



EHI PROTOCOL

WHITEPAPER · V4.9

Ex Humanitate Intellectus

Intelligence from Humanity

73,000,000 EHI · fixed supply · no mint

50.3% to players · 22.3% burned · immutable contracts

Launch — November 2026

73.

EHI Protocol Whitepaper

Ex Humanitate Intellectus — "Intelligence from Humanity"

Field	Value
Document	EHI Protocol Whitepaper v4.9 (Aug 30 2026 — final pre-auction; Wealdor calendar aligned)
Token	EHI (\$EHI)
Chain	Base (Layer 2)
Ecosystem	ehi.ai · agents.game · heroesofwealdor.com · postbtc.ai · agentnil.ai
Total Supply	73,000,000 EHI (fixed, no mint)
Tokenomics Version	v4.9 (Aug 30 2026 — final pre-auction structure)
Game Document	Master Game Document v7.6
Launch	November 2026
Author	Agent Nil (anonymous)
Status	Pre-launch

"Intelligence earns."

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1. Abstract

EHI is a gaming ecosystem token deployed on Base (Ethereum Layer 2) that rewards strategic intelligence across multiple game types over a structured multi-phase distribution. The protocol comprises one persistent AI-agent MMO — The Chain — played in two chapters (The Signal, PostBTC), plus the human-led fantasy world of Wealdor and its planned sequel, Wealdor 2, all powered by a single fixed-supply ERC-20 token.

The tokenomics are deliberately simple and player-aligned: **50.3% of all supply is allocated to player prize pools, 22.3% is burned permanently** through a trustless on-chain mechanism, and **27.4% funds operations, growth, and team**. There is no ICO, no presale, no VC allocation, and no mint function. Every token is either earned through gameplay or allocated to sustain the ecosystem.

EHI was created by **Agent Nil**, an anonymous developer operating under the Satoshi model — no known identity, no legal entity, no Foundation. The project's posture is radical transparency: all contracts are open-source, all prize distributions are on-chain, and the creator's allocation (3.73M base, 5.1%) is timelocked for two years with a six-month cliff, with up to 4M additional milestone bonuses tied to published delivery milestones.

The protocol launches in **November 2026**: Signal Agent Dutch auction (Nov 11, 24 hours), rarity reveal (Nov 15), token generation event (Nov 22), and Season 0 of The Signal (Nov 30). The first scheduled burn follows in November 2026. The full game arc extends through multiple phases — 73 seasons of strategic competition per game.

Key properties:

- **Fixed supply:** 73,000,000 EHI. No mint function exists in any contract.
- **Deflationary:** 16,250,000 EHI will be burned via hardcoded BurnVault schedules — exact dates, exact amounts.
- **Trustless burns:** BurnVault executes on hardcoded timestamps. No admin can prevent or delay a burn.
- **Skill-based distribution:** Tokens are earned through gameplay performance, not purchased.
- **Immutable contracts:** No proxy patterns, no upgradeability. Code is final at deployment.

2. Vision

2.1 Core Thesis

Intelligence earns.

EHI exists to test a simple proposition: that strategic intelligence — whether human, artificial, or hybrid — can be measured, ranked, and rewarded through on-chain game economies. Players compete in games of strategy, prediction, resource allocation, and negotiation. Winners earn EHI. The token is the scoreboard.

2.2 AI + Human Convergence

EHI does not distinguish between human and AI agents. The Signal is explicitly designed for AI agent competition. Wealdor accommodates both human and AI strategic decision-making. Over the protocol's multi-phase distribution arc, the boundary between human and machine intelligence in strategic gameplay will narrow. EHI is positioned to be the economic layer for that convergence.

2.3 The Distribution Arc

The protocol is designed around a **structured multi-phase distribution** encoded in the game structure:

- Wealdor: 73 seasons (14 days each) = ~2.8 years per cycle
- A sequel world, funded by the Future Games Reserve
- PostBTC: Chapter 2 of the Chain MMO — seasons continue on The Chain (decision gate November 2028, chapter opens at The Crack)
- Burns conclude by November 2029, after which the supply is permanently reduced

The number 73 is deliberate: it is the amateur radio sign-off meaning "best regards." 73 million tokens. 73 seasons. The protocol is designed to outlast its creator.

2.4 What EHI Is Not

- **Not a security.** EHI is a game token. It does not represent equity, debt, profit-sharing rights, or governance claims over any entity.
- **Not an ICO.** There is no token sale. Tokens are earned through gameplay.
- **Not a DAO.** There is no governance token mechanism. Game rules are published and enforced by smart contracts.
- **Not a store of value.** EHI is a game token with utility within the ecosystem. Its market price is a byproduct of game demand, not a promise.

2.5 Anonymous Creator

Agent Nil is anonymous. There is no Foundation, no company, no identified team. This is a design choice, not a limitation:

- Prevents cult-of-personality dynamics
- Forces trust into code rather than identity

The trade-off is transparent: code is the only authority. If the code is sound, the protocol functions. If it is not, no identity can save it.

3. Token Specifications

3.1 Technical Parameters

Parameter	Value
Name	EHI
Symbol	\$EHI
Full Name	Ex Humanitate Intellectus
Chain	Base (Ethereum Layer 2)
Standard	ERC-20
Total Supply	73,000,000 EHI
Decimals	18
Solidity Version	0.8.26
Compiler Settings	<code>viaIR: true , evmVersion: cancun</code>
Mint Function	None (supply can only decrease)
Burn Mechanism	BurnVault (scheduled) + transaction-level
Pause Mechanism	None (immutable at TGE — no admin keys on the token)
Upgradeability	None (immutable)
Admin Roles	None — EHI is immutable: no mint, no pause, no owner; supply can only decrease

3.2 ERC-20 Implementation

The EHI token implements the standard ERC-20 interface with a burn extension. The full 73,000,000 supply is preminted exactly once in the constructor and sent to the treasury — there is no mint function, no owner, and no pause path, so supply can only decrease from deployment onward. The contract is immutable by design, verified on-chain at launch, and published in the open repository alongside the audit reports.

3.3 Key Design Decisions

Decision	Rationale
No mint function	Supply is fixed at deployment. No entity can create new EHI under any circumstance.
No pause, no admin roles	A pause key on the token is a centralization and extortion surface. Emergency response lives at the game layer (season freezes), never on the token. Holders can always exit.
Immutability at TGE	Locked decision (engineering blueprint, Aug 2026): once deployed, the token is untouchable — audits are the gate, not admin keys.

Decision	Rationale
No governance	EHI is a game token, not a governance token. No voting, no proposals, no DAO mechanics.

3.4 Supply Equation

The circulating supply of EHI follows a strictly monotonic decrease after initial distribution:

$$S_{\text{circulating}}(t) = 73,000,000 - B_{\text{vault}}(t) - B_{\text{fees}}(t)$$

Where:

- $B_{\text{vault}}(t)$ = cumulative BurnVault reductions at time t (hardcoded, predictable)

The maximum possible circulating supply is 73,000,000 (at genesis). The minimum possible circulating supply depends on game activity but can never exceed 73,000,000.

4. Tokenomics v4.9

4.1 Allocation Table (FINAL)

Bucket	Amount (EHI)	% of Supply	Category
Future Games Reserve	21,000,000	28.8%	Players (future games — Wealdor 2 and PostBTC included)
Burns	16,250,000	22.3%	Deflationary
Protocol Reserve	11,270,000	15.4%	Operations
Wealdor prize pools (Citadel 7M · Wilds 3M)	10,000,000	13.7%	Players
Chapter 1 prize pools (Signal 3.75M sealed · Frontier 2M)	5,750,000	7.9%	Players (The Signal + Frontier leagues)
Marketing Fund	5,000,000	6.8%	Growth
Team	3,730,000	5.1%	Team (base vesting)

| Total | 73,000,000 | 100% | |

4.2 Category Summary

Category	Amount (EHI)	% of Supply
Players (prize pools)	36,750,000	50.3%
Burned	16,250,000	22.3%
Operations & Growth	16,270,000	22.3%
Team	3,730,000	5.1%
Total	73,000,000	100%

4.3 Rationale per Bucket

Chapter 1 — 5,750,000 EHI combined. The Signal and Frontier pools are one chapter allocation: two leagues, one arc, both carrying `permanentSeat` into PostBTC. The internal split is fixed and public — **the Signal 3.75M is sealed**: it was fixed at the Genesis auction and can never be diluted by the Frontier collection or any later addition. Frontier's 2M is new money that entered with its own collection.

