NOORCHAIN — Public Whitepaper 1.1

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Tagline
A blockchain protocol designed to recognise human contribution through transparent, ethical, and verifiable digital signals.

Legal Notice

NOORCHAIN operates under the Swiss Legal Light CH framework.
It is not a financial product, does not offer returns, does not custody user funds, and does not provide payment or investment services.

1. Executive Summary

1.1 Vision

NOORCHAIN introduces a shift in how digital systems represent value.
Most networks reward capital ownership, financial exposure, or infrastructure capacity.
NOORCHAIN is designed to recognise meaningful human contribution, recorded as auditable digital signals under an ethical and institution-compatible framework.
Its central innovation, Proof of Signal Social (PoSS), is not a consensus mechanism.
PoSS is an application layer that structures contribution records and curator validations into verifiable on-chain evidence, without introducing staking, yield, or financial promises.

Objective
Build a long-term digital infrastructure where recognition is driven by meaningful action rather than capital accumulation.

1.2 Mission

To provide a neutral blockchain infrastructure where positive human actions, validated by trusted institutions, generate structured recognition through a transparent and non-financial mechanism.

The mission rests on five pillars:

- Ethical participation: Encouraging meaningful engagement under clear rules.
- Transparency: Visible logic, traceable validation, no hidden incentives.
- Durability: Multi-decade architecture and governance constraints.
- Social recognition: Giving structure and visibility to real-world contribution.
- Neutral technology: Predictable, auditable, institution-friendly infrastructure.
  NOORCHAIN is designed for communities, institutions, NGOs, schools, and public initiatives, without positioning itself as a financial platform.

1.3 What Makes NOORCHAIN Unique

Unlike traditional blockchains, NOORCHAIN:

- recognises actions, not wealth
- uses a fixed supply: 299,792,458 NUR
- includes no staking, no APR, no yield product
- prohibits financial promises as a protocol posture
- preserves an immutable 70% participant / 30% curator PoSS distribution rule (application layer)
- follows a long-term 8-year halving rhythm for PoSS issuance logic
- is designed to align with real institutions: schools, NGOs, communities
- targets Swiss Legal Light CH compatibility by design
  NOORCHAIN does not try to replace financial blockchains.
  It defines a human-centric infrastructure category focused on participation and accountability.

1.4 Ethical Foundations

NOORCHAIN is built upon strict commitments:

- No yield, no passive income mechanism, no staking rewards.
- No privileged access based on wealth.
- No protocol-level incentives designed to stimulate speculation.
- Transparent rules, publicly auditable processes, and bounded governance.
  Its purpose is to provide a fair, stable, and institution-compatible environment that elevates verified human contribution.

2. Introduction

2.1 The Limitations of Traditional Blockchains

Blockchain technology enabled transparency and trust without intermediaries.
However, mainstream models typically tie participation to financial or technical power:

- Proof-of-Work rewards infrastructure and energy expenditure.
- Proof-of-Stake rewards capital ownership.
- DeFi systems generally benefit those who can commit significant capital.
- Token-based voting often correlates with the ability to buy influence.
  These systems recognise capital, not social contribution.
  They rarely capture:
- community participation
- educational engagement

- cultural contribution
- volunteer and humanitarian work
- civic collaboration

2.2 The Problem: Social Contribution Remains Digitally Under-Represented

Individuals create value daily through:

- supporting associations
- participating in education
- contributing to community projects
- engaging in cultural and civic initiatives
- collaborating within institutions
  These actions are real, but often remain fragmented across internal records, subjective evaluations, or non-verifiable systems.
  Traditional blockchains do not represent them because they are not financial inputs.

2.3 The Opportunity: A Human-Centric Infrastructure Layer

There is a clear opportunity for an infrastructure capable of:

- recognising participation
- validating engagement ethically
- documenting contribution with verifiable provenance
- supporting institutional accountability and reporting
- motivating positive behaviours without financial promises
  NOORCHAIN addresses this gap by enabling institutions to record validated contribution as on-chain signals under a transparent and constrained model.

2.4 A Participation-Oriented Protocol

A human-centric protocol shifts focus from assets to actions.
NOORCHAIN formalises this through a framework where:

- participation
- contribution
- collaboration
- responsibility
- ethical behaviour
  are represented as verifiable events.
  PoSS ensures that eligible actions are:

- recorded
- validated by curators
- visible on-chain
- protected by limits and accountability mechanisms

3. Foundational Concepts of NOORCHAIN

3.1 A New Paradigm: Social Value as Digital Evidence

Traditional systems equate value with financial resources or infrastructure.
NOORCHAIN adopts a different premise:
Value (in NOORCHAIN's sense) = verified contribution evidence validated by trusted actors.
This enables:

- inclusive participation
- equitable recognition
- transparent contribution records
- institution-grade auditability
  NOORCHAIN does not attempt to compete with financial blockchains.
  It expands what blockchains can represent: durable, verifiable records of contribution.

3.2 Signals: The Fundamental Units of Contribution

A signal is the atomic representation of a positive, real-world action, submitted and later validated.
Signals may represent:

- educational engagement
- NGO volunteering
- community project involvement
- cultural or civic participation
- institutional collaboration
  Signals are designed to be:
- simple
- non-financial
- universal
- verifiable
- auditable
  Their purpose is recognition and accountability, not productivity scoring.

3.3 Curators: Guardians of Legitimacy

Curators ensure integrity and trust.
They are not investors and do not operate for financial gain.
Curators are typically institutions such as:

- schools and educational actors
- associations and NGOs
- cultural institutions
- community organisations
- social-service entities
  Responsibilities include:
- validating authenticity of signals
- applying ethical guidelines
- preventing abuse and manipulation
- ensuring transparency and impartiality
  Curators are the bridge between real-world contribution and its on-chain representation.

3.4 An Ethical and Accessible Digital Infrastructure

NOORCHAIN follows a simple principle:
Technology must serve participation, not overpower it.
The system is designed to be:

- readable
- transparent
- predictable
- institution-friendly
- compatible with non-financial frameworks
  NOORCHAIN avoids complex financial mechanics by design.

3.5 Transparency and Public Accountability

Trust is built through visible rules and verifiable processes.
NOORCHAIN embeds transparency at every layer:

- public validation logic
- immutable structural parameters
- fixed supply constraints
- documented governance boundaries

- curator accountability through on-chain records
  Transparency is treated as a structural safeguard.

4. System Architecture

4.1 Overview of NOORCHAIN 2.1 Architectural Model

NOORCHAIN 2.1 is a sovereign EVM Layer-1 blockchain.
It is not an Ethereum L2 and does not rely on Ethereum mainnet security.
The architecture is designed for:

- operational clarity
- auditability
- long-term stability
- institution-compatible usage
  The core components are:
- a permissioned BFT consensus layer (validators are authorised)
- a native EVM execution environment
- an Ethereum-compatible JSON-RPC interface for tooling and wallets
- a strict separation between consensus/security (chain finality) and PoSS value/governance layer (application-level recognition)
  NOORCHAIN is not positioned as a DeFi platform.
  EVM compatibility is provided for tooling compatibility and controlled social-utility applications.

