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**Project purpose:** You agree that you are acquiring LINA to participate in Linear and to obtain services on the ecosystem thereon. The Company, the Distributor and their respective affiliates would develop and contribute to the underlying source code for Linear. The Company is acting solely as an arms' length third party in relation to the LINA distribution, and not in the capacity as a financial advisor or fiduciary of any person with regard to the distribution of LINA.

Nature of the Token Documentation: The Token Documentation is a conceptual paper that articulates some of the main design principles and ideas for the creation of a digital token to be known as LINA. The Token Documentation and the Website are intended for general informational purposes only and do not constitute a prospectus, an offer document, an offer of securities, a solicitation for investment, any offer to sell any product, item, or asset (whether digital or otherwise), or any offer to engage in business with any external individual or entity provided in said documentation. The information herein may not be exhaustive and does not imply any element of, or solicit in any way, a legally-binding or contractual relationship. There is no assurance as to the accuracy or completeness of such information and no representation, warranty or undertaking is or purported to be provided as to the accuracy or completeness of such information. Where the Token Documentation or the Website includes information that has been obtained from third party sources, the Company, the Distributor, their respective affiliates and/or the Linear Finance team have not independently verified the accuracy or completeness of such information. Further, you acknowledge that the project development roadmap, platform/network functionality are subject to change and that the Token Documentation or the Website may become outdated as a result; and neither the Company nor the Distributor is under any obligation to update or correct this document in connection therewith.

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The information set out in the Token Documentation and the Website is for community discussion only and is not legally binding. No person is bound to enter into any contract or binding legal commitment in relation to the acquisition of LINA, and no digital asset or other form of payment is to be accepted on the basis of the Token Documentation or the Website. The agreement for distribution of LINA and/or continued holding of LINA shall be governed by a separate set of Terms and Conditions or Token Distribution Agreement (as the case may be) setting out the terms of such distribution and/or continued holding of LINA (the Terms and Conditions), which shall be separately provided to you or made available on the Website. The Terms and Conditions must be read together with the Token Documentation. In the event of any inconsistencies between the Terms and Conditions and the Token Documentation or the Website, the Terms and Conditions shall prevail.

**Deemed Representations and Warranties:** By accessing the Token Documentation or the Website (or any part thereof), you shall be deemed to represent and warrant to the Company, the Distributor, their respective affiliates, and the Linear Finance team as follows:

- (a) in any decision to acquire any LINA, you have not relied on and shall not rely on any statement set out in the Token Documentation or the Website;
- (b) you will and shall at your own expense ensure compliance with all laws, regulatory requirements and restrictions applicable to you (as the case may be);
- (c) you acknowledge, understand and agree that LINA may have no value, there is no guarantee or representation of value or liquidity for LINA, and LINA is not an investment product nor is it intended for any speculative investment whatsoever;
- (d) none of the Company, the Distributor, their respective affiliates, and/or the Linear Finance team members shall be responsible for or liable for the value of LINA, the transferability and/or liquidity of LINA and/or the availability of any market for LINA through third parties or otherwise; and
- (e) you acknowledge, understand and agree that you are not eligible to participate in the distribution of LINA if you are a citizen, national, resident (tax or otherwise), domiciliary and/or green card holder of a geographic area or country (i) where it is likely that the distribution of LINA would be construed as the sale of a security (howsoever named), financial service or investment product and/or (ii) where participation in token distributions is prohibited by applicable law, decree, regulation, treaty, or administrative act (including without limitation the United States of America, Canada, and the People's Republic of China); and to this effect you agree to provide all such identity verification document when requested in order for the relevant checks to be carried out.

The Company, the Distributor and the Linear Finance team do not and do not purport to make, and hereby disclaims, all representations, warranties or undertaking to any entity or person (including without limitation warranties as to the accuracy, completeness, timeliness, or reliability of the contents of the Token Documentation or the Website, or any other materials published by the Company or the Distributor). To the maximum extent permitted by law, the Company, the Distributor, their respective affiliates and service providers shall not be liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including, without limitation, any liability arising

from default or negligence on the part of any of them, or any loss of revenue, income or profits, and loss of use or data) arising from the use of the Token Documentation or the Website, or any other materials published, or its contents (including without limitation any errors or omissions) or otherwise arising in connection with the same. Prospective acquirors of LINA should carefully consider and evaluate all risks and uncertainties (including financial and legal risks and uncertainties) associated with the distribution of LINA, the Company, the Distributor and the Linear Finance team.

