LAMINA1 Tokenomics & Governance v3.0

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1 Governance of Lamina1

The Open Metaverse is an economic commons, providing for creators, technologists, gamers, fans, enthusiasts and others to come together. Economic commons need currency, and a way to track value, finality of payments, and therefore an understanding of money supply dynamics.

We believe some lessons from modern central banking should be applied in the Open Metaverse. This document lays out how mainnet monetary governance will work for Lamina1.

In brief, the Open Metaverse Monetary Authority (OMMA) will control the inflation schedule for Lamina1. The Open Metaverse Arts Council (OMAC) will control how rewards are distributed among platform creators. The Rewards Contract will control the rewards tokens and replaces stake or proof of work mining.

1.1 Motivation — Why Have A Monetary Authority?

Despite messaging to the contrary, all chains have a monetary authority of sorts, as do almost all economies. Blockchains are particularly interesting macroeconomic spaces in that any participants that want to can make a copy and go about their merry way (a “hard fork”) — this is very different from a national currency — and so power dynamics and governance setups vary from nation-state setups.

Bitcoin is the most stable and ‘settled’ of the existing chains, but even Bitcoin has a group that decides to maintain the inflation schedule and various other promises made by the codebase: this plays out as a tenuous and at times competitive negotiation between large miners and the core dev team. In recent years, this relationship is mostly stable, but there have been times of significant political divisiveness, for instance, the fight over block size, culminating in the Bitcoin Cash fork.

Ethereum has long relied on the Ethereum Foundation to determine its inflation rate, and courted miners and large holders for support of breaking changes in the reward system. The move to Proof of Stake (a change in the reward system) is one that was promised to the community and delivered over nearly a ten year period.

Polkadot uses a board of elected-by-delegated-vote officials for most decisions, delegation being a decision to throw one's tokens behind a certain candidate, and balances this with at least a few foundation-directed seats. The Web3 Foundation (Polkadot’s Foundation) oversaw the rebase of its currency in 2020.

Famously, Tezos promised that all of its governance decisions would be based on ‘people’ not code at launch, and committed to an open process. Tether, on the other hand, has promised to maintain stable balances backing its issuances, and kept control of the protocol private. MakerDAO functions through a combination of boards, some of which set controls around safety and determine what will be lent against, impacting the DAI money supply. Major protocol changes are possible: the MKR token and chain as a whole voted to replace SDAI with what we now call DAI some years ago.

OMMA is an attempt to use over a decade of hard-won practical experience to build an evolutionary monetary governance structure that maintains the best from prior innovations and leans into what actually works in decentralized economies.

1.2 The Open Metaverse Monetary Authority (OMMA)

The Open Metaverse Monetary Authority (OMMA) is the governing body for the Lamina1 token supply. It functions as a central bank, subject to certain restrictions.

Most chains have two forms of central bank controls: token issuance and a “rewards” system — variously, proof of work, proof of stake, stake-mining, and so on. Token issuance is broadly split into total supply, and an inflation schedule.

In most blockchains, founders choose and embed into the genesis block a number of invariants: the inflation schedule, total supply, the rewards system, and the rewards calculations.

In Lamina1, OMMA will control the inflation *schedule*. The Rewards Contract will control the rewards *calculations*. The Rewards *system* is set at genesis, and can be changed by community vote.

OMMA can, on a quarterly basis: update the token issuance for future quarters, and update the unlock rate of all locked tokens.

OMMA will *not* designate or have any control of the reward system used; this will be governed by the Rewards Contract and the Open Metaverse Arts Council (OMAC, see below). Lamina1 codifies a balance of power between governance token holders (the chain as a whole) and the Monetary Authority. Thus, OMMA will set the rewards, the community will vote on their usage through the Rewards Contract.

OMMA will have an elected board. The flavor of the board is intended to be "technocratic and accountable," but the community will ultimately decide its composition.

There are a number of standards and rules baked into the blockchain and smart contracts that OMMA as a whole must follow; these will be the subject of much of this document.

1.3 The Open Metaverse Arts Council (OMAC)

The Open Metaverse Arts Council (OMAC) is the governing body overseeing the economic health and curation of rewards recipients. It will oversee platform curation and incentives around content creation and engagement on Lamina1, and is designed to oversee economic health and curation of rewards recipients, ensuring decisions align with community values and the platform's vision.

