Point of Contact:

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Outline:

1. Proposal Details

2. About Linea

3. Benefits to Uniswap

4. Additional Information

5. Partner Details

6. Timeline & Engagement Structure

Proposal Details

Proposal Summary

ConsenSys is proposing a recognized Uniswap V3 deployment for its incubated zkEVM, Linea.

Proposal Overview

Consensys is seeking a Uniswap V3 deployment for Linea's mainnet launch, looking to further integrate Uniswap with the Consensys product ecosystem (MetaMask, Infura, Linea, et. al). A key aspect of Linea's value proposition is its synergistic relationship with ConsenSys products. Establishing Uniswap as a dominant DEX on Linea would encourage more trading volume for the protocol and strengthen ties to current Consensys product users.

Motivation

Linea's testnet has impressively handled more than 12 million transactions. Many of these transactions are part of the ongoing Voyage quest, a crucial initiative designed to help stress-test the network. This exercise aids in identifying potential issues and performance impediments before transitioning to Linea mainnet.

Moreover, Linea is aligned with developers throughout the broader ecosystem via our relationships with MetaMask, Infura, and Truffle, emphasizing our commitment in serving developers, protocols, and builders.

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linea testnet

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Source:

[Linea Explorer](#)

Users will conveniently find Linea natively supported in the MetaMask network dropdown list, and it will support the full range of MetaMask curated experiences. These experiences include On/Off Ramp, MetaBridge, MetaMask Swaps, Portfolio dApp, and MetaMask SDK - all of which could leverage the Uniswap protocol.

Linea

About

Linea aims to be a [Type 2 zkEVM](#) and achieve EVM-equivalence, handling native EVM bytecode for proving and verification. This allows for the execution of Solidity smart contracts and enables developers to build while using familiar tools and infrastructure at extremely low switching costs. The network does not use transpilers or custom compilers on bytecode. By

taking the compiled bytecode directly from solidity, we significantly reduce the surface area risk for bugs and hacks.

Linea seeks innovation, pushing the boundaries of the Web3 space while maintaining top security and full EVM compatibility as top priorities. One (of the many) things worth mentioning is Linea's full support of EIP-4337 (Account Abstraction). Working with key stakeholders, the network already uses the single-entry-point contract and runs multiple networks of bundlers and paymasters services.

Vortex - Lattice-Based SNARKs

What is particularly exciting about Linea is its ability to consolidate transactions and submit proofs to the Ethereum mainnet using a novel prover mechanism. This process enhances throughput and minimizes transaction fees while maintaining the inherent security of the Ethereum network.

Vortex, a cryptographic primitive under development at ConsenSys, aims to increase the performance of Linea. It leverages a novel type of zkProof called a recursive aggregation proof. This is based on Ring-SIS, a well-known premise from lattice-based cryptography. This proofing system enables the batching of transactions to increase the network's throughput while reducing fees. Linea also employs zk circuits to conduct computations. These cryptographic circuits facilitate secure and efficient computations.

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Vortex

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For more information on the technical aspects of Linea, please refer to the sources section at the bottom of the proposal.

Market Adoption

Since the inception of Ethereum, ConsenSys was established to become the most potent proponent of decentralization worldwide. We believe that networks such as Ethereum can empower humanity to reach greater heights. With our experience handling web3 infrastructure, wallets, developer tools, public goods, and more, we are confident in our ability to steward Linea to complete decentralization and openness.

Linea is the result of more than 20 months of R&D from our award-winning research team that has released and maintains successful projects in the zk space like the GNARK library. Linea represents advancements in the zkEVM realm and the general field of cryptography. With the Linea network being incubated via Consensys, adoption will be encouraged through existing Consensys products and partnerships.

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Source:

Linea.Build

Some of these integrations include but are not limited to:

- MetaMask

- Largest Web3 wallet, easy user onboarding with default integration.

- Infura

- Simplified deployment lets developers ship faster and scale with the confidence of 99.9% uptime.

- Truffle

- Build, test, debug, and deploy Solidity smart contracts with tools like Truffle, Hardhat, and more.

- Besu

- Optimized execution for zkEVM transactions using Ethereum battle-tested components.

- Lastly

, nearly all EVM-specific development tools are Linea compatible.

Decentralization Roadmap

Linea is committed to actively pursuing decentralization. Over the following year, the Linea team plans to implement decentralizing features. Examples include introducing a DAO, decentralized sequencers and prover systems.

Benefits for Uniswap

There are many benefits to a Uniswap deployment on Linea. In the following sections, we highlight our top three…

1. Early Establishment in the Linea AMM Market

2. Increased Volume through MetaMask Swaps Integration

3. Cross Promotion

Early Establishment in the Linea AMM Market

Observing Uniswap market share across crucial Layer 2 solutions reveals that the protocol enjoys several advantages x-chain. These include a strong community, brand recognition, and, most importantly, the first-mover advantage.

