

Technical Document – Smart Contract Structure and GRV L1 Network

Introduction – Global Reserve Value (GRV)

The Global Reserve Value (GRV) represents a new economic approach based on blockchain, decentralized, sustainable, and meritocratic, where community governance and financial efficiency work together. Unlike conventional networks, GRV operates with an advanced management model, allowing financial institutions, investors, and network operators to actively participate through hashpower, ensuring a robust and antifragile system.

The project is developed in two essential phases:

- **L2 Phase – Strategic Capitalization:** Responsible for the initial capital raising, infrastructure development, and structuring of the network for its future consolidation in L1.
- **L1 Phase – Autonomous Network:** Definitive implementation, where full decentralization becomes a reality, with governance driven by active and proportional participation of members.

Overcoming Traditional Barriers

Although the financial sector is moving towards digitization, major obstacles still limit the transition to a truly decentralized system, such as:

- **Infrastructure and scalability:** Traditional blockchains face speed, cost, and storage challenges, especially for massive networks.
- **Regulation and institutional resistance:** Large financial institutions hesitate to lose control, hindering the full adoption of autonomous solutions.
- **Integration complexity:** Full migration to blockchain requires profound structural changes, generating resistance from traditional sectors.

However, two technological revolutions are about to transform this scenario, making the efficient implementation of GRV possible:

- **Enhanced computational infrastructure:** The advancement of quantum chips will exponentially increase processing capacity, ensuring fluid and scalable networks.
- **Decentralized economic model:** Instead of speculative markets, resources are directly reinvested in real assets, creating a sustainable economy within the network itself.



♦ The GRV Differential

GRV not only operates as a decentralized network—it redefines how financial institutions can integrate into the ecosystem without compromising the principles of transparency and community governance.

- **Institutions participate directly:** Banks and investors can contribute with hashpower, participating in decisions proportionally to the impact generated in the network.
- **Capital distribution aligned with contribution:** Instead of concentrated gains, resources are shared with all system operators, strengthening the ecosystem.
- **Meritocratic governance:** Decision-making power is not in the hands of an elite but distributed according to participation and effective contribution to the network.

Towards a Decentralized and Participatory Economy

Based on this structure, GRV establishes a new standard for digital financial networks, eliminating inefficiencies of centralized models and allowing for a fair and sustainable economic flow. Its concept goes beyond the token market—it is a functional, innovative financial system built to last.

 With the right technologies and transparent governance, GRV can redefine the future of digital economies! 

2 Token Structure and Initial Distribution

◆ Initial Supply:

- **Total Supply (Hard Cap):** 500 million tokens + 500 million frozen (25 packages of 20 million each).

◆ L2 Phase – Initial Capitalization:

- Pre-sale in **50 lots** totaling **200,000,000 tokens**.
- Lot 1: 4,000,000 tokens at **\$0.04** per unit.
- Lot 2: 4,000,000 tokens at **\$0.08** per unit.
- Lot 3: 4,000,000 tokens at **\$0.12** per unit.
- Progressively increasing by **+\$0.04** per unit every 4,000,000 tokens.
- Lot 50: 4,000,000 tokens at **\$2.00** per unit.
- **DEX Liquidity Reserve:** Estimated **25 million tokens (5%)** of the total supply.
- **25,000,000 tokens (5% of the total supply)** → The only direct initial compensation for the creators, publicly registered in the contract and immutable.
 - **Initial lock:** 5,000,000 tokens.
 - **Gradual release every 4 months:**
 - Release 1: 5,000,000 tokens.
 - Release 2: 5,000,000 tokens.
 - Release 3: 5,000,000 tokens.
 - Release 4: 5,000,000 tokens.

♦ L1 Phase – Autonomous Network:

- **Total supply:** 250,000,000 tokens.
- **Minimum direct sale price: \$5.00 per unit** (floating according to market supply and demand).
- **Fund distribution: 100% of the raised capital is allocated to the network**, with **no transfers to founders or private investors**.
- **Capital control:** All funds remain under collective custody, ensuring transparent and decentralized management.