The branch will encompass:

- **Project Funding:** Employ a mechanism similar to crowdfunding, where community members can discover specific projects or creators, and learn the information about what they are putting their vote towards, the threshold of rewards needed, and how the rewards are going to be used. Rewards are not paid out if enough votes are not received.
- **Thematic Funding:** Introduce thematic funding tracks that allocate resources to specific types of projects or sectors (e.g., short films, blockchain games, developer tools), allowing for targeted growth and development in key areas and a broader set of individual recipients.
- **Engagement Funding:** Reward creators based on measuring community engagement. This could involve publicizing platform-specific goals (such as purchases, clicks, and trading volume) and employing both on-chain and off-chain analytics to periodically rank and reward content creators based on their contribution towards achieving these goals.
- **Patronage Funding:** Vote on recipients and be rewarded by the recipients, e.g., pre-sell a movie.
- **Retroactive Rewards Campaigns:** Run campaigns to support projects that have established themselves and reward their prior contribution.

As with the OMMA, the Lamina1 platform will enable community election of select OMAC seats using VOTE tokens (see below).

1.4 The Rewards Contract

The Rewards Contract is a list of smart contract addresses, and a score for each. When rewards are issued, the various smart contract addresses on the list will each receive their pro-rata percentage of the reward.

The Rewards Contract replaces: Proof of Work, Proof of Stake, Node Rewards, TVL Rewards, Liquidity Provision rewards, Investment DAOs, and other various structures that chains typically employ for incentives and rewards.

At launch, the Rewards Contract will pay 40% to the Staking Contract, 25% to the Creators Contract, and 35% to a dedicated Ecosystem fund managed by the OMMA, the Lamina1 core team and the Open Metaverse

Foundation that will be used to fund future mergers, partnerships, integrations, and acquisitions for the community and platform.

For more information about Lamina1 launch tokenomics, see sections 3 & 4 below.

2 Separation of Powers

With this history in mind, we propose that:

- The Foundation will choose the overall monetary architecture
- The Monetary Authority has control over inflation, with strict bounds
- The Arts Council has control over creator rewards and curation
- The Community approves the recipients of inflation through the Rewards Contract
- The Community and Foundation together decide the composition of the Monetary Authority and Arts Council

The rest of this document is a summary of how Lamina1 will implement these goals. We pay particular attention to the parts of the decision making that cannot be undone, e.g. what is placed in the genesis block, and what is promised to the world, vs. those decisions that can be changed or updated later. In all cases unless otherwise specified, the right to make changes in the future will be given to L1 token holders whenever practicable.

3 Inflation — Thinking and Controls

The topic of inflation in fiat currency is enormous, and cannot be adequately summarized here, but there are a few key points that are critical to an informed understanding of the role of a monetary authority in a blockchain economy.

3.1 Modern NeoLiberal Thoughts on Inflation

Modern NeoLiberal Banking Theory holds that *some* inflation is good, for two reasons.

First, if deflation occurs[1], then investment in the economy as a whole might cease or be severely curtailed — if a 'risk-free' rate of return can be had by holding money, then the money will not otherwise flow through the economy, and that would be bad for all economic participants that do not hold very much currency. In most capitalist societies, this is the majority of citizenry.

Second, a rising currency value negatively impacts the balance of trade — if locally made goods are more expensive, then it is harder to get foreign purchasers of your goods, and therefore wealth will not increase for local economic participants[2].

It's important to note that these opinions have not been held by all participants for all time. Any large investor who holds significant currency might love deflation — rather than having to work to find returns and de-risk those returns, they could instead sit on their assets and relax.

Almost all agree, however, that *too much* inflation is very bad. Hyperinflation examples from Zimbabwe, Germany, and indeed the United States during the Revolutionary War are clear warnings that inflation getting out

[1] Deflation in this case just means that the native currency's fundamental *value* increases over time. Before, $1 bought one egg. Today, $1 buys two eggs.

[2] Note that this is precisely the value proposition offered by Ethereum L2s like Polygon: in this case, the "good" being sold by Ethereum was blockchain transactions on smart contracts. As ETH rose in value, Polygon offered to do it cheaper through lower underlying costs of the gas token, and less congestion. Defining what additional value such an L2 has, beyond being a cheaper place for transactions, has been an ongoing task for the various L2 chains launched in the last few years, and Ethereum has reacted quickly (by its standards) with innovation designed to lower gas fees on the native chain in the last two years.

of hand can destroy an economy with the power of compound interest quite quickly.

