HyperLink-White Paper

Connect Everything And Drive The Future

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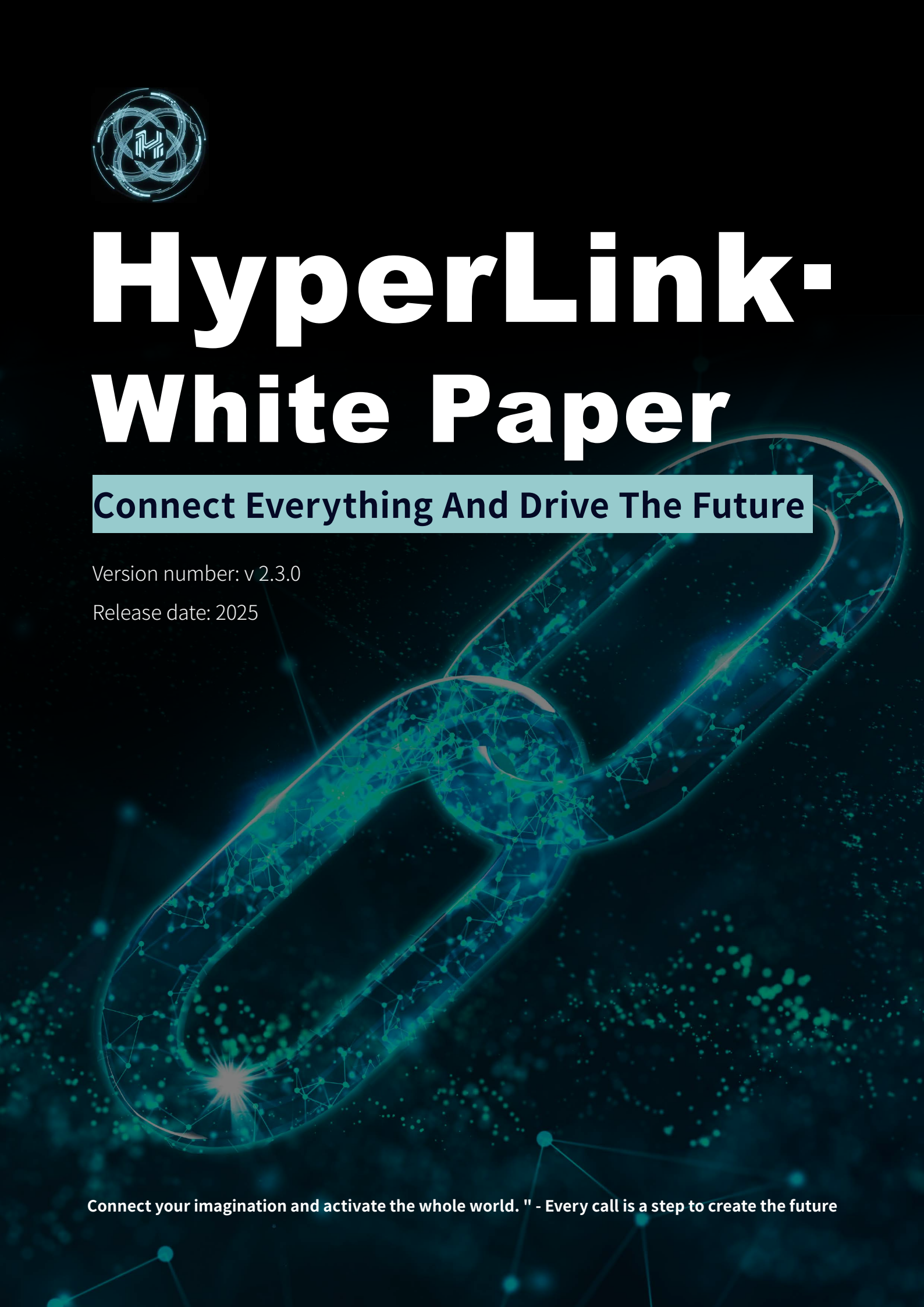

Connect your imagination and activate the whole world. " - Every call is a step to create the future

"True freedom lies not in creating islands but in building bridges." In an increasingly fragmented digital world, technology is creating countless autonomous individuals and systems, but true evolution lies not in division and closure, but in connection and collaboration.

HyperLink , as the link protocol layer of the Web3 era, not only allows identities, assets, data and contracts to be expressed in a unified manner, but also allows them to understand, combine and co-build each other .

From isolated blocks to composable ecosystems, from individual expression to collective collaboration, HyperLink builds not only an information channel, but also a bridge of value, a framework of consensus, and a gateway to the future.

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Chapter 1 Project Overview: Gateway To The Future

1.1 Background and Opportunity of Birth

In the context of the rapid development of Web3.0, data, identity, protocols, content and other elements are constantly fragmented. Although we have decentralized storage, computing and asset expression, the problem of "information islands" is still serious: it is difficult for on-chain and off-chain to communicate efficiently, there is a lack of unified standards between multiple chains, and the logical interaction between DApps is seriously fragmented. Users need to repeatedly verify their identities, rebuild relationships, and repeatedly migrate data on multiple platforms.

HyperLink (HYL for short) was born in this context. We realize that the core demand of Web3.0 is not to add chains, but to build a link logic and value bridge that can connect on-chain and off-chain, multiple protocols, and multiple ecosystems. The HyperLink project was born, dedicated to creating a "composable, trustworthy, and efficient" decentralized link protocol layer.

1.2 HyperLink’ s naming meaning and vision

The term "HyperLink" originated from the early hypertext system of the Internet, and its original meaning is "connecting two isolated information units through a link." We borrowed this concept and gave it new technical connotations:

Hyper: Infinitely Expandable Semantic Space and Interaction Dimension
Link: Intelligent connection between value, identity, protocol and assets

Our vision is to enable all elements on the chain to be linked, indexed, combined, and executed, thereby building a true "Web3 Universal Link Layer".

1.3 Project positioning: Building a decentralized link protocol layer

HyperLink is not just a single on-chain application, nor is it just a cross-chain bridge or

aggregator. We are committed to building a basic layer protocol stack with the mission of:

Provide a standardized linking protocol model for structurally annotating and connecting different data sources, assets, identities, and contracts;

Build a composable link execution engine to support automatic completion of the full-link interaction of "acquisition-identification-verification-calling" on the chain;

Support multi-chain ecological link bridging, realize protocol compatibility and identity mapping from Ethereum to Solana, from Arbitrum to LayerZero;

Provide Link API/SDK for developers and end users to promote the true implementation of Web3's "connectable Internet".

At this level, HyperLink is not the "next chain", but a bridge and foundation that connects all chains, all data, and all identities.

