AETHELRED

Canonical protocol materials

The AETHEL Economic Architecture

Fixed-Supply Mechanics for Sovereign Compute

Prepared for professional stakeholder review, diligence, and reference.

Published by: The Aethelred Foundation

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10B AETHEL

TOTAL SUPPLY

Fixed supply minted at genesis under the current public canonical posture.

0%

POST-GENESIS INFLATION

Inflation remains disabled unless code, governance, and disclosure posture all change together.

Utility-First

ECONOMIC DESIGN

Public positioning emphasizes staking, fees, governance, slashing collateral, and compute settlement.

uaethel

BASE DENOM

Cosmos accounting uses a 6-decimal base unit, with 18-decimal execution compatibility where required.

CONTENTS

Public Canonical Draft

Version: 1.1 Date: 2026-04-03 Prepared by: Aethelred Public disclosure posture: governed legal, commercial, and technical disclosures publish only when approved for release.

Document Control

ATTRIBUTE	VALUE
Document Owner	Ramesh Tamilselvan
Legal Reviewer	Ramesh Tamilselvan
CSP Reviewer	Ramesh Tamilselvan
Current Status	Public Canonical Draft
Last Approved Date	2026-04-03 (engineering and disclosure-owner review)
Next Review Date	TBD
Classification	Public Canonical -- Approved for Website Publication

Important Notice

This document is a public utility-token and protocol-economics paper prepared for website publication and for review by appointed Company Service Provider and legal counsel. It is designed to align with the current public disclosure posture of the project.

This document does not state or imply that:

- Aethelred has completed any specific regulatory registration or approval;
- any token sale, exchange listing, or market-maker agreement has been completed;
- any launch pricing, float, or valuation metric has been approved for disclosure; or
- any statement herein constitutes an offer of securities, units in a collective investment arrangement, derivatives, fund interests, or any other regulated financial product.

Any regulated activity requiring a Financial Services Permission, or equivalent approval, will only be conducted by an appropriately authorised entity or after the required permissions are obtained.

1. Executive Summary

This paper explains the current public token design of AETHEL, the native utility token of the Aethelred protocol. It focuses on:

- token purpose and intended use;
- fixed-supply issuance discipline;
- economic control principles;
- utility flows across staking, fees, governance, and verified compute;
- disclosure governance over launch and commercial information; and
- the current public legal boundary.

The tokenomics design is built around one central principle: the economic layer must reinforce protocol credibility rather than undermine it. That means supply discipline, utility clarity, burn logic, slashing accountability, and disclosure controls all matter together.

1.1 Public Metrics At A Glance

METRIC	CURRENT PUBLIC POSITION
Native token	`AETHEL`
Total supply	`10,000,000,000 AETHEL`
Supply model	Fixed at genesis
Post-genesis inflation	`0%`
Primary token roles	Staking, fees, slashing collateral, governance, verified-compute settlement
Launch metrics	Governed and withheld pending approval

1.2 Economic Design Intent

AETHEL is designed to support a protocol whose core purpose is verifiable AI computation. That makes its economic role different from a token whose only job is generalized gas consumption or speculative exchange.

The public token paper is therefore written as an operating model and control document, not as a sales brochure.

2. Current Public Disclosure Posture

The current public posture is intentionally conservative.

Publicly disclosed today:

- fixed supply: 10,000,000,000 AETHEL;

- post-genesis inflation: 0%;
- utility-first token design;
- fee, burn, staking, slashing, governance, and settlement roles; and
- disclosure controls for launch, counterparties, and regulatory status.

Not publicly disclosed today:

- launch float and circulating supply at token generation event;
- token price, valuation, and fundraising round metrics;
- exchange, market-maker, or liquidity counterparty names;
- any unverified performance or commercial metrics; and
- any statement that implies completed regulatory registration or approval.

