# Basic Project Description



## System goals

Stobox - Solaris

The system is aimed to optimize the expenses during operations with digitalised securities, reduction of ERC-20 tokens transfer fee, reduction of fees for other operations, with the possibility to confirm the operation in the Ethereum mainnet.

## Benefits

- Low transfer fee ($0.01)
- High transaction speed (3 seconds per confirmation)
- Enhanced security for operations with security tokens
- Possibility to publish transactions to L1
- Enterprise validators
- Automatic bridge

## What will be included

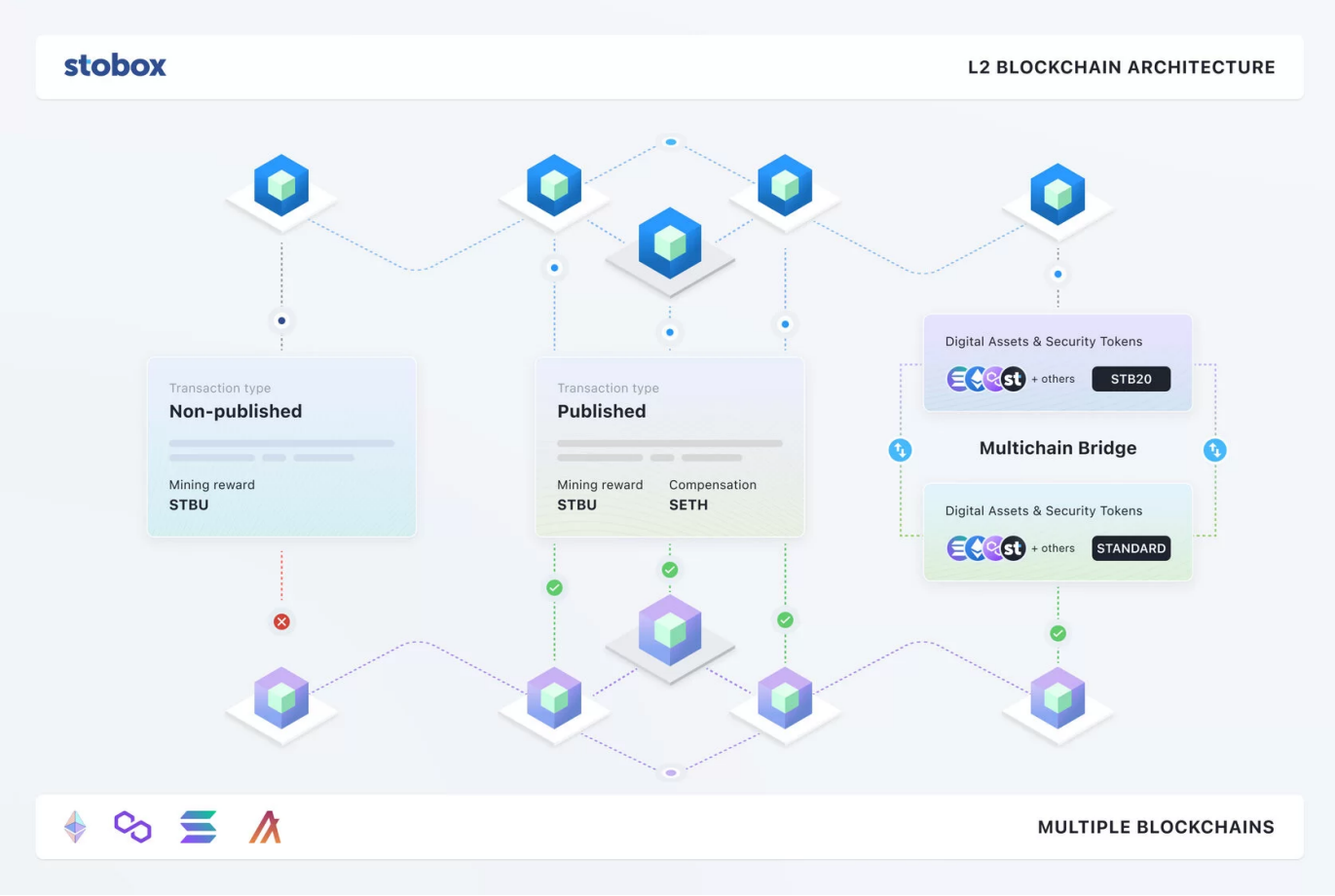
System will include:

1. Bridge between the Ethereum mainnet and our L2 system
2. Decentralized applications for trading with usual tokens and securities
3. Smart contract-based security system for management of smart contract deployers and operations with tokens
4. Blockchain based KYC and AML system
5. The possibility to publish transactions to the Ethereum mainnet with the 100x reduction of transaction fee. The fee will be paid with our network Ethereum tokens (L2ETH) and STBU
6. Smart contracts in L1 network for publishing of transactions from L2 network

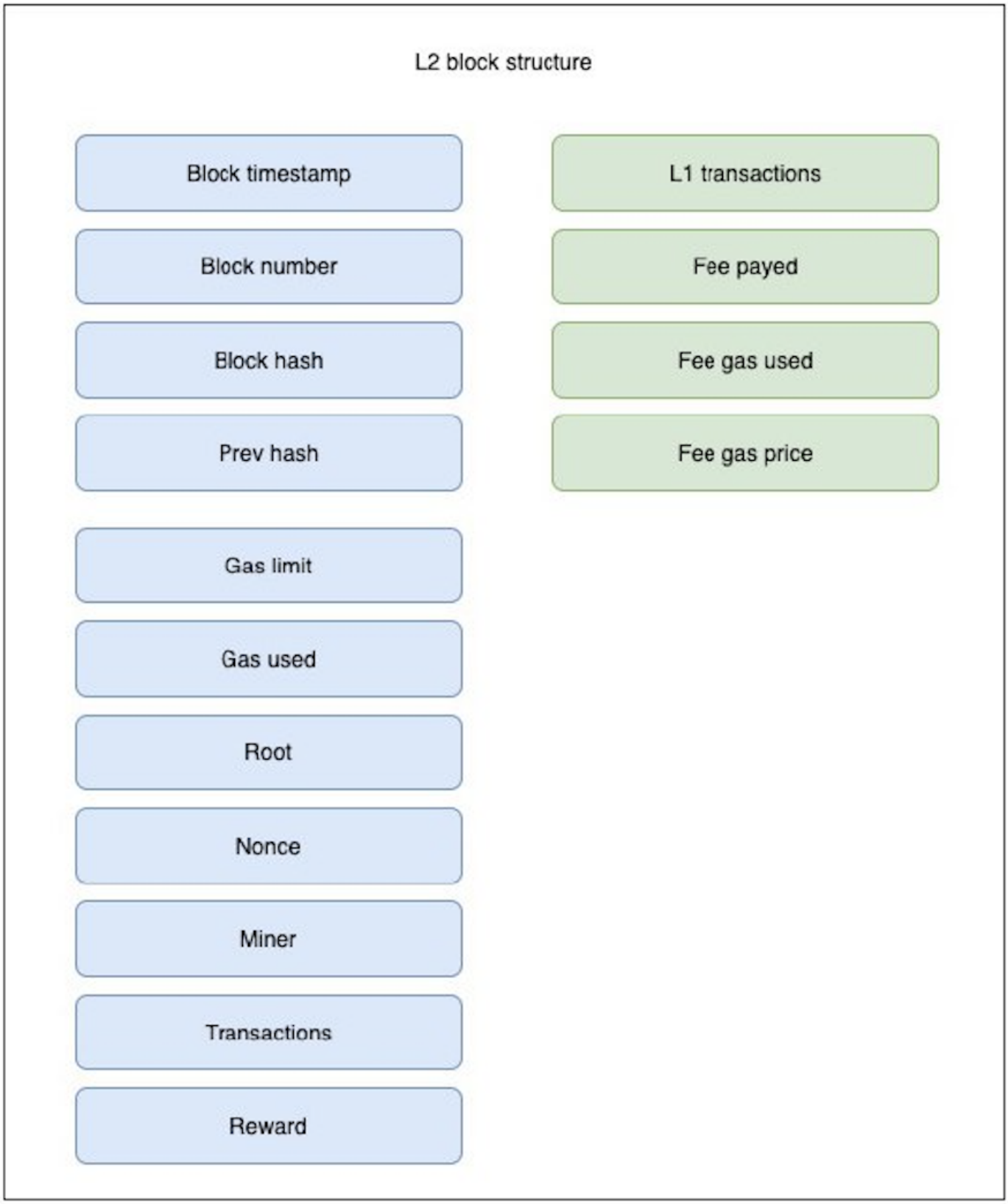
Technically:

1. Connector between L1 and L2 integrated directly into the blockchain node and the mining process
2. In the node, in addition to the main transaction pool, there will be a pool including transactions to be published to the Ethereum mainnet
3. Miner will receive rewards both in L2ETH and STBU, and will be able to transfer them to his wallet via the bridge
4. Changed block structure to support the payments in 2 tokens in parallel, with specification of an average value of transaction publication to L1
5. Proof of Stake

Architecture:

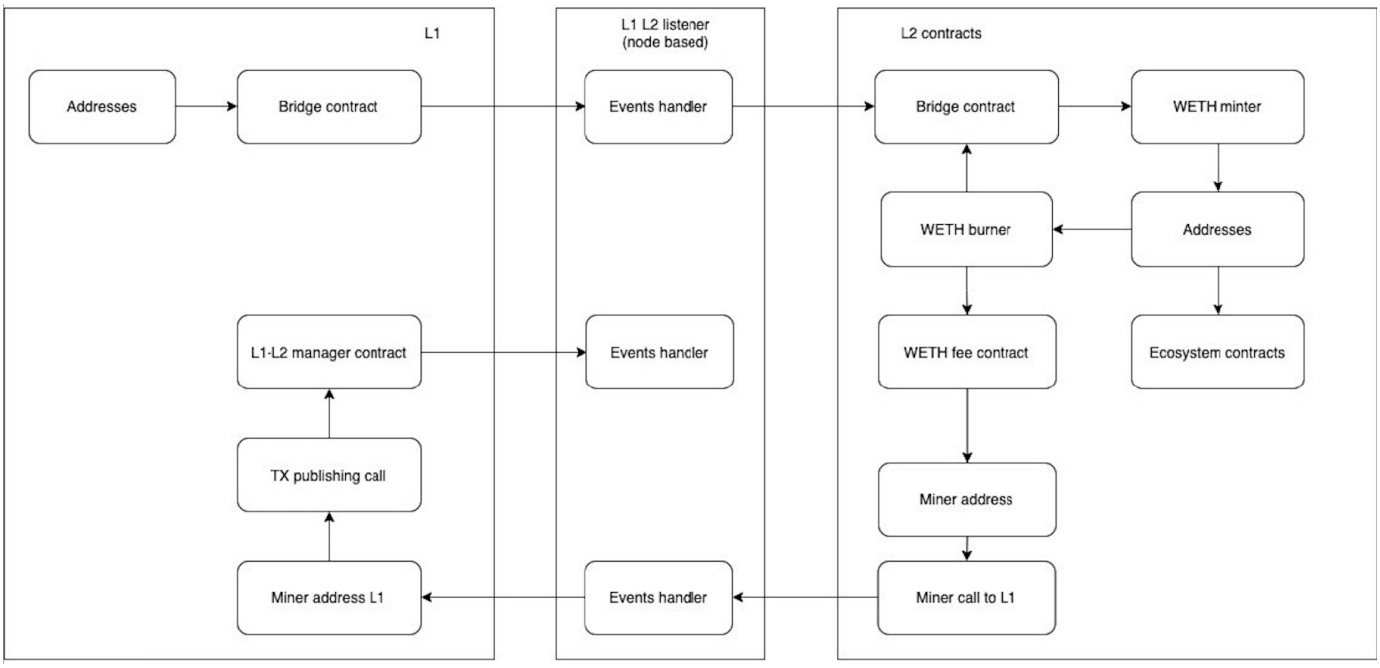



Block structure:

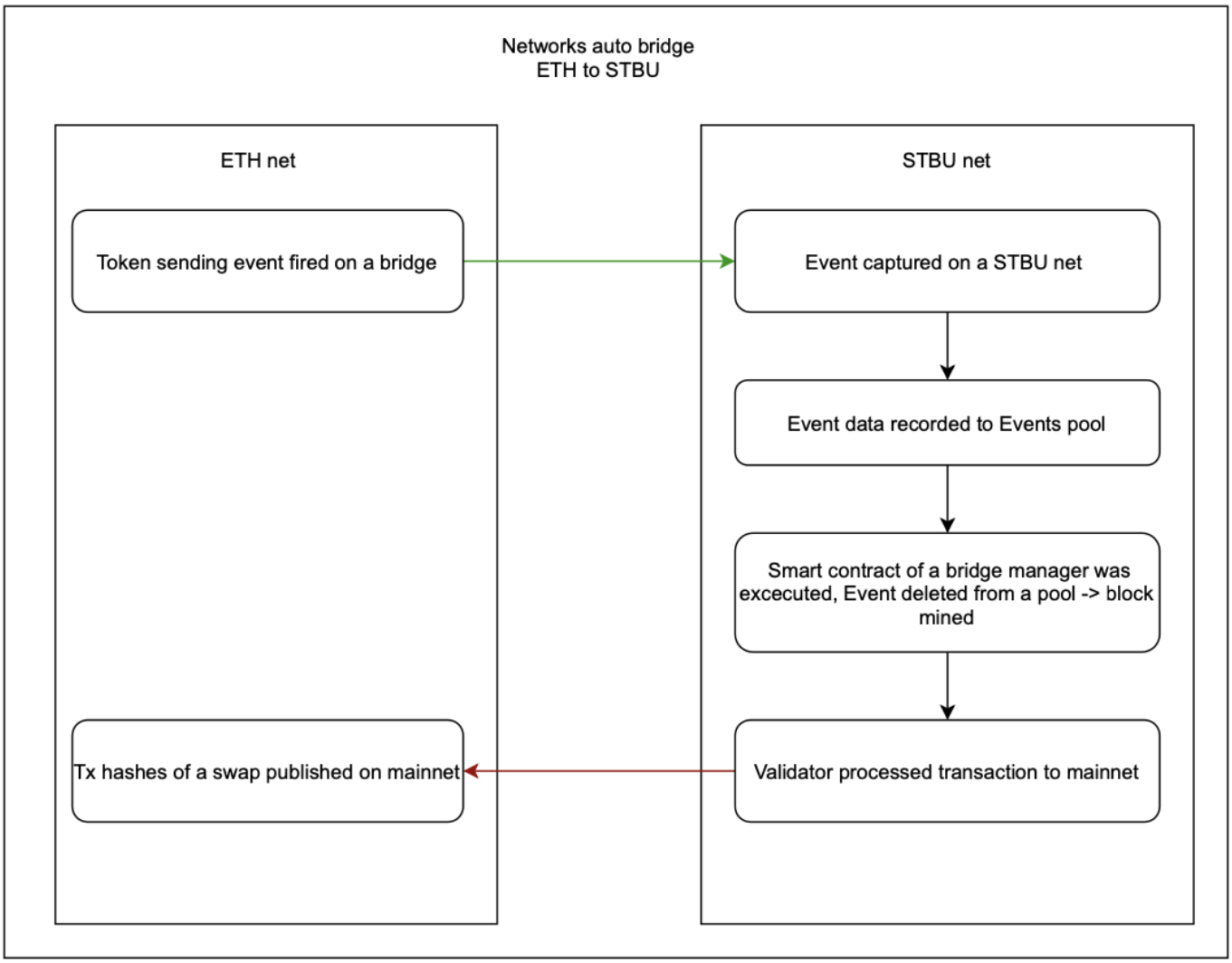



L1 - L2 communication schemes