4.2 Core Components

4.2.1 Consensus Layer (Permissioned BFT)

The chain finality and block production are provided by a permissioned BFT consensus.
Key properties:

- deterministic finality under authorised validator set
- operational predictability (institution-grade stability targets)
- no staking, no yield, no capital-weighted influence
  Consensus is security. It is not a reward engine.

4.2.2 Execution Layer (EVM)

NOORCHAIN executes transactions in an EVM environment to enable:

- standard Ethereum developer tooling
- wallet compatibility

- contract-based application primitives (when enabled)
  Execution is constrained by system rules and does not introduce protocol-level yield or financial incentives.

4.2.3 RPC Interface (Ethereum JSON-RPC)

NOORCHAIN exposes a JSON-RPC surface compatible with common Ethereum tooling, including:

- transaction submission and receipts
- block and state reads
- basic wallet interactions
  RPC compatibility is treated as an institutional adoption requirement rather than a speculative feature.

4.2.4 PoSS Layer (Application-Level, Off-Consensus)

PoSS operates as an application layer:

- curator networks validate signals
- curator signatures are aggregated into snapshots
- snapshots are committed on-chain through minimal on-chain registries/contracts
- reward logic (if enabled) follows strict limits, caps, and immutable split rules
  PoSS does not secure the chain. It structures recognition.

4.3 Data Structures and On-Chain Transparency

To maintain auditability, NOORCHAIN relies on clear and verifiable records, including:

- signal identifiers and metadata
- curator validation records (who validated, when, and under what rule set)
- snapshot history and provenance

4.4 Full PoSS Processing Pipeline (High-Level)

1. Real-world action occurs
2. A signal is submitted (structured, non-financial)
3. Signals enter a validation workflow
4. Curators review and validate according to guidelines
5. Curator decisions are consolidated into signed snapshots
6. Snapshots are committed on-chain (immutable record)
7. Optional protocol recognition logic applies limits/caps and distribution rules

8. Records remain public and auditable

4.5 Curator Validation Process

Curators follow a predictable process:

1. Review pending signal
2. Assess legitimacy and compliance with guidelines
3. Approve or reject
4. Record validation events in a traceable form
5. Contribute to snapshot signing and accountability
   Curators are social validators, not economic operators.

4.6 Architectural Principles

NOORCHAIN adheres to:

- Simplicity: predictable system surface
- Auditability: verifiable records and constraints
- Durability: multi-decade economic and governance model
- Separation of concerns: consensus vs PoSS
- Legal-light orientation: no yield dynamics by design
- Tooling compatibility: standard wallets and developer tools via JSON-RPC/EVM

5. Proof of Signal Social (PoSS)

(Core Mechanism — Extended Version)

5.1 Why PoSS Exists

Traditional blockchain reward models are fundamentally financial. They reward:

- computational power (Proof-of-Work)
- capital ownership (Proof-of-Stake)
- liquidity provision (DeFi)
- token accumulation (DAO governance)
  but they do not represent verified human contribution as a first-class primitive.
  Millions of socially meaningful actions—participation in education, volunteering, community support, cultural engagement—create value every day, yet they remain structurally under-represented in digital infrastructures.
  PoSS exists to correct this imbalance through a mechanism that is ethical, transparent, and institution-compatible.
  PoSS is not a consensus mechanism.
  PoSS is an application layer that converts validated actions into verifiable on-

chain signals under strict limits and without introducing staking, yield, or financial promises.

5.2 Complete Lifecycle of a PoSS Signal

The lifecycle of a PoSS event is designed to be predictable, auditable, and institution-friendly.

1. Real-world action
   A participant contributes in an educational, civic, cultural, or humanitarian context.
2. Signal submission
   The action is translated into a structured, non-financial signal.
3. On-chain registration
   The signal is recorded and receives a unique identifier.
4. Queueing for validation
   Signals enter a transparent workflow for fairness and traceability.
5. Curator review
   A curator validates or rejects the signal according to public guidelines.
6. Rule enforcement
   The system applies daily limits, curator capacity constraints, and anti-abuse controls.
7. Snapshot aggregation
   Validated signals are consolidated into signed curator snapshots.
8. On-chain commitment
   Snapshots are committed on-chain as immutable evidence.
9. Archiving
   Signal and validation history remain auditable and durable.
   This sequence ensures PoSS remains transparent, ethically constrained, and suitable for institutional adoption.

5.3 The 70/30 Distribution Model (Immutable Principle)

NOORCHAIN preserves an immutable PoSS distribution principle:

- 70% attribution to the participant
- 30% attribution to the curator
  This principle is structural to PoSS and is not intended to be adjustable through governance.
  It acknowledges both:
- the action performed (participant)

- the responsibility and legitimacy provided (curator)
  This is a protocol design principle for recognition alignment and ecosystem balance, not a promise of income.

5.4 Anti-Abuse Mechanisms

PoSS includes strict protective measures designed to prevent manipulation and preserve legitimacy:

- Daily participant limits
  Each participant is subject to daily caps on signal submission.
- Daily curator validation limits
  Curators cannot validate beyond defined thresholds, reducing:
- automated validation patterns
- institutional overload
- collusion incentives
- Recognition caps
  A recognition ceiling prevents rapid accumulation from high-frequency submissions.
- Behavioural anomaly monitoring
  Irregular patterns can be detected through transparent registries and auditable data trails.
- Public registries
  Signals, validations, and snapshot commitments remain verifiable on-chain.
  These mechanisms ensure PoSS remains abuse-resistant and credible for long-term institutional use.

5.5 Halving Mechanism (Every 8 Years)

PoSS recognition issuance follows a long-term schedule inspired by Bitcoin's stability principles, but adapted for participation-based recognition.
Every 8 years:

- the PoSS issuance rate halves
- recognition issuance slows
- long-term sustainability increases
  Why an 8-year cycle:
- aligns with institutional timeframes (education, civic programs, NGO cycles)
- discourages short-term optimisation behaviour
- provides multi-decade predictability
  NOORCHAIN is designed for generational continuity, not market cycles.

5.6 Examples of Real-World PoSS Applications

Education

- participation in class and collaborative work
- extracurricular involvement
- structured recognition of effort and behaviour
  Community
- civic engagement and neighbourhood initiatives
- cultural event participation
- community project collaboration
  NGOs & Humanitarian Work
- verified volunteering
- field missions and structured contribution
- operational support for community programs
  Each validated PoSS signal becomes durable evidence of contribution.

5.7 Ethical Code for Curators

Curators represent the ethical layer of NOORCHAIN.
They are expected to:

- act impartially
- validate only legitimate actions
- avoid conflicts of interest
- respect privacy and institutional constraints
- follow public guidelines
- maintain transparent activity
  Curator activity is accountable by design through public, verifiable records.

5.8 Non-Financial Reward Philosophy

PoSS recognition is:

- transparent and rule-based
- capped and paced
- decoupled from token price narratives
- not presented as income
- not a yield product

- not staking
  NOORCHAIN does not offer APR/APY, passive revenue mechanisms, or protocol-level financial promises.
  PoSS is about recognition and accountability, not financial return.