♦ Controlled Funds:

Fund	Function
Fund 1 – Capital	Stores initial tokens for sale, frozen packages, and network fees.
Fund 2 – Tokens	Holds the capital raised from sales and transaction fees.
Fund 3 – Founders' Multisig	Active participation in the forum and strategic support.
Fund 4 – Rare-GRV Swap Tokens	250 million GRV-Rare1 tokens for exchange with GRV-Rare ERC-20.
Fund 5 – Frozen GRV	Stores L2 tokens swapped for L1 tokens.

- **Funds 1 and 2** can be manipulated via governance.
- **Funds 3, 4, and 5** follow **fixed and immutable rules**.

3 Governance Structure and Forum

♦ Proposal Rules:

- **Proposal fees:**
 - Contract modifications → **100 GRV**.
 - Initiation of shutdown protocol → **1000 GRV**.
- Fees are refunded if approved and integrated into **Fund 2** if rejected.

♦ Possible changes via the forum:

- Transfer fees and fee distribution.
- Strategic reallocation of **Fund 1**.
- Unfreezing of token packages.

- Contract audits and implementations.

♦ Approval Criteria:

The system adopts a **weighted voting mechanism** based on two main factors operating simultaneously:

♦ Technical Participation – Computational Hashrate

The voting weight is directly proportional to the total percentage of hashrate contributed to the network, measured and recorded in the decentralized internal database, with periodic updates through technical audits.

The total hashrate accounts for **up to 60% of the maximum voting power**.

♦ Economic Participation – Eligible Token Pool

Token holders can participate in governance as long as they meet the minimum requirements:

- A minimum of **10 GRV** to be eligible for voting rights, representing **0.0001% of voting weight**, which is the smallest fractional unit allowed for decision-making participation.
- The total weight derived from tokens is capped at **40% of the total voting power**, acting as a counterbalance to purely technical governance.
- This percentage is dynamic and may be recalibrated through periodic audits based on governance proposals.

♦ Token Weight Calculation Model

When the total number of tokens staked for voting exceeds the 40% cap, a proportional adjustment factor is applied.
Example:

- If there are **800,000 tokens** staked, representing **80% of the theoretical limit**, then each individual token corresponds to:

$$(40 / 80) = 0.5$$

→ **Each token represents 0.00005% of the total voting power.**

This mechanism prevents governance centralization by large holders and maintains a balance relative to computational power.

♦ Approval Requirements

- **General proposals:** require **60% weighted affirmative votes**.
- **Network shutdown:** requires **50% of active hashrate-contributing addresses + 80% weighted affirmative votes**.

♦ Institutional Exceptions – Fund 3 (Founders' Multisig)

- Fund 3 holds:
 - **Permanent right to propose any change without paying proposal fees.**
 - **A fixed and immutable voting weight of 5% in all decisions, regardless of its hashrate contribution or token allocation.**

4 Fund Handling and Investment Rules

♦ Protection and Restrictions:

- **Fund 1 – Untouchable and non-transferable**, used **only for investments and buybacks**.

♦ Frozen Package Release Rules:

- Only **one package at a time** can be released.
- Tokens are made available for purchase in **Fund 2, three months after approval**.
- **5%** of each release is allocated to **Fund 3 (Founders' Multisig)**.
- **New release requests** can only be made **6 months after** the previous distribution.

♦ Buyback Limits:

- Buybacks are only allowed if **Fund 2 holds less than 30% of the total circulating tokens**.

♦ Token Pricing Rules:

- Token price = **current market exchange value**, or the **minimum proportional to Fund 1's reserve**, whichever is higher.
- **Minimum purchase**: 1 full token (even though decimals can circulate on the secondary market).

♦ Fee Distribution Rules:

- Minimum **20% of transfer fees must be directed to Fund 2** (adjustable via governance vote).

