

SlimeChain ? Musk-mode Parameter Proposal

Summary

Musk-mode preset introduces a minimum posting price (C_min), verified tiers with discounts and risk attenuation, DM/follow-request escrow microfees, strengthened Proof-of-Relay/Settlement diversity bonuses, and a more responsive basefare controller.

Key Objectives

- Make Sybil spam uneconomic.
- Reward actual serving and diversity.
- Keep hubs capped via diminishing returns and load-priced posting.
- Preserve transparency with on-chain parameters and proposals.

Preset Tables

quality: q_min=0.6, weights=(A:0.2,R:0.2,T:0.2,D:0.15,H:0.25,S:0.25)
cost: a=1.4, b=0.6, alpha=0.8, beta=0.5, lambda_actor=0.8, lambda_content=0.6, cmin_usd=0.005
propagation: ttl_base=5, fanout_base=6, k1=k2=3.0
rewards: r0=1.0, mu=0.5, diversity_bonus_pct=0.05
congestion: eta=0.12, target_tps=600, base_min=0.15, base_max=120.0
tiers: discounts {T0:1.0,T1:0.95,T2:0.85,T3:0.70}, risk_factor {T0:1.0,T1:0.95,T2:0.9,T3:0.8},
dm_escrow_usd=0.003, subscription_usd {T2:\$1,T3:\$4}, deposit_usd {T2:\$25,T3:\$100},
slash_pct_range [1,5]

YAML Proposal

```
quality:
  q_min: 0.6
  weights: { A: 0.2, R: 0.2, T: 0.2, D: 0.15, H: 0.25, S: 0.25 }
cost:
  a: 1.4
  b: 0.6
  alpha: 0.8
  beta: 0.5
  lambda_actor: 0.8
  lambda_content: 0.6
  cmin_usd: 0.005
propagation:
  ttl_base: 5
  fanout_base: 6
  k1: 3.0
  k2: 3.0
rewards:
  r0: 1.0
  mu: 0.5
  diversity_bonus_pct: 0.05
congestion:
  eta: 0.12
  target_tps: 600
  base_min: 0.15
  base_max: 120.0
tiers:
  discounts: { T0: 1.00, T1: 0.95, T2: 0.85, T3: 0.70 }
  risk_factor: { T0: 1.00, T1: 0.95, T2: 0.90, T3: 0.80 }
  dm_escrow_usd: 0.003
  subscription_usd: { T2: 1.0, T3: 4.0 }
```

deposit_usd: { T2: 25.0, T3: 100.0 }
slash_pct_range: [1, 5]

JSON Proposal

```
{  
  "quality": {  
    "q_min": 0.6,  
    "weights": {  
      "A": 0.2,  
      "R": 0.2,  
      "T": 0.2,  
      "D": 0.15,  
      "H": 0.25,  
      "S": 0.25  
    }  
  },  
  "cost": {  
    "a": 1.4,  
    "b": 0.6,  
    "alpha": 0.8,  
    "beta": 0.5,  
    "lambda_actor": 0.8,  
    "lambda_content": 0.6,  
    "cmin_usd": 0.005  
  },  
  "propagation": {  
    "ttl_base": 5,  
    "fanout_base": 6,  
    "k1": 3.0,  
    "k2": 3.0  
  },  
  "rewards": {  
    "r0": 1.0,  
    "mu": 0.5,  
    "diversity_bonus_pct": 0.05  
  },  
  "congestion": {  
    "eta": 0.12,  
    "target_tps": 600,  
    "base_min": 0.15,  
    "base_max": 120.0  
  },  
  "tiers": {  
    "discounts": {  
      "T0": 1.0,  
      "T1": 0.95,  
      "T2": 0.85,  
      "T3": 0.7  
    },  
    "risk_factor": {  
      "T0": 1.0,  
      "T1": 0.95,  
      "T2": 0.9,  
      "T3": 0.8  
    },  
    "dm_escrow_usd": 0.003,  
    "subscription_usd": {
```

```
"T2": 1.0,  
"T3": 4.0  
,  
"deposit_usd": {  
  "T2": 25.0,  
  "T3": 100.0  
,  
"slash_pct_range": [  
  1,  
  5  
]  
}  
}
```

Governance Flow

- 1) Upload proposal with the bundle as content.
 - 2) Discussion: 7d. 3) Voting: 7d. 4) If passed, apply after 72h timelock.
- Any component can be tuned later by parameter-change proposals.