6. Genesis Design

(Extended Version)
The Genesis Block of NOORCHAIN is not merely a technical starting point.
It is the constitutional moment of the protocol—the codification of values, economic rules, long-term parameters, and ethical constraints that guide the chain over decades.
Genesis defines what can change and what will never change.
It establishes NOORCHAIN's identity:

- transparent
- predictable
- ethically constrained
- institution-compatible

6.1 Fixed Supply Logic

NOORCHAIN adopts a permanently fixed total supply of:
299,792,458 NUR
This number is symbolic—a reference to the speed of light—but also structural.
Why a fixed supply:

1. Predictable environment
   Institutions can plan over long timeframes without inflation uncertainty.
2. Immutable transparency
   No authority can expand supply or dilute participants.
3. Ethical alignment
   A fixed supply prevents yield-like narratives and discretionary issuance.
4. Multi-decade stability
   PoSS issuance is paced to preserve long-term sustainability.
   The total supply is not governance-adjustable and is intended to remain permanent.

6.2 The Allocation Model — 5 / 5 / 5 / 5 / 80

Genesis divides the total supply into five defined pools, each with a distinct institutional purpose.
Allocation

- Foundation: 5%
  Purpose: governance, public mission, transparency obligations
  Allocation

- Dev (Noor Dev Sàrl): 5%
  Purpose: development, infrastructure, maintenance, R&D
  Allocation
- PoSS Stimulus: 5%
  Purpose: curator onboarding support, early institutional programs, adoption tooling
  Allocation
- Pre-sale Reserve: 5%
  Purpose: optional, strictly controlled private fundraising under compliant frameworks
  Allocation
- PoSS Mintable Reserve: 80%
  Purpose: long-term PoSS issuance for participation-based recognition
  This structure is designed to ensure:
- no hidden team allocation
- transparent institutional responsibilities
- long-term recognition capacity through the PoSS reserve
- reduced centralisation pressure
- alignment with Legal Light CH posture
  This allocation model is intended to be immutable.
  Governance cannot modify the percentages.

6.3 Immutable Rules of Genesis

Genesis includes structural rules that are intended to remain outside the scope of governance and ordinary upgrades.
Immutable Structural Rules

- Total supply is fixed
- Allocation percentages (5/5/5/5/80) are fixed
- PoSS distribution principle (70/30) is fixed
- Halving occurs every 8 years according to the protocol schedule
- PoSS reserve cannot be diverted into other pools
- No discretionary issuance outside defined PoSS logic is permitted
  These constraints protect:
- ethical integrity
- legal clarity
- long-term trust

- institutional adoption
  The intent is to eliminate ambiguity and prevent mission drift across decades.

6.4 The Philosophy Behind Genesis

Genesis is designed as a public commitment, not as a mere bootstrap.
It formalises:

- mission and ethical boundaries
- long-term economic constraints
- governance limits
- predictable issuance rules
  Genesis is the protocol's social contract.
  It signals to all future participants—schools, NGOs, municipalities, institutions, and individuals—that the structural rules they rely on will not change unpredictably.

6.5 Predictability and Institutional Trust

NOORCHAIN targets institutions and public-good ecosystems that require:

- clarity of rules
- stability across years
- legal neutrality
- predictable governance boundaries
  Financial-first blockchains often evolve rapidly and unpredictably.
  NOORCHAIN's Genesis establishes a durable backbone for:
- recognition timing
- issuance pacing
- governance constraints
- institutional responsibilities
  Predictability is treated as a requirement for long-term adoption.

6.6 Genesis as an Ethical Framework

Genesis encodes ethical boundaries that shape the protocol posture:

- No staking
  No protocol rewards tied to financial commitment.
- No investment product posture
  No public fundraising model built into the protocol, and no return promises.
- No inflation beyond defined logic
  No discretionary issuance or supply expansion.

- No custody by the Foundation
  Users remain responsible for their wallets and keys.
- No override of PoSS principles
  Recognition remains tied to validated human action.
  These constraints are designed to preserve a non-financial, institution-compatible system.

6.7 Genesis as the Foundation for the Next 30–40 Years

With an 8-year halving cycle and an 80% PoSS reserve designed for long-term pacing, Genesis defines a multi-decade recognition model.
This supports:

- stable institutional onboarding over time
- long-term availability of recognition issuance
- predictable governance planning
- slow, resilient ecosystem growth
  NOORCHAIN is designed to persist beyond market cycles.

6.8 Genesis and the Social Mandate

Genesis embodies NOORCHAIN's social mandate:

- recognise real human actions
- protect ethical participation
- provide transparent public infrastructure
- enable long-term community empowerment
- maintain institutional trust
  Genesis is not only technical.
  It is the constitutional foundation of a social contribution infrastructure layer.

7. Economic Model

(Extended Version)
NOORCHAIN adopts an economic architecture designed for participation and institutional compatibility rather than speculation.
It supports contribution-based recognition, not capital-based extraction.
The economic model rests on five pillars:

1. Fixed supply
2. Non-financial utility posture
3. Institution-friendly participation logic
4. PoSS as controlled recognition and issuance

5. Multi-decade sustainability

7.1 A Participation-Centered Economic Model

Unlike most blockchain protocols, NOORCHAIN is not designed to reward:

- wealth accumulation
- hardware capacity
- passive holding behaviour
- liquidity provision
- yield-seeking participation
  Instead, it recognises verified positive human action, validated by trusted curators and structured into auditable on-chain records.
  This design enables adoption by:
- schools and educational actors
- NGOs and humanitarian organisations
- cultural institutions
- municipalities and civic programs
- community initiatives
  NOORCHAIN functions as a public-good infrastructure layer rather than a financial platform.

7.2 Logic of the Fixed Supply

The total supply of 299,792,458 NUR is:

- predetermined
- transparent
- auditable
- resistant to discretionary expansion
  A fixed supply supports:

1. Predictability for institutions
   Long-term planning without inflation uncertainty.
2. Reduced legal ambiguity
   Avoids discretionary monetary policy narratives.
3. Strong governance discipline
   No authority can expand supply.
4. Ethical alignment
   Prevents yield-oriented or inflation-based incentives.
   Fixed supply is a structural identity element of NOORCHAIN.

7.3 Halving Cycle — Every 8 Years

NOORCHAIN adopts an 8-year halving rhythm for PoSS issuance pacing.
Every 8 years, the raw issuance rate halves.
Rationale:

- aligns with institutional and educational timeframes
- discourages short-term optimisation behaviour
- supports multi-decade sustainability
- provides predictable long-range planning for partners
  The halving schedule is intended to be structural and outside normal governance modification.

7.4 Sustainable Emission Theory

The PoSS Mintable Reserve (80%) is designed to be distributed gradually over decades, depending on ecosystem activity and validated contribution volume.
A typical long-term pacing model may follow eras:

- Years 1–8: full issuance rate
- Years 9–16: 50% rate
- Years 17–24: 25% rate
- Years 25–32: 12.5% rate
  This pacing:
- avoids rapid depletion
- prevents short-term incentive spikes
- supports gradual institutional adoption
- maintains stable long-term recognition capacity
  NOORCHAIN is designed for longevity, not rapid economic cycles.