Even worse than high inflation is *unexpected* inflation; if price rises cannot be planned for, businesses and jobs can evaporate incredibly quickly. At some point, hyperinflation turns food, guns and precious metals into deflationary currency — at that point, the economy is sunk and needs to be reset completely.

Eliding much detail, a modern neoliberal central banker might propose that an ideal inflation rate would be to inflate the money supply something like 2% over the underlying economic growth of an economy. This 2% functions, among other ways, as incentive to borrow money and deploy it, boosting the economy through leveraged investment incentives. Tracking the economy as a whole is thus a critical job for central bankers.

3.2 Some Counterpoints from Crypto

While Bitcoin is inflationary (every ten minutes, new Bitcoin are created), the protocol does not evaluate the underlying economic value of the chain in any way — instead, it promises that every 210,000 blocks that are issued, inflation will halve, ad-infinitum. Bitcoiners generally think of this as 'deflation' — in that they propose demand for the currency will outstrip issuance, if not now, sometime in the future.

This is a very different economic promise than a NeoLiberal Central Bank, which basically promises to keep inflation low and prioritize employment. The Bitcoin promise was instead: "These are going to get a lot harder to acquire. No matter how hard, we won't make more." Today's Bitcoin economy is aligned around this promise, and focused together on increasing utilization, and thus demand, for the underlying asset.

Since Bitcoin became publicly known, macroeconomists have been complaining about this promise — it is the opposite of what they expect as a "proper" Central Banking promise. A quick search for "Is Bitcoin a currency or a store of value?" will no doubt turn up hundreds of complaints, which briefly summarized, are: deflation (e.g. price rising of the underlying asset) makes lending impossible, encourages people to sit out the economy, and with the volatility that comes from no central bank management, makes this a terrible currency, a terrible money, and so on.

These theorists are probably correct. However, there is no world in which someone can be told: "Please buy this thing — I promise it will be worth less in five years, and if we all do a great job, it will never deviate from slowly being worth less every year." In other words, most macroeconomists walk or ride bicycles to work, while most early Bitcoiners ride helicopters between their various islands.

Our view is that the macro-economists aren't wrong — about a national currency. Embedded in their view of a money is the rest of the apparatus of the state. When a money is issued by a government, civil and often physical penalties can be enacted to back up its usage. "Use this, it will get less valuable every year, it's for the economy's (and therefore your) own good, and if you don't use it, you'll go to prison," is a more compelling pitch than the first one, but the "prison" part is often left unsaid and unconsidered[3], despite being a fundamental tool of the issuing nation-state.

Today the US has strict controls over "coinage," but very limited ones over "banknotes," continuing to allow issuance of banknotes by private participants as has been possible for at least a century — see for example BerkShares, a local currency used in parts of Massachusetts, pegged to the US dollar in a narrow range and intended only for use in a limited geographical area. In short, voluntary economies that eschew violence need other methods to encourage participants, while still balancing the ills of volatility, too much inflation, and poor re-investment incentives.

3.3 Levers Available on Chain

For cultural and risk reasons, we prefer not to launch a leveraged economy — that is, we don't intend to issue L1-denominated bonds, or privilege "retail" banks by allowing them to overissue L1 that will enter the money

[3] Note that these nation state controls are not just theoretical — those who opted out of the first US currency, issued to fund the Revolutionary War — were killed as traitors in a number of states. The currency had no capital controls and was ultimately burned in bonfires and retired in favor of one issued and personally backed by Robert Morris, A Philadelphia philanthropist and banker. Inflation rates during the war were so high they bankrupted many prominent New England families who, e.g. made the mistake of selling property and dutifully receiving the payment in the young and inflating US dollar, rather than the illegal pound sterling.

supply against reserve requirements[4].

At the time of listing, the Lamina1 token supply will be set at 1,500,000,000 L1, with 50% going to the Lamina1 community via the rewards distribution plan detailed in this paper, 16.1% going to the Lamina1 founding team, 14.7% going to investors, 13.2% going to the Open Metaverse Foundation, and 6% going to community airdrops (including Airdrop ADb, the Hubmania airdrop, and future drops for exchanges, market makers, and community members participating in building, creating, testing and questing on the platform).