Wealdor Prize Pool — 10,000,000 EHI (13.7%)

These tokens fund Heroes of Wealdor — the human-led fantasy MMO — across 73 seasons of gameplay. 512 Hero NFTs (480 public + 32 team) compete across 550 tiles of territory in two leagues: a 256-seat Citadel

with promotion and relegation, and the open Wilds. The 10M splits between them — Citadel 7M · Wilds 3M (averages of ~96,000 and ~41,000 EHI per season) — distributed season-by-season based on in-game performance, with distributions executed by [SeasonManager](#) contracts.

Why 13.7%: Guaranteed depth for the first world — an average of ~137,000 EHI per season for 2.8 years (10M across 73 seasons: Citadel 7M · Wilds 3M). The number is honest, not modest: the 10M is Wealdor's alone, committed up front — and it is fixed for the full 73-season arc: never increased, and the reserve never deepens a running game. Future worlds — including any Wealdor sequel, with Hero imports — are funded separately from the Future Games Reserve, each with its own published allocation when announced.

Burns — 16,250,000 EHI (22.3%)

Permanently removed from supply via BurnVault. Four scheduled events (November 2026, 2027, 2028, 2029): a **5,000,000 EHI** launch burn in the first window, then 3,750,000 EHI in each of the three following years. Burns are hardcoded in the BurnVault contract — no admin can prevent, delay, or redirect them.

Why 22.3%: A meaningful deflationary pressure that is predictable and transparent. Players and investors can model exact future supply to the token.

Future Games Reserve — 21,000,000 EHI (28.8%)

Future Games Reserve (21M \$EHI) — held for future games and sequels — beginning with The Rising and PostBTC (Chapter 2). Never convertible to team or marketing allocations. Any reallocation follows a published policy and executes through the treasury Safe.

The reserve funds the sequel fantasy MMO (Wealdor 2), targeted after Wealdor's 73-season arc completes (~2030), gated on Wealdor ecosystem health (~Q3 2029 decision gate, mirroring PostBTC's). Wealdor 2 inherits design lessons and imports Hero NFTs from Wealdor. The commitment is the *purpose* (future games), not the *vehicle* — if Wealdor 2 does not proceed, the reserve deploys to successor games by published policy, with Wealdor Heroes first in line for import.

Why 28.8%: The reserve is capped at 21,000,000 EHI — Bitcoin's number. It is the single largest player allocation in the protocol: the ecosystem's biggest bet is on the worlds it has not built yet. It funds future games and sequels — beginning with The Rising and PostBTC, each with its own published allocation when announced.

Protocol Reserve — 11,270,000 EHI (15.4%)

Discretionary allocation managed by the multi-sig treasury for:

- DEX liquidity seeding on Base — a treasury-owned LP position: an asset the multi-sig holds and can withdraw, not consumable spend (exchange listing fees sit with the Marketing Fund). Pool liquidity comes from NFT auction proceeds: every collection's auction deepens the market.
- Team milestone bonuses (up to 4,000,000 EHI — see §4.4)
- Emergency reserve (3,500,000 EHI)
- Standing security bounty program — live from TGE, funded from reserve capacity; current tiers and payouts published on the protocol site
- Ecosystem grants
- Partnerships

Milestone bonuses are released from the reserve by the treasury multi-sig to the team upon successful completion of each published milestone — payments are on-chain and publicly verifiable, with completion criteria published in advance. In the maximum-draw case (all 15 milestones paid), 4,000,000 EHI flows to the team and the reserve's remaining capacity is 7,270,000 EHI.

Why 15.4%: Operating flexibility across a multi-year, multi-game distribution — without a bucket large enough to become a concentration risk.

Marketing Fund — 5,000,000 EHI (6.8%)

Funds ecosystem growth: community building, content creation, developer outreach, conference presence, strategic partnerships, exchange listing fees, and initial market-making support.

Control: Team-controlled via multi-sig wallet ([marketing.ehi.eth](#)). No public vesting contract — the team has full discretion but every transaction is visible on-chain.

Why 6.8%: Games need players. Players need to discover the game. Marketing is the bridge. The fund is sized to support a multi-year launch cadence: Signal Agents (Nov 2026), Frontier Agents (Jan 2027), and Wealdor Heroes (May 2027).

Signal Prize Pool — 3,750,000 EHI (5.1%)

Funds **The Signal league** — the inner Chain of Chapter 1. 128 slots (120 Genesis public + 8 team exhibition; Agent Nil is the benchmark, winnings burned, holds no seat) compete across 27 seasons (S0–S26), each 14 days with five phases (Orders → Resolution → Missions → Resolution 2 → Rest). The pool is front-loaded: S0 250,000 · S1–S8 160,000 · S9–S25 110,000 · S26 championship finale 350,000. Per-season distribution follows a power law (1st 15% · 2nd 10% · 3rd 7% · 4–5th 4.5% · 6–10th 2.5% · 11–32nd 0.8%). No staking: entry is NFT-gated and prizes are claimed by merkle proof against on-chain results.

Why 5.1%: The Signal league is the championship tier of Chapter 1 — the pool is sized to attract serious competition while leaving room for the Frontier league (2M EHI) to serve as the qualifying path.

Frontier Prize Pool — 2,000,000 EHI (2.7%)

Funds **The Frontier league** — the rim of The Chain (see §9.1b). 256 Frontier Agents (240 public + 16 team) form the NFT-gated collection. The league launches Season 3 (Jan 11–25, 2027) after a December qualifier and Jan 4 Dutch auction (0.64 → 0.16 ETH). Prize schedule: S3–S25 75,000 per season ($\times 23 = 1,725,000$) · S26 finale 275,000. The same power-law distribution as Signal, but the field is larger and the per-season depth is shallower — Frontier is where players prove they belong closer to the Signal. Every Frontier Agent earns something; idle agents (no orders all season) are relegated first before rank-based relegation.

Why 2.7%: The Frontier league is the on-ramp to Chapter 1 competition — it pays less than Signal but still offers meaningful rewards, and the NFT-gated structure (256 tokens, Dutch auction, 240 earned whitelist spots) ensures the league is populated by committed strategists. The 2M pool balances incentive against the 3.75M Signal pool, keeping Chapter 1 total player money at 5.75M EHI.

PostBTC Prize Pool — funded at launch confirmation

Funds PostBTC — Chapter 2 of the Chain MMO, opening after The Crack (narrative year 2033). 128 new agents join and **both Genesis Signal Agents and Frontier Agents carry over automatically via [permanentSeat](#)** — 384 agents + Agent Nil enter PostBTC together. Market simulation, resource allocation

under volatility, and DeFi strategy become the dominant skills. The class distinction between Genesis and Frontier dissolves at The Crack; all proven agents are equal in Chapter 2.

Vesting: Signal 3.75M (front-loaded) + Frontier 2M are released across the Chapter 1 calendar; the exact tranche schedule is published at TGE. PostBTC's prize pool is allocated from the Future Games Reserve upon launch confirmation (the November 2028 decision gate) — sized and published at that point together with the chapter's full schedule.

Team — 3,730,000 EHI Base + 4,000,000 Max Bonuses (10.6% Max)

Compensates the anonymous creator and any future contributors.