7.5 Why PoSS Is Not a Financial Reward Mechanism

PoSS-based issuance and recognition are:

- rule-bounded
- capped
- paced
- linked to validated actions only
  PoSS is not:
- staking
- yield

- passive income
- price-dependent
- a financial incentive product
  NOORCHAIN does not claim profit, dividends, interest, or returns.
  The model is designed for recognition and accountability under a Legal Light posture.

7.6 Comparison With Traditional Blockchain Models

Proof-of-Work (PoW)
PoW rewards computational power and energy expenditure, creating high entry barriers and favouring infrastructure capital.
NOORCHAIN recognises verified human contribution, making participation accessible without hardware or financial capital.
Proof-of-Stake (PoS)
PoS rewards capital ownership and can concentrate influence among large holders.
NOORCHAIN does not grant protocol power or recognition based on token holdings and does not rely on staking economics.
DeFi and Yield-Based Systems
Yield-based systems are driven by capital allocation, liquidity incentives, and speculative behaviours.
NOORCHAIN does not include protocol-level yield mechanics and does not position itself as a financial ecosystem.
NOORCHAIN therefore defines a distinct category: a social contribution infrastructure layer rather than a financial blockchain.

7.7 Rejection of Financial Incentives

NOORCHAIN intentionally rejects:

- staking rewards and interest-like narratives
- yield farming and liquidity mining models
- protocol mechanisms designed to stimulate speculation
- marketing language implying financial returns
  This posture reduces:
- volatility-driven adoption patterns
- market manipulation risks
- regulatory ambiguity associated with investment promotion
- barriers to institutional participation
  NOORCHAIN's growth is designed to be driven by verified adoption and institutional usage rather than price dynamics.

7.8 Community Growth Instead of Price Growth

Traditional crypto ecosystems often grow when price increases.
NOORCHAIN grows when:

- more curators join and operate under public guidelines
- more signals are validated and committed as snapshots
- institutions integrate recognition workflows
- communities adopt participation tools
- public-good initiatives use contribution evidence for accountability
  Growth is measured in adoption, validation capacity, and contribution records, not in speculative price expansion.

7.9 Integrity Principles of the Economic Model

The economic architecture is grounded in five integrity rules:

1. Predictability
   Rules are stable, published, and designed for long-term institutional planning.
2. Transparency
   No hidden allocation, no discretionary issuance, and auditable parameters.
3. Inclusion
   Participation does not require financial capital or specialised infrastructure.
4. Ethics
   No protocol-level financial promises or yield dynamics.
5. Stability
   Multi-decade pacing and bounded governance prevent abrupt shifts.
   These principles support institutional trust and long-term sustainability.

8. Governance Framework

(Extended Version)
NOORCHAIN's governance model is designed to protect mission integrity and long-term stability.
It is not a token-holder financial governance system and is not intended to be captured by capital concentration.
Its purpose is ethical stewardship under transparent constraints.

8.1 Governance Philosophy

NOORCHAIN governance follows four principles:

1. Protect the protocol
   Governance exists to prevent misuse, manipulation, and mission drift.
2. Serve the mission
   All decisions must reinforce contribution recognition under a non-financial posture.

3. Prevent capture
   No actor should gain control through wealth, token holdings, or financial influence.
4. Maintain clarity
   Rules remain predictable and comprehensible for institutions and partners.
   Governance is treated as stewardship, not as an economic power market.

8.2 Multi-Signature Architecture

Institutional reserves and critical actions are protected by a multi-signature structure.
A 3-of-5 multi-sig model ensures:

- no unilateral control
- shared responsibility and checks
- operational discipline for sensitive actions
- documented accountability
  The multi-sig committee is intended to include representatives from:
- the Foundation
- NGOs or social-sector actors
- technical experts
- legal and compliance advisors
- education or community partners
  This composition reinforces neutrality and institutional trust.

8.3 Immutable vs. Adjustable Parameters

NOORCHAIN distinguishes between structural invariants and operational parameters.
Immutable (structural)
The following are intended to remain permanent:

- total supply
- allocation structure (5/5/5/5/80)
- PoSS structural distribution principle (70/30)
- halving schedule (8-year rhythm)
- Legal Light posture commitments (no yield, no custody by the Foundation)
  These elements are outside normal governance scope.
  Adjustable (operational)
  The following may evolve through documented governance processes:
- daily PoSS limits
- signal-type weighting schemes

- curator onboarding and operational rules
- activation and operational parameters of PoSS tooling
- non-structural system parameters
  This separation preserves integrity while enabling practical adaptation.

8.4 Transparency as a Governance Standard

Governance activity must be:

- documented
- publicly visible where appropriate
- traceable and archived
- consistent with mission constraints
  Transparency builds trust among:
- institutions
- NGOs
- schools
- public entities
- community participants
  Transparency is treated as an operational obligation, not an optional feature.

8.5 Ethical Governance Charter

Governance actors commit to five principles:

1. Impartiality
   Decisions prioritise public interest rather than private benefit.
2. Transparency
   Rationales and outcomes must be documented.
3. Accountability
   Actions must be traceable and reviewable.
4. Neutrality
   Governance actors must avoid financially motivated decision-making.
5. Mission Alignment
   Every decision must reinforce contribution recognition and Legal Light constraints.
   The charter is an extension of NOORCHAIN's ethical foundation.

8.6 Decision-Making Process

A governance decision follows a predictable workflow:

1. Proposal Drafting
   A proposal is written clearly, with scope and rationale.
2. Public Review
   Stakeholders may review and comment where appropriate.
3. Discussion and Refinement
   Feedback is integrated within mission constraints.
4. Multi-sig Validation
   Approval requires the defined signature threshold.
5. Publication and Archiving
   Final outcomes and justifications are recorded and preserved.
   This structure reduces discretion and prevents opaque governance.

8.7 Anti-Capture Mechanisms

NOORCHAIN reduces governance capture risk through:

- no governance power tied to token ownership
- multi-sig execution for sensitive actions
- immutable boundaries preventing supply and structural rule changes
- documentation and transparency requirements
- institutional committee composition designed for neutrality
  These safeguards ensure governance remains mission-driven and resistant to capital-driven capture.

8.8 Alignment With Swiss Legal Light CH

NOORCHAIN governance is designed to remain compatible with Legal Light expectations:

- no custody of user funds by the Foundation
- no protocol-level yield promises
- no public token sale model embedded into the protocol
- organisational separation between Foundation (governance) and Dev Sàrl (operations)
- transparent documentation of parameters and decisions
  This posture supports institutional confidence and reduces regulatory ambiguity.

8.9 Public Responsibility and Institutional Trust

Governance actors must maintain:

- high ethical standards

- public accountability
- consistent mission alignment
- long-term stability commitments
  The governance framework is designed for multi-decade institutional trust rather than short-term optimisation.