How should these 1.5 billion L1 tokens be released into the economy, balancing supply and demand and needs of all participants? We look to the levers chains have successfully and unsuccessfully used so far.

1. Issuance — How many tokens are issued over time
2. Vesting — This is generally applied to team and insiders as a way to make sure they don't 'dump' and sell into the market too much of the money supply, driving prices down
3. Asset Backing — Various methods have been explored here, from non-crypto asset-based (USD, Commercial Paper, Vague Promises) to on-chain asset based (ETH backing DAI), with programmatic and non-programmatic arbitrage available
4. Voluntary Locking and Rewards Systems — Staking, locking, liquidity provision rewards on centralized and decentralized exchanges, and tracking of TVL are all "carrot" type incentives to encourage participants to keep their tokens out of liquid markets, and thus, it is hoped, not add to downward volatility by selling at inopportune times

All of these have merit as strategies. Some can create unusual incentives, and need to be carefully monitored. At launch, we intend to deploy these levers as follows:

750,000,000 L1 will be allocated to the rewards pool for future staking, community, creator and validator incentives, with an additional 90,000,000 set aside for upcoming airdrops. 241,500,000 L1 will be distributed to Lamina1 founding team members, and 220,500,000 L1 will be issued to early investors in the project. The remaining 198,000,000 will be deployable by the Foundation.

OMMA will have control over issuance and vesting.

VOTE tokens will have limited control over Voluntary Locking and Rewards Systems through the Rewards Contract.

Early investors will be subject to a 9-month cliff for their L1 tokens.

The Lamina1 founding team and advisors will be subject to a cliff of 12 months.

4 Genesis Block – L1 at Launch

On Lamina1, Reward Tokens are the equivalent of "Block Rewards", "Node Rewards," or "Proof of Work Rewards," or "Stake Rewards," in other systems.

At launch, 500mm L1 were minted to wrap into Rewards L1 or RL1, and 500MM L1 were minted to wrap into Launch L1 or LL1[5] on the Lamina1 genesis block.

A recent update to platform tokenomics prior to the L1 token listing will now increase that supply to 750MM RL1 and 700MM LL1. The remaining 50MM L1 tokens will be allocated to the Foundation as a strategic reserve

[4] Note that the chain is permissive and open, and nothing would stop a "bank" from issuing its own leveraged L1 tokens, making various safety promises — but this is not, in our opinion, the best path for the chain, the Foundation, or the OMMA, and we will not extend the ability to call such things "L1 tokens" or have them be a part of the fundamental gas token of the chain. In Central Bank terms, we are committing to a maximum M0 for L1 of 1.5 billion tokens.

[5] Of the LL1, the Foundation will have the discretionary power to unlock up to 10% of these tokens (up to 50M) for strategic investment in the platform, and to power platform operations such as gas fees, partner subsidies, onboarding costs, etc.

to fund future Foundation/OMMA operations, partnerships, and creator programs/incentives.

Of the Foundation's token pool, ~216K liquid L1 and 26.9MM LL1 have been distributed so far to early members of the Lamina1 community in a series of pre-launch airdrops, bonus rewards, and creator onboarding incentives.

Moving forward, LL1 Reward tokens will be distributed to partners, team members, partners and community members, and held back for the Foundation to finance future development of the chain.

The remaining Reward Tokens will be placed in a locked wrapping contract, which will issue RL1 ERC20 tokens a.k.a — Reward L1 tokens to those who stake, validate, build, or participate in various builder/creator initiatives on the network.

Long-term, this means over 60% of the entire Lamina1 token supply will go back into the ecosystem and creators and developers in some way, via block rewards, foundation ecosystem grants, builder initiatives and beyond.