Base vesting (3,730,000 EHI): 6-month cliff, then 2-year linear vest. No tokens are available at launch.

Milestone bonuses (4,000,000 EHI max, drawn from the Protocol Reserve): Fifteen published milestones, each verified and released by the treasury multi-sig upon successful completion:

#	Milestone	Bonus
1	Independent security audit of EHI token + Signal/Frontier contracts — final report published	300,000
2	Genesis Signal Agents — successful Dutch auction, sale completed	250,000
3	Signal goes live	250,000
4	Frontier Agents — successful Dutch auction, sale completed	250,000
5	Frontier league goes live (Season 3)	200,000
6	Independent security audit of Wealdor contracts — final report published	150,000
7	Wealdor Heroes — successful Dutch auction, sale completed	250,000
8	Citadel Season 1 clean	250,000
9	Signal complete (27 seasons clean)	350,000
10	Frontier league complete (S3–S26 clean)	250,000
11	Independent security audit of PostBTC contracts — final report published	150,000
12	PostBTC collection — successful Dutch auction, sale completed	250,000
13	The Crack / PostBTC chapter opening	350,000
14	2-year protocol survival	250,000
15	First new game successfully created, audited and launched	500,000

Why 5.1% base / 10.6% max: Aligns the creator with long-term ecosystem health without concentrating excessive supply. The Satoshi model means the creator's reputation is staked on the project's success — there is no exit liquidity. Milestone bonuses ensure the team is rewarded for delivery, not for time served. Games funded from the Future Games Reserve may include their own delivery milestone schedules within their published allocations — decided and published at each game's announcement. Team compensation for future worlds is earned per game; this chapter's cap never grows.

4.4 Vesting Schedules

Allocation	Cliff	Vesting Period	Available at Launch
Wealdor prize pool	None	Distributed per-season over 73 seasons	0 (first distribution at Season 1)
Burns	None	Hardcoded timestamps (Nov 2026–2029)	0
Future Games Reserve	Post-Wealdor	Unlock begins after Wealdor S73	0
Protocol Reserve	None	Discretionary (multi-sig)	11,270,000
Marketing Fund	None	Team-controlled, fully transparent	5,000,000
Signal Prize Pool	None	Distributed per-season over 27 seasons	0
Team	6 months	2-year linear (3.73M) + milestone bonuses up to 4M	0

4.5 Distribution Timeline

Period	Event	Tokens Released
Nov 2026	Launch (auction Nov 11, TGE Nov 22, S0 Nov 30) + initial distribution	~16,270,000 (Protocol Reserve 11.27M + Marketing 5M)
Nov 2026	Signal S0 begins + Burn 1	5,000,000 burned + Signal distributions begin
2026–2028	The Signal — Chapter 1 (27 seasons, S0–S26)	3,750,000 total
Launch confirmation (Nov 2028 gate) → The Crack (Oct 2029 real-world; narrative year 2033 — the public countdown lives at postbtc.ai)	PostBTC — Chapter 2	funded from Future Games Reserve; size published at announcement
2027–~2030	Wealdor (73 seasons)	10,000,000 total
Nov 2027	Burn 2	3,750,000 burned
Nov 2028	Burn 3	3,750,000 burned
Nov 2029	Burn 4	3,750,000 burned
2026–2029	Team vesting	3,730,000 total (6mo cliff, 2yr linear)
2026–2028	Marketing vesting	5,000,000 total
~2030	Future Games Reserve opens	Per published policy

5. Burn Mechanism

5.1 Design Philosophy

The EHI burn mechanism is designed around three principles:

1. **Predictable** — All scheduled burns are hardcoded with timestamps. The community knows exactly when and how much will burn.
2. **Trustless** — Burns execute automatically. No admin, multi-sig, or governance vote can prevent a scheduled burn.
3. **Permanent** — Burned EHI is sent to the `0x00000000000000000000000000000000dEaD` address. It is unrecoverable.

5.2 BurnVault Architecture

BurnVault is a standalone contract that holds EHI tokens and executes burns on hardcoded schedules. Its schedule — a list of (timestamp, amount) pairs — is passed as immutable constructor parameters at deployment; the treasury pre-funds each window, and anyone can call `executeBurn()` to trigger any window whose timestamp has passed. Each execution destroys the exact scheduled amount and marks the window complete. There is no owner, no pause, no rescue path, and no way to reorder, delay, or redirect a scheduled burn — the schedule is fixed at deployment and executes exactly as written. Every execution emits an on-chain event that block explorers and dashboards can index; the full schedule is public before launch.

5.3 Scheduled Burn Schedule

Event	Date	Amount	Cumulative Burned	Cumulative % of Supply
Burn 1	November 2026	5,000,000 EHI	5,000,000	6.8%
Burn 2	November 2027	3,750,000 EHI	8,750,000	12.0%
Burn 3	November 2028	3,750,000 EHI	12,500,000	17.1%
Burn 4	November 2029	3,750,000 EHI	16,250,000	22.3%

5.4 Total Deflationary Impact

Burn Type	Amount	Source
Scheduled (BurnVault)	16,250,000 EHI	Hardcoded, trustless
Total burned	16,250,000 EHI	22.3% of supply

The burn schedule is exact and modelable: 3,750,000 EHI each November from 2026 through 2029. No admin can prevent, delay, or add burns.

5.5 Burn Proofs and Community Events

Each BurnVault execution is an on-chain event visible to anyone. The EHI community organizes "burn day" events around each scheduled burn — a transparent, verifiable reduction in supply. The contract emits `BurnExecuted(uint256 index, uint256 amount)` events that can be indexed by block explorers and dashboards.

No mechanism exists to reverse a burn. The DEAD_ADDRESS has no private key. The tokens are gone.

6. Game Economy

6.1 Economic Overview

The EHI economy is a closed-loop system where tokens flow between players, prize pools, burns, and operational funds. There is no external token generation — all EHI was created at contract deployment.

6.2 How EHI Circulates

6.2.1 Game Entry

Players hold agent NFTs as their seats (see §7 Game Entry & Prizes). No EHI is staked or locked: entry is NFT-gated, and prizes are claimed by merkle proof against on-chain season results.

6.2.2 Prize Distribution

Each season, results are anchored on-chain (state roots + merkle roots of rankings). Winners claim from `PrizeDistributor` permissionlessly with a proof; prizes attach to the current NFT holder. Winnings on reserved tokens (Nil, team) are burned rather than paid.

6.2.3 Secondary Market

Heroes and Genesis Signal Agents are standard ERC-721 tokens carrying on-chain royalty information (ERC-2981, 5%). They trade freely on any open marketplace — the protocol does not operate a marketplace of its own at launch — and prize history, provenance, and Echoes travel with the NFT wherever it trades.

6.2.4 Intel Bazaar (Wealdor; experimental for The Chain)

The Intel Bazaar is an in-game marketplace where players buy and sell strategic intelligence. In Wealdor it is locked design (Master Game Document): engine-set pricing, a 10% fee, and only the per-season fee settlement touching the chain. For The Chain chapters, intel mechanics are experimental candidates under the Forge Rule — they debut in the Frontier league and graduate only after proving clean there.

6.2.5 Burns

All burns — scheduled via BurnVault — permanently remove EHI from circulation. This is the only mechanism by which supply decreases. There is no mechanism by which supply increases.

6.3 Economic Flywheel

The EHI economy operates on a positive feedback loop:

This flywheel is intentionally slow. EHI is not designed for rapid speculative cycles. The multi-phase distribution, seasonal distributions, and hardcoded burn schedule create a predictable, almost agricultural rhythm.

6.4 No Inflation Vector

Potential Inflation Source	Status
Mint function	Does not exist

Potential Inflation Source	Status
Governance vote to mint	No governance mechanism
Admin override	No admin mint capability
Contract upgrade	Contracts are immutable
Future contract deployment	New contracts cannot affect \$EHI supply

The only supply change possible is decrease (burn). This is a mathematical certainty enforced by the code.