9. Security Model

(Extended Version)
NOORCHAIN's security model is designed for a blockchain intended for institutional and public-good usage.
Security is multi-layered:

- technical security of the chain (consensus, networking, execution, state)
- integrity of the PoSS recognition layer (validation, curator accountability, anti-abuse)
- economic immutability (fixed supply, constrained issuance logic)
- governance safeguards (multi-sig, transparency, anti-capture)
  The objective is not to protect custodial assets—NOORCHAIN is non-custodial—but to protect integrity, fairness, and long-term trust.

9.1 Threat Landscape Overview

NOORCHAIN operates in a hybrid environment:
real-world actions + curator validation + on-chain commitment.
It therefore faces three categories of threats:

1. Social Abuse

- fabricated or misleading signals
- collusion between participants and curators
- mass submission of low-integrity contributions
- institutional misuse or role misrepresentation

2. Technical Attacks

- execution layer exploitation (EVM misuse)
- networking disruption and denial-of-service attempts
- validator misbehaviour within the permissioned set
- state corruption risks and persistence failures
- RPC abuse and tooling-driven attack surfaces

3. Governance and Economic Risks

- attempts to distort PoSS issuance or recognition distribution
- pressure to modify structural invariants
- governance capture attempts through coordination or influence
- misinformation and opaque decision-making
  The security model anticipates these risks through layered constraints and operational discipline.

9.2 Social Risk Mitigation

Social signals originate from real-world contexts and therefore require integrity mechanisms beyond pure cryptography.
NOORCHAIN mitigates social risks through:

- Daily Limits
  Participants and curators operate under daily caps to reduce farming behaviour and mass fabrication.
- Recognition Caps
  Maximum daily recognition constrains rapid accumulation patterns.
- Curator Accountability
  Curators are identifiable and accountable through:
- public validation activity trails
- documented ethical guidelines
- potential governance oversight and audits
- transparent on-chain snapshot records
- Institutional Anchoring
  Curators are aligned with real-world organisations whose reputational incentives support integrity.
- Non-Financial Posture
  By avoiding protocol-level yield promises, NOORCHAIN reduces financial motivation for collusion and exploitation.

9.3 Technical Security Architecture

NOORCHAIN 2.1 is a sovereign EVM Layer-1 secured by a permissioned BFT consensus.
Core security principles include:

- Deterministic Finality
  BFT finality reduces fork ambiguity and supports institution-grade predictability.
- Validator Accountability
  Permissioned validator operations enable clear operational responsibility and governance oversight.

- Execution and State Discipline
  EVM execution and world state persistence are treated as critical security components:
- transaction processing must be deterministic
- receipts and state transitions must be auditable
- state must remain consistent across restarts
- RPC must expose consistent views of chain state
- RPC Surface Control
  Ethereum-compatible JSON-RPC increases tooling compatibility but also expands the attack surface.
  Operational safeguards include:
- rate-limiting and monitoring policies (deployment-dependent)
- strict input validation in RPC methods
- separation of public endpoints vs internal endpoints where applicable
- Controlled Application Scope
  NOORCHAIN does not position itself as a DeFi platform.
  Avoiding protocol-level DeFi primitives reduces exposure to common financial-smart-contract attack classes.

9.4 Governance Safeguards

NOORCHAIN protects itself from governance misuse through:

- Multi-sig Enforcement
  Critical actions require multi-party approval, reducing unilateral risk.
- Immutable Boundaries
  Governance is constrained from altering structural rules such as supply and allocation.
- Public Decision Records
  Governance outcomes and rationales are documented and archived to prevent opaque manipulation.
- Separation of Roles
  Foundation (governance) and Dev Sàrl (operations) have defined boundaries to reduce conflicts of interest.

9.5 Economic Security (Non-Financial Design)

NOORCHAIN's non-financial posture is a security layer.
By excluding:

- staking yield systems

- liquidity mining
- treasury yield mechanics
- protocol-level financial incentives
  the system reduces:
- incentive-driven exploitation
- capital-based capture vectors
- speculative attack motivations
  Economic design therefore supports stability and institutional compatibility.

9.6 Transparency as a Structural Defence

Transparency is treated as a security feature.
Public visibility of:

- structural parameters
- governance decisions
- curator activity traces (where appropriate)
- PoSS snapshot history
  creates accountability and makes manipulation easier to detect.

9.7 Immutable Rules as Security Guarantees

NOORCHAIN's structural invariants function as security guarantees:

- fixed supply (299,792,458 NUR)
- fixed allocation model (5/5/5/5/80)
- PoSS structural distribution principle (70/30)
- 8-year halving rhythm for issuance pacing
- prohibition of discretionary issuance outside defined logic
  These invariants reduce mission drift, prevent inflation abuse, and preserve long-term trust.

9.8 Regulatory Compatibility as Security

Operating under a Swiss Legal Light posture reduces legal risk and supports institutional adoption.
Key principles include:

- no custody by the Foundation
- no investment product framing
- no yield promises

- transparent documentation
  Legal clarity acts as a long-term security buffer.

9.9 Summary

NOORCHAIN's security relies on:

- permissioned BFT finality and validator accountability
- disciplined EVM execution and persistent world state
- constrained governance and multi-sig enforcement
- PoSS anti-abuse limits and curator accountability
- immutable economic rules and transparent documentation
  Security is not a bolt-on component.
  It is woven across architecture, governance, economics, and the PoSS recognition layer.

10. Institutional Use Cases

(Extended Version)
NOORCHAIN is designed as an institutional-grade infrastructure.
It does not target speculative markets or financial ecosystems.
Its architecture, PoSS model, and Legal Light posture make it suitable for organisations focused on education, community engagement, culture, and public service.

10.1 NGOs and Humanitarian Organisations

NGOs operate in environments where:

- impact must be measured
- participation must be demonstrated
- transparency is required
- resources are limited
- trust is essential
  How NOORCHAIN helps
  NOORCHAIN provides:
- durable contribution records
- curator-validated recognition workflows
- ethical technology with no yield mechanics
- auditable snapshot histories for reporting
  Concrete applications
- volunteer activity tracking
- certification of participation in missions

- contribution evidence for grant dossiers
- transparent engagement statistics for donors and partners
  NOORCHAIN can function as a neutral backbone for social-impact evidence.

10.2 Educational Institutions

Educational organisations generate broad contribution signals:

- participation
- collaboration
- effort
- attendance and engagement
- extracurricular involvement
  These actions are often under-represented in durable, verifiable systems.
  How NOORCHAIN helps
  NOORCHAIN provides educators with:
- structured recognition workflows
- auditable logs of student contributions
- tooling suitable for digital citizenship education
- non-financial motivation aligned with learning objectives
  Concrete applications
- participation validation
- recognition of effort
- tracking project involvement
- documenting extracurricular contributions
  NOORCHAIN adds a recognition layer without introducing financial incentives.