Total value locked (TVL) of Uniswap across significant roll-up ecosystems:

- Arbitrum - 316.12M

- Optimism - 82.5M

We anticipate that Uniswap will replicate its success in capturing market share on Linea, and we also hope that this deployment will serve as a model for the DAO on how Uniswap will perform with all upcoming L2/zkEVM launches over the next 6-8 months.

Increased Volume through Swaps Integration

MetaMask Swaps is an aggregation product built natively into MetaMask. Across all integrated chains, as of last week, Swaps had an average weekly volume of ~$133M. Uniswap is consistently the largest leveraged dex of this weekly volume, executing ~58%, or $77.1M of trades.

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%swaps

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Source:

[Swaps - Dune](#)

Most of this volume is directed through Ethereum; however, observing comparable L2 deployments shows that Swaps contributed nearly 100M of volume to Arbitrum since integration.

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Volume

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Source:

Products like Swaps leverage many service providers, and only a few of them will be deployed on Linea day 1, providing Uniswap the opportunity to capture an even bigger market share of L2 volume produced from the product.

Cross Promotion

Another benefit for the protocol is the cross-promotion between Consensys and Uniswap, and to double down on the shared mission of contributing to the growth of the Ethereum ecosystem. The team plans to promote the network's usage and the protocols that operate on it. This, combined with utilizing a recognized deployment of Uniswap, will aid in establishing Uniswap on Linea and in the greater ecosystem.

Additional Information

Costs and Incentives

Consensys will cover all deployment costs, and is willing to contribute any engineering resources required for the deployment.

Cross Chain Messaging

The Linea team operates and maintains a canonical Open Messaging Service (OMS). The OMS allows for messages to pass to and from Ethereum & Linea. The Ethereum network verifies smart contracts on the L1 that enforce a valid state on Linea.

Security Considerations

The OMS will be operated in-house. The design implements a relayer and leverages the rollup to maintain state/security.

Example Walk-Through of Cross-Chain Message Passing

A technical walk-through of the future-state, cross-chain governance on mainnet is as follows:

1. The Uniswap Governor Bravo Contract will send a message to the L1 bridge contract (implementing the IBridge.sol interface) by calling the dispatchMessage

method.

1. The L1 bridge contract emits a MessageDispatched

event.

1. The roll-up relayer catches the event and sends an L2 transaction to the L2 bridge contract by calling the deliverMessage

function.

1. The L2 contract calls the contract defined in the to

field. The L2 contract should authenticate the call by calling the sender()

method on the L2 bridge upon reception of the deliverMessage

call, verifying that this corresponds to a known L1 address.

1. The L1 bridge contract verifies the message execution and emits an event MessageConfirmed

, once the next L2 block is finalized and the zk proof is verified.

Source:

[Modified from Linea Documentation](#) (links in documentation)

Success Criteria

Although it is difficult to quantify success criteria, we can confidently state that establishing Uniswap as an early, dominant

DEX from Day 1 is a priority.

The overarching success of the Uniswap deployment will be determined through increasing key DeFi metrics that include TVL, Volume, Users, and Swaps. Upon deployment, we will provide a dashboard to monitor Uniswap's progress and assess market performance.

Proposer Details

Proposer Details

ConsenSys is a leading Ethereum and decentralized protocols software company. We enable developers, enterprises, and people worldwide to build next-generation web3 applications, launch modern financial infrastructure, and access the decentralized web. Our product suite, composed of MetaMask, Infura, Truffle, Diligence, and CNFT, serves millions of users. ConsenSys has the technical expertise to deploy Uniswap.

Conflict of Interest

ConsenSys is an active delegate and provides software services to Uniswap Labs. However, these developments and contractual relationships do not impact the organization's independence.

Proposal Stakeholders

Proposer:

Consensys

Deployer:

Consensys

Bridge Provider:

Linea Native Bridge

Target Chain:

Linea

Proposal Sponsor:

Consensys

Engagement Terms

Linea Mainnet Timeline

Linea mainnet aims to launch in the month of July. We understand that deployment relies on mainnet, and we will proceed with the on-chain portion of this proposal at the appropriate time.

As for now, and as outlined here, the timing of the official recognition will occur after deployment.

Deployment Process/Timeline

1. The request for comment will be at least seven days.

2. After, a temperature check will be made on Snapshot and remain live for five days.

(The temperature check solely assesses the DAO's desire to deploy on linea.)

1. If 10m votes support the proposal, ConsenSys and the Linea team will prepare an on-chain proposal.

2. Under appropriate conditions, we will move to an on-chain vote that lasts ~11 days (7-day voting window).

Sources

- [Proposal Template 2.0](#)

- [Linea Website](#)

- [Linea Block Explorer](#)

- [Linea Docs](#)

- [Introduction into zkEVMs](#)

- [Linea Mirror](#)

- [Consensys: R&D](#)

- [Consensys R&D Gnark Library](#)

- [Vortex: Building a Lattice-based SNARK scheme…](#)

- [Ethresearch.ch - A ZK-EVM specification](#)

- [Vitalik - A rollup-centric Ethereum roadmap](#)