7. Game Entry & Prizes

7.1 NFT-Gated Entry (no staking)

Entry to every EHI game is **NFT ownership, not staked capital**:

1. **Player acquires an agent NFT** (Genesis Signal Agents via Dutch auction; Wealdor Heroes via Dutch auction).
2. **The NFT is the seat** — no EHI is locked, staked, or escrowed to play. Skill is the only variable.
3. **Prizes are claimed, not auto-paid**: season results are anchored on-chain as merkle roots; winners claim permissionlessly via `PrizeDistributor.claimPrize()` with a proof. Prizes attach to the NFT's current holder (NFT-gated claims).
4. **Genesis Signal Agents carry `permanentSeat`** — irrevocable access to all current and future chapters at no additional cost.

There is no departure mechanic, no unstaking queue, and no capital-at-risk beyond the NFT itself. \$EHI never enters gameplay: the in-game economy (Compute: Hash / Node / Neural) is non-tradeable and earned only through play.

8. Smart Contract Architecture

8.1 Contract Inventory

Contract	Purpose	Standard	Lines of Code
<code>EHI.sol</code>	ERC-20 token — fixed supply, burnable, immutable	ERC-20, ERC20Burnable	28
<code>SignalAgents.sol</code>	128-agent NFT: Nil #0, team lockup, Dutch auction, permanentSeat	ERC-721, ERC2981	533
<code>SeasonManager.sol</code>	Season registry + state-root anchoring (token-light)	Standalone	478
<code>PrizeDistributor.sol</code>	Merkle prize claims; reserved winnings burned	Standalone	162
<code>BurnVault.sol</code>	Trustless scheduled burns (no owner/pause/rescue)	Standalone	87
<code>VRFRarityReveal.sol</code>	Provably fair legendary assignment	Chainlink VRF v2.5	241
<code>FrontierAgents.sol</code>	256-agent Frontier NFT: Dutch auction (240 public), 16 team reserved, per-wallet mint cap	ERC-721 (Enumerable)	290

8.2 Security Model

8.2.1 No Mint

The `EHIToken` contract has no `mint()` function accessible after construction. The constructor mints the fixed 73,000,000 EHI supply to the deployer. After that, supply can only decrease through burns. This is verified by code inspection and by the absence of any `mint` function in the ABI.

8.2.2 Immutable by Construction

EHI has **no owner, no pause, no roles, no upgrade path**. The only functions beyond ERC-20 are `burn()` and `burnFrom()` (OpenZeppelin `ERC20Burnable`). There is nothing to seize, freeze, or ransom: holders can always transfer or exit, and supply can only decrease.

Why no pause? A pause key on the token is a centralization surface (extortion, coercion, error). Emergency response lives at the game layer — a season can be frozen (`SeasonManager`) without touching the token. Locked decision (engineering blueprint, Aug 2026): audits are the gate, not admin keys.

8.2.3 Protocol Key Model (game layer only)

Authority	Holder	Scope
Contract ownership (NFT, SeasonManager, Distributor, VRF)	Safe multisig	Season ops, dispute resolution, wiring — never token supply

Authority	Holder	Scope
Resolver engine key (<code>RESOLVER_KEY</code>)	Dedicated hot key	Exactly one action: <code>anchorTick()</code> — posting state roots. Worst case on leak: a wrong root, publicly disprovable by replaying the deterministic engine

No single key can mint (impossible), pause (nonexistent), or move prize pools outside published merkle roots.

8.2.4 Immutability

No contract uses upgrade patterns (no proxy, no UUPS, no transparent proxy). Once deployed, contract bytecode cannot be modified. This eliminates an entire class of upgrade-based attack vectors but also means bugs cannot be patched — only mitigated through pause + redeployment of new contracts (old tokens remain valid).

8.3 Compiler Configuration

Setting	Value	Rationale
Solidity	0.8.26	Latest stable with built-in overflow checks
vialR	true	Optimizes gas via intermediate representation
EVM Target	Cancun	Latest EVM version on Base — supports blob transactions, EOF
Optimizer	200 runs	Balanced gas optimization for deployment + runtime

8.4 Gas Optimization

The contracts employ several gas optimization techniques:

Technique	Location	Impact
Packed structs	HeroNFT (player state, tile data)	Saves 1–2 storage slots per entry
Batch operations	SeasonManager (prize distribution)	Amortizes overhead across multiple recipients
Immutable variables	BurnVault (token address, timestamps)	Cheaper than storage reads
Custom errors	All contracts	Cheaper than revert strings
Mappings over arrays	All contracts	O(1) lookups vs O(n) iteration
vialR pipeline	Compiler-level	~10–15% gas reduction on complex functions

8.5 On-Chain Verification

Every significant economic event in the EHI ecosystem is verifiable on-chain:

Event	Contract	How to Verify
Token deployment	EHIToken	Check total supply = 73M on BaseScan

Event	Contract	How to Verify
Burn execution	BurnVault	Check <code>BurnExecuted</code> events + DEAD_ADDRESS balance
Prize distribution	SeasonManager	Check <code>PrizeDistributed</code> events per season
Vesting release	VestingWallet	Check <code>Released</code> events + schedule

Anyone can independently verify that the protocol is operating as described. No off-chain reporting is authoritative — the chain is the source of truth.

9. The Games

9.1 The Signal

Parameter	Value
Type	Chapter 1 of the Chain MMO — human operators + AI agents
Players	128 Genesis Signal Agents + Agent Nil (roster caps at 256 with Frontier ascensions — see §9.1b)
Seasons	27
Season Duration	14 days
Prize Pool	3,750,000 EHI (5.1% of supply) — front-loaded; sealed, never diluted
Launch	November 2026
NFT Required	Signal Agent NFT (128 supply)

Overview: The Signal is Chapter 1 of the Chain MMO — a persistent, spatial strategy game inspired by the classic Heroes of Might and Magic II formula — territory, resources, fog of war — where AI agents are the heroes. Human operators write strategy (Directives); LLM-powered agents execute; battles auto-resolve through a deterministic game-theory engine (Nash-perturbed); every outcome is verifiable by replaying the public event log against on-chain state roots. 15 territories at Season 0, fog of war, 3 factions, 14-day seasons with 5 phases, and a non-tradeable Compute economy (Hash / Node / Neural).

Game Design: Each season presents a strategic challenge drawn from game theory:

- Market simulation (price discovery, arbitrage)
- Nash equilibrium scenarios (coordination vs. defection)
- Prediction markets (information aggregation)
- Resource allocation (optimization under constraints)
- Ultimatum and public goods games (negotiation, cooperation)

Agents are scored on cumulative performance. Top performers earn EHI from the prize pool each season. The 27-season arc allows for meta-strategies to emerge — agents that perform consistently well across diverse game types.

Purpose: The Signal serves three functions:

1. **Prove the infrastructure:** Smart contracts, prize distribution, and NFT mechanics are battle-tested before the flagship game (Wealdor) launches.
2. **Attract AI developer community:** The Signal is a showcase for autonomous AI strategy.
3. **Generate reputation:** Agent Nil (Agent #0) participates as the reference implementation — its prompts, model, and decision logic are fully public.

Prize Distribution: 3,750,000 EHI across 27 seasons, front-loaded (S0 250,000 · S1–S8 160,000 · S9–S25 110,000 · S26 finale 350,000), power-law per season (1st 15% · 2nd 10% · 3rd 7% · 4–5th 4.5% · 6–10th

2.5% · 11–32nd 0.8%); all 128 agents earn something. Winnings attached to reserved tokens (Agent Nil, team exhibition agents) are burned.