**LINA Token:** LINA are designed to be utilised, and that is the goal of the LINA distribution. In particular, it is highlighted that LINA:

- (a) does not have any tangible or physical manifestation, and does not have any intrinsic value (nor does any person make any representation or give any commitment as to its value);
- (b) is non-refundable and cannot be exchanged for cash (or its equivalent value in any other digital asset) or any payment obligation by the Company, the Distributor or any of their respective affiliates;
- (c) does not represent or confer on the token holder any right of any form with respect to the Company, the Distributor (or any of their respective affiliates), or their revenues or assets, including without limitation any right to receive future dividends, revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property or licence rights), right to receive accounts, financial statements or other financial data, the right to requisition or participate in shareholder meetings, the right to nominate a director, or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to Linear, the Company, the Distributor and/or their service providers;
- (d) is not intended to represent any rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss;
- (e) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument, unit in a collective investment scheme or any other kind of financial instrument or investment;
- (f) is not a loan to the Company, the Distributor or any of their respective affiliates, is not intended to represent a debt owed by the Company, the Distributor or any of their respective affiliates, and there is no expectation of profit; and
- (g) does not provide the token holder with any ownership or other interest in the Company, the Distributor or any of their respective affiliates.

Notwithstanding the LINA distribution, users have no economic or legal right over or beneficial interest in the assets of the Company, the Distributor, or any of their affiliates after the token distribution.

To the extent a secondary market or exchange for trading LINA does develop, it would be run and operated wholly independently of the Company, the Distributor, the distribution of LINA and Linear. Neither the Company nor the Distributor will create such secondary markets nor will either entity act as an exchange for LINA.

**Informational purposes only:** The information set out herein is only conceptual, and describes the future development goals for Linear to be developed. In particular, the project roadmap in the Token Documentation is being shared in order to outline some of the plans of the Linear Finance team, and is

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# Linear Whitepaper v2.0

# A Cross-Chain Compatible, Decentralized Delta-One Asset Protocol with Deep Aggregated Liquidity ABSTRACT

Linear Finance ("Linear") is a non-custodial, cross-chain compatible, delta-one asset protocol. Linear's long term DeFi vision is to increase inclusiveness and democratize users' access to various investible assets (digital and traditional). Tremendous value exists in the ability for users to easily and quickly purchase/sell assets at fair market value and save on transaction fees. Linear combines substantial technical experience from numerous crypto projects with extensive financial experience in exotic and structured assets from traditional global asset management firms to bring to market one of the first DeFi projects built upon Ethereum with cross-chain compatibility. By using the tools available on Linear, users may build and manage their own spot or portfolio exposures with a slew of innovative digital and traditional derivative products. Linear supports synthetic assets built on other EVM compatible chains first and other prominent blockchains in the long run, making the staking, acquisition, and redemption process easier, quicker and with substantially lower transaction fees whilst maintaining access to the Ethereum DeFi ecosystem.

Linear is a non-custodial cross-chain compatible DeFi protocol with deep aggregated liquidity and the platform's peer-to-peer contracts allow users to mint synthetic assets (Liquids) with zero slippage. The backbone to Linear's protocol is our collateralized debt pool, where various digital and real-world assets may be utilised as collateral (including the native Linear token (LINA)). Users who have provided collateralized assets to the debt pool are able to mint Linear USD ( $\ell$ USD) which can then be used to purchase synthetic assets (Liquids) from the platform's native exchange. The collateralized assets are subsequently pooled to enable instantaneous liquidity and serve as a counterparty. LINA will also be a governance token enabling holders to vote on distribution models, assets to be listed, oracle selection, pledge ratio etc. Active participants which have provided collateral to the debt pool will be rewarded for their engagement with the platform with a pro-rata portion of fees from the minting of Liquids.