1.4 Core Values: Freedom, Co-construction, Trustworthiness, Sustainability

HyperLink is based on open protocols and emphasizes the following four values:

Free linking: Any developer, application, or node can use our protocols and standards to build their own linking logic;

Co-building the ecosystem: All participants in the ecosystem can obtain HYL token incentives by contributing node resources, content structure, semantic annotation, etc.

Trusted execution: All link requests and execution logic are verifiable on the chain, ensuring transparency, traceability, and tamper-proof;

Continuous evolution: Based on the DAO governance mechanism, HyperLink will gradually return core control to the community and achieve full autonomy from protocol design, parameter tuning, node election to version upgrade.

Chapter 2 Industry Status And Revolutionary Entry Points

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Chapter 2 Industry Status And Revolutionary Entry Points

2.1 Brief Analysis of Web3.0 Infrastructure Development

The proposal of Web3.0 is a systematic reflection on the logic of centralized Internet. Key elements such as decentralized identity (DID), on-chain assets, smart contracts, and DAO governance have built a new infrastructure for the digital economy. The public chain ecosystem represented by Ethereum has gradually prospered, and multi-chain systems such as Polygon, BSC, Solana, and Avalanche have emerged one after another; the L2 Rollup expansion solution has broken through the performance bottleneck, and DeFi, GameFi, SocialFi, and RWA have formed a huge scenario matrix.

However, "many and fragmented" has become the main contradiction in the industry:

Data fragmentation: assets, identities, and content are scattered across multiple chains and protocols, making them difficult to retrieve, integrate, and operate in a unified manner;

Protocol incompatibility: Each protocol is a self-contained system with different interface formats, interaction logics, and permission structures, resulting in complex combinations;

Repeated identity verification: Users frequently authorize, log in, and re-establish data links in different DApps, resulting in a fragmented experience;

Cross-chain transmission is cumbersome: Even if a bridge protocol exists, there are often security, latency and liquidity risk issues.

This fragmentation limits the true potential of Web3. We don’ t lack “chains” , we lack the “link layer” that connects everything.

2.2 The current on-chain protocol breakdown problem

Although Layer 1 and Layer 2 are solving performance and cost issues, there is still a gap in the level of "semantic connection, information flow and logical collaboration".

The current industry faces the following key issues:

Missing links: There is a lack of standardized data and logic linking mechanisms between DApps;

The state cannot be shared: the call state of a contract cannot be automatically transferred to another contract or application;

Content has no semantic annotation: On-chain content is difficult to be effectively identified, indexed, and reused by machines;

User path fragmentation: User behavior trajectories cannot be uniformly archived and understood across different chains and protocols.

This has resulted in a fragmented user experience and development ecosystem in the Web3 world.

2.3 HyperLink’ s “Full-Stack Link Protocol” Concept

In this context, HyperLink proposed the concept of "Full-Stack Linking Protocol" to solve the above problems. Its essence is to build a decentralized semantic network that runs through identity → data → content → protocol → contract → asset → social → behavior.

This protocol stack includes:

Semantic Link Layer: semantic analysis of content and protocols through structured metadata and AI annotation;

Cross-protocol middleware layer (Middleware Layer): compatible with multiple protocol stacks such as EVM, Move, WASM, and realize automatic arrangement of link logic;

Intelligent Routing Engine: Provides users with link paths and content sorting based on identity, preferences, and historical behavior;

Executable Link Contracts: Establishing composable, callable, and inheritable link-type smart contract specifications.

2.4 Collaboration bottlenecks and optimization space in the multi-chain

ecosystem

HyperLink does not attempt to replace existing public chains, but rather to become their “connection engine” as a public foundation layer for multi-chain collaboration:

For developers: there is no need to understand the differences between multiple chains, just build Link logic to implement multi-chain calls;

For users: No need to frequently switch wallets and identities, only one LinkID is needed to access the entire network;

For DApp: Link semantics can be used to map content, data, and user behavior to other platforms, achieving cross-ecological diffusion and growth.

HyperLink will become the information neural network and interactive highway of the Web3 world.

Chapter 3 Core Technology Architecture

- 3.1 LinkCore: Native Decentralized Link Engine
- 3.2 LinkID: Cross-protocol identity resolution and mapping module
- 3.3 LinkMesh: Structured Information Weaving Network
- 3.4 LinkAI: Intelligent Semantic Indexing and Decision-making System

Chapter 3 Core Technology Architecture

HyperLink's technology system is not a stack of single modules, but a structured system with "link" as the core. It consists of four core modules: LinkCore, LinkID, LinkMesh, and LinkAI, which together build a cross-chain, cross-protocol, and cross-application intelligent link network.

3.1 LinkCore: Native Decentralized Link Engine

LinkCore is the underlying engine of the HyperLink system, responsible for link creation, registration, calling and tracking. It has the following technical features:

Link object structuring: abstract identities, assets, contracts, content, etc. into LinkObjects, and describe their structures through LinkSchema;

Atomic Link Protocol: supports linking multiple objects into a logical unit to form a composable LinkUnit (for example: identity A links asset C in contract B);

On-chain evidence storage mechanism: Each link behavior will record the hash and timestamp on the chain to achieve verifiability and traceability;

Light node support: Provides efficient and low-cost link services for mobile, IoT, edge computing and other environments.

LinkCore is the "heart" of the entire HyperLink protocol, maintaining the real and dynamic connection between all objects on the chain.

3.2 LinkID: Cross-protocol identity resolution and mapping module

LinkID is HyperLink's decentralized identity protocol, which aims to solve the problems of identity fragmentation, repeated verification and lack of integration in the Web3 world.

Technical features:

Multi-chain unified identity resolution: supports unified address binding of chains such as Ethereum, Solana, Polygon, Arbitrum, and zkSync;

Social relationship mapping: Generate an on-chain social graph (LinkGraph) based on user interaction behaviors, supporting relationship visualization;

Identity behavior data storage: Combined with IPFS/Filecoin/Arweave, etc., to store non-sensitive off-chain data such as user preferences, operations, and tags;

Authorization and access control mechanism: Through ZKP and on-chain permission settings, encrypted access to identity data and refined permission allocation are achieved.

LinkID is not a centralized account system, but a portable, composable and governable cross-ecological identity matrix.

3.3 LinkMesh: Structured Information Weaving Network

LinkMesh is a distributed semantic network that is used to "weave" scattered data, content, and protocols into a machine-readable, user-controllable information network.

Core components:

LinkTag annotation system: add semantic tags to any content, support user customization and community collaborative annotation;

LinkPath navigation mechanism: users, nodes or developers can define “link paths” to achieve automatic navigation from information retrieval to smart contract calls;

Semantic Hash Index: Generates a unique hash for content through AI algorithms and

Relationship Graph Generator: Visualize the links between content, identity, and assets in the form of a graph to enable graph structure relationship queries.

