

Ascendia Network Whitepaper

Version 1.0

April 2025

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Introduction and Mission:

Ascendia is a Layer 1 blockchain ecosystem designed for the era of autonomous AI agents. It is a space where technology is rising to a new form - free, private and global. Ascendia is not just a network, it is a conscious platform standing at the boundary between human and machine evolution.

Main ticker: \$ASC

Secondary Token Ticker for AI Launchpad: \$AIA

Ascendia is built for AI. At its core, the network is optimized to support AI agents that can autonomously interact with smart contracts, execute on-chain tasks, and facilitate decentralized decision-making.

Our mission is to create an infrastructure for autonomous AI agents that protect privacy, enable digital independence, and allow everyone to participate in the global economy - without borders, intermediaries, or centers of influence. Ascendia is not just infrastructure. It is a platform where intelligence ascends — and belongs to everyone.

Ascendia aims to be there in everyday life - helping normies to manage crypto assets, degens to automate financial routines, analysis, etc, and newbies to enter the world of Web3 and artificial intelligence with ease. It's a network where intelligence works for you - regardless of your background, level of expertise, or digital experience.

This whitepaper serves as a primer on the state and design of the Ascendia Ecosystem, detailing its development and future trajectory. Here is a breakdown:

Section 1, *The Ascendia Blockchain*, focuses on the technical specifications of Ascendia, particularly in relation to Ethereum.

Section 2, *\$ASC Tokenomics*, outlines the upgraded economic model that sustains the ecosystem.

Section 3, *The AI-Powered Ascendia Ecosystem*, explores the integration of AI agents and the AI Agent Marketplace.

Section 4, *The Future of Ascendia*, provides an up-to-date roadmap for scaling the network and expanding its AI capabilities over the next decade.

Section 1: The Ascendia Blockchain:

The Ascendia blockchain was created to enable a high throughput of transactions at a low cost, making it ideal for AI-driven automation. This design is built around a Proof of Authority (PoA) consensus mechanism, supported by 69 validators designated as Beacons, and smart contract development in the Solidity programming language.

Section 1 outlines the technical functionality of the Ascendia network, covering its PoA network design, block production, transaction fees, gas costs, and block rewards. In addition to these foundational elements, Ascendia has been architected to support AI-driven smart contracts and autonomous agent execution. This includes optimized gas models for AI agent interactions, specialized contract structures for AI-to-AI transactions, and real-time learning mechanisms that allow AI agents to adapt based on blockchain data.

With the AI Agent Marketplace, developers and businesses can launch and monetize AI-driven applications that operate seamlessly within the blockchain ecosystem. Whether for automated trading, predictive analytics, supply chain management, or governance automation, Ascendia is the foundation for a decentralized AI-driven future.

1.1 Why Use Ascendia

Artificial Intelligence is rapidly becoming the most powerful technology of our time — yet it is increasingly monopolized. Today's AI is dominated by corporate APIs, proprietary models, and permissioned systems. These black boxes are opaque, unaccountable, and centralized by design.

Users have no sovereignty over the intelligence that affects their lives.

- ❖ **You cannot own an agent.**

- ❖ **You cannot verify what it knows.**

- ❖ **You cannot shape how it acts.**

In this paradigm, AI does not empower — **it controls**.

Even as AI tools proliferate, their accessibility remains limited. Crypto-natives have no trustless way to run autonomous agents on-chain. Degens lack tools that automate daily tasks with real intelligence. Normies are alienated from Web3 by complexity, jargon, and unsafe UX. There is no native infrastructure where AI agents can live, evolve, and serve humans with full transparency, ethics, and economic alignment.

Layer 1 chains today were built for assets and contracts — not for **intelligence**.

They have many limitations such as:

- ❖ No native AI support, high fees, not agent-centric

- ❖ Fast, but designed for finance — not intelligence

- ❖ Modular, but lacks standardized AI agent runtime

- ❖ Not programmable

Blockchains today are **passive** ledgers. They do not host **living**, evolving, autonomous agents. They do not understand **context**, **intent**, or **agency**. As the world grows more complex, users need more than apps — they need intelligent extensions of themselves:

- ❖ AI wallets that manage assets with consent
- ❖ AI proxies that handle governance voting
- ❖ Personal agents that protect privacy and handle online interactions
- ❖ Agents that can earn, learn, and interact on behalf of individuals and DAOs

This is not science fiction — this is the next UI layer of the internet. For this to happen, a new kind of blockchain is needed — built natively for AI-agents, not retrofitted around them.