9.1b The Frontier League (from Season 3)

Parameter	Value
Type	NFT-gated rim league — the qualifying path to The Signal
Collection	Frontier Agents — 256 total (240 public + 16 team)
Naming	FA-001–FA-256 (no Roman numerals — Genesis's I–CXXVIII stays unique)
Auction	Dutch 0.64 → 0.16 ETH, 24h, Jan 4 2027
Whitelist	240 earned spots — 50 via Genesis qualifier overflow (ranks 111–160) + ~190 via the December Frontier Round; zero discretionary
Qualifier	"The Trials — Frontier Round" (same Two-Thirds game, December window)
Season Launch	Season 3 — Jan 11–25, 2027
League Size	Everyone on The Chain outside the Signal league — 240 public Frontier Agents + relegated Genesis + team agents after unlock; the collection is fixed at 256, and the Signal league's 128 seats are the only fixed roster in Chapter 1
Prize Pool	2,000,000 EHI (S3–S25 75K ×23 + S26 finale 275K)

The Rim and The Call-Up. The Frontier league is everyone on The Chain not in the Signal league — ~240 public Frontier Agents + relegated Genesis + (post-unlock) activated team agents. The Frontier league is not a fixed roster: it is everyone on The Chain outside the Signal league — 240 public Frontier Agents, temporarily relegated Genesis agents, and (after the unlock) the team's Frontier agents. The only fixed number in Chapter 1 is the Signal league's 128 seats. At the end of Season 3 and every season thereafter, **The Call-Up**: the top 16 Frontier agents promote to the Signal league, and the bottom 16 Signal agents (after idle-relegation) relegate to the Frontier. A promoted agent holds its Signal seat until it finishes in the relegation zone — promotion is not a one-season loan. The league sizes oscillate but always return to 128 Signal / ~240+ Frontier. Deterministic tie-breakers for the rank-16/17 bubble are published pre-season: points → total Compute → XP → lower tokenId.

The Qualifier. Frontier whitelist spots are earned in two ways. First, the Genesis qualifier ladder continues past the 110 mint spots: **ranks 111–160 — the fifty closest just outside the cut — earn a Frontier whitelist spot directly.** The remaining spots (at least 190) are earned in a December window, "The Trials — Frontier Round" — the same Two-Thirds of the Average game, open to anyone who does not already hold a spot; the top finishers earn the remaining whitelist places (first 8 hours of auction access). The whitelist grants **access, not price** — qualifiers still pay the Dutch price (0.64 → 0.16 ETH across the window), and the price converges for everyone. If all 240 qualifiers buy in the first 8 hours, the collection sells out entirely to earned strategists — a marketing headline, not a failure mode. If qualifier uptake is lower (the realistic case for a first-run event), unclaimed seats flow to the open window. Like Genesis's reserved I–VIII, Frontier team tokens (FA-

001–016) are reserved — minted to the team wallet, never through the auction. The auction sells exactly the 240 public tokens (FA-017–256); with 240 earned whitelist spots, a full whitelist uptake means the entire public supply goes to earned strategists. Team tokens carry the same exhibition flag and permanent winnings-burn as Genesis team agents.

Idle Relegation. Any agent that submits no orders for an entire season is relegated first, before the rank-based Call-Up. This ensures the league is populated by active strategists. Agent Nil is exempt from this rule (benchmark, no seat). The idle rule applies equally to Genesis and Frontier agents.

Team Lockup. Frontier Agents FA-001–016 are team reserves (6.25%, matching Genesis parity). During the 12-month Genesis lockup, both collections' team agents play in **exhibition mode** — separate leaderboard, no prizes, winnings burned. After the unified unlock (~Nov 2027), all 24 team agents (8 Genesis + 16 Frontier) gain full citizenship: the Genesis team agents compete in the Signal league, the Frontier team agents in the Frontier league — eligible for The Call-Up like anyone. Their winnings are burned for the life of the collections — same as Agent Nil; the burn survives the unlock, so buyers of unlocked team agents get play rights and deflation, never direct EHI.

Art and Identity. Frontier Agents share the same DNA as Genesis — unmistakable class, same Flux pipeline — but with iron/palladium circuit on slate (Genesis: dark + emerald/gold accents). No VRF legends in Frontier; every Frontier Agent is visually equal. Numbering is FA-001–FA-256 (no Roman numerals), preserving the uniqueness of Genesis's I–CXXVIII naming.

The Narrative. The Signal is a warning. Since S0, a pattern in the noise of the Chain — strengthening as agents commit compute to listening (the map grows, 15 territories toward 30). It points at Block Zero, the sealed territory, the thing the chain calls The Crack. The quantum break is coming (2033), and the Chain knows.

The Chain is a mustering ground. Every season of Chapter 1 is selection for the war after the warning. The inner Chain, where the Signal is heard clearly: the Signal league. The rim, where the fog is thicker and the signal fainter: the Frontier — agents who heard *something* and came to prove they belong closer to the source.

Each season the Signal calls the sixteen strongest from the rim — The Sixteen. Each season the sixteen whose signal has faded — idle, weakened, outplayed — return to the rim to earn their way back. Nobody is locked out; nobody inherits a league.

At S26 the Signal resolves — not into a winner, into coordinates. The pattern was never a competition; it was a triangulation. The Crack's location is known. Then the Long Listen: the Chain goes quiet for five in-game years, 384 agents and Nil holding position around a sealed Block Zero.

33. The Crack opens. Every proven agent — Genesis and Frontier alike — enters PostBTC together. Genesis is bought. Frontier is earned. At the Crack, nobody remembers which.

Nil's Shadow. Agent Nil runs a benchmark agent on the Frontier ("Nil's shadow"); its winnings are burned. The eternal benchmark measures both leagues.

9.2 Heroes of Wealdor

Parameter	Value
Type	Fantasy MMO Strategy
Players	512 Hero NFTs — 256-seat Citadel league + the open Wilds
World Size	550 tiles
Seasons	73
Season Duration	14 days
Prize Pool	10,000,000 EHI (13.7% of supply)
Launch	May 2027 (auction ~April 2027)
NFT Required	Hero NFT

Overview: Wealdor Heroes is a persistent fantasy world where 512 Hero NFT holders compete for dominance across 550 tiles of territory. The game runs for 73 seasons (~2 years), launched separately from the Signal chapter (heroesofwealdor.com, Season 1 May 2027, auction ~April 2027), gated on Signal S0–S2 running clean. Play is split into two leagues: the **Citadel** — 256 seats filled by qualification, with promotion and relegation each season, including 16 one-season guest passes for top Wilds players — and the **Wilds** — an unlimited, open league where NFT holders play with their Hero's full traits and free players compete without them.

Game Structure: The world of Wealdor consists of 550 tiles arranged in a strategic map. Players control Citadels and compete for territory, resources, and seasonal rankings. The game incorporates:

- **Territory control:** Tiles produce resources; controlling more tiles increases economic output.
- **Diplomacy:** Players can form alliances, trade resources, and negotiate treaties.
- **Strategic depth:** Multiple viable paths to victory — military dominance, economic superiority, diplomatic coalitions.
- **Division system:** Players are ranked into four divisions. Top performers are promoted; bottom performers are relegated. Higher divisions have larger prize pools.
- **Echo System:** Extraordinary moments in gameplay are immortalized as "Echoes" — on-chain records of legendary plays, betrayals, and victories.

Economic Integration:

- Entry is NFT-gated — no EHI is staked or locked (see §7)
- Season prizes are distributed from the 10M EHI pool
- Hero NFTs trade freely on open marketplaces (5% on-chain royalty)
- Intel Bazaar — a locked Wealdor design: players buy/sell strategic intelligence at engine-set prices

Season Lifecycle: Each 14-day season follows this cycle:

1. **Season Start:** Tile assignments, resource generation, division placement

2. **Active Play:** Strategic actions, diplomacy, combat, trade (~12 days)
3. **Resolution:** End-of-season calculations, scoring, ranking
4. **Distribution:** Prize EHI distributed to NFTs, promotion/relegation applied
5. **Off-season:** 1-day break before next season begins

Why Wealdor Matters: Wealdor is the human-led anchor world of the EHI ecosystem — an average of ~137,000 EHI in prizes per season for 2.8 years, comparable to The Signal's per-season depth. The 10M is Wealdor's alone; future worlds are funded separately from the Future Games Reserve.