5 Rewards Contract, STAKE and VOTE Tokens

The Rewards Contract will rely on the Staking Contract to facilitate the distribution of rewards to Lamina1 community members for holding their tokens, and a combination of OMMA and the Voting Contract to make changes to its list of destination addresses. Initially, the Lamina1 Hub platform will launch with just staking, followed by the release of voting on the network 90 days after. We believe the Rewards Contract is a significant innovation and improvement over existing rewards systems, and we hope it will be a model for future chains. In short:

1. The Rewards Contract holds RL1.
2. The Contract knows how long is left in its current period.
3. On a call to claim, it will calculate how many RL1 it has access to as of the block timestamp, and transfer RL1 to each smart contract in the Rewards list, pro-rata to their score.
4. Claim distributions only go to the top *n* recipients. At launch, *n* is set to 5, but the number will be scaled up during the first quarter of the chain's life, at the discretion of the Foundation. It is unlikely to exceed 20 in the first years of the chain's life.
5. An address could be a smart contract or an account address. If it is a smart contract, it is advised that the contract be able to call functions on the Rewards Contract and the LL1 contract, or tokens will be lost. Audited contracts may apply to be considered RL1 Senders if they have a use case that requires they distribute RL1 out to other participants.

5.1 Staking Contract

In addition to the RL1 they receive for staking over time, whenever a builder or creator on Lamina1 "locks up" their L1 tokens via staking, they will instantly receive a set amount of STAKE and VOTE tokens (see below). STAKE tokens enhance your rewards earning power based on a *day's locked methodology* — meaning, the more tokens, and the longer you stake L1, the higher your rewards earning potential.

STAKE tokens only earn rewards while you are staking the L1 you initially used to receive them. These tokens are soulbound and cannot be transferred between network participants. They have no bearing on your voting power on the network.

5.2 Voting Contract

The voting contract will issue ERC20 VOTE tokens that represent voting power in the network. As with STAKE tokens, whenever a builder or creator on Lamina1 "locks up" their L1 tokens via staking, they will instantly receive a set amount of VOTE tokens that can be used to weigh in on OMMA and OMAC elections, creator

grants, builder initiatives, and other key platform decisions on Lamina1.

As with the Staking Contract, the Voting Contract will work on a *day's locked* methodology. It will implement support for *financial* and *non-financial* voting, and VOTE tokens will be distributed instantly to anyone who stakes on the Lamina1 network.

At launch, the Rewards Contract pays rewards to Stake Contract participants. Votes may influence the payout amounts.

VOTE tokens are soulbound and cannot be transferred. Holding VOTE tokens will no longer affect your earning potential on Lamina1.

5.3 Voting Rules

Staking will launch first on Lamina1, followed by the launch of voting and governance 90 days after the initial staking period.

In this new system, voting will operate independently of staking to allow participants to engage in governance without compromising financial benefits. We anticipate that OMMA will be given the power to propose changes to the Rewards Contract recipients and the community will be given the power (via VOTE) to approve/veto those changes. The new system and Lamina1 governance platform will also provide clear information to voters about the proposals they are voting on in the UI.

We also aim to extend governance mechanisms to non-financial voting and to include engagement metrics, allowing a diverse range of participants to influence decisions. This system is designed to enhance transparency and accessibility to empower all community members, ensuring equitable influence regardless of joining time. We look forward to community inputs as we continue its development.

5.4 Unlocking and Issuance Rates

The OMMA will vote quarterly on the following numbers:

1. The unlock rate for LL1.
2. The unlock rate for RL1.
3. The issuance rate for RL1 as a percent of remaining.

At Genesis,

1. The unlock rate for LL1 will be 5% per quarter.
2. The unlock rate for RL1 will be 10% per quarter.
3. The issuance rate for RL1 will be 10% per quarter of remaining.

Thus, for example,

1. Of the 32.5MM community tokens airdropped (LL1), 1.625MM L1 tokens will be unlockable in the first quarter
2. Of the 750MM RL1 tokens issued, 75MM RL1 tokens will be sent to the Rewards Contract

3. Of the 30MM RL1 tokens sent to Stakers via the rewards contract, 3M tokens will be unlockable in the first quarter

   18.75MM RL1 tokens will go to the OMAC contract — of which 1.8M will be unlockable in the first quarter

   26.25MM RL1 will be tokens sent to the Foundation's Ecosystem reserve fund — of which 2.6MM will be unlockable in the first quarter.

This initial setup provides rewards to participants who lock tokens; they gain the ability to multiply their earning

power, and eventually vote on future changes for the chain, but give up other utility and economic benefits; the chain specifically rewards this behavior.

6 OMMA Details

6.1 Mandate — Unchanging Values, Self-Improving Processes

Implementing any new governance system is an iterative process; thus it is expected that rules, norms and restrictions will continue to evolve after announcement. The OMMA will not, by charter, be allowed to deviate from the following core rules:

1. Its mandate is to ensure a broad distribution of wealth across economic participants through the encouragement of fundamental economic activity and the discouragement of speculative or other activity that harms traditional economic participants.
2. It must commit to executing the above mission with the utmost integrity and transparency (where possible).