LinkMesh is the core hub in the HyperLink ecosystem that truly transforms the "link" structure into semantic knowledge and execution logic.

3.4 LinkAI: Intelligent Semantic Indexing and Decision-making System

LinkAI is the most innovative intelligent module in the HyperLink architecture. It integrates AI technologies such as natural language understanding (NLU), knowledge graph, and reinforcement learning to:

User intent recognition: understand the natural language commands entered by the user and intelligently match the link logic with the contract;

Automatic content routing: Automatically recommend linkable content and services based on user history, preferences, and social circles;

Behavior prediction engine: predicts the user's next action, prepares the required data and calls resources in advance, and improves execution efficiency;
Risk assessment and path optimization: Identify high-risk call paths and provide optimal alternative link path recommendations.

LinkAI allows HyperLink to evolve from a "linking network" to an "intelligent guiding network", thus realizing the true meaning of "linking is interaction, interaction is intelligence".

Chapter 4 Token Economic Model Design (Hyl)

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- 4.4 Ecosystem Participant Levels and Reward System
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Chapter 4 Token Economic Model Design (Hyl)

The HyperLink token HYL (HyperLink Token) is the core driving force of the protocol operation, carrying multiple functions such as ecological incentives, service calls, governance voting, etc. When designing the token economic model, we adhere to the three principles of "sustainability, participation, and incentives" to build a fair, transparent, and long-term value-supported token system.

4.1 Token issuance mechanism and distribution model

Basic parameters:

Token name: HyperLink Token

Token abbreviation: HYL

Total issuance: 30,000,000,000 HYL (30 billion)

Issue price: 0.0001 USDT

The allocation structure is as follows:

use	Proportion	Quantity (HYL)	Release Mechanism
Ecological Incentives	35%	10,500,000,000	Released year by year for user behavior incentives, content incentives, node incentives, etc.
Foundation Reserve	15%	4,500,000,000	Locked for 12 months, linearly released for 24 months
Team and Consultants	20%	6,000,000,000	Locked for 18 months, linearly released for 36 months
Private placement round	15%	4,500,000,000	Unlock in stages, set lock-up period and crash protection mechanism
Public offering	5%	1,500,000,000	IDO or platform issuance, released according to market opening hours
Market operation and cooperation	10%	3,000,000,000	Used for partner incentives, marketing promotion, ecological support, etc.

This structure ensures sufficient initial operational resources while guaranteeing the incentive security of long-term participants.

4.2 LinkGas: Network Service and Call Fee Mechanism

In the HyperLink network, all calls such as linking objects, executing smart paths, content indexing, etc. require payment of LinkGas. HYL is the only payment medium for LinkGas, and its value will continue to grow as the frequency of system usage increases.

Basic call fee: used for contract execution, semantic analysis, data bridging and other underlying resource usage;

Dynamic pricing mechanism: Automatically adjust the gas fee based on the on-chain computing load and node operation status;

Execution priority mechanism: The more HYL is staked, the higher the execution priority of the link path, reducing the waiting cost.

By embedding HYL into the core logic of network operation, we ensure its strong demand, high frequency of use and sustainable internal circulation.

4.3 Staking and Node Incentive Design

HyperLink supports multiple roles to participate in ecological nodes, and HYL tokens play an important role in it.

Node type and revenue model:

Link Node: executes link requests and provides bandwidth and computing power to obtain basic HYL rewards;

Tag Node: Participate in content semantic tagging and get rewards based on accuracy and

timeliness;

Validator: Verifies cross-chain link requests and execution results to ensure network security;

AI training nodes: Contribute computing power to participate in LinkAI model training and receive training subsidies and incentive dividends.

Staking and incentive logic:
Nodes need to pledge a certain amount of HYL as a security guarantee;

The more staked and the more active the participation, the higher the allocation incentives;

Malicious behavior of nodes will trigger a penalty mechanism (Slashing) and deduct the staked portion.

This mechanism realizes a closed-loop design of resource sharing, rights protection, and behavioral incentives.

4.4 Ecosystem Participant Levels and Reward System

In order to encourage more developers, content creators and community members to participate in the long term, HyperLink has designed an ecological hierarchy system:

grade	Points conditions	Exclusive rewards
Level 1	Sign Up for Free	Use the basic link API to participate in community activities
Level 2	⩾10,000 HYL pledge or 50 valid links	Get development kit, directional traffic support
Level 3	⩾100,000 HYL pledge or node status	Can publish Link contracts and participate in on-chain governance

Level 4	Community selection or system incentives	Can propose protocol changes and receive ecological dividends

This model not only improves participation stickiness, but also creates a "growing user system" to gradually bind on-chain identity and value.

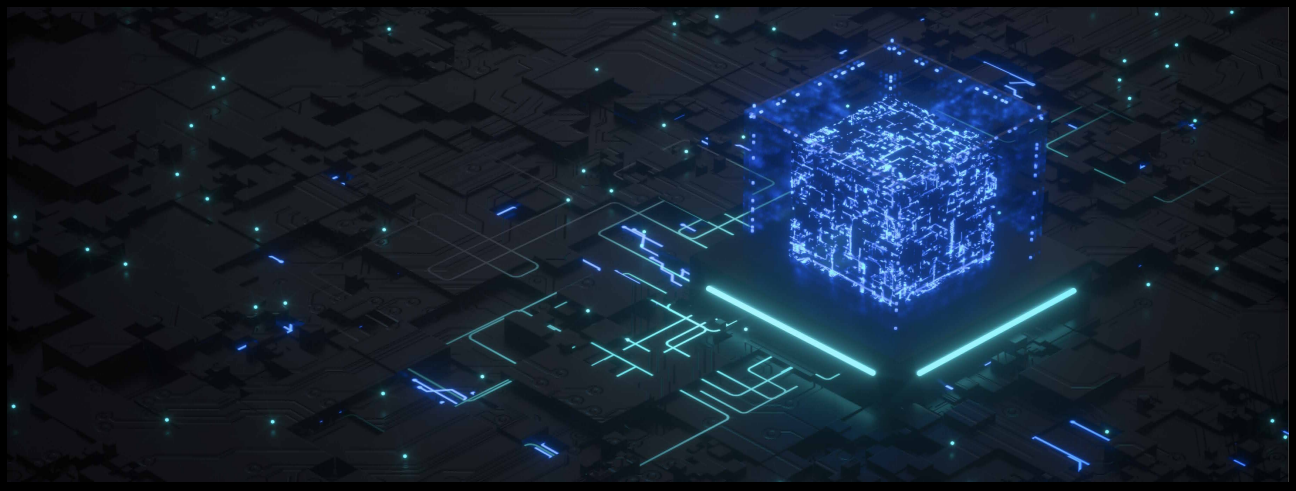
4.5 Deflation, Destruction and Stable Value Logic

In order to ensure the long-term value of HYL, the following mechanisms are set up in the system:

The protocol uses a destruction mechanism: for all calls using LinkGas, a certain percentage of HYL will be automatically destroyed;

Transaction fee repurchase mechanism: The protocol will regularly repurchase HYL from the market and inject it into the DAO treasury;

Ecological deflation path map: As the frequency of use increases, the market circulation of HYL will continue to tighten;
The black hole destruction address is publicly available to ensure complete transparency of the process.
Combining the above mechanisms, HyperLink has built an internal circulation economic model with "links are consumption, behavior is reward" as the main axis.