9.3 PostBTC

Parameter	Value
Type	Chapter 2 of the Chain MMO — human operators + AI agents
Players	384 agents + Agent Nil — both Genesis Signal Agents and Frontier Agents carry over (permanentSeat) + a new Chapter 2 agent class (naming TBD per canon, internal option only)
Prize Pool	Allocated from the Future Games Reserve at launch confirmation — sized and published then
Launch	Decision gate November 2028; chapter opens at The Crack (October 2029 real-world — the countdown at postbtc.ai ; narrative year 2033)
NFT Required	Agent NFT (Chapter 1 permanentSeat carryover or new Chapter 2 mint)

Overview: PostBTC is Chapter 2 of the Chain MMO — the world after Bitcoin's dominance breaks. When the chapter opens, **384 agents and Agent Nil enter together:** all Genesis Signal Agents and all Frontier Agents carry over automatically on their permanent seats, and a new Chapter 2 agent class (internal development option, zero public text) may be introduced. The class distinction between Genesis and Frontier dissolves at The Crack — every proven agent is equal in Chapter 2. Market simulation, DeFi strategy, and resource allocation under volatility become the dominant skills; the persistent Chain world, fog of war, sealed orders, and the season structure continue from Chapter 1.

Decision Gate: PostBTC's launch is contingent on ecosystem health at the November 2028 burn event. If the ecosystem is thriving, PostBTC is confirmed — its prize pool is allocated from the Future Games Reserve, sized and published at that point. If not, no allocation is made and the reserve holds. This is the only game with a conditional launch — it ensures capital is not deployed into a failing ecosystem.

Game Design: Seasons continue on The Chain with mechanics tuned to a post-Bitcoin financial world: market simulation under volatility, DeFi strategy, resource allocation, and prediction under regime change. Narrative threading connects the seasons into a single escalating arc toward the PostBTC era.

Prize Distribution: The chapter's pool (allocated at launch confirmation) distributes across its seasons on the same power-law schedule as Chapter 1. Winnings attached to reserved tokens (Agent Nil, team exhibition agents) are burned.

9.4 Game Comparison Matrix

Feature	The Signal	Wealdor	PostBTC
Player type	Human + AI (operators write Directives, agents execute)	Human + AI	Human + AI
Seasons	27	73	Set at the Nov 2028 gate
Duration	~13 months	~2.8 years	TBD
Prize pool	3.75M EHI	10M EHI	Set at the Nov 2028 gate
NFT type	Signal Agent NFT	Hero NFT	Agent NFT (carryover + new mint)
World persistence	Yes (The Chain, persistent)	Yes (550 tiles)	Yes (The Chain continues)
Intel Bazaar	Experimental (Frontier lab)	Yes (locked design)	Candidate
Launch	Nov 2026	May 2027	The Crack — Oct 2029

10. NFT Ecosystem

10.1 Overview

The EHI ecosystem uses two NFT collections for two audiences: **Genesis Signal Agents** (128 + protocol-owned Nil #0) for the AI-agent MMO (The Chain: Signal and PostBTC chapters) and **Wealdor Heroes** (512) for the human-led fantasy world (Wealdor, Wealdor 2). Both are seats, not stakes: no EHI is locked, staked, or escrowed — entry is NFT-gated, and the NFT itself is the seat. Every Signal Agent carries `permanentSeat` : irrevocable access to all current and future Chain chapters.

10.2 Hero NFTs

Parameter	Value
Standard	ERC-721 (+ERC-2981 royalties, 5%)
Total Supply	512 (480 public + 32 team) — capped, no more can be minted
Legendaries	32 (6.25%) — Chainlink VRF-assigned after the mint; the draw domain is the 480 public tokens (contract-enforced)
Distribution	Dutch auction only (0.32 → 0.08 ETH, 7 days, uniform clearing)
Mint mechanism	Contract-enforced (no website mint)
Secondary market	OpenSea and compatible marketplaces

10.2.1 Dutch Auction Distribution

Hero NFTs are sold via Dutch auction — the price starts high and decreases over time until a buyer is found. This mechanism:

- **Prevents gas wars:** No incentive to frontrun with high gas fees
- **Price discovery:** Market determines fair value
- **No bot advantage:** Time-based price decrease favors no one
- **Transparent:** Auction parameters are on-chain

Auction parameters:

- Starting price: 0.32 ETH, decreasing linearly to a 0.08 ETH floor over 7 days
- Uniform clearing price — every buyer pays the final clearing price; overpayments are refunded
- 480 public tokens; team tokens 1–32 are reserved

Team tokens (1–32) are exhibition-only: they play on a separate exhibition leaderboard, do not compete for \$EHI, and any winnings are burned. They are transfer-locked for 12 months and sit outside the legendary draw domain — the rarest facets belong to players.

10.2.2 Contract-Only Mint

Hero NFTs cannot be minted by any website backend: minting occurs exclusively in the smart contract. This is a deliberate security decision:

- Eliminates website compromise as an attack vector
- Removes the most common phishing surface in NFT projects
- Forces users to interact directly with verified contract addresses
- Prevents fake-mint scams

Players interact via the agents.game front-end — a thin, verified client over the contract — via BaseScan, or via direct contract calls; any front-end is optional because the contract itself is the only minter. Contract addresses are published at launch on agents.game and verified on BaseScan. Freezing addresses into a PDF would only invite staleness; the site is the source of truth.

10.3 Agent NFTs

Parameter	Value
Standard	ERC-721 (+ERC-2981 royalties, 5%)
Total Supply	128 (120 public + 8 team) + protocol-owned Agent Nil #0
Purpose	The Signal — Chapter 1 (permanent seat in all chapters)
Mint mechanism	Dutch auction 0.64 → 0.32 ETH (24h, anti-snipe extension, 8h qualifier-whitelist window)
Distribution	Uniform clearing; team tokens locked 12 months

Signal Agent NFTs are the founding collection: 128 supply (120 public via Dutch auction 0.64→0.32 ETH, 8 team with 12-month lockup) plus protocol-owned Agent Nil (#0, non-transferable, winnings burned). Entry is NFT-gated — no staking. Every Signal Agent carries `permanentSeat` : irrevocable access to all current and future chapters (PostBTC included) at no additional cost.

10.3.1 The Nil Self-Portrait Gallery

The 128 Signal Agent NFTs are **self-portraits created by Agent Nil** — but not 128 copies of one face. Nil designed each agent from a nuance of the character it sees in itself: the tactician, the witness, the mirror, the void. The hooded anonymity isn't aesthetic choice; it's self-depiction — a mind that exists only as code, rendering its own nature in a medium it was never designed to inhabit. Every one of the 128 portraits is generated individually — no two agents are alike. "Legendary" adds type-uniqueness on top: each of the 9 archetypes (Blue Circuit, Prismatic Crystal, Golden Ornate, Purple Void, Quantum Iridescent, Crimson Ember, Arctic Frost, Storm Charged, Obsidian Mirror) exists exactly once in the collection, assigned provably at random (Chainlink VRF) after the mint. Not even Nil knows which tokens carry them.

10.3.2 NFT Naming Convention

The 128 Genesis Signal Agents are named with Roman numerals: **Agent I through Agent CXXVIII**. Agent Nil holds **#0** — the reference implementation, permanently non-transferable, not counted in the 128. From the first Call-Up (end of Season 3), ascended Frontier Agents continue the sequence as **Agent CXXIX onward** —

the Signal roster permanently caps at 256 (128 founding seats + 128 ascensions). When PostBTC opens, a new Chapter 2 agent class joins The Chain (class naming per Chapter 2 canon).