6.2 Governance and the OMMA/OMAC Boards

There will be four seats on the Open Metaverse Monetary Authority board. The first two seats will be announced and appointed the day of the L1 token listing. One seat will be appointed by the OMF at the sole discretion of the Foundation's board and begin each calendar year as the Chairman Pro-Tem. One seat will be appointed by a member of the Lamina1 core team.

The third seat will be elected by the community alongside the launch of voting within 90 days of the L1 token listing. One additional seat will be elected by the community one year from the listing date. All seats elected or appointed to the OMMA board will serve three year terms.

Foundation/Chairman Seat	Day 0; appointed
Core Team Seat	Day 0; appointed
Community Seat #1	Q1 2025; elected
Community Seat #2	Q4 2025; elected

The OMMA shall use broad discretion to fulfill its mandate, but shall be bound by the bylaws which are laid out in broad strokes in this document. At all times, the OMMA will be guided by the principles of transparency, fairness, and the long-term health of the chain, and will take into account the statistics around the monitored activities on-chain.

In Q1 2025, once the first two OMMA seats are filled, the board and Foundation will work toward defining a more formal governance plan and board structure for the Open Metaverse Arts Council. The OMAC will then host its first community-wide election in Q2 2025.

6.3 Monitored Activities and Economic Assessment

The fundamental goals of the OMMA money supply management are to ensure a broad distribution of wealth across economic participants through the encouragement of fundamental economic activity and the discouragement of speculative or other activity that harms traditional economic participants.

At minimum, therefore, this places responsibility on OMMA to monitor the following economic activities:

` 1. Trading at centralized, private, and decentralized venues.

2. Pricing depth at these venues.

3. Economic activity on the chain as a whole, including:

Transaction volumes

Gas fees paid

Value of issued tokens hosted by the chain

L1 Price movement

Additionally, the OMMA must look out for and fight against currency speculators, those aiming to 'break the bank' or create downward spirals in price, harming the economy as a whole. Many of the tools central banks use to fight off speculative runs are harder to deploy on-chain; in particular, break points for leverage are easily inspectable on-chain. In traditional central banking, this information is often split between multiple private participants, and not easily inspectable by speculators. The rise of large-scale anonymous flash loan facilities also allows participants to move significant capital toward price decreases for those who are not "long" the currency, adding somewhat unique risks.

Not all of these problems are solvable, but many can be mitigated through good policy, communications, money supply and contractual agreements.

Note that OMMA does not believe principled shorting of a money to be wrong; shorts have a place in efficient discovery of pricing. However, any modern money system on-chain or not, brings with it a large array of difficult to understand leverage and risk points for ordinary participants. We believe we should insulate ordinary participants from surprising negative impacts of systemic leverage.

6.4 Elections

OMMA Elections will take place every two years. On-chain ranked preference voting will be used to select two winners.

On winning, each winner must pass general background and suitability checks. These suitability checks will be at the sole discretion of the OMMA board. The board will generally reject "influencers," nation-state employees, power-brokers and others who seem to be most interested in self promotion. If rejected, the board must then evaluate the next preferred candidate from the voting. If no suitable candidates are found, then a second election will be held. If no candidates from the second election are suitable, then the top ranked candidate with no felony convictions from either of the first two elections must be chosen by the board.

Candidates may represent a block, faction, DAO, AI-informed or other interest group, providing that they follow the bylaws and values of the Monetary Authority.

6.5 Votes of No Confidence

Any board member except the OMF-appointed member can be removed

1. By a vote of No Confidence of three or more out of six total board members. If there are not six total board members, then a member can resign, but may not be removed in this way.
2. By any two other members, if that member has not countersigned the two prior quarter money supply updates in a timely fashion.

6.6 OMMA Rate and Unlock Guidelines

These guidelines are directional in nature and are intended to be a starting point for the OMMA. They are not permanently binding, and the OMMA and Foundation may choose together to update them. Bylaws and rule changes must be noticed to the public 100 days or more before they take effect.