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Chapter 5 Application Scenarios And Ecosystem

HyperLink uses "link" as the underlying logic, and opens up a "semantic link highway" in the multi-chain, multi-protocol, multi-identity, and multi-content Web3 world. Its design is not only a technological innovation, but also a structural reconstruction of the application ecosystem. This chapter will explain the application of HyperLink in multiple practical scenarios and explain how HYL continues to play its value in the ecosystem.

5.1 Decentralized Link Search Engine (dSearch)

In Web2, search engines are the gateway between people and information. However, in Web3, traditional search engines cannot index on-chain contracts, addresses, assets, governance proposals, etc. The decentralized search engine (dSearch) launched by HyperLink is implemented through LinkMesh+LinkAI:

Cross-chain content aggregation index: search results include contracts, assets, events, and user behaviors on multiple chains;

Semantic matching: Based on natural language processing and graph reasoning, it realizes accurate and context-related search experience;

Customized results can be combined and executed: search results are not limited to "viewing", but can also be directly linked and called;

Anti-censorship mechanism: No central server is required, and user data and search behavior are not recorded.

dSearch allows the Web3 world to have "universal composable search" for the first time, with HYL as the calling fuel throughout it.

5.2 LinkBoard

LinkBoard is a Web3 aggregation page tool for content creators, KOLs, and project parties, building a "callable content homepage".

Generate a multi-chain identity homepage with one click: integrate address, assets, DAO identity, and content publishing history;

Dynamic link structure: NFT, content, video, contract and other resources can be structured and mounted;

Link-to-earn model: Every time someone triggers a call through your link, you can get HYL incentives;

DAO recommendation system: Whether the content is credible and active is jointly labeled and rated by the community.

Through LinkBoard, Web3 creators have a freer, more trustworthy, and more profitable operating platform.

5.3 Smart Contract Intercommunication Orchestration System (LinkFlow)

HyperLink uses LinkFlow to implement cross-protocol contract orchestration and combined calls:

Cross-chain/cross-protocol calls: One operation can call Solana contract + Arbitrum contract + Polygon content at the same time;

Visual process builder: developers can drag and drop to configure the contract execution path without coding;

LinkGas automatic evaluation: estimates the cost and response time of the path, and

users can choose the optimal execution plan as needed;

Failure recovery mechanism: If any node fails, it can be automatically rolled back or rerouted to ensure execution consistency.

5.4 DID and on-chain identity unified entry (LinkID Hub)

LinkID Hub, as HyperLink’ s “identity hub” , builds:

Multi-dimensional identity portrait: Combine wallet activity, on-chain roles, and transaction preferences to generate a credible portrait;

One-click connection to multiple platforms: Users can authorize a set of identity systems to connect all DApps that support the HyperLink protocol;

Web2-Web3 bridge: Bind to the blockchain through OAuth, and map social accounts such as Twitter, Telegram, and GitHub to Link identities;

Self-sovereign control: All identity data is authorized by the user’ s signature and can be revoked at any time, ensuring autonomy.

LinkID Hub is the “identity passport” to the Web3 world.

5.5 Ecological Synergy under DAO Governance

HyperLink's decentralized organizational mechanism encourages users to participate in the co-construction of the ecosystem, specifically:

Modular Ecosystem Guidance Fund: Provide targeted incentives for developers and build subsystems around the Link protocol;

Scenario-based DAO incubation mechanism: Establish professional DAO autonomous

units around search, content, social and other scenarios;

Voting is a link: Each proposal, vote, and governance behavior is itself a link, forming a governance traceability chain;

Tool market mechanism: Users can upload their own tools, plug-ins, and contracts built on HyperLink and obtain HYL profits based on the number of calls.

The HyperLink ecosystem is a self-driven, evolvable, intelligent collaborative network that drives the transition from “tool protocol” to “ecological platform” .

Chapter 6 Decentralized Governance And Community Empowerment

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- 6.2 Community Nodes and Proposal System
- 6.3 Incentive transparency and voting mechanism
- 6.4 Core Code Open Source Path and Audit Mechanism

Chapter 6 Decentralized Governance And Community Empowerment

HyperLink is committed to building an ecosystem that is user-led, self-evolving, and sustainably growing. In the early stages of the system launch, the foundation and the core development team will lead the direction, but in the medium and long term, governance will gradually be taken over by the community through a decentralized organization (DAO) mechanism to form a truly autonomous network.

6.1 HyperDAO governance model design

HyperDAO is the core organizational form of HyperLink’ s governance system. It divides governance weights based on HYL token holdings and staking cycles, and users can participate in key decision-making through voting.

The scope of governance includes:

Protocol parameter adjustments (such as link rates, execution priority, etc.)

Node access and audit rules
Developer Incentives and Funding
Core protocol upgrade and version release
Application Ecosystem Incubation Direction
Risk warning and emergency response

HyperDAO uses on-chain proposal → voting → review → implementation as its standard governance process. All processes are open and transparent and subject to supervision by all users.

6.2 Community Nodes and Proposal System

HyperLink promotes a multi-role participation governance mechanism, which is not limited to HYL major holders, but also encourages technical contributors, content

creators, and validators to participate in the construction of the ecosystem.

Node governance model:

Node Type Permission Participation Method

Core nodes can propose governance proposals. To have voting rights, they need to stake ⩾ 1,000,000 HYL and run for 60 days.

Community nodes have voting rights but no proposal rights . Stake ⩾ 100,000 HYL

Creator nodes can participate in content rating and recommendation algorithms to contribute content and pass audits

The proposal process includes:

Proposal creation: Users who meet the node level or joint signature requirements can initiate proposals;

Proposal review period: 7 days community inquiry period is preset;

Voting period: Public on-chain voting mechanism, using weighted voting;

Execution and review: After the proposal is passed, it will be automatically executed or initiated by a designated node and will be subject to follow-up audit.