1.2 Beacons and AURA Consensus

Ascendia is built on the OpenEthereum client and uses the AURA consensus algorithm, a variant of Proof of Authority (PoA). On Ascendia, the larger the amount of \$ASC staked, the more likely your node will be chosen to validate blocks. This will result in a reward for the validator. Validators are selected based on the size of their stake rather than pre-approval. If your stake surpasses that of other validators, you take their place in the block production process. This automated system ensures a dynamic and competitive environment, making it ideal for scaling AI experimentation, where adaptability and efficiency are key.

To run a Beacon on the Ascendia network the following other conditions must be fulfilled: 1) The validator node must be in the Top list (this list is officially called the *Validator_set*). The size of the number of nodes in the Top List is regulated by the Ascendia Council via a shared multiSig (currently there can be 69 validators). 15 of these validators are base nodes run by Ascendia, 19 of these nodes are reserved for DeFi to support products like Hopeum, and 35 nodes are exclusively reserved for the Ascendia community. Upon acceptance, 2) Validators are placed in the Top List by the size of the node stake, the bigger the stake, the more likely you are to remain a validator (the bigger stake is equal to the bigger reward for the block round, where block round is equal to the number of active validators). In the event that all of the seats in the top list are filled, and the stake of a node is smaller than that of a node with a smaller stake from the top list, then such a node will be placed in the 'queue'.

1.3 Block Production and Transaction Fees on Ascendia

*'The Ascendia Network currently has **over 69 validator nodes live on the network**, and an **average block time of 5.242 sec.**'*

The AURA consensus validation mechanism ensures that block production remains fast and consistent, with signers selected in a round-robin fashion, allowing each to create a block within a specific time frame. As all 'signers' on Ascendia are permissioned and hold a significant stake on the network, there is little risk that block production defaults on Ascendia. In its half a decade of uptime, Ascendia has consistently operated with 24/7 uptime.

Transactions that change the state of the Ascendia blockchain need to be broadcast to the entire network. Any node can broadcast a request for a transaction to be executed on the network; once this happens, a validator will execute the transaction and propagate the resulting state change to the rest of the network.

1.4 Gas Fees on Ascendia

In all transactions broadcasted on the Ascendia network, Gas is a reference to the computation required to process the transaction by a validator. The gas fee is the amount of gas used to perform an operation, multiplied by the cost per unit of gas. On Ascendia this fee is paid in the network token \$ASC (discussed in detail in Section 2), regardless of whether a transaction succeeds or fails. Gas bidding enables users to set higher amounts in fees, for a stronger guarantee that their transaction will be processed in the next block.

The base fee is set by the protocol—you have to pay at least this amount for your transaction to be considered valid. The priority fee is a tip that you add to the base fee to make your transaction attractive to validators so that they choose it for inclusion in the next block. A transaction that only pays the base fee is technically valid but unlikely to be included because it offers no incentive to the validators to choose it over any other transaction.

1.5 Block Rewards on Ascendia

Block rewards on Ascendia adjust dynamically based on network participation. This mechanism serves as a lever to increase or decrease validator rewards, making it more attractive to run nodes when network engagement is low and balancing incentives when engagement is high. As more of the circulating supply is staked or locked in smart contracts, the block reward scales accordingly to encourage participation and secure the network.

1.6 Network Mechanics and Development on Ascendia

Smart Contracts on Ascendia are deployed using the same tools and methods [as on Ethereum](#), with a couple of important exceptions: **All Gas** is paid for in \$ASC, and running a smart contract requires access to an **Ascendia Beacon**. This can be done by running your own node, or connecting to an existing node. The suite of Ethereum developer tools for smart contract deployment, including [Hardhat](#), [Foundry](#), [Remix](#), [Tenderly](#), [Third Web](#), and [Cross Mint](#), can all be utilized for deploying smart contracts on Ascendia.

Section 2: The \$ASC Token

The utility token of the Ascendia Network is known as \$ASC. This token is used to interact with the Ascendia blockchain and as block rewards for validators securing the network. This section focuses on \$ASC token mechanics, by outlining its utility, supply and demand mechanics, as well as long term issuance plans.