2.1 Disclosure Classes

INFORMATION CLASS	CURRENT STATE	PUBLICATION RULE
Supply and inflation	Public	Code-backed and canonical
Utility roles	Public	Must remain consistent with current protocol design
Launch float and price	Withheld	Publish only through approved source pack
Counterparty names	Withheld	Executed-only and approval-gated
Performance metrics	Withheld	Benchmark-gated
Regulatory status	Withheld except preparation-stage wording	Evidence- and legal-approval-gated

These withheld items publish only after approval through the canonical token source pack and the relevant disclosure process.

3. Economic Design Principles

The public token design follows a small number of stable principles.

3.1 Fixed Supply Discipline

The supply should not expand post-genesis under the current canonical posture.

3.2 Utility-First Design

The token is presented as protocol utility, security collateral, and settlement infrastructure rather than as an ownership or revenue-share instrument.

3.3 Burn-Compatible Scarcity

Deflationary mechanics may reduce circulating supply over time without requiring inflation elsewhere in the system.

3.4 Accountability Through Bonding and Slashing

The economic model should reward correct operation and impose costs on harmful or fraudulent behavior.

3.5 Governance Over Disclosure

Economic truth is not whatever appears in a spreadsheet or pitch deck. Public token statements must follow canonical source control and legal/disclosure approval.

4. Token Nature and Intended Use

AETHEL is designed as a protocol utility token for a network that verifies artificial-intelligence computation with cryptographic evidence.

Its current intended uses are:

- staking and validator participation;
- slashing collateral and security bonding;
- payment of protocol fees;
- governance participation;
- settlement support for verified computation;
- fee burning and supply reduction mechanisms; and
- treasury and ecosystem coordination under governance controls.

AETHEL is not described in this paper as:

- an ownership interest in Aethelred;
- a claim on dividends, profits, or protocol revenue;
- a debt instrument;
- a redemption right against the project team;
- a right to guaranteed appreciation; or
- a promise of exchange or listing access.

4.1 Public Utility Matrix

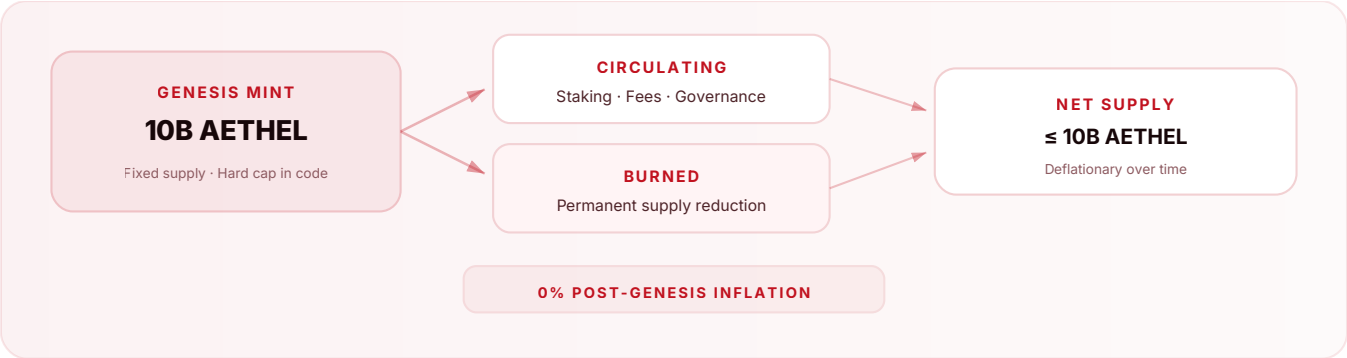
UTILITY ROLE	PUBLIC DESCRIPTION
Staking	Economic security and validator participation
Slashing collateral	Accountability for downtime, fraud, or harmful behavior
Fee settlement	Native unit for protocol fee accounting
Governance	Participation in protocol-level decision processes
Verified-compute settlement	Payment and settlement support for AI jobs and associated evidence
Burn	Supply reduction through fee-based mechanisms

Final legal characterisation depends on the applicable legal framework, actual launch structure, required licences, and review by counsel and the appointed Company Service Provider.