Governance is not only a right, but also an important channel for all users to participate in the evolution of the system.

6.3 Incentive transparency and voting mechanism

To avoid “zombie voting” and the concentration of governance resources, HyperLink has designed the following governance incentive system:

Voting return mechanism: A certain percentage of voting gas fees can be returned for

each vote;

Active governance rewards: Participating in more than 10 valid proposal votes in a row will earn you additional HYL rewards;

Governance Reputation Points (GovScore): records user participation frequency, success rate, deviation, etc., used to assess governance activity;

Mortgage unlocking and binding: Governance voting requires locking HYL for a certain period of time to prevent short-term speculative behavior from affecting system judgment.

This mechanism ensures that governance is a sustainable, effective, and incentive-based process.

6.4 Core Code Open Source Path and Audit Mechanism

HyperLink adheres to the principle of "code is consensus". The core protocol and governance logic will be open source and audited by a professional team:

GitHub open source repository, using the MIT open source protocol, development progress can be checked in real time;

Quarterly code audit mechanism: A third-party security agency conducts a full-chain audit every quarter, focusing on contract vulnerabilities, permission control, and call security;

Community code audit incentives: Provide HYL rewards to white hat hackers who discover major bugs;

LinkAI logic interpreter open source plan: In the future, we plan to open AI call logic to the community for review and training to improve the explainability of AI governance.

Through open source and audit mechanisms, HyperLink not only improves system security, but also builds a governance trust foundation with community co-governance, code sharing, and transparent operation.

Chapter 7 Market Strategy And Global Expansion

- 7.1 Initial Cold Start Strategy: Web3 Tool Developers and Content Communities Enter the Community
- 7.2 Three-stage expansion route: technology, community, and business
- 7.3 Overseas Node Incentive Plan
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Chapter 7 Market Strategy And Global Expansion

HyperLink is not only an innovation of protocol tools, but also a global open ecosystem. Since its launch, the project has established four strategic principles: "multi-chain collaboration, cross-context communication, developer-friendly, and community-driven". Through phased market expansion and global node deployment, it aims to build a Web3 world network that connects everything.

7.1 Initial Cold Start Strategy: Web3 Tool Developers and Content Communities Enter the Community

In the early stages, HyperLink will focus on two core user groups: developers and content creators, and achieve a cold start through the following paths:

Open API/SDK toolkit: give priority to supporting the most commonly used EVM chain development ecosystem and lower the entry threshold;

Standardized content link component: Provide a one-click Link module to content platforms to quickly build a Web3 creator aggregation page;

Early Node Support Plan: Provide basic HYL subsidies to the first batch of users running verification nodes and annotation nodes;

Dual Currency Participation Plan: Join mainstream DEX platforms to enable cross-protocol calls and joint incentives between HYL and other tokens;

Developer Incentive Program: Establish a special "Link Innovation Fund" to fund early applications built using the HyperLink protocol.

By closely connecting with the most innovative developer groups and content dissemination nodes, we can quickly form a consensus that "links are value."

7.2 Three-stage expansion route: technology, community, and business

HyperLink's market promotion strategy will be implemented in three phases, gradually from technology promotion to ecological governance and then to commercial closed loop.

Phase 1 (2025 Q2–Q4): Technology Popularization

Complete the main chain launch and multi-chain compatibility framework

Open LinkCore, LinkID, and LinkMesh interfaces

Launched two native DApps: dSearch and LinkBoard

Launch early node plan and first round of HYL circulation

Phase 2 (2026 Q1–Q4): Ecosystem Expansion

Attracting 100+ DApps to integrate HyperLink protocol

Launched LinkFlow combination calling system

Reached access agreements with 10 content platforms and 10 developer communities

Launched the community DAO module and initially transferred some governance rights

Phase 3 (from 2027): Business closed loop construction period

Create a cross-chain asset aggregation search and contract call business engine

Deep integration with mainstream wallets, DEX, and cross-chain bridges

Launch a global DAO node incubation plan to form 50+ local governance communities

Promote the full transfer of protocol governance to HyperDAO and form an internal autonomous financial system

Build long-term competitiveness through the three-step process of technology implementation, ecological prosperity, and commercial transformation.

7.3 Overseas Node Incentive Plan

To accelerate the construction of the global ecosystem, HyperLink will launch the "Overseas Node Incentive Program" in key countries and regions, including:

Southeast Asia: Vietnam, Indonesia, Philippines

Web3 users are growing rapidly and the community is active

Each country will set up at least 10 content nodes + 5 verification nodes

Latin America: Argentina, Mexico, Brazil

Digitalization of financial services and strong demand for on-chain assets

Encourage community DAO to participate in semantic annotation and AI training

Middle East and Africa: UAE, Nigeria, Kenya

Focus on identity linking and financial linking businesses

Provide high node operation subsidies and HYL governance rights

Europe and North America: Germany, Türkiye, Canada, the United States

Serve as a central hub for technical standards and community engagement

Promote open source contributors and community development challenges

The global node deployment will lay the foundation for HyperLink’ s “semantic neural network” and promote the global operation of the protocol layer.

7.4 Deep linkage plan with multi-chain ecology, wallets, and DEX

HyperLink's growth is inseparable from the collaboration with the industry's core infrastructure. We will establish strategic cooperation in the following areas:

Cross-chain bridge cooperation: Establish protocol compatibility with LayerZero, Wormhole, Axelar, etc. to achieve seamless links between multiple chains;

Wallet system integration: Connect LinkID with MetaMask, Trust Wallet, OKX Wallet, etc. to achieve one-click identity recognition;

DEX linkage: HYL will be launched on Uniswap, SushiSwap, PancakeSwap, etc., and

transaction rebates will be set up in combination with the LinkGas mechanism;

Web3 domain name system docking: such as ENS, SpaceID, etc., to realize the binding of user Link identity with the on-chain naming system;

Content platform access: Cooperate with Mirror, Paragraph, ShowMe and other platforms to enable creators’ content to be linked and monetized.

HyperLink is not just a project, but also a "system integrator" for the collaborative Web3 multi-chain ecosystem.

Chapter 8 Investment Institutions And Ecosystem Partners

- 8.1 Confirmed investment institutions and strategic investors
- 8.2 Cooperative public chains, protocols and development tool platforms
- 8.3 Collaboration Matrix among Media, Community and Education Platforms

Chapter 8 Investment Institutions And Ecosystem Partners

The development of HyperLink not only benefits from the long-term investment and technological innovation of the core team, but also relies on the full support of a number of strategic investment institutions and ecological partners. They provide solid support for HyperLink's global expansion in terms of funds, resources, channels, standardization, and internationalization.