The RL1 and LL1 unlock schedule will be chosen by the OMMA on a quarterly basis, subject to the following guidelines:

1. LL1 quarterly unlock rate: 0% to 8% of issued LL1
2. RL1 quarterly unlock rate: 2.5% to 15% of issued RL1

3. RL1 quarterly issuance: 2.5% to 25% of remaining RL1
4. RL1 and LL1 shall not adjust more than 1.5% from previous quarter
5. Unlock rates for LL1 and RL1 shall be limited if liquidity on major exchanges, trading volume, transaction volume and price have all declined the prior two quarters.
6. Unlock rate changes and schedules shall be announced publicly on the Lamina1 Hub platform, social, and community channels before any changes are made
7. No changes shall be made outside the notice and update window, the period 14-21 days before the end of a quarter.

In this way, the OMMA can respond to contractions in the market or overexuberance. The list of rules may be changed using the typical OMMA governance rules. No rule changes can take effect more quickly than 100 days from the initial request for comments.

7 Token Contract Details And Architecture

7.1 LL1 and RL1 contract

These contracts are the same underlying code with slightly different permissions. They include typical wrapping functions and the custom functions allowing for unlock rates to be set.

The smart contracts will implement the following rules:

- LL1, STAKE, and VOTE tokens can only be transferred to or from the Foundation.
- Only RL1 Senders — at launch, The Foundation, the Rewards contract, the Staking Rewards address, the OMAC address and the VOTE contract — can transfer RL1.
- LL1 and RL1 can be unwrapped to L1 on a schedule that calculates the unlock rates applied to the current period. Unwrapping calculations update each second.
- For safety reasons, RL1 will not receive all 500mm L1 at launch; instead, it will be filled up with sufficient L1 to support unwrapping on a weekly basis until a new schedule is chosen. We anticipate lengthening the schedule over the first few quarters with a goal of locking all 500mm in a calendar year from launch.

7.2 OMMA Contract

OMMA will have an m-of-n multisignature wallet which will be granted the ability to make rate and unlock changes on the various smart contracts governing token issuance for Lamina1.

Once the OMMA contract is deployed and added to RL1 and LL1 contracts, the Foundation will not easily be able to update it. In the event that OMMA wallet is not used for a period of time, the Foundation will be able to update the OMMA wallet with a new multisig wallet, but only after a cooling off period. The smart contracts can function without updates by OMMA, carrying forward the prior rates into future periods. # Appendix A: Node Operator Contract and OMAC Contract

At the launch of Mainnet, the Foundation will manage a StakingRewards wallet, and an Open Metaverse Arts Council wallet. Both of these wallets will receive RL1 tokens from the Rewards Contract, and will be allowed to send on the RL1 tokens to appropriate destinations — at beginning, some of these transfers will be manual, but over time, we intend to cause programmatic distribution through smart contracts.

Over time, the Staking contract will be enhanced to programmatically reward node operators for uptime and performance, and slash them for poor performance, or SLA misses. Implementing these rewards in Solidity offers unique opportunities for novel and improved incentivization, and we look forward to developing this system over time.

We encourage the community to self-organize around deploying the OMAC tokens to the best and most impactful uses for the chain. The Foundation will be available to help with technical and financial support for these projects, and can advise on the setup, structure and governance. We are inspired by a number of modern

investment infrastructure ideas coming out of the last wave of DAOs, and hope to see some of these ideas implemented on Lamina1.

8 Appendix — Possible Uses For The Rewards Contract

The programmability of the Rewards Contract combined with Staking and Voting open up a large number of possibilities for incentive rewards. Some possible uses include:

- One could implement Bitcoin's Proof of Work very simply, by paying out to those who can deliver hashes of block headers smaller than the desired difficulty in a small amount of code.
- One could implement various Proof of Stake systems and allow preferred systems to win out over time based on voting.
- ZK: Generalized non-interactive ZK proofs could be used as bases for a number of scoring systems, including proof of storage, proof of compute, proof of portability of objects.
- Proof of Voting: Payment could be made pro-rata to those who provably voted in the prior quarter's nonfinancial voting.
- Incentive Yield: RL1 Tokens could be paid to, e.g. a Stable Coin smart contract boosting underlying assets or providing yield to holders. This sort of incentivization could be deployed to any individual address or smart contract.

We are excited to see what the community comes up with, and look forward to seeing the first independent smart contracts being voted into the rewards infrastructure.