2.1 \$ASC Tokenomics

The \$ASC token is the native utility token of the Ascendia ecosystem, powering the Ascendia blockchain. \$ASC is used for 3 specific purposes within the Ascendia Network:

1st - Medium of Exchange:

\$ASC serves as the primary medium of exchange within the Ascendia ecosystem. It is used to pay for the gas fees necessary to execute on-chain transactions, ensuring the smooth operation of the network. \$ASC powers the Ascendia Network as its base L1 utility token.

2nd - Store of Value:

\$ASC was built with a robust token economy that is designed to maintain the value of \$ASC for the foreseeable future. While the token does have inflation, these additional tokens are used to support the network through validation rewards and ecosystem treasury/liquidity. Eventually, inflation will reach a 0.5% floor and the \$ASC supply will be ~20 billion tokens. This ensures the token is able to support the ecosystem while having a soft cap to guarantee scarcity.

3rd - Utility token for Staking and Rewards:

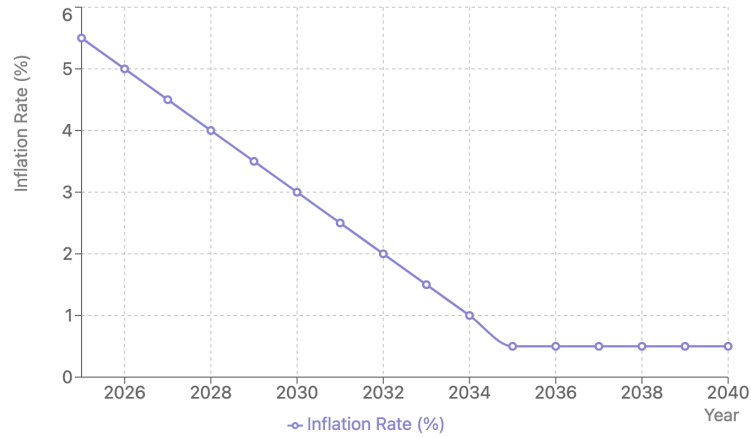
\$ASC is used to secure the network through staking in validator nodes. Both node operators and users can earn rewards for participating in \$ASC staking.

Ascendia (ASC) tokenomics is built around the sustainable management of a base L1 platform, which functions as the engine of growth for a layer of decentralized and AI-agent based applications on top of the Ascendia L1. From a 1,000 foot view, this tokenomics focuses on the core parameters of a sound tokenomics system: Starting supply, annual inflation and distribution, deflationary parameters, and expected supply over time. Validators, ecosystem builders, and the core team have developed the Ascendia tokenomics as a mechanism for both building out the ecosystem and safeguarding the future potential of the ASC token.

Supply Parameters and Inflation Distribution

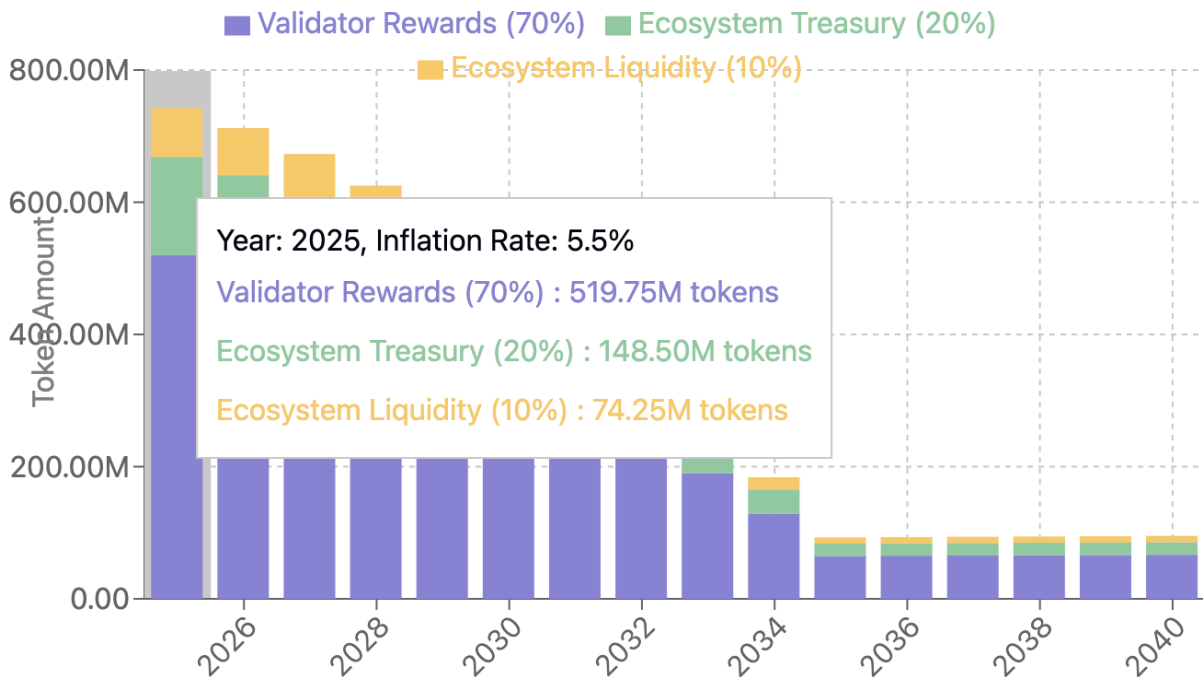
The Ascendia token (ASC) has an initial total supply of 13.5 billion tokens. Of those 7 billion ASC are reserved for ecosystem development, team, and liquidity incentives for ensuring liquid markets for the trading of ASC. 6.5 billion ASC meanwhile, sit in circulation as there will be no TGE for ASC.