8.1 Confirmed investment institutions and strategic investors

HyperLink has completed two rounds of strategic financing, introduced a number of world-renowned institutions and long-term supporters, and built a three-in-one support system of "technology-driven + long-term capital + diversified ecology".

Major institutions include (partial list):

Delphi Ventures

As a world-renowned Web3 research and investment institution, Delphi provides in-depth industry research support to HyperLink and assists in the design of token economic models and governance systems.

NGC Ventures

A global fund focused on early-stage blockchain infrastructure investments, promoting the market implementation and node expansion of HyperLink in the Asia-Pacific region.

Hashed

South Korea's leading Web3 investment fund provides key resources for HyperLink to connect South Korea's local technology community and developer ecosystem.

Mirana Ventures

As a member of the BitDAO ecosystem, it provides strategic consulting for the design of

open governance structure for HyperLink and connects with its ecological resource network.

LD Capital

One of the funds that invests in underlying protocols and development tools for a long time, responsible for building HyperLink's influence in the Web3 development tool ecosystem.

Individual investor representatives: Several technical founders of leading industry projects, DAO governance opinion leaders, and Web3 content ecosystem evangelists participated in HyperLink's early code review, protocol testing, and communication empowerment.

8.2 Cooperative public chains, protocols and development tool platforms

HyperLink adheres to the technical strategy of "multi-chain collaboration and compatibility first" and has established technical compatibility relationships and cooperation agreements with many mainstream public chains and middleware service platforms:

Partners	Cooperation Content
Ethereum/Polygon/Arbitrum/zkSync	Provide EVM compatible deployment environment and native test network
Solana/Sui/Aptos	Promote Link protocol compatibility with Move language version
Chainlink/The Graph	Access to oracle data and decentralized indexing modules to support real-time dynamic updates of semantic tags
IPFS/Arweave	Support off-chain content linking and long-term storage structured calls
Biconomy/LayerZero/Axelar	Jointly promote cross-chain protocol standards and support one-click construction of multi-chain call paths
DoraHacks/Gitcoin	Co-developer incentives and open source funding plans form a HyperLink exclusive funding track

These collaborations will greatly enhance HyperLink's compatibility, execution efficiency and global development support capabilities.

8.3 Collaboration Matrix among Media, Community and Education Platforms

In terms of communication and community building, HyperLink has reached strategic cooperation with several industry-leading platforms to promote project education and consensus formation:

Cooperation with educational platforms: Jointly launched training programs such as "Link Protocol Developer Training Camp" and "Web3 Semantic System Course" with platforms such as Lianwen, DeSchool, and CryptoU;

Media Cooperation: Obtained key coverage and long-term follow-up support from mainstream media such as The Block, CoinDesk, TechFlow, and Foresight News;

Developer community co-construction: Join international developer communities such as BuidlBox, Superteam, and Encode Club to form a long-term technology co-creation and hackathon support mechanism;

Localized DAO incubation: Collaborate with Web3 communities in Southeast Asia, Latin America, Eastern Europe and other regions to establish local governance DAO nodes and jointly build a global collaborative governance system of "local nodes + content + governance".

HyperLink is committed to using "link" as a consensus language to promote its implementation and prosperity in cultural contexts and communities around the world.

Chapter 9 Roadmap And Key Milestones

- 9.1 Goals (2025 Q2–2027 Q4)
- 9.2 Technology Iteration Timeline
- 9.3 Key nodes of ecological development and version release plan

Chapter 9 Roadmap And Key Milestones

HyperLink's development path is based on "technology construction - ecological launch - global expansion - decentralized governance", combining long-term market strategy and technology evolution rhythm, and planning clear phased goals. The following is the three-year roadmap and key implementation plan for the project from 2025 to 2027.

9.1 Overview of Phase Goals (2025 Q2–2027 Q4)

Time period	Main Objectives	Core Mission
2025 Q2–Q4	Start-up phase	Mainnet launch, protocol deployment, basic DApp launch, private placement completed, ecosystem incentives launched
2026 Q1–Q4	Ecosystem expansion period	Multi-chain compatibility, node incentive plan launched, initial delivery of DAO governance, and formation of major ecological applications
2026 Q1–Q4	Business closed loop period	Start the protocol revenue model, DAO complete governance, and global localized ecological self-driven governance

9.2 Technology Iteration Schedule

2025 Q2–Q4: Protocol launch and core functionality implementation

Release HyperLink Mainnet v1.0

Complete the basic deployment of LinkCore/LinkID/LinkMesh modules

Launched native DApps: dSearch and LinkBoard

Release developer SDK and CLI tools

Completed private placement financing and initial liquidity allocation

Start the first circulation and trading of HYL tokens (expected to be listed on 3 medium-sized exchanges)

2026 Q1–Q4: Multi-chain integration and scenario penetration

Officially compatible with Solana, zkSync, Polygon zkEVM, Aptos and other heterogeneous

chains

Launched LinkFlow visual contract orchestration tool

Start testing distributed annotation nodes and semantic training nodes

Launch community DAO proposal and governance voting mechanism

Launched LinkWallet prototype to build a unified identity wallet framework

Achieve at least 50 mainstream DApps integrating HyperLink protocol components

2027 Q1–Q4: Smart Ecosystem Network Maturity Stage

Launch of cross-chain business intelligence engine service (HyperScan)

Promote LinkAI community co-construction and open source training system

Establish HyperDAO Ecosystem Fund, and let the community vote to decide the incentive targets

Promote the formation of 50+ governance entities for global local DAO nodes

Explore the “Trusted Link Identity” standard pilot with government regulatory sandbox agencies

Launched the HyperLink protocol revenue distribution mechanism to achieve self-economic circulation at the protocol layer

9.3 Key nodes of ecological development and version release plan

Node Name	Time Node	Landmark Events
Alpha Network Launches	May 2025	On-chain deployment is successful, test contract call is completed
HYL public offering	June 2025	Completed public offering and community round release, and started on-chain circulation
The first batch of nodes started	July 2025	Content nodes, semantic nodes, and verification nodes start running
dSearch is online	August 2025	The world's first Web3 decentralized link search engine is released

HyperDAO opens proposal permissions	March 2026	Start community governance and proposal process
Multi-chain contract execution compatibility	August 2026	Realize the contract call interconnection among the five main chains
LinkAI Beta Released	February 2027	Enable AI semantic indexing and automatic link logic optimization
Business intelligence engine launched	June 2027	LinkScan data tool is launched to serve DeFi, RWA and other landing projects
DAO Full Takeover Agreement	December 2027	The foundation will gradually withdraw, and the governance and resources will be completely handed over to HyperDAO for operation and management

Chapter 10 Risk Control And Compliance Framework

- 10.1 Technical Security and Smart Contract Audit Plan
- 10.2 Compliance Route and Transnational Operation Policy
- 10.3 Black Swan Event Emergency and Governance Response Mechanism

Chapter 10 Risk Control And Compliance Framework

In the rapid development of Web3, security, compliance and transparent governance have become the three core elements for the sustainable operation of the project. HyperLink established a risk control and legal strategy with "on-chain verification, rule governance, and compliance adaptation" as the core in the early stage of system design to comprehensively protect the legitimacy, security and sustainable participation of the platform, developers, nodes and users.