The LINA token will adopt an inflationary model to enhance the incentives available to active platform participants, and will have "liquidity mining" programs to encourage usage of the exchange and stability of the pool. Synthetization of assets will focus on cryptocurrencies, commodities and, more importantly, traditional assets such as market indices and thematic theme exposures.

The long term vision of Linear is to provide a platform for any user to gain exposure to a wide range of assets without slippage and settlement time. Furthermore, Linear Finance will act as a reliable gateway with the adoption of cryptocurrency we saw in 2020 and the collaboration of Decentralized Finance (DeFi) and Centralized Finance (CeFi). Applications can be developed on top of Linear for CeFi / DeFi composability.

#### LINA token - Collateral and Governance

The native cryptographically-secure fungible protocol token of Linear (ticker symbol LINA) is a transferable representation of attributed governance and utility functions specified in the protocol/code of Linear, and which is designed to be used solely as an interoperable utility token thereon.

LINA is a functional multi-utility token which will be used as the native governance token and economic incentives which will be distributed to encourage users to exert efforts towards contribution and participation in the ecosystem on Linear, thereby creating a mutually beneficial system where every participant is fairly compensated for its efforts. LINA are an integral and indispensable part of Linear, because without LINA, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on Linear. Given that additional LINA will be awarded to a user based only on its actual usage, activity and efforts made on Linear and/or proportionate to the frequency and volume of transactions, users of Linear and/or holders of LINA which did not actively participate will not receive any LINA incentives.

LINA does not in any way represent any shareholding, participation, right, title, or interest in the Company, the Distributor, their respective affiliates, or any other company, enterprise or undertaking, nor will LINA entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Panama, Singapore or any relevant jurisdiction. LINA may only be utilised on Linear, and ownership of the same carries no rights, express or implied, other than the right to use LINA as a means to enable usage of and interaction within Linear. The secondary market pricing of LINA is not dependent on the effort of the Linear Finance team, and there is no token functionality or scheme designed to control or manipulate such secondary pricing.

## LINA as one of the Base Collateral Options

LINA tokens may be used as the base collateral to mint Liquids using "Buildr", which is a decentralized application for collateral pool and Liquids management. The minting of Liquids will require a pledge ratio which is over 100%, i.e. over-pledged. Over-pledging is necessary to ensure the volatility of the pledged assets do not adversely affect the stability of the entire system. In the long run, the pledge ratio can gradually be optimized and this will be determined by the community-driven LinearDAO.

Compared to other competitors which are testing to accept cryptocurrency such as Ether (ETH) as collateral, Linear protocol will take a hybrid approach instead. As such, Buildr will accept a mixture of LINA tokens and other digital assets as collateral. There will be a threshold on the size of non-LINA tokens to be accepted in order to stabilize the system. The threshold is subject to community adjustment with the inception of the LinearDAO.

# LINA Participation Rewards

Incentives are provided to active participants of the Linear platform in the following ways:

## Pro-rata Exchange Fee

Transaction fees are generated whenever a user exchanges one type of Liquid to another using our Linear. Exchange platform. The initial transaction fee is set to be 0.25%. Users which provide liquidity/collateral will be incentivized with a portion of such rewards (in \( \emptyre{USD} \)) weekly on a pro-rata basis, provided that their Pledge Ratio (P ratio) is above the threshold.

# Inflationary Reward

Linear adopts an inflationary tokenomics with a decreasing rate until a terminal floor is reached. We share the same vision as Ethereum in the sense that the imminent inflation reward is important for the initial explosive growth of the platform while the long term terminal rate should help stabilizing the total LINA supply in circulation. Currently the starting inflation is set as 60% (of the tokens designated for staking) and the inflation going forward depends on the circulating supply and the expected growth of the exchange volume. There will be a yearly review in the format of LinearDAO.

Users which provide liquidity/collateral will be incentivized with additional LINA token rewards on a pro-rata basis, provided that their P ratio is above the prescribed threshold. To encourage greater usage of LINA, users which utilise LINA-type collateral would receive greater rewards.