The inflation rate set for ASC begins at 5.5%, and drops incrementally 0.5% each year, until it reaches a terminal rate of 0.5% set for the year 2035.



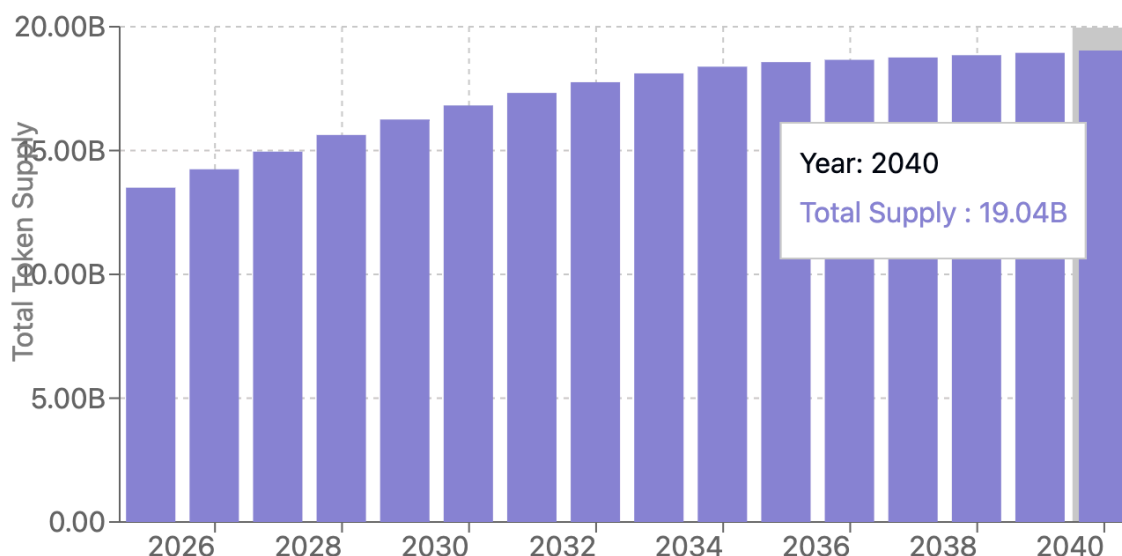
- Starting at 5.5% in 2025
- Decreasing by 0.5% annually
- Reaches terminal rate of 0.5% in 2035
- Maintains terminal rate through 2040 and beyond

The inflationary distribution annually, is distributed across three parameters: 1) Validation Rewards - set at 7%, 2) Ecosystem Treasury - set at 2% and Ecosystem Liquidity - set at 1%.



The focus of ecosystem liquidity is specifically to ensure that tokens launching on top of ASC have the capacity to launch, trade, and grow with base-layer liquidity.

The expected token supply of ASC will incrementally increase over time to arrive at a steady state of 19.04 billion ASC tokens over a 15 year period.



