. The protocol insures itself against the $/€ change risk by issuing perpetual futures and by relying on the deposits of another type of agent incentivized by the strategies built by the protocol (involving lending to Aave).

## agEUR Liquidity

agEUR is a supported asset on the V3 on Polygon, and it has beenvoted to make it a collateral in isolation mode.

So far, there are 900k agEUR circulating on Optimism, and 320k on Arbitrum with almost all the liquidity on DEXes (Velodrome on Optimism and UniswapV3 on Arbitrum) making it an easily liquidable asset.

Besides these liquidity pools, agEUR has deep liquidity on UniswapV3, Sushiswap and Curve on mainnet. As mentioned above, the stablecoin can be minted/burnt at oracle value on mainnet meaning liquidity for it could be theoretically infinite on any chain beyond these liquidity pools.

agEUR smooth cross-chain liquidity is guaranteed by Angle bridge infrastructure which allows to bridge and get the canonical versions of agEUR on different chains. The protocol relies on different bridge providers, with an emphasis on LayerZero. To drastically limit the impact a bridge hack could have on agEUR, the protocol has set up several safety measures (hourly and global limit notably).

Overall, agEUR is an over-collateralized stablecoin (current collateral ratio = 203%) with as a backing mostly liquid USD stablecoins (USDC, DAI and FRAX).

# Links

- Official: https://angle.money
- Docs: https://docs.angle.money
- Token Contracts: Mainnet, Polygon, Optimism, Arbitrum. More generally, all Angle related contract addresses can be found here
- Smart contracts/Code: Angle · GitHub
- Analytics: https://analytics.angle.money
- App: https://app.angle.money
- Governance forum: https://gov.angle.money
- Dune Analytics Dashboard: Dune

agEUR has a Chainlink feed on Polygon, and it passes all the requirements for feeds on Optimism and Arbitrum. Otherwise, given agEUR consistent and robust peg, Chainlink EUR-USD feed could be used as a starter before they release the agEUR-USD feeds on Optimism and Arbitrum.

# Audits

Angle Protocol had four different audits which can be found here.

## Benefits for Aave V3

agEUR is already supported in efficiency mode with other stablecoins on Polygon, which should technically allow people to take leverage on Forex and more easily arb the stablecoin's peg.

On Polygon, the fact that it's going to become a collateral in isolation mode will allow people to long € and short $ through agEUR (and the agEUR liquidity on DEXes).

Onboarding agEUR to Optimism and Arbitrum would provide the same upsides of enabling € shorts and Euro DeFi users to get a yield on their €. It would in addition make these opportunities more easily accessible for a range of DeFi users who care about the security provided by layer 2 solutions and about small transaction fees.

There's no Euro stablecoin listed on Optimism, and having agEUR on Optimism would be a first option for European DeFi users to get a yield on their assets without having to care about the USD/EUR change risk. On Arbitrum, with the EURs stablecoin that is already available there, adding agEUR could be a way to facilitate a Euro efficiency mode (beyond the stablecoin efficiency mode).

We are working on a Curve pool on Arbitrum to facilitate immediate arbitrages between agEUR and EURs with the efficiency mode.

Overall, it's very likely that Forex on DeFi won't happen on a single chain, and enabling efficiency mode on different chains is a way to make sure that Aave is well positioned for wherever it's going to fully take off.

## Risk Parameters

With the liquidity on Optimism and Arbitrum in mind, I propose to use the following risk parameters on each of these chains. Obviously this is a first proposition and governance/risk team is more suited to choose better risk parameters:

1. V3 Emode EUR stablecoins (if it exists): 97% LTV, 98% liquidation threshold, 10% reserve factor
2. V3 Emode stablecoins: 90% LTV, 95% Liquidation threshold, 10% reserve factor

At this point we're not requesting agEUR to be a collateral (even in isolation mode) and propose to start with a 0% LTV.

## Specifications

1. What is the link between the author of the AIP and the Asset?

As mentioned in the disclaimer, I am a Core Contributor of the Angle Protocol.

1. Provide a brief high-level overview of the project and the token

See agEUR summary section

1. Explain positioning of token in the AAVE ecosystem. Why would it be a good borrow or collateral asset?

See Benefits for Aave section.

1. Provide a brief history of the project and the different components: DAO (is it live?), products (are the live?).

Angle Protocol is a decentralized stablecoin protocol, it is ruled by the ANGLE token and more specifically by the veANGLE token. Like many other projects, Angle DAO has indeed adopted the ve tokenomics.

The platform was released on November 3rd 2021..

ANGLE locking went live in January. Votes by veANGLE holders are implemented by a 4/6 multisig composed of 3 core team members (including myself), Julien Bouteloup, 0xMaki and SebVentures.

1. How is the asset currently used?

The asset is a € stablecoin. It is used by people as a means of exchange to pay in Euros in DeFi, or to keep a stable asset value in reserves before aping in elsewhere.

It is also used as a way to get yield in many places in DeFi

1. Emission schedule

Token can only be issued following the rules of the protocol on mainnet: at oracle value if someone has provided either USDC, DAI, FRAX or wETH. As such there's no emission schedule for the token. agEUR can also be borrowed from Angle Borrowing module at a 0.5% rate.

1. Token (& Protocol) permissions (minting) and upgradability. Is there a multisig? What can it do? Who are the signers?

agEUR token contract on mainnet is upgradeable and can be upgraded by the multisig described above.

agEUR on Optimism and Arbitrum can also be upgraded by a multisig on these chains with the same signers as the one on mainnet and Polygon.

1. Market data (Market Cap, 24h Volume, Volatility, Exchanges, Maturity)
2. Market Cap

: €47m circulating, across all chains, market cap = FDV

- 24h Volume

: $3m (from Coingecko) and this does not take into account Curve liquidity + some exchanges on other chains

- Volatility

: Low

- Maturity

: Early

1. Social channels data (Size of communities, activity on Github)
2. Discord

: 30k members (invitation link)

- Twitter

: 27k followers (Page)

1. Contracts date of deployments, number of transactions, number of holders for tokens

On mainnet:

- Date of Deployment

: Oct 23rd 2021

- Number of Transactions

: 3443 and 51596 transfers

- Number of holders for token

: 542 (NB: there are many incentive programs involving LPs of agEUR which means actual amount of holders is higher)

On Optimism:

- Date of Deployment

: July 4th 2022

- Number of Transactions

: 167 and 1883 transfers

- Number of holders for token

: 94

On Arbitrum:

- Date of Deployment

: July 4th 2022

- Number of Transactions

: 86 transfers

- Number of holders for token

: 6