5. Supply Architecture and Denomination Model

The current canonical token state is:

FIGURE 1 — AETHEL SUPPLY ARCHITECTURE



- total supply: 10,000,000,000 AETHEL;
- genesis mint model: fixed supply minted at genesis;
- post-genesis inflation: zero; and
- hard supply cap: 10,000,000,000 AETHEL.

The codebase enforces this posture at the protocol level. The canonical emission configuration sets:

- initial inflation basis points: `0`;
- target inflation basis points: `0`; and
- maximum supply cap: genesis supply.

5.1 Supply Parameters

PARAMETER	VALUE
Total supply	`10,000,000,000 AETHEL`
Genesis mint model	Fixed supply minted at genesis
Post-genesis inflation	`0%`
Hard supply cap	`10,000,000,000 AETHEL`
Change boundary	Governance and code change would be required to alter public posture

5.2 Denomination Model

For operational clarity, AETHEL uses multiple denominations across layers:

- Cosmos L1 accounting unit: `uaethel` with 6 decimals;
- EVM and Rust execution environments: 18-decimal representation for compatibility and bridge interoperability.

DENOMINATION	MEANING	USE
`AETHEL`	Human-readable unit	Public references and economic summaries
`uaethel`	6-decimal base unit	Cosmos accounting
18-decimal execution form	Compatibility denomination	EVM and compatible execution surfaces

This is a technical denomination model, not an economic increase in supply.

5.3 Supply Change Boundary

Under the current public design:

- total supply can remain constant or decrease through burn mechanics;
- total supply cannot increase beyond the hard cap without a code change and formal governance process; and
- any attempt to publish an inflationary public posture would conflict with the current canonical code and disclosure policy.

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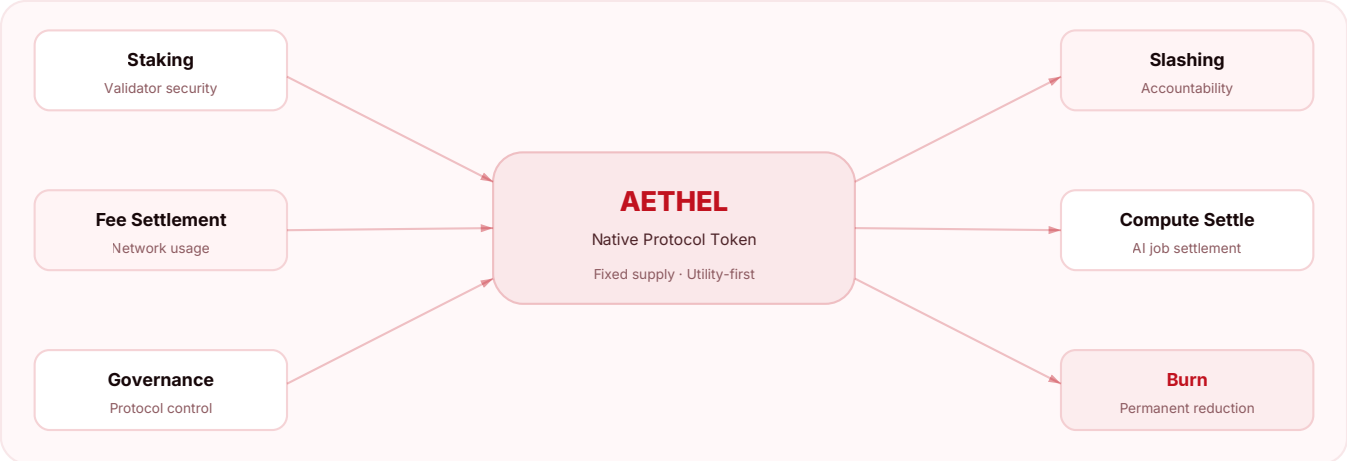
6. Utility Flows in the Protocol

The token's utility is tied to protocol operations, not merely to narrative positioning.