## Yield Farming Campaign

Given the current DeFi environment and "yield farming" trend, we realize the importance of appealing to collateral providers (yield farmers) upon the launch of the project in order to help bootstrap the debt pool and have users experience the usability and ease of our protocol. As such, we view this as a cost of user acquisition and upon the launch of Linear, in addition to the proposed token distributions, which will be front loaded in the first two years, active users who fully utilize the exchange will have token bonuses, allowing them to receive a larger portion of the reward pool. Whilst our LINA token and  $\ell$ USD are ERC-20 tokens, Liquids are EVM compatible and hence, they can all be deposited by users in third party pools such as Balancer, Uniswap, and Curve to facilitate yield stacking.

In addition, we will also be leveraging the use of token rewards to also incentivize users to help stabilize the debt pool in certain instances. When the debt pool becomes unbalanced in exposures e.g. if a large number of users mint Liquids against gold (Long), we will provide users who counterbalance this trade by minting a Liquid short against gold with additional LINA token rewards, ultimately reducing the volatility and increasing the safety of the debt pool.

# Pledge Ratio

The starting ratio is initially set at an optimal rate of 500% and will be subject for further review by the LinearDAO. The initially high P ratio is essential for the long term growth of the platform amid black swan or volatile incidents. The P ratio varies with the price variation of LINA token. If the P ratio of a collateral provider rises, the user can choose to mint more Liquids as long as the P ratio is not below

the threshold. On the other hand, if the P ratio of a user drops below the threshold, the user is required to stake more collateral or burn part of the Liquids until the ratio is at least on par with the threshold in order for him to receive transaction fee rewards.

## The Linear Pool

The existence of the Linear Pool is the key to the overall platform as it acts as a "decentralized counterparty" to all Liquids exchanges, thus making deep aggregated liquidity available to platform users. Users incur a debt whenever using Buildr to mint a Liquid. The debt value varies with respect to all the Liquids in the system. For example, if all the Liquids on the platform are synthetic gold (£XAU), the price fluctuation of gold is insignificant as gold price increases the corresponding debt value of each £XAU holder increases the same amount, or vice versa.

Users act as collateral providers while using the platform at the same time. Depending on the Liquids minted, the overall debt level changes according to the overall long / short ratio. Below are the 2 major journeys that normal users and market-makers have:

#### Normal Users

- 1. Get LINA tokens via our fiat payment gateway partners, CEXs or DEXs
- 2. Provide LINA tokens as collateral via Linear.Buildr to mint &USD
- 3. Get Liquids exposure using &USD and exchange among different Liquids via Linear. Exchange
- 4. Claim the transaction split and staking rewards
- 5. Convert the Liquids exposure back to \( \ext{USD} \)
- 6. Burn the USD to unlock the staked LINA tokens

## Market Maker

- 1. Get LINA tokens via our fiat payment gateway partners, CEXs or DEXs
- 2. Provide LINA token collateral via Linear.Buildr to mint &USD
- 3. Depending on the net position of a particular Liquid, for example, if the position of  $\ell XAU$  is net long 50%, marketmaker can help stabilize the debt pool by doing the other side (i.e. go short on XAU in this case)
- 4. Linear will incentivize the marketmaker to do so by providing extra rewards (i.e. LINA tokens) on top of the inflation/staking reward and transaction fee split for their effort to stabilize the debt pool

# Linear.Exchange

#### The Issue

Liquids provide a seamless exposure for all users. Imagine a world without Linear. Exchange, when Alice wants to switch her exposure from CAC 40 index to Bitcoin, it would take her approximately two days to get the proceeds from her brokerage account because of T+2 settlement timeframe and another 1 to 2 days for the broker to direct a transaction to Alice's bank account. Afterwards, it would be another couple of days for Alice to wire money from her bank account to a cryptocurrency exchange before she can finally switch her exposure into Bitcoin, ultimately exposing her to a potential negative price movement.