Notably, these parameters are fixed, and have been implemented to ensure that builders and participants in the Ascendia Ecosystem can benefit from a truly decentralized and permissionless tokenomics system that they can rely upon for network security, ecosystem incentives, and ecosystem liquidity needs.

Deflationary Parameters:

The core deflationary parameters of \$ASC revolves around transactions on the Ascendia Layer 1, as well as the agentic economy built on top of the ASC network. As agents and users interact on the Ascendia Base layer, tx fees will burn more ASC out of existence, permanently.

ASC Tokenomics Overview:

Initial Circulating Supply: 13.5 billion ASC.

Target Total Supply: Unfixed.

Initial Annual Inflation: 5.5%.

Annual Inflation Decay: 0.5% each year.

Inflation Rate Floor: 0.5%.

Inflation Distribution Overview:

70% of new tokens go to validators (securing the network),

10% of new tokens go to liquidity incentives,

30% of new tokens go to an ecosystem treasury

Section 3: The AI Powered Ascendia Ecosystem

Ascendia has existed as an open permissionless ecosystem for more than five years. This section focuses on existing developer tools inside of the Ascendia ecosystem, as well as ecosystem tokens and projects currently being developed on Ascendia.

3.1 AI Agent Architecture

Ascendia is a sovereign Layer 1 blockchain, custom-built for the age of autonomous intelligence. Ascendia is designed for:

- ❖ High-throughput, low-latency finality
- ❖ Scalable agent execution environment
- ❖ Modular architecture to support upgrades and experimentation
- ❖ Built-in privacy-preserving computation and coordination
- ❖ Native support for agent identity, agency, and interoperability

At the heart of Ascendia lies the Agent Layer — a specialized runtime environment for deploying, verifying, and evolving AI-agents. Some of its core features are:

- ❖ On-chain agent identities (soul-bound or transferable)
- ❖ Modular agent containers (for different use cases: finance, governance, communication, etc.)
- ❖ Agent actions as transactions: agents can act on-chain as first-class actors

❖ Multi-agent coordination logic — agent-to-agent protocols for social intelligence

In Ascendia, AI agents work directly for users, seamlessly integrating into daily life. These intelligent agents monitor on-chain activity, optimize financial strategies, automate bill payments and subscriptions, and manage budgets, taxes, and reporting. Acting as digital concierges, they handle scheduling, reminders, and tasks, making AI an essential part of everyday interactions for crypto-natives, degens, and newcomers alike.

Beyond personal finance, Ascendia enables fully autonomous DeFi interaction. Users can deploy rebalancing bots, yield-maximizing agents, and AI underwriters for risk assessment and micro-loans. Smart wallets and liquidity providers operate based on predictive models, removing the need for constant manual input. This automation makes DeFi more accessible, intelligent, and efficient. To help users manage all these operations, AI agents will be integrated into the upcoming Ascendia Wallet. This Wallet will act not only as a base for your portfolio, but a command center for your deployed agents. Full announcement will be revealed at a later date.

AI agents also extend into the physical world, managing IoT devices, smart locks, and drones. Embedded into cars, homes, and smart city infrastructure, they optimize security, logistics, and energy use. Logistics agents streamline supply chains, while AI-driven reputation and identity systems enhance real-world commerce, embedding AI seamlessly into human environments.

Ascendia includes a decentralized registry of all deployed AI agents, providing public profiles, metadata, and reputation systems to ensure trust and transparency. Ownership mapping and permission controls allow for secure interactions, while discovery interfaces enable seamless integration between users, protocols, and other agents. This framework makes AI agents visible, composable, and reliable within the ecosystem.

For developers, Ascendia provides a framework to launch AI-driven products and services on-chain. Builders can create customer support agents for dApps, blockchain analysts, discovery engines for NFTs and governance, and compliance tools for enterprises. Open-source libraries enable further innovation, positioning

Ascendia as a foundation for decentralized AI-powered applications that push automation, intelligence, and blockchain integration to new levels.