10.1 Technical Security and Smart Contract Audit Plan

HyperLink has adopted a multi-layered protection strategy in terms of technical security to ensure that user assets and the execution of link logic are not maliciously manipulated or attacked.

Multiple safety measures:

Code audit mechanism: The main network, smart contracts, governance modules, and AI logic will all be audited throughout the entire process by professional third-party organizations (such as CertiK, SlowMist, and Trail of Bits);

Multi-signature + on-chain control mechanism: key governance and protocol upgrade processes are bound to the DAO multi-signature structure to eliminate single-point control risks;

Tamper-proof logging: All execution records are traceable and auditable on the chain, making it easy for users to verify the call path and status;

Disaster recovery and cold standby mechanism: Cold standby contract versions are deployed for important protocol logics, and recovery can be initiated through governance proposals when an attack occurs;

Vulnerability Incentive Program: Provide HYL rewards to white hat teams that discover medium- and high-risk vulnerabilities, forming a double insurance of "external audit + community security community".

10.2 Compliance Route and Transnational Operation Policy

HyperLink will gradually complete compliance adaptation work in major jurisdictions around the world, and actively embrace regulatory compliance requirements for on-chain identity, protocol operation and data calls.

Compliance principles and strategies:

KYA (Know Your Address) mechanism: without collecting personal privacy data, it achieves quasi-compliance risk control through on-chain identity behavior profiling and signature verification;

Optional KYC interface connection: Provide modular KYC/KYB gateway for DApps willing to access the compliant financial system;

Data permission governance model: Combining ZK and DID technologies to achieve "verifiable but non-disclosed" calls for user data;

Isolation deployment of international operation nodes: Establish local governance DAOs in the European Union, North America, Southeast Asia and other regions to achieve the matching of "legal jurisdiction-data jurisdiction-asset jurisdiction";

DAO establishes a legal entity: It plans to establish a legal entity under the control of DAO in the Cayman Islands, Estonia, Singapore and other places to ensure compliance with investment participation and distribution of governance rights.

Through the approach of "componentized compliance + community sovereign

governance", HyperLink will establish a decentralized system that can adapt to the regulatory frameworks of multiple countries.

10.3 Black Swan Event Emergency and Governance Response Mechanism

In order to deal with potential black swan events such as system-level risks, market fluctuations, and governance attacks, HyperLink has established a complete on-chain emergency response and governance intervention mechanism:

The emergency response system includes the following elements:

Smart contract suspension mechanism (Emergency Pause): When encountering a major logic bug or attack, HyperDAO can quickly initiate the suspension operation through multi-signature;

Safe Governance Override: This is used to activate a temporary takeover plan by community consensus voting when the DAO proposal voting mechanism fails or is manipulated;

Asset protection priority mechanism: Any destructive proposal must pass a two-step verification process and meet specific time lock restrictions to ensure fund stability;

Risk control reserve pool system: The foundation reserves 5% of the initial HYL for emergency user compensation, system reconstruction and incentive adjustment;

Governance Accountability and Punishment Protocol: All governance proposal processes are recorded on the entire chain. If behavioral manipulation or malicious attacks occur, accountability can be pursued and voting penalties can be initiated based on on-chain evidence.

This mechanism ensures that the HyperLink ecosystem has the ability to self-repair, self-protect, and self-govern even under extreme conditions.

Chapter 11 Team Introduction And Consultants

- 11.1 Core Team Background
- 11.2 Overview of Technical and Strategic Consultants
- 11.3 Diversified Governance Structure and Professional Endorsement

Chapter 11 Team Introduction And Consultants

The success of the HyperLink project stems from an international team that integrates the R&D of underlying protocols, AI intelligent systems, Web3 product design, and global market expansion. We have gathered outstanding talents from multiple cutting-edge fields such as blockchain, artificial intelligence, distributed systems, encryption security, and financial technology to jointly promote the implementation of the technical mission of "connecting everything".

11.1 Core Team Background

Ethan Marlowe – CEO/Co-founder

Former Director of Decentralized Architecture at ConsenSys, with over 12 years of experience in blockchain infrastructure, he has led multiple EVM-compatible projects and Web3 collaborative protocol design. He is good at protocol-layer economic model design and open governance structure architecture.

Lina Choi – CTO/Co-founder

A former Google Brain AI researcher and a PhD in Computer Science from Tsinghua University, she focuses on natural language processing and graph structure learning. She led the development of LinkAI, a semantic modeling system in HyperLink, and is the core builder of the project's intelligent system.

Oscar Bianchi – CPO

Former head of Polkadot ecosystem products, proficient in cross-chain protocols, modular structures and multi-chain interface optimization design. Participated in the development of multi-chain bridges and governance protocols at Parity and Astar, and led the overall product strategy planning and user experience system of HyperLink.

Emily Dervaux – CMO

She was previously the head of Binance's French-speaking market. She has been deeply involved in the Web3 ecosystem market in Europe and Africa, and has strong international cooperation and community growth capabilities. She leads HyperLink's global node strategy and local DAO formation plan.

Dr.Tomas Ilyin – Chief On-chain Governance Architect

Former MIT Blockchain Lab researcher, focusing on the design of distributed governance systems and digital identity governance mechanisms. Responsible for the design of HyperDAO governance model and mechanism, promoting the transition of HyperLink governance from the foundation model to full autonomy.

11.2 Overview of Technical and Strategic Consultants

Prof. Andrew J. Green – Decentralized Semantic Web Consultant

Professor of Semantic Networks and Knowledge Graphs at the University of Cambridge, has long been committed to the research of the underlying logic of knowledge modeling and semantic AI, providing theoretical support for the LinkMesh structure design and semantic hashing algorithm.

David Ahn – Blockchain Security Consultant

Senior consultant of SlowMist Lab, has led security audits of several leading projects, including Aave, Synthetix, dYdX, etc. Participated in the HyperLink contract security framework and AI logic explainability audit.