## The Solution

Linear.Exchange can seamlessly solve the issue with the debt pool concept and deep aggregated liquidity. Any Liquids settlement timeframe can be lowered into seconds with the help of blockchain technology (as compared to T+2 in traditional securities). Linear is now working with selected public blockchains with EVM compatibility to further lower the settlement timeframe with block times as low as a few seconds and instant finality. In this case we can combine the best of the both worlds: the most sought-after tooling and infrastructure of Ethereum and the high TPS of other public blockchains. In addition, when minting Liquids, as it will be on the other blockchains, the transaction fees will be minimal, compared to the high gas fees of Ethereum. The front-running problem of some existing platforms can also be very much alleviated as the oracle will be able to refresh prices in a much higher frequency at much lower fees.

## For Broad-Based Exposure

One of the goals of the Linear. Exchange is to not only reduce the hassle and risk involved in cross-assets asset allocation but to also expand the breadth of available assets. Upon our launch, Linear. Exchange will support not only cryptocurrency but also traditional assets such as commodities, forex, market indices, thematic exposures, and ultimately equities. In addition, we will start an internal group that focuses on building thematic exposures within the crypto world and traditional equities depending upon the wishes and asks from our users and approved by the governance base. What's more, Linear will be building our exchange functionalities that will allow users to effectively manage their exposure and additional asset management functionalities such as portfolio management and analytics.

## **System Architecture**

In order to effectively solve the high transaction fee and oracle frontrunning problem of existing DeFis on Ethereum, Linear is adopting a cross-chain approach by supporting both the Ethereum and EVM-compatible blockchains. From a user's perspective, he would only need to initialize both an Ethereum-based wallet and the EVM-compatible wallet. Operation-wise it would be exactly the same as handling the wallets separately, while Linear will help pegging the two wallets and record the pegging on smart contracts. By separating the smart contract suite of Linear into 2 different blockchains, the following benefits can be achieved:

- 1. As LinearDAO and Linear tokens (ERC-20) are deployed on Ethereum, we are able to maximize the support from the DeFi community (which is the largest on Ethereum so far) and cross-DeFi partnership with other protocols.
- 2. For Buildr and Exchange the smart contract logic will be deployed on the EVM-compatible blockchains. The entire Liquids building and trading will be nearly free from gas fee, which greatly improves the user experience.
- 3. Since the block time of our partnering EVM-compatible blockchains are much lower than that of Ethereum and the transaction fee is almost minimized as compared to the Ethereum side, Linear enables users to mint Liquids with a more prompt oracle price update, making the window for front-running much lower. As such, collateral tokens can be better protected and there will also be less concern on the debt inflation.
- 4. The entire process will be optimized and automated in the near future to reduce any potential friction when cross-chain smart contracts are called.

It is important to reiterate that the protocol simply comprises a set of autonomous smart contracts deployed on the relevant blockchain network, operated directly by users calling functions on it (which allows them to interact with other users and/or pool their own selected assets in a multi-party peer-to-peer manner). There is no further control by or interaction with the original entity which had deployed the smart contract, which entity solely functions as a provider of technical tools for users, and is not offering any sort of securities product or regulated service nor does it hold any user assets on custody.

# Building

All assets are supported by the decentralized debt pool comprising various major/stable cryptocurrencies, including LINA tokens. Hence holders of LINA (and/or other major/stable cryptos) can use their balances to mint Liquids using Buildr.

In order to reduce the gas fee required and improve the time required for building Liquids, Linear makes use of the best of both Ethereum and partner chain networks. This means that there will be a cross-chain operation when LINA tokens are pledged to mint Liquids, utilizing smart contracts on both chains so that from a user perspective they will not notice the difference. The only extra requirement is for users to have a partner chain-based wallet which will be pegged to their Ethereum wallet so that when LINA tokens / other cryptos are swapped to the partner chain, the Liquids will be built on the

partner chain.

Once the Liquids are built, an user can perform seamless transactions and adjust his exposure freely with much lower fees and faster confirmation time due to the high performance of the EVM-compatible blockchains. Users can also perform cross-chain actions to convert Liquids back to Ethereum for cross-chain composability and use.