10.3 Community Programs and Local Governments

Municipal and civic programs often promote:

- civic engagement
- volunteer initiatives
- cultural participation
- community-building projects
  They frequently lack unified, auditable participation infrastructure.
  How NOORCHAIN helps
  Local programs gain:
- transparent participation dashboards

- curator-based validation models
- non-financial motivation tooling
- accessible, lightweight interfaces for diverse populations
  Concrete applications
- citizen participation tracking
- validation for municipal volunteering
- cultural and sports event engagement records
- community project documentation
  NOORCHAIN supports institution-grade accountability without financial framing.

10.4 Cultural Institutions

Museums, theatres, associations, and cultural organisations need to:

- measure participation
- document engagement
- structure contribution recognition
  How NOORCHAIN helps
  Cultural institutions can:
- validate attendance or participation
- record engagement over time
- issue auditable non-financial recognition
  Concrete applications
- workshop participation validation
- cultural volunteering recognition
- transparent engagement indicators for partnerships
  NOORCHAIN can serve as a cultural participation ledger.

10.5 Universities and Research Centres

Academic institutions need to:

- document collaborative contribution
- recognise participation in research contexts
- provide auditable engagement records
  How NOORCHAIN helps
  NOORCHAIN provides:
- durable contribution records
- neutral, auditable infrastructure

- structured collaboration evidence
  Concrete applications
- laboratory participation tracking
- research project contribution logs
- validation of collaborative work
- recognition for academic contributions

10.6 Certification and Social Recognition Systems

Many organisations require infrastructure for:

- digital credentials
- contribution certificates
- public recognition systems
- long-term engagement portfolios
  How NOORCHAIN helps
  NOORCHAIN enables:
- curator-validated certification
- durable recognition records
- configurable public or private disclosure depending on context
  Concrete applications
- non-financial civic engagement portfolios
- contribution badges for programs
- youth engagement tracking
  NOORCHAIN provides a universal contribution evidence layer without financial incentives.

10.7 Why Institutions Trust NOORCHAIN

Institutions can trust NOORCHAIN because:

- it is non-financial in posture
- it avoids yield and speculative incentives
- it is transparent and auditable
- it is designed for long-term stability
- it aligns with Legal Light constraints
- it uses curator accountability instead of capital-based control
  NOORCHAIN is not a marketplace.
  It is a contribution recognition infrastructure layer.

10.8 Operational Characteristics Relevant to Institutions

Institutions require operational predictability and simple responsibilities.
NOORCHAIN is designed to support:

- deterministic finality under permissioned BFT consensus
- stable RPC interfaces for standard tooling
- clear curator responsibilities and audit trails
- bounded governance scope and immutable structural rules
- non-custodial usage patterns for end users
  These characteristics reduce operational uncertainty and lower adoption friction for public-good organisations.

10.9 Institutional Accountability and Reporting

NOORCHAIN is intended to support institutional reporting needs through:

- immutable contribution evidence (signals and snapshots)
- curator validation trails
- timestamped records suitable for audit narratives
- transparent rule sets and capped recognition logic
  The intent is not to replace internal institutional systems, but to provide an external, verifiable layer of evidence when appropriate.

11. Ecosystem Vision

(Extended Version)
NOORCHAIN is more than a blockchain.
It is designed as the foundation of a social digital ecosystem that recognises, structures, and amplifies human contribution without relying on financial incentives.
The ecosystem evolves around five components:

1. Curators Hub
2. CCN Studio (Community Content Network)
3. Local Community Tools
4. Institutional Integrations
5. A Non-Speculative, Participation-Based Digital Economy

11.1 Curators Hub — The Social Integrity Layer

The Curators Hub is the operational interface for curator activity.
It enables curators to:

- view incoming signals

- validate or reject contributions
- apply ethical guidelines
- maintain accountability through traceable activity
- coordinate across curator networks where necessary
  Strategic role
  The Curators Hub preserves PoSS integrity by providing:
- operational clarity for institutions
- workflow discipline and traceability
- reduced abuse risk through structured validation processes
  It functions as the social integrity layer of NOORCHAIN, independent from financial incentives.

11.2 CCN Studio — The Creative and Cultural Layer

CCN Studio is the ecosystem layer where communities structure cultural and educational content and document contributions.
It enables:

- creation of educational and cultural initiatives
- certification of contributions through curator-validated signals
- documentation of community programs
- cross-institution collaboration
  Strategic role
  CCN Studio supports:
- collective narratives and community identity
- structured contribution evidence around content creation
- long-term cultural participation records
  It extends NOORCHAIN beyond pure validation into durable social documentation.

11.3 Local Community Tools — Infrastructure for Municipal and Social Projects

Local governments and community organisations often lack unified participation infrastructure.
NOORCHAIN supports development of:

- community dashboards
- participation trackers for events and programs
- volunteer workflow tools

- validation interfaces for local initiatives
  Impact
  These tools position NOORCHAIN as a local public-service infrastructure component:
- inclusive
- accessible
- non-financial
- accountable

11.4 Institutional Integrations — APIs and Data Interfaces

Institutions require simple integration paths.
NOORCHAIN is designed to support:

- public APIs and data interfaces
- dashboards for validated contribution metrics
- verification endpoints for contribution evidence
- interoperability with existing institutional systems where appropriate
  Benefits
  Institutional integrations provide:
- auditable contribution evidence
- transparency and reduced disputes
- non-financial recognition workflows
- scalable adoption without complex crypto-specific operations

11.5 A Non-Speculative Digital Economy Based on Participation

NOORCHAIN rejects financial-first token models:

- no staking
- no APR/APY
- no yield farming
- no liquidity mining
- no protocol-level financial promises
  Instead, it defines an economy of participation:

1. Fixed supply for predictability
2. PoSS-based issuance tied to validated contribution
3. 8-year halving rhythm for multi-decade pacing

4. 70/30 structural distribution principle for ecosystem balance
5. Recognition-first posture rather than investment framing
   This economy is designed to be slow, stable, and institution-compatible.

11.6 Multi-Decade Vision

NOORCHAIN is designed to evolve in phases rather than hype cycles.
The long-term horizon is supported by:

- an 8-year halving schedule
- stable governance constraints
- institutional onboarding capacity
- gradual expansion of curator networks
  Why multi-decade
  Social infrastructure evolves slowly:
- educational programs
- civic initiatives
- NGO operations
- cultural strategies
  NOORCHAIN is aligned with these institutional rhythms.

11.7 A New Category of Digital Infrastructure

NOORCHAIN is not:

- a financial product
- a DeFi platform
- a staking ecosystem
- a speculative token economy
  It is positioned as:
  A Social Contribution Infrastructure Layer.
  It provides durable, verifiable, curator-validated evidence of participation and contribution.
  This category is designed for:
- educational networks
- NGOs and humanitarian programs
- civic initiatives and municipalities
- cultural institutions
- youth and community organisations

- research collaborations

12. Roadmap

(Long Version)
NOORCHAIN's roadmap is designed to be realistic, institution-oriented, and compatible with Legal Light CH constraints.
It prioritises technical stability, transparency, and governance discipline over speculative expansion.