♦ Fund 1 Investment Targets:

- Government bonds, precious metals, and commodities via fintechs and DEXs.
- Minimum **10% allocation in major fiat currencies**: USD, EUR, CAD, GBP, JPY.
- **Maximum 5% per financial institution**.

🔥 Objective:

- Ensure profitability, diversification, and security of network funds.

♦ Fiat Integration Strategy via Decentralized Modeling (Model 2)

♦ **To ensure interoperability between GRV and global fiat currencies while maintaining decentralization and legal sustainability, the following strategy applies:**

1. No Direct Custody of Fiat Currencies

- GRV will **not hold direct reserves** of fiat (USD, EUR, BRL, etc.) internally.

- All fiat flows are processed via **regulated third-party platforms** (e.g., MoonPay, Transak, Binance Connect).

2. Tokenization Through Stablecoins

- Fiat value inside the network is represented by **audited, regulated stablecoins** (e.g., USDC, EURC, BRZ).
- GRV's **L1 blockchain acts as an infrastructure layer**, interacting with these tokens **without issuing or custodizing fiat directly**.

3. DEX Integration and Multichain Swap Protocol

- Conversions between GRV and other assets occur via DEXs (Uniswap, 1inch, Curve, Thorchain) and decentralized aggregators.
- **Smart contracts handle destinations, fees, routes, and swap rules**, but have no control over the fiat asset itself.

4. Decentralized Community Management (DAO)

- All operational and financial decisions remain under **DAO control**, with proposals and votes weighted by hashrate.
- The community governs swap routes, integration policies, DEX partnerships, and gateway incentives.

5. Elimination of Direct Regulatory Obligations

- By decentralizing fiat handling via smart contracts and external regulated infrastructure, GRV avoids:
 - Registration as a financial institution.
 - Custody licenses.
 - Banking compliance (KYC/AML).
 - Tax compliance across jurisdictions.

6. Fully Digital and Autonomous Architecture

- GRV operates as a **liquidity and governance protocol**, outsourcing fiat interactions to licensed providers.
- The proposal remains a **transparent, auditable, and sovereign decentralized financial system**.

♦ Farming to Support Community Proposals

- **Dual Structure:**
 - Farming allows users to allocate tokens for proposal support and also for suggesting real capital reallocations from **Fund 1**.
- **Token Allocation:** Users can allocate GRV into support pools, which are automatically detected by technical parameters.

- **Fund 1 Suggestions:** Open-ended suggestions for real capital reallocation are allowed. If approved by the community, the system generates the necessary smart contract code.
 - **Forum Submission:** Only proposals with **minimum support thresholds** proceed to formal governance voting.
 - **No Automatic Execution:** Farming does not directly apply changes, ensuring everything passes through the community validation process.
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5 Software Infrastructure and APIs

- **Blockchain integrated with official software:**
 - Forum, governance, smart contracts, token buying/selling.
- **API control for integration with third-party software.**
- External software is allowed, provided it meets network standards.
- **All funds from the L2 phase are directed to full network development before total decentralization.**



Goal:

- Create a functional, decentralized, and meritocratic system accessible to the entire community.
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6 Technical Shutdown Protocol

- ♦ **1. Initial Shutdown Proposal**
 - **Minimum participation:** 50% of active wallets with registered hashrate.
 - **Minimum approval:** 80% of votes weighted by hashrate.
 - **Voting period:** 30 days.
 - If approved, it starts a **contest phase** to confirm or revoke the decision.
- ♦ **2. Contest Phase (Shutdown Rejection Vote)**
 - **Duration:** 90 days of open voting.
 - **Criteria:** 50% participation + 60% affirmative weighted votes.
 - If the contest is approved → **The network remains active.**
 - If the contest fails → The **immutable shutdown protocol starts.**

♦ 3. Execution of the Shutdown Protocol

- **Complete freeze** of governance contracts and funds.
- **Full lock** of **Funds 1 and 2**, preventing manipulation.
- **3-month period** for asset reallocation before final conversion.
- **Gradual liquidation of Fund 3's real assets:**
 - Converted strategically into gold, sovereign bonds, and commodities.
 - **Maximum 5% per financial institution**, ensuring diversification.
- **Proportional conversion of funds into stablecoins for holders.**
 - **3-month period** for GRV holders to exchange tokens for stablecoins.
- After **6 months**, any remaining tokens in Fund 2 are permanently locked.
- **Network closure is finalized with a public blockchain record**, including a final shutdown hash.