FIGURE 2 — AETHEL UTILITY FLOW



6.1 Staking and Validator Security

Validators and other security-relevant operators use AETHEL as bonded collateral. This aligns network participation with economic accountability.

The token supports:

- validator admission and continued participation;
- slashing for downtime, fraud, or malicious conduct;
- economic weight in selected governance flows; and
- deterrence against invalid verification and governance abuse.

6.2 Fee Settlement

AETHEL is the native unit for protocol fee accounting. Fees may reflect:

- base network usage;
- verification pathway requirements;
- hardware and assurance profile;
- jurisdictional or policy-aware routing; and
- urgency or service tier.

6.3 Governance

AETHEL participates in the project's governance design together with non-token governance safeguards. Current public materials describe governance as a control framework, not as a promise of unrestricted tokenholder control over all matters.

6.4 Verified Compute Settlement

The network's purpose is not generic transaction throughput alone. AETHEL supports settlement and policy enforcement around verified AI jobs, Digital Seals, and related protocol services.

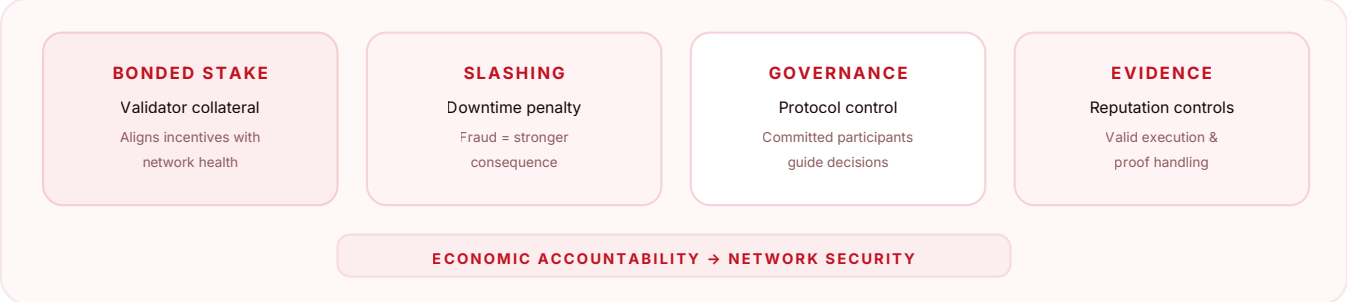
6.5 Utility Flow Summary

FLOW	ECONOMIC EFFECT
Staking	Locks capital into protocol security
Slashing	Creates downside for harmful behavior
Fees	Creates recurring transactional demand
Burn	Reduces supply under defined conditions
Governance	Aligns token utility with protocol control surfaces

7. Validator, Staking, and Security Economics

A protocol token becomes more credible when security participation is tied to explicit economic accountability.

FIGURE 3 — ECONOMIC SECURITY MODEL



7.1 Security Bonding Principle

AETHEL is used as bonded collateral to align validator incentives with network correctness. The public point is the incentive structure, not a speculative yield projection.

7.2 Slashing Philosophy

The slashing philosophy is straightforward:

- downtime should have an economic consequence;
- fraud should have a stronger consequence;
- evidence-related or consensus-related abuse should not be economically neutral.

7.3 Public Staking Posture

This paper does not publish APY promises or launch-day reward projections. Those depend on network state, governance, and release conditions, and therefore belong in governed operational materials rather than in public token marketing.

7.4 Economic Security Matrix

SECURITY LEVER	PURPOSE
Bonded stake	Align validator incentives with network health
Slashing	Penalize harmful or fraudulent behavior
Governance participation	Align protocol control with committed participants
Reputation and evidence controls	Encourage valid execution and valid proof handling

8. Fee Market and Verified Compute Settlement

The fee market is designed to reflect more than raw transaction inclusion. It is intended to reflect the cost of verified, policy-aware, evidence-bearing computation.