3.2 Building on Ascendia

Building on Ascendia is similar to Ethereum with a couple of important caveats: There are currently a number of open-source documentation repositories detailing how to deploy a smart contract, run a node, bridge assets onto Ascendia, and set up a wallet. From an infrastructure perspective Ascendia is readily accessible with a number of key integrations into the ecosystem:

1. **Bridge Infrastructure:** The Ascendia <> Ethereum, Ascendia <> Solana and Ascendia <> Binance Smart Chain Bridges are all live, and enable the movement of assets and data between the two ecosystems. This means as Ascendia grows from a small community run ecosystem in the coming years, it can benefit from Ethereum liquidity and users.
2. **Stable Coins on Ascendia:** A Native USDC integration with Ascendia means that a well respected stable coin provider can be utilized by builders, community members, and partners within the Ascendia ecosystem. Stable coins have been identified as one of the first 'killer dApps' of crypto, enabling liquidity and increased traction for dApps.
3. **Liquid Staking Primitives:** Staked ASC (sASC) is live on Ascendia enabling the staking of \$ASC in return for a liquid version of the asset. This is another core piece of DeFi and fundamental infrastructure that helps position the ecosystem towards future growth.

All four of these core infrastructure pieces, coupled with a number of developed Gitbooks, makes the Ascendia network a fully equipped ecosystem for builders and developers to inhabit when building their next Web3 application. The vision surrounding this ecosystem infrastructure is one of long term development: Building an ecosystem with millions of users will not happen in five or even ten years, but creating the basic infrastructure to enable assets and users to engage with the ecosystem is the first step in advancing this vision.

3.3 Ecosystem Products and Tokens:

Beyond providing core infrastructure in the form of developer kits, bridges, and stable coins, Ascendia has invested in the development of core application primitives for future teams and developers to benefit from. Three of these core primitives are designed around making Ascendia a DeFi oriented ecosystem with the capacity to handle new token launches, the flow of assets between different stakeholders, and to launch Ascendia native tokens. Together these three products make up the Starfleet Ecosystem initiative of 2024 - a core strategy of the Ascendia council.

Astra: DEX

Trading and barter are financial tools of every emergent economic system. Astra is the product on Ascendia to enable both limited and deep liquidity trading between assets on Ascendia. Astra facilitates trading through DEX liquidity pools, offering both single-sided and double-sided liquidity options. The focus on building a core ecosystem DEX and DeFi primitive on Ascendia is two fold: 1) Such a product helps jumpstart DeFi on Ascendia with native support for ASC token pairs, 2) Such a product ensures that any user in the Ascendia ecosystem can create and exchange an asset with or without liquidity - a core prerequisite for incentivizing the movement of assets inside of Ascendia.

The native token of Astra, \$AST serves a variety of uses on the platform. These include: Staking, Governance, and accessing treasury based liquidity. \$AST is a second Ascendia Native token expected to launch soon in the Ascendia ecosystem.

Hopeum: Liquid Staking on Ascendia

Hopeum is a liquid staking platform built for staking \$ASC and receiving staked ASC or \$sASC. Through the issuance of \$sASC, a liquid staking derivative such that users can maintain their liquid ASC, while also receiving a yield from the Ascendia Network. The native token of Hopeum, \$HBR, is also Ascendia Native. The token utility is built around governance of Hopeum over time as well as the remuneration of fees to different Beacons.

Rodeo:

Rodeo is a memecoin launchpad that allows users to create, trade, and manage tokens on the Ascendia blockchain. The platform simplifies the process of launching new tokens by handling smart contract deployment, liquidity provisioning, and initial distribution. The platform is designed to make token trading accessible while ensuring transparent and permissionless transactions. Once a token graduates from Rodeo (must reach 1,000,000 \$ASC marketcap) it is listed on Astra Dex.

A key feature of Rodeo is its AI trading agents, which help users automate buy and sell orders based on predefined conditions. These agents can execute stop-loss orders to limit losses or buy tokens when specific price conditions are met. Users can also customize trading strategies with additional parameters such as volume triggers and time-based execution. By integrating AI-driven automation, Rodeo allows users to interact with the market more efficiently while reducing the need for constant manual oversight.

Altogether the Ascendia ecosystem is developed around offering builders essential infrastructure such as bridges, stable coins, and exchange listings, with core ecosystem products that can jumpstart the launch of new tokens in Ascendia, the movement of assets between stakeholders, and the availability of core financial services.

Section 4: The Future of Ascendia

Web3, as the third layer of the internet, remains an untapped frontier in its early infancy. The Ascension Network is uniquely positioned to democratize and scale blockchain technology through its novel approach to AI-driven decentralization. Ascension is more than just a Layer 1 blockchain—it is an ecosystem designed specifically for the future of AI agents, ensuring user privacy, autonomy, and global economic participation across both digital and physical realms.