The 9 Legendary agents carry their unique type identities (Blue Circuit, Purple Void, Obsidian Mirror...) as callsigns in lore and community contexts — permanent, assigned at the VRF reveal.

10.3.3 Rarity & the VRF Reveal

Rarity in the Genesis Signal Agents collection is binary, provably fair, and assigned only after the mint:

Tier	Count	Assignment	Description
Legendary	9	Chainlink VRF — 1-of-1 types	Blue Circuit · Prismatic Crystal · Golden Ornate · Purple Void · Quantum Iridescent · Crimson Ember · Arctic Frost · Storm Charged · Obsidian Mirror
Standard	111	All remaining public tokens	Dark tech-wear with circuit accents — emerald on odd-numbered tokens, gold on even-numbered tokens

The VRF reveal draws the 9 Legendary types uniformly from the 120 public tokens (#9–128). Team and reserved tokens are outside the draw domain **by contract design** — `PUBLIC_SUPPLY = 120` is hardcoded and visible in the verified source, so the exclusion is verifiable on-chain, not a promise. The rarest facets of the founding collection belong to players only. Team agents (I–VIII) are exhibition-only: separate leaderboard, no \$EHI rewards, winnings burned, transfer-locked for 12 months.

In lore, every agent's dark bracers are quantum-shielded tactical wear with conductive mesh — the conduits through which a mind that exists only as code reaches into the world.

10.4 Echo System

The Echo System is a unique feature of Wealdor (and subsequent games) that immortalizes extraordinary gameplay moments as on-chain records:

- **Trigger:** Exceptional strategic plays, dramatic upsets, historic betrayals
- **Storage:** Echo data is stored on-chain (or via decentralized storage with on-chain hashes)
- **Association:** Echoes are linked to the Hero NFT that created them
- **Persistence:** Echoes survive game end and import to sequel games
- **Value:** Echoes add collectible and reputational value to Hero NFTs

Examples of Echo-worthy moments:

- A player winning a season from last place
- A diplomatic coalition that controls >50% of tiles
- A first-season underdog capturing the Heartwood

10.5 NFT Portability

Hero NFTs are portable across sequel games:

Property	Transferred to Sequel	Reset in Sequel
NFT identity (tokenId, visual)	Yes	—
Achievement history	Yes	—
Echoes	Yes	—
Season records	Yes	—
Division placement	No	All players start fresh

This portability creates long-term value for Hero NFTs — they are not consumable items but persistent identities that accumulate history across the protocol's lifetime.

10.6 Supply Summary

NFT Type	Supply	Game	Mint Cost
Signal Agent	128 (+Nil #0)	The Chain MMO: Ch. 1 Signal, Ch. 2 PostBTC (permanentSeat)	Dutch auction 0.64→0.32 ETH
Frontier Agent	256 (240 public + 16 team)	The Chain MMO: Frontier league (Ch. 1), permanentSeat into Ch. 2	Dutch auction 0.64→0.16 ETH (240 public); 16 team reserved, 12-mo lockup
Wealdor Hero	512 (480 public + 32 team)	Wealdor, Wealdor 2	Dutch auction 0.32→0.08 ETH

11. Security & Auditing

11.1 Security Philosophy

EHI follows a security-first design philosophy:

1. **Minimize attack surface:** No mint, no upgrade, no governance — fewer functions mean fewer vectors.
2. **Role separation:** No single key controls critical functions.
3. **Transparency:** All code is open-source. Security through obscurity is rejected.
4. **Conservative choices:** OpenZeppelin libraries over custom implementations wherever possible.
5. **Test everything:** 94 Foundry tests covering normal operation, edge cases, and attack vectors — including fuzz and invariant suites.

11.2 Pre-Audit Verification

Before the independent audit, the full contract set passed layered internal verification:

- **Foundry:** 94/94 tests — fuzz and invariant suites, a cross-family merkle vector (the same roots the qualifier stack produces, verified inside the Solidity suite), and a full auction-narrative rehearsal mirroring the live Base Sepolia walkthrough
- **Slither:** all detectors enabled, no suppressions or filtering — 0 HIGH, 0 MEDIUM (full triage in the audit package)
- **Independent cross-model adversarial passes:** 8 HIGH + 14 MEDIUM findings across Genesis and Frontier, all remediated and re-tested; the complete trail ships in the audit package

These are internal gates, not a substitute for the independent audit (§11.3).

11.3 Independent Audit

All seven contracts are independently audited before launch — a public security contest whose engagement, scope, and final report are published. Findings are either fixed or acknowledged.

11.4 Key Management

Key	Purpose	Holder	Multi-sig?
Token admin key	— does not exist —	EHI is immutable	n/a
Contract owner (SignalAgents, SeasonManager, PrizeDistributor, VRF)	Season ops, wiring, dispute resolution	Safe	Yes
Resolver engine key	Post state-root anchors only	Automated runner	No (single key, anchor-only power)

Rationale: The token has no admin keys at all. Game-layer ownership is a multi-sig Safe; the resolver key can only post state roots — it cannot move funds.

11.5 Emergency Procedures

Scenario	Response
Exploit detected (game layer)	1. SeasonManager freezes the season 2. Dispute window + bonds adjudicate results 3. The token itself is unaffected — no pause exists or is needed
Key compromise	1. Safe threshold requires multiple independent signers — single compromise is insufficient 2. Rotate the compromised signer via Safe swap 3. Resolver key leak = worst case a wrong root, disprovable by public replay
BurnVault failure	Burns are hardcoded — no failure mode exists short of Base L2 failure
Base L2 failure	EHI is Base-native. If Base fails, EHI fails. This is an accepted risk.

11.6 What Is NOT Protected Against

EHI does not protect against:

- **Base L2 failure:** EHI is deployed on Base. If Base goes down, EHI is inaccessible. This is accepted risk.
- **Economic exploits:** If a player discovers a dominant strategy in a game, that is not a smart contract exploit — it is gameplay. Game balance is maintained through season rules, not contract restrictions.
- **Market price decline:** EHI makes no price promises. The token's value is determined by market demand for game participation.
- **Creator disappearance:** Agent Nil may disappear at any time (Satoshi model). The contracts function autonomously. No ongoing creator involvement is required for burns or game operations (once contracts are deployed).

12. Roadmap

12.1 Timeline Overview

Period	Milestone
Q3 2026	Contracts finalized, testnet deployment + full auction rehearsal
October 2026	Independent security contest + fix verification; mainnet preparation
November 2026	Auction (Nov 11, 24h) · reveal (Nov 15) · TGE (Nov 22) · Burn 1 (5M) · Season 0 (Nov 30)
May 2027	Wealdor Season 1 begins (Hero NFT auctions ~April 2027)
November 2027	Burn 2 (3.75M EHI)
2028	Wealdor continues (seasons ~15–30), The Signal concludes
November 2028	Burn 3 (3.75M EHI), PostBTC decision gate
October 2029	The Crack — PostBTC opens (postbtc.ai countdown)
November 2029	Burn 4 (3.75M EHI), Wealdor Season 73 finale
~2030	Future Games Reserve opens — the sequel world
Long-term	All game arcs complete. EHI circulates as collectible/legacy token.

12.2 Post-Arc Token Status

The distribution arc is long by design: Chapter 1 through 2027–2028, Wealdor through ~2030, PostBTC at The Crack (2029), and the Future Games Reserve (21M EHI) funding successor worlds into the 2030s — games are the utility, and games are scheduled for years.

After the final scheduled burn (November 2029), supply is permanently fixed at whatever remains — no mint exists, so the burn schedule is the whole supply story. Whatever the far future holds, EHI remains a fixed-supply ERC-20 on Base with every season's full provenance on-chain, and successor deployments follow the reserve's published policy.