8.1 Fee Components

FEE COMPONENT	PUBLIC DESCRIPTION
Base network fee	Covers standard network activity
Verification premium	Reflects proof or attestation pathway requirements
Hardware / assurance factor	Reflects higher-assurance execution conditions
Policy-routing factor	Reflects jurisdictional or policy-aware treatment
Priority / urgency factor	Reflects service-tier or scheduling requirements

8.2 Settlement Logic

AETHEL functions as the unit through which verified compute is priced and settled. This makes the token economically tied to useful work, not only to generalized block occupancy.

8.3 Proof of Useful Work and Token Economics

The Proof-of-Useful-Work (PoUW) consensus model has direct implications for AETHEL token economics. Unlike Proof-of-Stake systems where validator rewards are derived primarily from inflationary issuance, Aethelred's PoUW design ties validator compensation to actual verified computation performed on behalf of the network.

The economic flow of PoUW operates as follows:

- **Job fees fund validator rewards.** Enterprises and users pay AETHEL to submit AI workloads. These fees are distributed to validators who execute the work, creating a direct link between network demand and validator income.

- **Complexity-weighted compensation.** Validators receive higher rewards for more complex, resource-intensive computations. The fee model accounts for TEE enclave costs, proof generation overhead, and evidence sealing, ensuring that validators are compensated proportionally to their actual resource expenditure.
- **Stake-as-commitment.** Validators must bond AETHEL as collateral to participate in PoUW. This stake is subject to slashing if the validator produces invalid outputs, fails verification, or exhibits dishonest behaviour. The economic consequence of failure scales with the value of work being performed.
- **Zero-inflation discipline.** Because validator rewards come from job fees rather than new token issuance, the PoUW model reinforces the protocol's fixed-supply commitment. As network utilisation grows, validator economics improve without diluting existing token holders.
- **Burn integration.** A portion of job fees may be burned rather than distributed, creating deflationary pressure that scales with network usage. This means that increased demand for verified AI compute directly reduces circulating supply.

The result is a token economic model where AETHEL's utility value is directly proportional to the volume and value of useful computation settled through the protocol. This is a fundamental departure from speculative tokenomics: the token earns its value by being necessary for economically productive activity.

8.4 Public Disclosure Rule For Fee Metrics

This paper describes the fee model qualitatively. It does not publish launch fee curves, expected burn volumes, or utilization-linked projections unless and until such figures are reviewed and approved for public disclosure.

9. Burn and Deflation Mechanisms

The public economic design includes deflationary elements. Under the current design posture:

- the token begins from a fixed supply baseline;
- protocol fees can be partially burned;
- burn mechanisms may scale with utilisation; and
- any burn reduces supply permanently rather than offsetting inflation.

9.1 Why Burn Matters In This Design

Burn mechanics are not included as spectacle. They matter because they make demand for protocol usage economically legible in supply terms while preserving the zero-inflation posture.

9.2 Burn-Compatible Scarcity

This means deflationary effects can occur without contradicting the fixed-supply model.

9.3 Public Burn Posture

Because public launch and usage metrics remain withheld pending canonical release, this paper describes the burn architecture qualitatively rather than publishing speculative demand-driven projections.

BURN DIMENSION	CURRENT PUBLIC POSITION
Base state	Fixed supply
Burn source	Fee-linked
Directional effect	Deflationary
Quantitative forecast	Withheld pending approved evidence

10. Governance, Treasury, and Change Control

The token model is not governed only by narrative. It is tied to:

- code-level supply constraints;
- public disclosure controls;
- claims-register discipline;
- counterparty disclosure state management; and
- legal and regulatory status tracking.