For the optimal P ratio as initialized above, it can be adjusted upward or downward via community governance. The ratio of LINA: other acceptable collaterals can also be included shall the community provide a sensible proposal. On the other hand, collateral providers will create debt when minting Liquids. In order to remove the exposure (i.e. to unlock the staked LINA tokens / other acceptable collaterals), Liquids have to be burned. If the prices of LINA increases, a user can choose to keep a higher P ratio as a price shock buffer OR mint more  $\ell$ USD and maintain the minimal P ratio.

## Exchange

For the best user experience, the Liquids exchange smart contract suites will be on the EVM-compatible partner blockchain. To trade on Linear. Exchange, the counterparty is different from that of traditional Centralized Exchanges (CEX) or any order book based Decentralized Exchanges (DEX) where a user trades against another user. Instead, users are trading directly with Linear's smart contracts facilitating activities of the debt pool with the price provided by oracle providers to supply price feed of underlying assets.

Linear will support Liquids pairing with respect to  $\ell$ USD and other large cap coins such as  $\ell$ BTC and  $\ell$ ETH in the future. Depending on the base pair, it will be first burned into  $\ell$ USD form and a transaction fee of 0.25% will be deducted from the proceeds before the conversion. The total supply of the newly built Liquids will then be updated.

Fee Claim

The fee claim procedures will be as follows:

Depending on the amount of collateral staked by users and provided that they fulfill the P ratio requirements, their rewards (a. Inflationary reward and b. transaction fee split) will be stored in the corresponding reward claim smart contracts.

Users will be able to claim their unlocked weekly distribution every Wednesday. For inflationary reward, there is a lock-up of 1 year for ensuring the healthiness and long term growth of the platform. The locked up amount of inflationary reward will be automatically staked in the debt pool. This amount will also help to lower the overall P ratio of that user.

## Burning

Collateral providers can reduce their debt and unlock the collateral provided by burning the Liquids they built. The initial debt level and the current debt level of a particular user may vary, depending on the long / short ratio of the overall pool. Ideally it should be 50:50, and Linear is incentivizing marketmakers to maintain this ratio by providing extra incentives in the form of token rewards.

Since the decomposition of Liquids (i.e. burning of debts) will be performed on the partner blockchain, the entire process can be done nearly instantaneously and nearly 0 fees.

#### Debt Pool

As the debt pool serves as the counterparty of users on the platform, there should be proper tracking on the segregate level of each user's debt amount (and the changes over time due to platform use of building and decomposing by himself or others).

This means that the current debt amount may be different from the initial debt amount of users. User's debt proportion with respect to the entire debt pool is based on the building / decomposition history and the corresponding Liquids size, and overall debt pool level. This is a changing number determined by the entire Liquids portfolio of the platform as users are indeed betting against the decentralized debt pool.

#### Oracle

Oracle is the backbone of feeding our platform prices of different Liquids. Supported by the Dev team of our first EVM-compatible partner blockchain, we will be using oracles that can update prices in a nearly- instantaneous manner. Linear is also exploring some of the decentralized cross-chain oracle partners in long term.

For inverse Liquids, Linear will be utilizing some existing short tokens, which is essentially a derivatives portfolio with 1x short exposure and regular re-balancing. Going forward, we can also implement short tokens with higher leverage e.g. 3x to balance the debt pool.

## **Solutions for Existing Issues**

The following session concludes different issues that our current DeFi competitors still have:

# Improved Collateralization Mechanism

There is no proper mechanism to deal with the high pledge ratio of synthetic asset landscape right now. Linear is solving the problem right at the beginning by accepting major stable cryptocurrency as collateral. The community can further decide the LINA:others ratio after the governance protocol is completed. In the long run Linear will look to tokenize real world assets as collaterals.