🔥 Guarantee:

- **Transparent and immutable process**, preventing manipulation after approval.
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7 Modular Software Architecture for Network Participation

♦ To ensure broad accessibility, interoperability, and functional meritocracy in GRV interaction, the technical ecosystem offers five levels of modular software.

1. Mobile Wallet – GRV Wallet Lite

- **Core Functions:**
 - Direct token purchase via Fund 2 with variable pricing.
 - Send/receive GRV native tokens.
 - Swap assets via automated DEX.
 - Payment links and fiat gateway integration (e.g., MoonPay, Transak) with payments routed directly to Fund 1.
 - Passive proposal farming via a simplified interface.
- **Restrictions:**
 - No direct token buyback from the fund.

- Interface-only; does not participate in governance or mining.

2. Integrated Wallet with Centralized Exchanges – GRV Wallet Pro

- **Additional Features:**

- All Lite functions.
- Pairing with approved CEXs to hold fiat balances directly.
- Active participation in the real-time exchange market between GRV, network tokens, and fiat.

- **Goal:** Facilitate access for users operating in hybrid crypto and traditional finance environments.

3. Basic Desktop Software – GRV Node Basic

- **Additional Features:**

- All Wallet Pro functions.
- Mining via existing cooperative pools.
- Token buyback requests according to Fund 1 policy.

- **Restriction:**

- No independent direct mining or active governance participation.

4. Intermediate Node with Partial Validation – GRV Node Intermediate

- **Additional Features:**

- All Node Basic functions.
- **Partial blockchain download** (cooperative sharding).
- Direct smart contract mining without pools.
- Full forum participation:
 - Technical change proposals.
 - Voting rights weighted by individual hashrate.

- **Goal:** Foster technical decentralization and progressive governance participation.

5. Full Node with Complete Validation – GRV Node Full

- **Additional Features:**

- All Node Intermediate functions.

- **Full blockchain download** (full validator node).
- Ability to create and manage mining pools:
 - Define autonomous participation fees applied to affiliated miners.
- Forum participation weighted by the **total hashrate of the pool**, not by individual members.
- **Purpose:** Build technically and politically influential validators, maintaining meritocracy through real computational power.

♦ **Strategic Note on Voting Meritocracy**

The GRV governance architecture is designed to reflect a **technical and operational meritocracy**, where decision-making power is proportional to **actual computational contribution (hashrate)**.

- Direct voting is **not granted to microholders**, to prevent:
 - Unproductive decision-making overload.
 - Low-cost manipulations.
 - Governance fragmentation.
- Small users are **encouraged to join larger pools**, receiving proportional participation in **political and financial benefits**.

This creates a **self-sustaining ecosystem**, where pool leaders develop their own strategies for marketing, cooperation, and expansion, while intermediate users can grow through technical partnerships and hashrate consolidation.

Thus, GRV establishes a **functional, scalable, and strategically optimized decentralized governance**.

▼ **Final Considerations and Technical Perspectives**

This document presents the **core vision and main framework** for the implementation of the GRV L1 network, forming the technical basis for the full operation of the token as designed.

- The choice of a **sovereign L1 network, with its own decentralized, robust, and auditable architecture**, aligns with the project's fundamental principles.
- However, initial deployment on **Ethereum L2 (ERC-20)** remains viable, provided the described processes are faithfully followed and **decentralized governance remains a non-negotiable premise**.

Throughout development, technical improvements and community suggestions are welcome, **as long as they do not compromise the core pillars of GRV:**

- **Real decentralization**
- **Functional meritocracy**

- **Economic sustainability**
- **Integration with the external financial world**