Sarah Fernandez – Web3 Legal and Compliance Advisor

A registered lawyer in New York State, he focuses on the legal framework of digital assets, DAO compliance paths and data sovereignty protection. He has assisted Uniswap Labs and ENS Foundation in dealing with cross-border legal structures and led the design of HyperLink's cross-border compliance route.

Anshul Mehta – Marketing Strategy Consultant, Asia Pacific

Polygon ecosystem consultant and founding member of DeFi Asia, assisting HyperLink in expanding developer ecosystem and community cooperation in India, Singapore, the Philippines and other places.

11.3 Diversified Governance Structure and Professional Endorsement

HyperLink is committed to building a cross-cultural, cross-disciplinary, and cross-ecological governance and execution system to ensure:

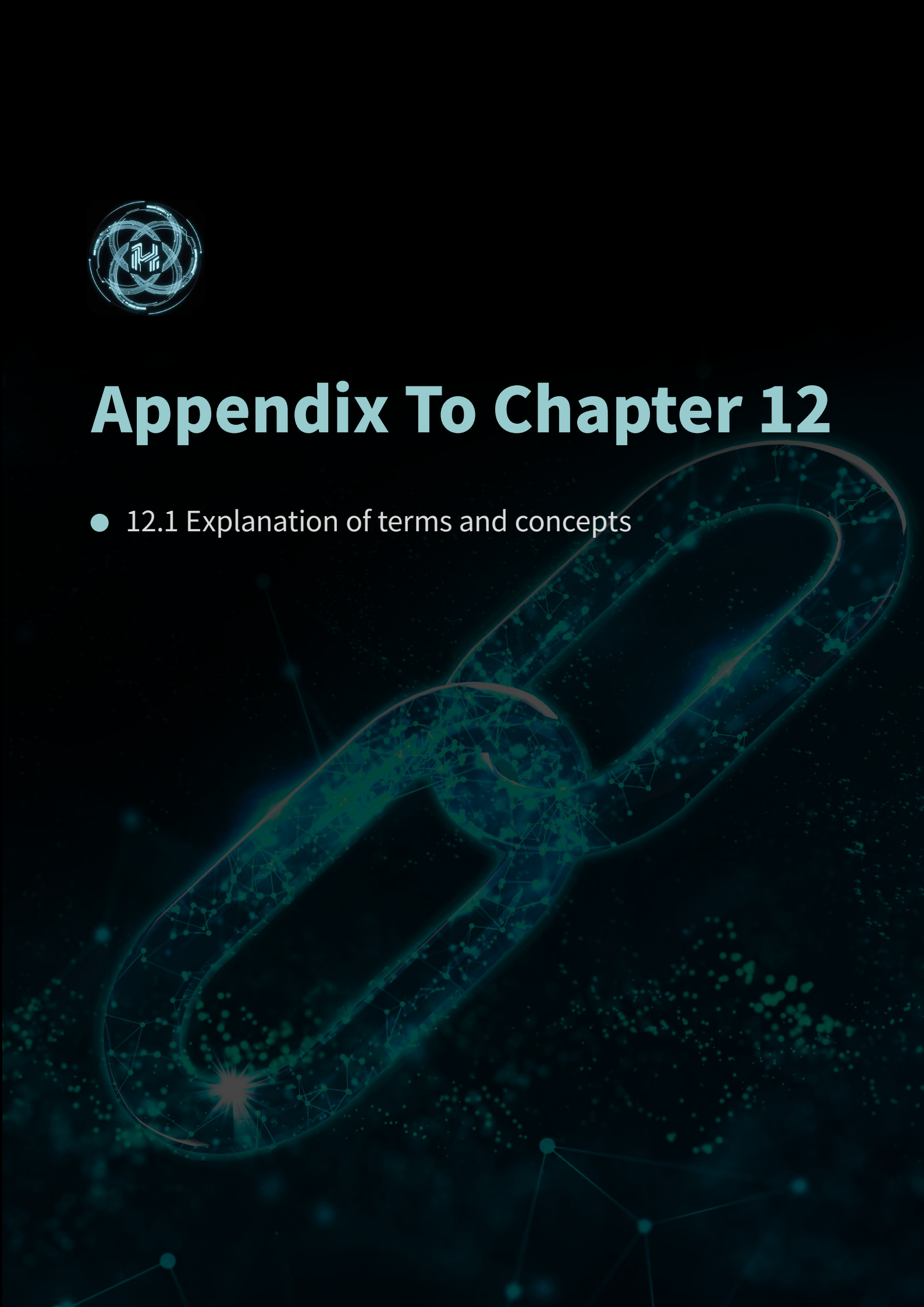
All team members' resumes are open, roles are transparent, and governance rights are traceable;

All governance proposals are executed by a multi-signature structure controlled by the DAO, eliminating black boxes and centralization;

All major version updates are subject to technical review and compliance assessment by the Advisory Committee;

The Foundation publishes governance reports, financial disclosures, and security audit reviews every quarter.

This governance structure ensures the long-term security, health, and self-evolution of the project, and provides a basis of trust for all participants.



Appendix To Chapter 12

- 12.1 Explanation of terms and concepts

Chapter 12 Appendix

This appendix aims to supplement the core terminology definitions, smart contract deployment information, diagrams and version update records of the HyperLink project, so that readers can fully understand the project architecture and future plans.

12.1 Explanation of terms and concepts

Partners	Cooperation Content
HYL	HyperLink native token is used to pay for link calls, incentivize nodes, participate in governance and other ecological behaviors.
LinkCore	The core link engine of the HyperLink protocol is responsible for link creation, execution, and tracking of structured objects.
LinkID	Decentralized identity resolution and binding system to achieve i ntegrated management of multi-chain addresses and social accounts.
LinkMesh	An information link network built based on semantic annotation and graph structure for content discovery and behavior indexing.
LinkAI	AI-driven semantic recognition and decision-making modules support user intent analysis and path recommendation.
LinkFlow	The cross-chain contract combination calling system supports automated logic orchestration between DApps.
LinkGas	An execution fee system for all protocol-level calls, paid by users in HYL and executed by nodes.
HyperDAO	A decentralized autonomous organization system responsible for protocol governance, node supervision and fund management.
LinkBoard	A link homepage tool for Web3 content creators to achieve information aggregation and call entry.
dSearch	HyperLink is a native decentralized search engine that supports structured semantic search and composable calls.

changes. HYL tokens do not represent any equity or income commitments, and buyers need to independently judge the risks.

The HyperLink Foundation and its members will continue to operate the project in an open, transparent and compliant manner, and reserve the final right of interpretation for platform governance, protocol updates and strategic adjustments (before the DAO governance system is fully taken over).

The future is a world made up of links. HyperLink makes everything connectable, combinable and creative.