Terra Protocol – Whitepaper

Real-World Economic Infrastructure Layer for Polkadot

Version: 1.0

Status: Draft for Web3 Foundation / Parity / Polkadot Treasury

License: MIT

1. Introduction

Terra introduces a rights-based, governance-controlled economic layer for real-world systems operating natively on Polkadot.

2. Motivation

Traditional economic systems lack transparency and governance. Terra solves this using OpenGov, XCM, and interoperable parachains.

3. System Overview

Five core components: Rights-Based Engine, XCM Payment Router, Governance Layer, Revenue Router, SDK.

4. Design Principles

Regulatory safety, modularity, interoperability, governance-first, treasury alignment, developer extensibility.

5. Core Architecture

Rights Engine, XCM Router, Governance Layer, Revenue Router, SDK.

6. Use Cases

Eco-villages, worker communities, tourism, energy micro-grids, resource economies.

7. Economic Model

Three-token model: TERRA (rights), GOVT (governance), WORK (bonding curve).

8. Tokenomics

TERRA distribution: 55% Treasury, 20% Worker Vesting, 20% Team (4-year vesting), 5% Partnerships.

9. Governance

DAO-controlled economic parameters, project approvals, revenue flows, bonding curve parameters.

10. Treasury Return Mechanism

DOT-based returns, buybacks, staking yield.

11. Implementation Phases

Phase 1: Foundation. Phase 2: Expansion. Phase 3: Multi-village network.

12. Security & Compliance

Rights-based model avoids property regulation. Contract audits and governance safeguards included.

13. Ecosystem Alignment

Integrates with Moonbeam, Astar, HydraDX, AssetHub, Polkadot Treasury.

14. Conclusion

Terra aims to be Polkadot's real-world economic coordination layer.

15. Contact

GitHub: https://github.com/Terra-Protocol