PierNet: A Decentralized, Market-Driven Mesh Network

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1. PierNet Tokenomics

1.1. Core Principles

- **Market-driven economy:** Bandwidth (MB/sec) and hosting prices are dynamic.
- **Node incentives:** Piers (relays) and Harbors (gateways) are rewarded based on performance.
- **No central authority:** Pricing and distribution remain decentralized.

1.2. Token Circulation & Pricing Model

- Tokens are earned by relaying data and hosting content.
- Users spend tokens for network access, based on speed and congestion.
- **Dynamic pricing model:**
    - Low demand = cheaper bandwidth.
    - High demand = increased cost per MB/sec.
    - Priority users can pay more for guaranteed speeds.

2. Governance & DAO Model

2.1. DAO Role & Limited Intervention

The DAO does not control daily operations but has emergency authority during crises.

2.2. DAO Emergency Triggers

Trigger Event	Why It's a Problem	Automated Response	DAO Override?	Expires in 7 Days?
Token Value	Market panic,	Auto buy-back	✅ Yes	✅ Yes

Trigger Event	Why It's a Problem	Automated Response	DAO Override?	Expires in 7 Days?
Drops 50%+	potential collapse	starts		
Token Supply Too Inflated	Rewards become worthless	Auto fee/burn mechanism	✅ Yes	✅ Yes
Majority of Piers Go Offline	Network stability at risk	Auto reward boost for relayers	✅ Yes	✅ Yes
Abnormal Trading Activity	Whale manipulation	Auto slow-mode on transactions	✅ Yes	✅ Yes

3. Failsafe Mechanism: Preventing DAO Deadlock

3.1. What Triggers the Failsafe?

- DAO intervention expires, but the problem persists.
- DAO vote fails to reach 67% majority.
- Network collapse detected (e.g., relayers drop below 10%).

3.2. What Happens When the Failsafe Activates?

- **Reverts to Standard Algorithmic Control** – Resets rewards, inflation, and pricing.
- **Triggers Emergency Mode (if collapse is near)** – Gradual buy-backs, inflation control, temporary node incentives.
- **DAO Can Regain Control Anytime** – If the DAO votes, it overrides the failsafe.

4. Content Hosting & Network Participation

4.1. Open & Free Hosting

- No central verification system.
- No content censorship – nodes choose what they store.

4.2. Self-Regulating Hosting Model

- Popular content survives naturally.
- Unused content fades out automatically.

4.3. Privacy-Preserving Content Management

- Nodes do not decrypt or inspect content.
- Content is labeled only by self-declared metadata.

5. Conclusion: The Tao of PierNet

PierNet is designed to flow like a self-sustaining system, adapting to user demand without centralized control. Governance ensures that market forces drive pricing, while failsafes protect against total collapse.