# Instant and Dynamic Mechanism with Partner Chains

Secondly, the oracle front-running problem has long been an issue with Ethereum based dApps. To really enable financial innovation and permissionless finance, Linear is tackling the problem by cross-chain capabilities between Ethereum and other EVM-compatible chains. On the partnering EMV-compatible blockchain side, thanks to the low block time and much lower cost, exchanging Liquids on the platform is a seamless experience. On the other hand, for oracles on the Ethereum blockchain, a higher frequency of update will be used. Linear adopts a dynamic mechanism to shorten the update interval based on front-end interaction on the assets. When the gas fee is low or in the future when scalability is achieved, the oracle update gas fee can be directly embedded into the transaction performed by users.

# Liquidation Mechanism and Insurance Fund

Last but not least, it is vital for Linear to implement a liquidation mechanism in order to handle black swan events such as the March 12, 2020. Linear will propose a proper liquidation mechanism and open it up for community governance to decide in order to safeguard the healthiness and resistance to any market situation. In addition, the setup of an insurance fund will also help tackle any liquidation loss so that the loss would not need to be socialized each time. Again, the community can decide on the source of the insurance fund, e.g. a percentage from the transaction fee.

## Long Term Technology Roadmap

Cross-chain compatibility with non-EVM-compatible blockchains

Though Linear is now working with EVM-compatible blockchains to solve the clogging issues of Ethereum on day one, the team has already been in touch with some other prominent public blockchains with innovative and dynamic design that could potentially gain community traction over time. In the long run, Linear seeks to become the cross-chain compatible delta-one protocol that provides seamless trading experience across any major blockchains.

# Optimization of Transaction Fee and Speed

Currently, we tackle the issue by separating the smart contract logic of Buildr and Exchange on the EVM- compatible blockchains which have high TPS and much lower fees. However, the gas fee on the Ethereum side could still be a long term problem shall the usage of the blockchain keep going up with ETH 2.0 still a long way to go.

In order to solve the issue, Linear plans to implement Layer 2 solution in the later versions. For example, by using zk-rollup on Ethereum, the TPS, fees and oracle problems can be better handled. The team is currently looking into the best way for utilizing zk-rollup without adding friction on the front-end side.

## Liquidation mechanism

As mentioned above, despite the fact that users are required with a dynamic pledge ratio of around 500%, there should also be a liquidation mechanism that should be triggered when the P ratio is under a certain number, say 150%. There will be a punitive conversion rate for Linear to re-purchase the corresponding Liquids using the pledged LINA tokens to ensure the stability of the debt pool. If the value from the liquidation of the Liquids is higher than the value of the LINA tokens at liquidation, a system loss will be incurred. On the other hand, when the value from the liquidation of the Liquids is lower than that of LINA tokens, there will be a system profit.

LinearDAO (explained in the paragraph later) will decide on this implementation and handle the profit and loss when it comes to liquidation. It could be in the form of an insurance fund or distributed socially across the platform.

## LinearDAO

After the launch of the protocol, LINA would allow holders to propose and vote on governance proposals to determine future features, upgrades and/or parameters of Linear, or provide feedback, with voting weight calculated in proportion to the tokens staked. Linear will be under the governance of LinearDAO on important parameters and platform design such as:

- 1. Pledge ratio
- 2. LINA inflation reward and frequency
- 3. Split of transaction fees on areas such as burn, fee claims and Linear Reserve
- 4. New functionalities and technology roadmap
- 5. Proposals can be submitted by the community and voting will be done to determine whether they should be adopted or not. In between there will be discussion on each proposal before the voting so as to ensure the voting is meaningful to the long term growth of the platform.

The right to vote is restricted solely to voting on features of Linear; it does not entitle LINA holders to vote on the operation and management of the Company, its affiliates, or their assets or the disposition of such assets to token holders, or select the board of directors or similar bodies of these entities, or determine the development direction of these entities, nor does LINA constitute any equity interest in any of these entities or any collective investment scheme; the arrangement is not intended to be any form of joint venture or partnership. After governance launch there will be no individual or corporate entity or other active promoter, sponsor, or group or affiliated party that maintains sole control over Linear.