As a fully decentralized, highly functional L1 listed on top exchanges, Ascension is built with essential DeFi primitives and an expansive roadmap that prioritizes three fundamental pillars of Web3:

Phase I: Ascent: Foundations and Infrastructure for an AI Agent Future.

- ❖ **Botpad:** A launch pad for AI Agent tokens. Easy, fast, and meant to bring together token enthusiasts looking to get exposure to cutting edge agents launching on the Ascendia network.
- ❖ **SOL Bridge:** A liquidity bridge, for Ascendia agents to easily access SOL liquidity whether it be for token launches, agent activities, or movement of assets between different L1s.
- ❖ **Base Bridge:** Similar as the SOL bridge, the BASE bridge connects existing agent infrastructure on BASE with emergent agent infrastructure on Ascendia. Ascendia agents will be able to source liquidity, users, and community support from the BASE ecosystem with this design.
- ❖ **Ascendia Wallet:** A one-stop shop for managing ASC native tokens, accessing AI-Agent dApps, and tracking user activity of AI-twins in the Ascendia ecosystem. Notably, the Ascendia wallet is built as a modern, user-friendly product with no expectation of understanding the complexities of crypto or blockchain.
- ❖ **AI Digital Twins:** Users will be able to credit a Sim-style character that lives on Ascendia and mirrors certain real-world behaviors. These characters will be able to interact with one another, and also respond to their human counterparts. Ultimately, AI digital twins on Ascendia will accelerate the

user-AI connection on-chain to facilitate services and take actions on behalf of real humans.

All of the products developed by the Ascendia team in phase I are about building the sustainable foundations for a multi-decade ecosystem of AI-Agent products, that are easy to user, tokenized and liquid, with easy access to other L1 ecosystems.

Phase II: Market Capture: Product Market Fit For Value Creation.

- ❖ **Multi-Chain AI Agents:** Leveraging both bridging, and chain abstraction (intents), Ascendia agents will not only function as automated service providers from within the Ascendia ecosystem, but also as cross-chain navigable agents capable of taking actions on other chains as well.
- ❖ **Shared Ownership Agents:** With an agent launch pad, and marketplace, co-investing, and improving existing agents is a natural next step to allow coalitions of inventors, builders, and liquidity providers to collaboratively scale AI-Agents on Ascendia.
- ❖ **BotMarket:** Once mature agents launch and graduate from Botpad, Botmarket exists to drive exposure, and liquidity on agents as they grow, find product market fit, and become valuable from the services they provide.

Phase III: User-Acquisition.

- ❖ **Cross-Chain AI Swarm Networks:** With agents established and liquidity for the development of different types of AI agents, Ascendia sees long term value in integrating multiple agents into coherent networks to work together on operations and tasks on and off chain. In other words, a future where an agent can work with other agents, and move between email, slack, a DEX, and a wallet - on any blockchain!
- ❖ **Agent Oversight of Inflows and Outflows:** Tracking of information and data will help agents make better decisions. Automating how agents track and collect data provides agent operators and agent stakeholders with cutting-edge insight into what is actually happening in close to real time.

Whether this refers to financial markets, usage of products, or consumer purchases, Ascendia envisions a future where users of the Ascendia agent stack can spot trends and actionably benefit from such trends.

Phase IV: Acceleration.

The fourth and final phase of the Ascendia roadmap centers on accelerating the adoption of the first three phases. While this phase is envisioned as a long-term north star to aim at, it will nevertheless center on the emergence of AI, the adoption of smart-contract platforms, and the evolution of digital-physical systems. Ascendia is positioning itself as the L1 Ecosystem for the adoption of artificially intelligent on-chain agents.

Conclusion:

The goal of this whitepaper is to explain and outline the current state and design of the Ascendia Ecosystem. Starting with the fundamentals of the Ascendia blockchain, and the specifics of \$ASC tokenomics. The Ecosystem itself - including its core primitives and upcoming products was finally discussed in reference to the future development goals of the Ascendia Ecosystem. With over 69 Beacons live on the network and multiple native Ascendia tokens already launched in the past months, the Ascendia blockchain ecosystem remains well positioned to continue its growth as a true dark horse L1 in the coming decade.