10.1 Treasury Role

Treasury references in public materials should be interpreted as governed coordination and operating capacity, not as an unconstrained spend bucket or commercial promise.

10.2 Governance Layers

CONTROL LAYER	FUNCTION
Code-level	Hard cap and inflation posture enforcement
Governance-level	Controlled parameter and process change
Disclosure-level	Approval of public economic claims
Legal-level	Alignment with filing, licensing, and activity boundaries

10.3 Change Management

The public token paper is one layer in a wider control system that includes:

- source-of-truth files;
- website drift checks;
- disclosure state rules;
- legal artifact tracking; and
- formal approval gates for future public releases.

11. Launch, Float, and Commercial Disclosure Controls

The most important public rule is that launch metrics do not publish from draft spreadsheets, pitch materials, or unapproved commercial assumptions.

The following items are withheld until approved for public disclosure:

- token generation event float;
- circulating supply at launch;
- launch price;
- implied or target valuation;
- fundraising totals;
- round pricing and timing;
- counterparty inventory allocations; and
- named exchange or market-maker relationships.

11.1 Release Conditions For Commercial Metrics

Public release of these items requires:

1. canonical token source pack completion;
2. disclosure owner approval;
3. consistency with the public whitepaper and website;
4. consistency with legal and regulatory posture; and
5. where relevant, executed agreements rather than pipeline discussions.

11.2 Why This Control Exists

This rule exists because economic misinformation damages credibility faster than technical delay. In a regulated context, discipline around what is not yet public is part of the economic design itself.

12. Counterparty Disclosure Policy

Public counterparty naming is governed by a strict rule:

- counterparties may be named publicly only at `EXECUTED` status.

All earlier states, such as:

- target;
- in discussion;
- term sheet; or
- signed but confidential,

remain withheld from public token materials unless and until approved for disclosure.

12.1 Counterparty State Model

COUNTERPARTY STATE	PUBLIC NAMING ALLOWED?
Target	No
In discussion	No
Term sheet	No
Signed but confidential	No unless approved
Executed and approved for disclosure	Yes

This rule exists to prevent the token paper from overstating listings, liquidity support, or institutional relationships.

13. Public Economic Metrics and Governed Metrics

A sophisticated token paper should distinguish between what is public, what is code-backed, and what is intentionally governed.

13.1 Public Today

METRIC TYPE	STATUS
Total supply	Public
Inflation posture	Public
Utility roles	Public
Denomination model	Public
Burn directionality	Public

13.2 Governed / Withheld Today

METRIC TYPE	STATUS
Float at launch	Withheld
Token price	Withheld
Valuation	Withheld
Fundraising totals	Withheld
Exchange / MM counterparties	Withheld
Detailed launch unlock metrics	Withheld

13.3 Why This Separation Is Useful

This separation improves the document in two ways:

- it gives readers a complete picture of the economic model; and
- it makes clear which metrics are intentionally controlled rather than accidentally omitted.

14. Scenario Framework

A responsible public token paper can discuss economic scenarios without publishing speculative launch numbers.

14.1 Scenario Types

SCENARIO	PUBLIC INTERPRETATION
Low utilization	Burn impact remains limited; security utility dominates
Moderate utilization	Fee settlement and burn both become more economically material
High utilization	Verified-compute settlement becomes a more visible demand driver
Delayed launch disclosure	Commercial metrics remain governed without changing core token design

14.2 What This Section Is Not

This section is not a price forecast, valuation model, or returns projection. It is a qualitative description of how different protocol usage states may change the relative importance of each economic mechanism.

15. Interoperability and Settlement Economics

AETHEL's economic role is not isolated to a single execution environment.

15.1 Cross-Environment Consistency

The denomination system and bridge compatibility posture are designed so that the token can move across different execution contexts without changing the underlying economic truth.

15.2 Settlement Integrity

Cross-domain settlement should preserve:

- fixed-supply accounting discipline;
- evidence integrity;
- governance control over bridge risk; and
- auditability of token movement.