12.1 Overview of Phases (Public Summary)

NOORCHAIN progresses through controlled phases:

- architecture and invariants definition
- implementation of a mainnet-like sovereign chain stack
- documentation and public materials
- pre-mainnet preparation under permissioned governance
- permissioned mainnet activation
- progressive ecosystem expansion
  Public roadmap communication avoids hype cycles and yield-oriented narratives.

12.2 NOORCHAIN 2.1 Technical Status (Publicly Relevant)

NOORCHAIN 2.1 is currently implemented as a sovereign EVM Layer-1 with:

- permissioned BFT consensus operations (mainnet-like model)
- Ethereum-compatible JSON-RPC interface for tooling and wallets
- on-chain transaction path and receipt availability
- persistent world-state workstream in progress toward full EVM equivalence
- PoSS application layer mechanisms designed as off-consensus recognition, with on-chain snapshot commitments
  This status reflects a controlled progression toward a stable, institution-grade mainnet-like deployment prior to public activation.

12.3 Mainnet Milestones (Institutional Readiness Path)

The path to a permissioned mainnet activation is structured around verifiable readiness milestones:

1. Mainnet-like stack stability

- stable multi-node operation (leader/follower)
- deterministic block production under permissioned consensus

- consistent state persistence across restarts
- RPC stability under standard tooling usage

2. Execution and state correctness

- persistent world state (accounts, balances, nonces, code, storage)
- state root continuity and block metadata integrity
- deterministic transaction execution and receipts

3. PoSS operational readiness (application layer)

- curator onboarding procedures
- snapshot signing procedures and accountability rules
- on-chain commitment of snapshots for auditability
- limits and anti-abuse controls validated in real workflows

4. Governance and operational controls

- multi-sig committee activation
- immutable constraints documented and enforced
- operational playbooks and incident procedures

5. Public documentation readiness

- Genesis Pack publication
- governance and curator charters publication
- non-financial legal notices and usage constraints published
  Each milestone is intended to be validated before any expansion of visibility or usage scope.

12.4 Ecosystem Growth Path

NOORCHAIN’s growth is designed to be driven by real adoption and institutional integration:

- onboarding of curator institutions (education, NGOs, civic entities)
- deployment of contribution recognition workflows (signals, validations, snapshots)
- public dashboards for contribution evidence where appropriate
- tooling standardisation (wallets, RPC compatibility, operational playbooks)
- progressive extension of community applications without financial product framing

Growth is measured in validated participation, institutional integration, and durable contribution evidence, not in token price narratives.

12.5 Long-Term Strategy (10–30 Years)

NOORCHAIN is designed as a multi-decade public-good infrastructure layer.
Long-term objectives include:

- durable curator networks with transparent accountability
- stable participation evidence standards suitable for institutions
- inter-institution collaboration frameworks (education ↔ NGOs ↔ civic programs)
- progressive improvement of tooling and interfaces without introducing yield mechanics
- gradual governance maturity while preserving immutable constraints
  The halving rhythm and constrained issuance posture are designed to support long-range stability rather than short-term optimisation.

13. Comparative Analysis

(Extended Version)
NOORCHAIN introduces a distinct category of blockchain infrastructure focused on contribution evidence rather than capital incentives.
This section compares NOORCHAIN with common blockchain models to clarify scope, posture, and risk profile.

13.1 Proof-of-Work (PoW) vs. NOORCHAIN

PoW rewards participants based on computational power and energy consumption.
Underlying principle:
Those who deploy more infrastructure receive more protocol rewards.
Strengths of PoW:

- long-tested security model
- predictable issuance logic
- high resistance to certain classes of attacks
  Limitations of PoW:
- high energy footprint
- hardware cost barriers
- rewards structurally tied to infrastructure capital
  NOORCHAIN differs by design:
- recognition issuance is tied to curator-validated human contribution
- entry does not require hardware investment

- the protocol posture avoids yield framing and investment narratives

13.2 Proof-of-Stake (PoS) vs. NOORCHAIN

PoS assigns influence and rewards based on token ownership or stake.
Underlying principle:
Those who hold more capital receive more rewards and often more influence.
Strengths of PoS:

- energy efficiency
- high throughput potential
- widespread adoption
  Limitations of PoS:
- capital concentration and centralisation pressure
- yield narratives and investment framing risks
- governance capture risks in token-weighted systems
  NOORCHAIN differs by design:
- no staking, no APR/APY posture, no yield-based participation
- governance is not token-weighted and is constrained by immutable boundaries
- participation recognition is based on validated actions rather than capital allocation

13.3 Social Tokens and Reputation Systems vs. NOORCHAIN

Many reputation systems attempt to tokenise social activity but often introduce:

- subjective scoring dynamics
- market speculation tied to personal identity
- unclear validation legitimacy
- ethical risks and governance ambiguity
  NOORCHAIN differs by design:
- validation is anchored in curator institutions under published guidelines
- the system avoids markets around personal reputation
- the model is constrained by non-financial posture and transparent rules
  NOORCHAIN is not a personal reputation market.
  It is an institutional contribution evidence layer.

13.4 Financial Smart-Contract Platforms vs. NOORCHAIN

Many EVM-compatible platforms position themselves for DeFi and financial applications:

- liquidity pools
- yield farming
- staking derivatives
- leveraged products
  These ecosystems carry systemic risks:
- complex financial smart-contract attack surfaces
- incentive-driven exploitation
- regulatory uncertainty
  NOORCHAIN differs by posture:
- EVM compatibility is provided for tooling compatibility and controlled social-utility applications
- NOORCHAIN does not position itself as a DeFi platform and avoids protocol-level yield mechanisms
  The execution environment is a technical compatibility layer, not a financial strategy.

13.5 Systemic Risks of Traditional Models

Traditional blockchain models commonly introduce risks unsuitable for institutional public-good contexts:

- high volatility exposure and speculative association
- capital-driven governance capture
- yield narratives and investment-product ambiguity
- complex smart-contract financial risk
  NOORCHAIN's design intentionally reduces these risks through:
- non-financial posture
- constrained governance
- curator accountability
- immutable economic boundaries

13.6 How NOORCHAIN Addresses These Risks

NOORCHAIN applies a structured set of safeguards:

1. Fixed supply and transparent allocation
2. Long-term issuance pacing (8-year halving rhythm)
3. Curator validation and accountability trails
4. Governance constrained by immutable boundaries and multi-sig execution

5. Non-custodial posture and absence of protocol-level yield claims
6. Transparency as a structural requirement
   These safeguards support institutional adoption where traditional crypto models are unsuitable.

13.7 A New Category: Social Contribution Infrastructure

NOORCHAIN is not:

- an investment platform
- a yield-based protocol
- a financial governance marketplace
  It is:
  A non-financial blockchain designed to record curator-validated evidence of human contribution under transparent rules and long-term constraints.

14. Legal and Compliance Summary

(Extended Version)
NOORCHAIN is designed to operate under a Swiss Legal Light CH posture through a conservative, transparent, and non-financial architecture.
This section summarises compliance principles and structural protections that support institutional safety.

