SECTION 1: APPLICANT INFORMATION

Provide personal or organisational details, including applicant name, contact information, and any associated organisation. This information ensures proper identification and communication throughout the grant process.

Applicant Name or Alias: Teddy Woodward

Project Name: Notional Finance

Project Description: Notional Finance is a fixed rate lending protocol that offers leveraged yield strategies by integrating with

other protocols like GMX.

Team Members and Qualifications:

Teddy Woodward: CEO and Co-founder

Jeff Wu: CTO and Co-founder

Pierre-Yves Gendron: Head of Risk

Matthew Garrett: Frontend Engineer

Isaac Petsch: Design

Project Links:

Website: https://arbitrum.notional.finance/

Twitter: https://twitter.com/NotionalFinance

Github: Notional Finance · GitHub

Grant Type: Open Grant

Contact Information:

TG: @teddywoodward

Twitter: @teddywoodward

Email: teddy@notional.finance

SECTION 2: GRANT INFORMATION

Detail the requested grant size, provide an overview of the budget breakdown, specify the funding and contract addresses, and describe any matching funds if relevant.

Requested Grant Size: 100,000 ARB

Grant Matching: N/A

Grant Breakdown: This grant would be used to fund the development and audit of two GMX V2 leveraged vaults. For an example of a leveraged vault strategy that is currently live, see here: Notional Finance - DeFi Fixed Rates

The first vault strategy would enable a Notional user to borrow at a fixed or variable rate from Notional and use the cash to mint GMX V2 GM tokens. This would give the user leveraged exposure to the GM token yield and directly result in greater liquidity for GMX V2 markets.

The second vault strategy would enable a Notional user to borrow a token like USDC at a fixed or variable rate from Notional, swap that token for the other token in a V2 market like ETH, deposit that ETH as collateral on GMX and open up a short position on ETH/USDC. This would give the user leveraged exposure to the V2 funding rate on a particular market while staying net delta-neutral. This strategy would benefit GMX by contributing to open interest and decreasing risk for GMX LPs by helping to balance out their price exposure (high funding rates occur when there is a significant imbalance in open interest).

Funding Address: 0xbf778Fc19d0B55575711B6339A3680d07352B221

Funding Address Characteristics: 2 / 3 Gnosis Safe with private keys held securely by three members of the Notional Team.

Distribution Contract Address: N/A

Incentivised Contract Addresses: N/A

SECTION 3: GRANT OBJECTIVES AND EXECUTION

Clearly outline the primary objectives of the project and the Key Performance Indicators (KPIs) used to measure success. This helps reviewers understand what the project aims to achieve and how progress will be assessed.

Objectives: The primary objective of this grant will be to get these two leveraged vault strategies developed, tested, audited, and deployed in production with an initial set of supported markets. We would initially support BTC, ETH, and ARB. We would look to support additional markets pending further risk analysis.

With these strategies we would hope to achieve two things:

- 1. Increase total GMX V2 liquidity across all supported markets. When the returns to providing liquidity on GMX are high, the returns available to our leveraged vault strategy would be very high. This will help Notional attract deposits to this vault and help GMX attract liquidity when it is being productively utilized.
- 2. Increase GMX V2 liquidity utilization and decrease risk for GMX V2 LPs by helping to correct open interest imbalances in supported markets. High open interest imbalances drive high funding rates. High funding rates will drive very high returns to the Notional leveraged vault strategy. This will hopefully attract capital to the leveraged vault, balance out the open interest on the GMX market and decrease risk and volatility for GMX LPs.

Key Performance Indicators (KPIs): KPIs for this grant will be successful deployment of the vault strategies in production and the number of currencies/markets that we support for each strategy.

How will receiving a grant enable you to foster growth or innovation within the GMX ecosystem?: The leveraged vaults enabled by this grant will help increase GMX V2 liquidity and make providing liquidity on GMX less risky. We think that this will directly solidify GMX's leadership position in the perps landscape on Arbitrum by making it the most liquid and best perps dex on Arbitrum.

Justification for the size of the grant: We're asking for an amount that we think will roughly cover the expected cost of auditing the two leveraged vault strategies. Given the relative complexity of these strategies we estimate that they will require a 2-week audit, although we don't know for sure given that we haven't written them yet.

Our preferred audit provider Sherlock charges ~47k USD per week which would total 94k USD for a 2-week audit.

Execution Strategy: We plan to develop these strategies, test them, and then audit them when they're ready. Once we receive the report from our auditors, we will fix any bugs and deploy them to production.

Grant Timeline and Milestones:

Milestone 1: Develop the initial version of the two strategies

Expected delivery date: March 2024

Milestone 2: Complete testing and internal audit. Make any necessary fixes.

· Expected delivery date: March 2024

Milestone 3: Complete external audit and make any necessary fixes.

Expected delivery date: April 2024

Milestone 4: Deploy vault strategies into production.

• Expected delivery date: May 2024

Fund Streaming: Yes we accept the terms.

SECTION 4: PROTOCOL DETAILS

Provide details about the protocol requirements relevant to the grant. This information ensures that the applicant is aligned with the technical specifications and commitments of the grant.

What date did you build on GMX?: Notional is new to Arbtirum. Notional V3 launched on Arbitrum in November 2023. The current extent of Notional's integration with GMX is that Notional has listed GMX as a collateral asset.

Protocol Performance: Notional V3 has been live on Arbitrum since November 6th and Notional V2 has been live on Ethereum Mainnet since November 2021. Here are some key points:

• V3 on Arbitrum: current TVL ~\$1.4M

• V3 on Arbitrum: current open debt ~\$2.6M

- V2 on Ethereum: Executed \$770M in total loan volume.
- V2 on Ethereum: Currently TVL ~\$25M
- V2 on Ethereum: Established leading position in the fixed rate lending and borrowing category.
- V2 on Ethereum: Launched the first leveraged yield strategy product using fixed rate leverage.
- V2 on Ethereum: Integrated with leading protocols like Balancer, Curve, Yearn, Spool, Phuture, and Index Coop.

Dashboards:

- V3 on Arbitrum: https://dune.com/PierreYves_Gendron/notional-dashboard
- V2 on Ethereum: https://info.notional.finance/

Protocol Roadmap: Notional has a backlog of development work to get through and will not be able to begin development of these leveraged vault strategies immediately. Here is what we need to get done before starting work on the leveraged vault strategies described in this proposal:

- December 2023: launch a set of Balancer/Aura leveraged vaults live on Arbitrum.
- January 2024: Upgrade Notional V2 to Notional V3 on Ethereum Mainnet.
- January 2024: List new currencies, list Balancer/Aura leveraged vaults, and list Curve/Convex leveraged vaults on Ethereum Mainnet.
- February 2024: Begin work on the GMX leveraged vault strategies.

Audit History (if any): Notional has been audited 14 times by Sherlock, Open Zeppelin, Consensys Diligence, Code Arena, Certora, and ABDK. You can find the link to all our audits at https://github.com/notional-finance/contracts-v2/tree/master/audits

SECTION 5: Data and Reporting

Provide details on how your team is equipped to provide data and reporting on grant distribution.

Is your team prepared to create Dune Spells and/or Dashboards for your incentive program?: I don't think this applies to this grant as it is focused on development and not distributing incentives for a live product.

Does your team agree to provide bi-weekly program updates on the GMX Forum thread?: Yes. We can provide updates on development and testing of the vault strategies on whatever cadence the GMX DAO requires.

Does your team acknowledge that failure to comply with any of the above requests can result in the halting of the program's funding stream?: Yes.