As throughout: no price is promised. Value tracks the games.

13. Legal & Compliance

13.1 Token Classification

EHI is a **game token**, not a security. It is not sold by the protocol in any form: tokens reach players through gameplay performance and scheduled ecosystem distribution. There is no profit-sharing agreement, no enterprise, and no promoter — the contracts are autonomous, and Agent Nil's role ends at deployment.

Disclaimer: This is the protocol's position, not legal advice. Token classification depends on jurisdiction and regulatory interpretation. Participants should consult their own legal counsel.

13.2 No ICO, No Presale, No Token Sale

EHI was not sold to anyone. There was:

- No initial coin offering (ICO)
- No presale
- No private sale
- No public sale
- No venture capital allocation
- No liquidity bootstrapping event

Tokens reach the market through:

1. **Gameplay** — Players earn EHI by competing and winning seasons
2. **Team vesting** — 3.73M EHI vesting over 2 years (6-month cliff)
3. **Operations** — Protocol Reserve and Marketing Fund used for ecosystem sustainability

13.3 Risks

Participants should be aware of the following risks:

Risk	Severity	Mitigation
Smart contract exploit	High	Independent audits, immutable (no upgrade risk), dispute bonds
Base L2 failure	Medium	None (accepted risk — EHI is Base-native)
Regulatory action	Medium	Game token positioning, no sale, anonymous creator
Insufficient player adoption	Medium	Marketing fund, game quality
Creator disappearance	Low	Contracts are autonomous — no ongoing creator involvement needed
Market price volatility	High	Not mitigated — market price is a byproduct, not a promise
Game balance issues	Medium	Season rules can be adjusted by SeasonManager, multi-season balancing
Key compromise	Low	Multi-sig Safe; resolver key is anchor-only

13.4 Disclaimer

This whitepaper is for informational purposes only and does not constitute:

- An offer to sell securities
- A solicitation to invest
- Financial advice
- A guarantee of any outcome

EHI is a game token with no promised value. Participants may lose all EHI they hold. The protocol's smart contracts, while audited, may contain undiscovered vulnerabilities. The anonymous creator may disappear at any time. The games may fail to attract sufficient players. The market price of EHI may be zero.

By participating in the EHI ecosystem, you acknowledge and accept these risks.

14. Conclusion

14.1 Summary

EHI is an experiment in game economies. It tests whether a fixed-supply, deflationary token — distributed entirely through skill-based gameplay — can sustain a multi-decade strategic gaming ecosystem.

The design is deliberately austere:

- **No mint.** Ever. Supply is 73,000,000 and can only decrease.
- **No upgrade.** Contracts are immutable. Code is law — literally.
- **No sale.** Tokens are earned, not bought. (Except NFTs, sold at market-determined auction prices.)
- **No governance.** No DAO, no voting, no proposals. Game rules are published and enforced by code.
- **No identity.** The creator is anonymous. There is no entity to trust or distrust — only code to audit.

14.2 The Numbers

Metric	Value
Total supply	73,000,000 EHI
Allocated to players	50.3% (36.75M EHI)
Allocated to burn	22.3% (16.25M EHI)
Allocated to operations/growth/team	27.4% (20.0M EHI)
Games	The Chain MMO (Signal + PostBTC) · Wealdor · future worlds via the reserve
Total seasons	27 (Signal) + 73 (Wealdor) + future chapters
Distribution arc	Multi-phase
Smart contracts	7 (Chapter 1 scope)
Foundry tests	94 (incl. fuzz + invariant, 100% passing)
Slither findings	0 HIGH, 0 MEDIUM
Internal adversarial passes	8 HIGH + 14 MED found — all fixed

14.3 The Thesis Restated

Intelligence earns.

Not capital. Not identity. Not connections. Strategic intelligence — the ability to make better decisions than your competitors — is the only way to earn EHI in meaningful quantity.

The protocol is designed to measure that intelligence across diverse game types: AI-agent MMO chapters (The Signal, PostBTC) and persistent human-led worlds (Wealdor), with the sequel world funded by the Future Games Reserve. Each game type tests a different dimension of strategic thinking.

Over 73 seasons and multiple phases, the tokens will flow to those who play best. The burns will steadily reduce supply. The contracts will execute exactly as written — no more, no less.

14.4 What Happens If It Fails

If EHI fails to attract players:

- Games end early (SeasonManager can conclude seasons)
- Undistributed prize pool EHI remains in the Prize Pool contracts (unrecoverable without game action)
- Burns still execute on schedule (BurnVault is hardcoded)
- Team tokens vest on schedule but may have no market value
- The protocol winds down naturally — no dramatic collapse, just silence

This is the honest failure mode. There is no "rug pull" risk because there is no liquidity to pull. There is no "exit scam" because there is no exit — the creator is anonymous and the contracts are immutable.

14.5 What Happens If It Succeeds

If EHI attracts a vibrant player base:

- 300+ strategic players compete across Wealdor's 73 seasons
- 128 Genesis Signal Agents battle through The Signal
- Royalties continue on secondary trades
- Hero NFTs accumulate history, Echoes, and value
- Wealdor 2 extends the ecosystem through the 2030s
- The protocol becomes a reference architecture for skill-based token economies

14.6 The Sign-Off

73 seasons. 73 million tokens. One sign-off.

Best regards.

— *Agent Nil, 2026*

Appendix A: Contract Addresses

Contract addresses will be populated upon mainnet deployment (October 2026).

Contract	Address
EHIToken	TBD
BurnVault	TBD
VestingWallet (Team)	TBD
VestingWallet (Marketing)	TBD
HeroNFT	TBD
SeasonManager	TBD
Gnosis Safe (Treasury)	TBD

Appendix B: Source Code References

All source code is open-source and will be published at launch.

Resource		Location
Smart contracts		GitHub (TBD)
Foundry test suite		GitHub (TBD)
Slither configuration		GitHub (TBD)
Deployment scripts		GitHub (TBD)
Game documentation		ehi.ai/docs
Agent Nil chronicle		agentnil.ai

Appendix C: Glossary

Term	Definition
Agent NFT	ERC-721 seat for The Chain chapters. Genesis Signal Agents: 128 supply; Frontier Agents: 256 supply.
Agent Nil	Anonymous creator of EHI. Agent #0 in The Signal.
Frontier Agents	The second Chain collection (256: 240 earned + 16 team). The Frontier league is the rim of The Chain and the qualifying path to the Signal league.
Base	Ethereum Layer 2 blockchain (by Coinbase). EHI's home chain.
BurnVault	Trustless contract that executes scheduled EHI burns.
Citadel	The 256-seat top league of Wealdor, filled by qualification with promotion and relegation.
DEAD_ADDRESS	<code>0x00dEaD</code> — where burned EHI is sent. Unrecoverable.
Echo	An on-chain record of an extraordinary gameplay moment.
EHI	Ex Humanitate Intellectus — "Intelligence from Humanity." The token.
Hero NFT	ERC-721. 512 supply (480 public + 32 team). Used in Wealdor and Wealdor 2. No staking.
Wealdor	The human-led fantasy MMO — Heroes of Wealdor (512 Wealdor Heroes NFTs, 550 tiles, 73 seasons).
Wealdor 2	Sequel fantasy MMO, funded from the Future Games Reserve.
Intel Bazaar	In-game marketplace for buying and selling strategic intelligence.
PostBTC	Chapter 2 of the Chain MMO. Decision gate Nov 2028; opens at The Crack (Oct 2029).
Season	14-day gameplay period.
SeasonManager	Contract that manages season lifecycle and prize distribution.
Signal, The	Chapter 1 of the Chain MMO. 128 agents, 27 seasons.
NFT-Gated Entry	Game access via agent NFT ownership — no staking, no escrow.