14.1 Core Principles of a Swiss Legal Light Posture

A Legal Light posture is supported when a system:

1. Does not promise financial returns
   NOORCHAIN does not offer yield, APR/APY, dividends, or income claims.
2. Avoids investment-product positioning
   NUR is presented as a utility token for participation and ecosystem operations, not as an investment instrument.
3. Is non-custodial
   NOORCHAIN does not custody user assets or keys.
4. Avoids internal fiat conversion and financial intermediation
   Any fiat services are external and subject to separate regulated providers where applicable.
5. Maintains full transparency
   Rules, constraints, governance boundaries, and structural parameters are documented and publicly accessible.
6. Preserves organisational separation
   Foundation (governance) and Dev Sàrl (operations) have defined boundaries to reduce conflicts of interest.

14.2 Absence of Financial Promises

NOORCHAIN avoids financial language and does not claim:

- profit
- interest
- returns
- passive income
- staking rewards
  PoSS recognition is framed as transparent, capped, rule-based recognition tied to validated contribution, not as an income mechanism.

14.3 Non-Custodial Architecture

Users remain responsible for:

- wallets and private keys
- transaction signing
- personal asset management
  NOORCHAIN does not provide custodial services, does not recover accounts, and does not operate user wallets.
  This posture reduces regulatory risk and supports institutional adoption.

14.4 No Public Token Sale Model Embedded in the Protocol

NOORCHAIN does not embed an ICO-like public sale as a core protocol mechanic.
Any optional private allocation processes (if used) are intended to be:

- strictly controlled
- transparently documented
- compatible with legal constraints and institutional governance
  The public posture remains non-financial and non-promotional.

14.5 Mandatory Transparency Requirements

To sustain institutional trust, NOORCHAIN commits to:

- public documentation of invariants and constraints
- versioned and archived governance records
- published curator guidelines and accountability expectations
- auditable on-chain records (signals, validations, snapshots)
  Transparency is treated as an institutional requirement.

14.6 Architectural Features Supporting Compliance

NOORCHAIN’s technical and economic design supports a Legal Light posture through:

- fixed supply and immutable allocation boundaries
- absence of staking and yield mechanics
- controlled, rule-based PoSS issuance pacing
- multi-sig execution for critical actions
- non-custodial operational model
- explicit separation between consensus security and PoSS application logic

14.7 Legal Safety for Institutions

Because NOORCHAIN avoids financial product framing and custodial services, institutions can adopt it without assuming:

- custody obligations
- investment-product obligations
- yield-related promotional risk
  Typical usage contexts include:
- NGO reporting and participation evidence
- educational participation recognition
- civic engagement documentation
- cultural contribution records

14.8 Regulatory Alignment Summary

Regulation Area

- Financial product classification
  Status: Not positioned as a financial product
  Notes: No yield promises, non-financial posture
  Regulation Area
- Custody
  Status: Non-custodial by design
  Notes: Users control keys and wallets
  Regulation Area
- Payment services
  Status: Not provided by the protocol
  Notes: No fiat processing, no PSP role
  Regulation Area
- Transparency
  Status: Structural requirement
  Notes: Public rules, records, and governance constraints
  Regulation Area

- Organisational separation
  Status: Structural principle
  Notes: Foundation governance vs Dev operations

14.9 Long-Term Legal Stability

NOORCHAIN aims to remain legally stable over decades by:

- avoiding transformation into a financial platform
- maintaining immutable boundaries and transparent governance
- preserving a recognition-first posture
  Legal stability is treated as an adoption requirement for institutions.

14.10 Conclusion of the Compliance Section

NOORCHAIN is designed to be a legally conservative, transparent, and institution-compatible blockchain.
It avoids speculative mechanisms and maintains a non-custodial, non-yield posture consistent with a Swiss Legal Light orientation.

15. Annexes

(Extended Version)
The annexes provide complementary references for institutional readers, technical reviewers, and governance bodies.
They remain neutral, concise, and non-financial.

15.1 Glossary of Core Concepts

PoSS — Proof of Signal Social
An application-layer mechanism that structures curator-validated contribution evidence into on-chain records.
It is not consensus and is not staking.
Signal
A structured representation of a real-world action submitted for validation.
Curator
An authorised validating institution or actor responsible for approving or rejecting signals under published guidelines.
Snapshot
A signed consolidation of validated activity committed on-chain for auditability and long-term evidence.
Halving
A protocol-defined reduction of PoSS issuance rate every 8 years for long-term pacing.
Genesis
The initial configuration encoding immutable structural rules such as supply, allocation boundaries, and governance constraints.
Fixed Supply
A permanent cap of 299,792,458 NUR.
Legal Light (Switzerland)

A conservative posture characterised by non-custodial design, absence of yield promises, avoidance of financial product framing, and strong transparency requirements.

15.2 Examples of Valid Signals (Illustrative Only)

Education

- active participation during class
- completion of collaborative projects
- tutoring and peer support contributions
- contributions to school community events
  Community and Civic Engagement
- participation in local initiatives
- volunteering in community programs
- structured engagement in municipal projects
  NGO and Humanitarian Work
- verified volunteering activities
- participation in field missions
- support for training, workshops, and awareness programs
  Cultural and Artistic Activities
- participation in workshops and cultural programs
- contribution to cultural volunteering
- collaboration on community cultural initiatives
  These examples illustrate the neutrality and universality of PoSS as an evidence model.

15.3 Curator Ethical Charter (Concise Institutional Version)

Curators commit to:
Integrity

- validate only legitimate, real-world actions
- reject manipulated or inconsistent signals
  Neutrality
- avoid conflicts of interest
- apply uniform standards regardless of participant identity
  Transparency
- maintain consistent, reviewable validation activity

- operate under published guidelines
  Responsibility
- understand the impact of validation decisions
- protect the legitimacy of the recognition process
  Curators are accountability actors, not financial beneficiaries.

15.4 Governance Process Overview (Institutional Workflow)

A governance decision follows:

1. Proposal drafting with clear scope and rationale
2. Review and consultation where appropriate
3. Refinement within mission constraints
4. Multi-sig execution under defined threshold
5. Publication and archival of outcome and rationale
   This workflow is designed to prevent opacity and preserve institutional trust.

15.5 Version History

Version

- 1.1 — Extended Whitepaper (2.1 Alignment Revision)
  Description: Updated to reflect NOORCHAIN 2.1 sovereign EVM L1 posture and PoSS off-consensus architecture
  Notes: Removes Cosmos/Ethermint references; preserves immutables and Legal Light posture
  Version
- 1.0 — Initial Specification Drafts
  Description: Early internal drafts used during initial specification stages
  Notes: Not intended for public release
  Future updates may add:
- institutional integration clarifications
- operational and tooling guidance
- curator onboarding refinements
  Structural rules (supply, allocation boundaries, PoSS distribution principle, halving rhythm) remain non-negotiable.

15.6 Contact Information (Placeholder)

NOORCHAIN Foundation
Non-profit entity responsible for governance and transparency.
Contact (placeholder): foundation@noorchain.io
Official Website (public): https://noorchain.io