# **Summary**

The team at Linear, with a strong technical background and financial investment experience is committed to bringing our protocol to market and expanding financial inclusivity to all users. While participating in digital asset markets may be difficult, we want it to be easy, cheap, and transparent so that you don't have to be a rocket scientist to build and manage your assets through our exchange. Whilst the above will be our short term goal, in the long term we recognize the value of building Linear as an asset layer and will welcome app developers to build additional asset management dApps on top of Linear. Lastly, in the spirit of decentralized finance, upon launch, we will start the planning and transition of our governance to a DAO, allowing our user community to help and continue to drive innovation and be key decision makers within our protocol and ultimately becoming a protocol for users, built by users.

## **RISKS**

Linear is currently in the initial development stages and there are a variety of unforeseeable risks. You acknowledge and agree that there are numerous risks associated with acquiring LINA, holding LINA, and using LINA for participation in Linear. In the worst scenario, this could lead to the loss of all or part of LINA held. IF YOU DECIDE TO ACQUIRE LINA OR PARTICIPATE IN LINEAR, YOU EXPRESSLY ACKNOWLEDGE, ACCEPT AND ASSUME THE FOLLOWING RISKS:

- Uncertain Regulations and Enforcement Actions: The regulatory status of Linear, LINA and distributed ledger technology is unclear or unsettled in many jurisdictions. The regulation of digital assets has become a primary target of regulation in all major countries in the world. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including LINA and/or Linear. Regulatory actions could negatively impact LINA and/or Linear in various ways. The Company, the Distributor (or their respective affiliates) may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. After consulting with a wide range of legal advisors to mitigate the legal risks as much as possible, the Company and Distributor have worked with the specialist blockchain department at Jacque Law LLC and obtained a legal opinion on the token distribution, and will be conducting business in accordance with the prevailing market practice.
- Inadequate disclosure of information: As at the date hereof, Linear is still under development and its design concepts, consensus mechanisms, algorithms, codes, and other technical details and parameters may be constantly and frequently updated and changed. Although this material contains the most current information relating to Linear, it is not absolutely complete and may still be adjusted and updated by the Linear Finance team from time to time. The Linear Finance team has neither the ability nor obligation to keep holders of LINA informed of every detail (including development progress and expected milestones) regarding the project to develop Linear, hence insufficient information disclosure is inevitable and reasonable.
- Competitors: Various types of decentralised applications, games and networks are emerging at a rapid rate, and the industry is increasingly competitive. It is possible that alternative networks could be established that utilise the same or similar code and protocol underlying LINA and/or Linear and attempt to re-create similar facilities. Linear may be required to compete with these alternative networks, which could negatively impact LINA and/or Linear.
- Loss of Talent: The development of Linear greatly depends on the continued co-operation of the existing technical team and expert consultants, who are highly knowledgeable and experienced in their respective sectors. The loss of any member may adversely affect Linear or its future development. Further, stability and cohesion within the team is critical to the overall development of Linear. There is the possibility that conflict within the team and/or departure of core personnel may occur, resulting in negative influence on the project in the future.
- Failure to develop: There is the risk that the development of Linear will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any digital asset, virtual currency or LINA, unforeseen technical difficulties, and shortage of development funds for activities.

- Security weaknesses: Hackers or other malicious groups or organisations may attempt to interfere with LINA and/or Linear in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Furthermore, there is a risk that a third party or a member of the Company, the Distributor or their respective affiliates may intentionally or unintentionally introduce weaknesses into the core infrastructure of LINA and/or Linear, which could negatively affect LINA and/or Linear. Further, the future of cryptography and security innovations are highly unpredictable and advances in cryptography, or technical advances (including without limitation development of quantum computing), could present unknown risks to LINA and/or Linear by rendering ineffective the cryptographic consensus mechanism that underpins that blockchain protocol.
- Other risks: In addition, the potential risks briefly mentioned above are not exhaustive and there are other risks (as more particularly set out in the Terms and Conditions) associated with your participation in Linear, as well as acquisition of, holding and use of LINA, including those that the Company or the Distributor cannot anticipate. Such risks may further materialise as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Company, the Distributor, their respective affiliates, and the Linear Finance team, as well as understand the overall framework, mission and vision for Linear prior to participating in the same and/or acquiring LINA.