15.3 Institutional Settlement Relevance

For institutional flows, economic credibility requires more than transfer mechanics. It requires confidence that movement, proof, and governance rules remain consistent across environments.

16. Regulatory and Operating Boundary

This paper is written to stay within the current public legal posture of the project.

Accordingly:

- the project may state that it follows governed legal and disclosure controls;
- the project may state that legal and regulatory publication materials remain in preparation;
- the project must not state that it is already registered, approved, or filed unless supported by evidence;
- the project must distinguish protocol utility from regulated financial-service activities; and
- public materials must remain consistent with the current nature and use of tokens and the relevant disclosure posture.

16.1 Permitted Activities Principle

Any token-related activity that constitutes a regulated activity will require the relevant legal analysis and, where necessary, the required authorisation or licensed counterparties.

16.2 Operating Principle

The token paper must remain aligned with the real operating perimeter of the project. Legal discipline is part of economic credibility.

17. Risk Factors

Token-related risk remains material. The main public risk categories are:

- launch timing may change;
- public float and pricing may remain withheld until approval is complete;
- counterparties may not reach executed status on the expected timeline;
- technical milestones may change benchmark, release, or testnet timing;
- regulatory interpretation may evolve;
- protocol usage may be lower or higher than expected, affecting fee and burn behaviour; and
- token utility depends on actual network adoption and operational readiness.

17.1 Risk Matrix

RISK CATEGORY	PUBLIC DESCRIPTION
Launch timing	Sequence may change as approvals and readiness evolve
Commercial disclosure	Some metrics may remain withheld longer than expected
Counterparty execution	Planned relationships may not become executable or disclosable
Technical readiness	Protocol rollout may affect usage timing
Regulatory timing	Legal interpretation or filing sequence may change
Adoption	Real network demand may differ from design assumptions

No holder or participant should rely on public token materials as a guarantee of commercial outcome.

18. Public Summary

The current public token design can be summarised simply:

- AETHEL has a fixed supply of 10 billion tokens;
- there is zero post-genesis inflation;
- the token is designed for protocol utility, security, settlement, and governance;
- deflationary mechanisms may reduce supply over time;
- launch metrics remain withheld until canonical release; and
- public legal and commercial wording remains tightly governed.

This is the version of tokenomics that is suitable for public website publication while the broader legal, commercial, and filing process remains in preparation.

Appendix A - Current Public Token Facts

FACT	CURRENT PUBLIC WORDING
Supply	Fixed at `10,000,000,000 AETHEL`
Inflation	`0%` post-genesis
Token nature	Utility-first protocol token
Core roles	Staking, fees, slashing, governance, verified-compute settlement
Launch metrics	Governed and withheld pending approved release
Counterparty naming	Executed-only and approval-gated

Appendix B - Glossary

TERM	MEANING
Fixed supply	Supply posture in which no post-genesis inflation is publicly permitted
Burn	Permanent token removal linked to protocol logic
Staking	Bonding of tokens to support network security
Slashing	Economic penalty for harmful or invalid behavior
Float	Publicly circulating amount at a given moment
Disclosure state	Governance state that determines whether a metric may be published

19. Document Control

Document status: Public canonical draft Version: 1.1 Disclosure state: Public website publication permitted Regulatory state: legal and regulatory publication materials in preparation Counterparty naming policy: Executed only Benchmark policy: Token paper does not publish unverified performance claims

Foundation Leadership & Institutional Contact

The Aethelred tokenomics model is designed to ensure long-term sovereign security, institutional compliance, and sustainable ecosystem growth.

Ramesh Tamilselvan, Founder & Chief Architect

Ramesh Tamilselvan is a deep-tech entrepreneur and Electronics and Communication Engineer serving as the Founder & Chief Architect of Aethelred, where he designs both the core sovereign infrastructure and its genesis ecosystem of enterprise applications.

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