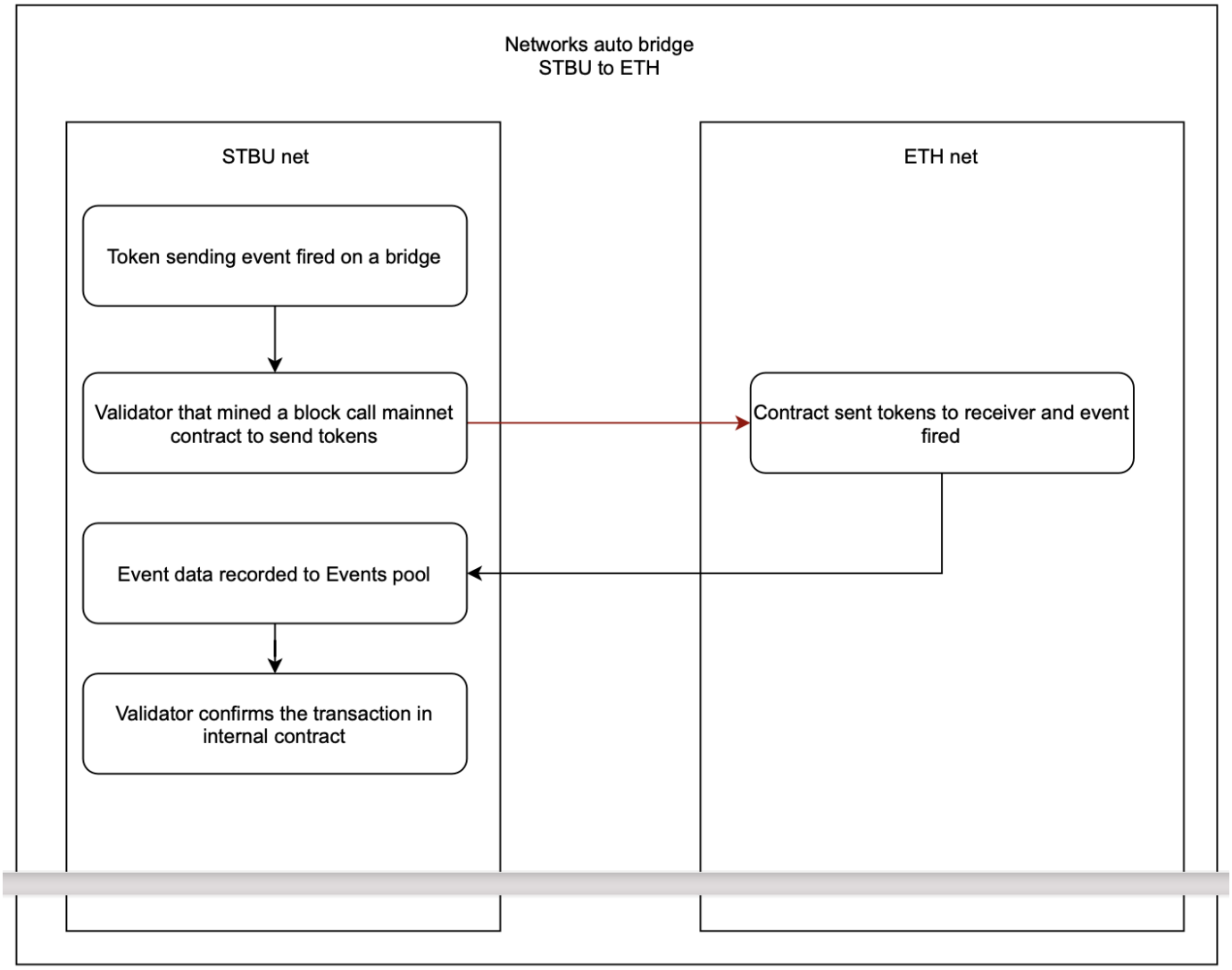
General communication model:



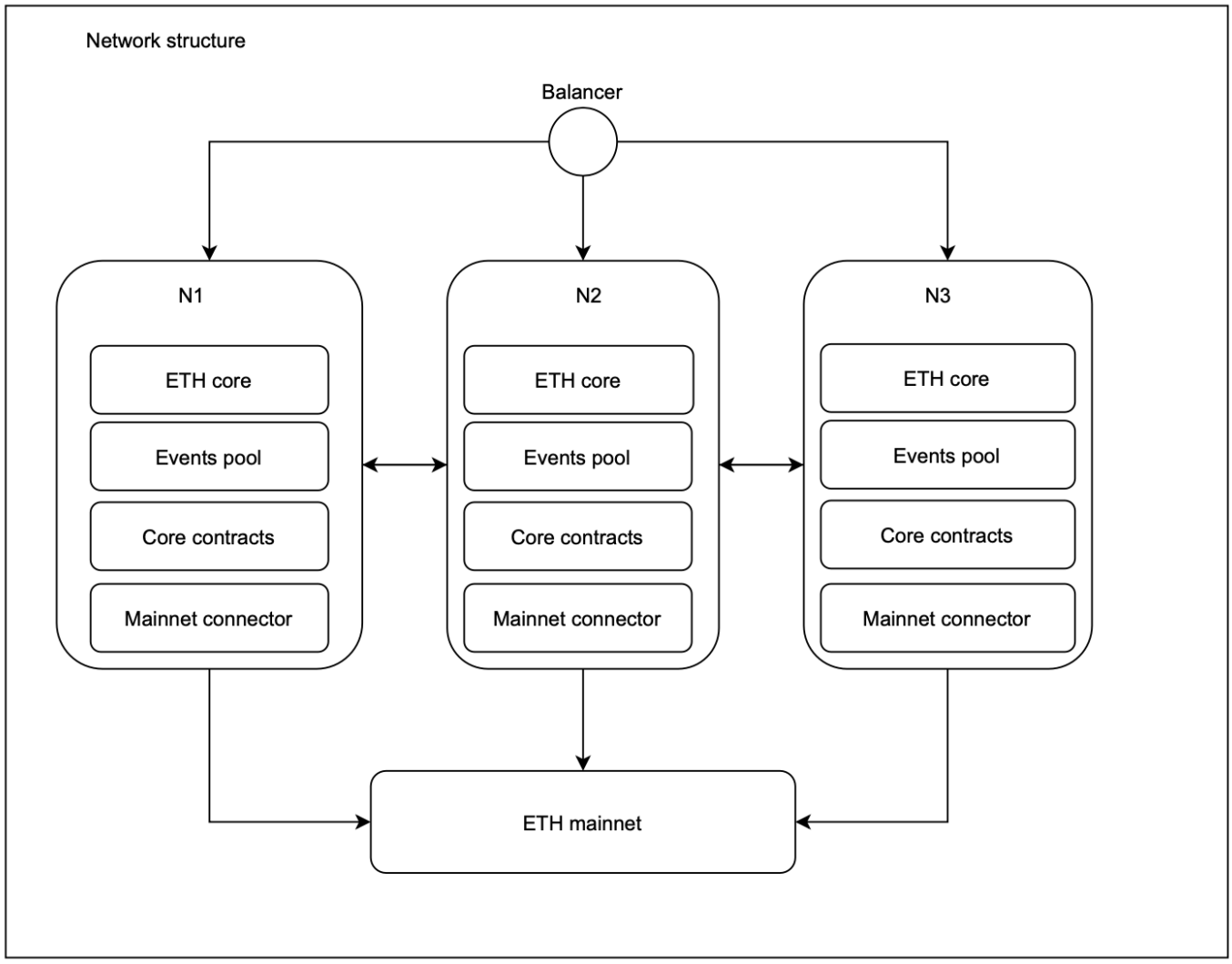

Transferring funds from L1 to L2, with transaction confirmation in L1:



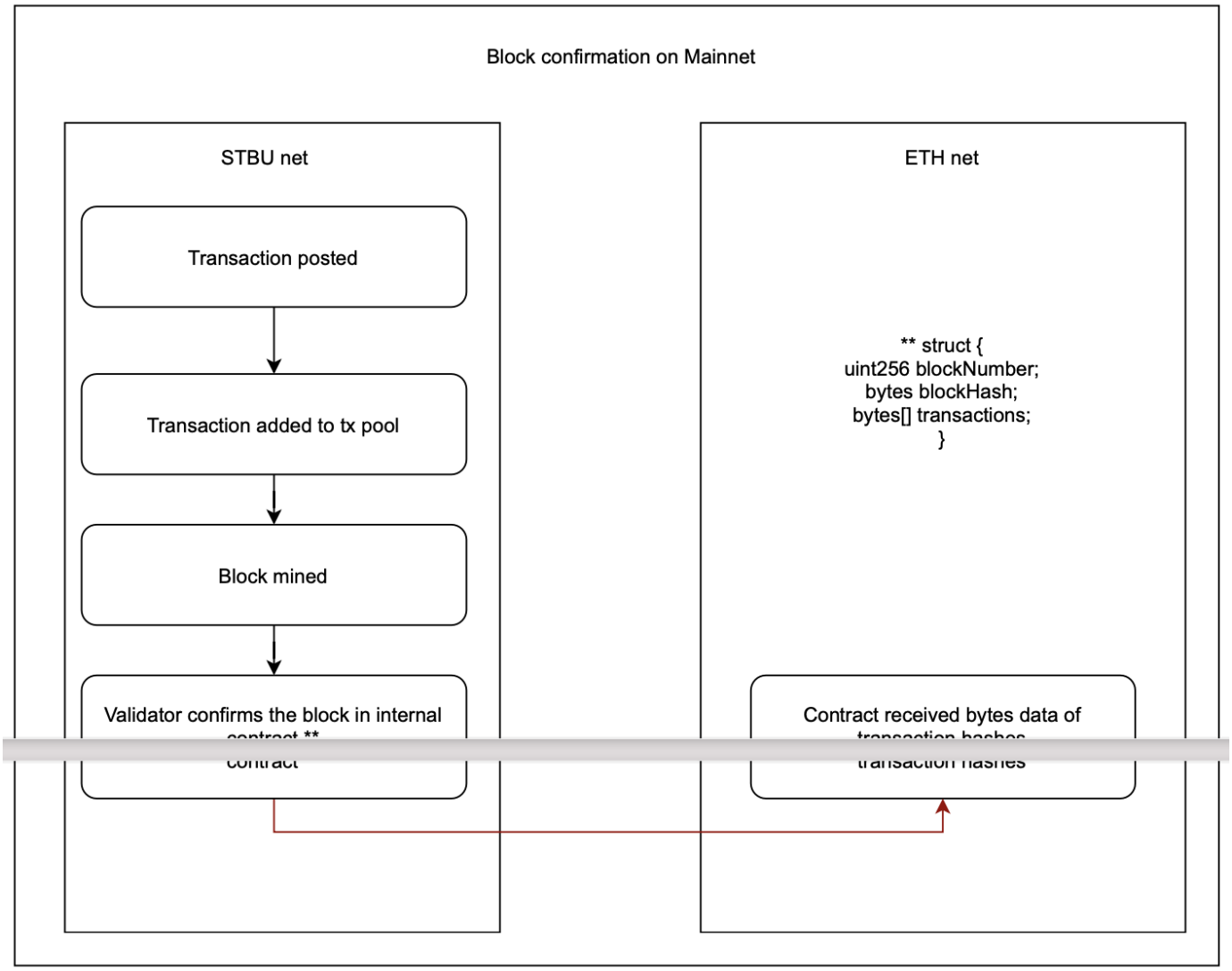

Transaction confirmation in L1 network:




Network structure:



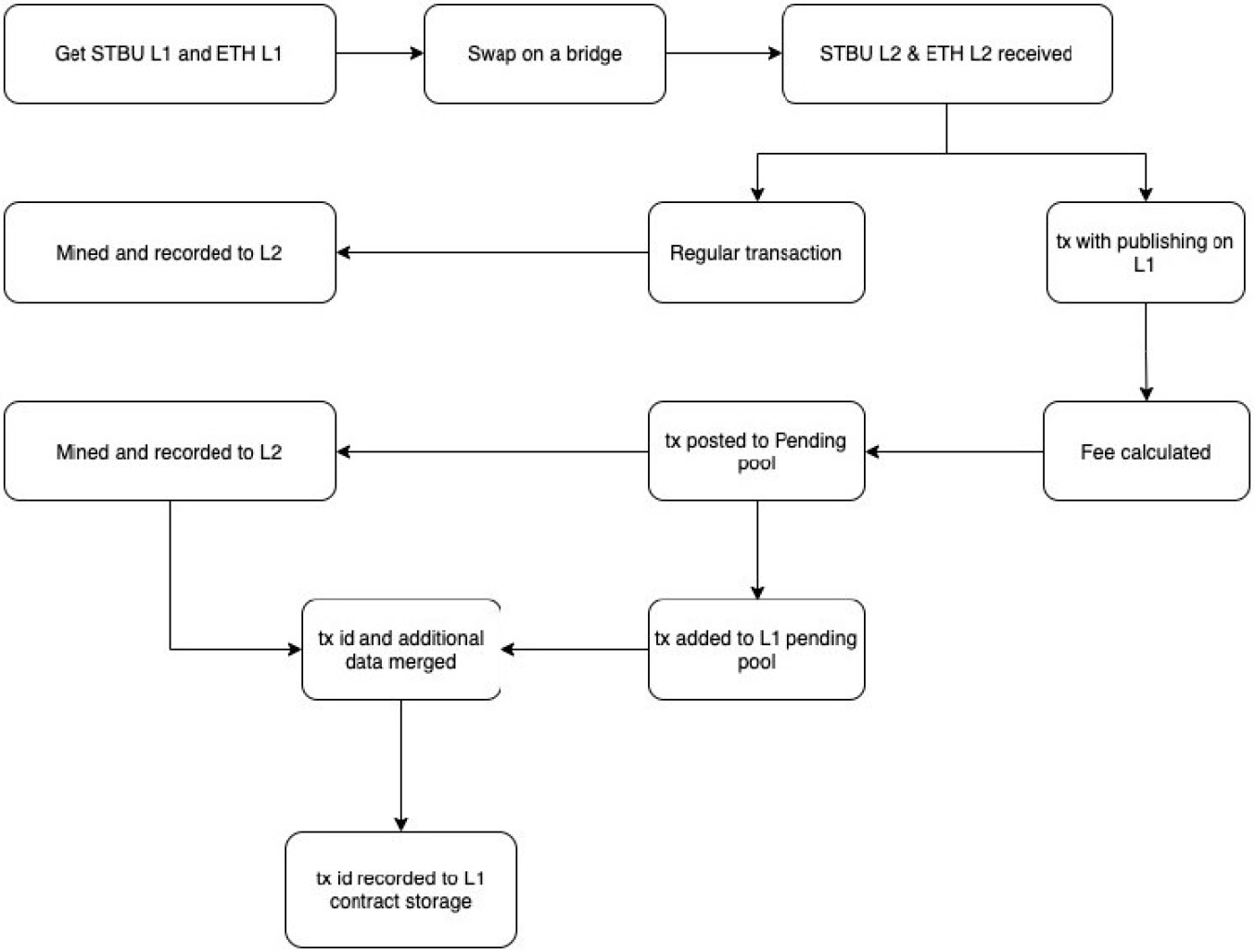

Block confirmation in L1 via L2 smart contract




Tokenomics

- Blocks per day - 28800
- Block time - 3 seconds
- Average mining per day - 4200 STBU
- Initial supply - 50 million STBU
- Average L2 network fee
  - For STBU transfer - 0.0001 STBU
  - For SRC20 (ERC20 analogue) - 0.0005 STBU
- Average price for publication of transaction to L1 - 0.000025 L2ETH
- L2 Gas price - 5 gwei

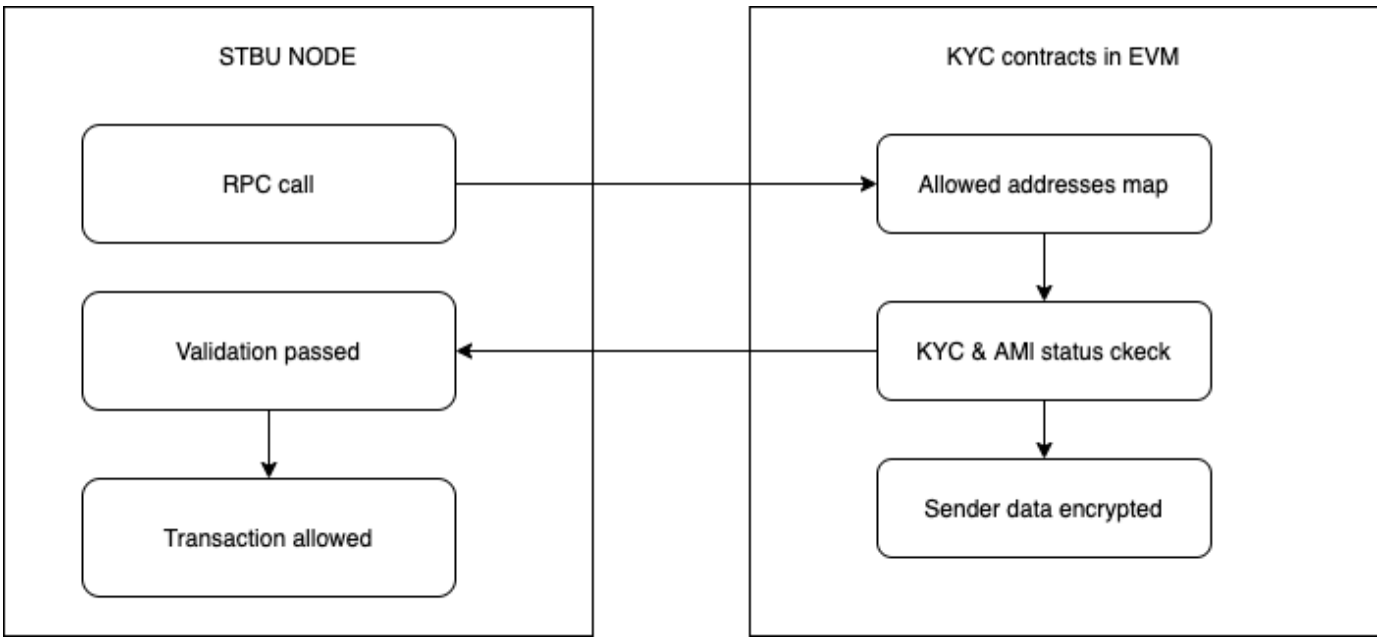
User flow




Permissions, access and control

KYC contracts

- User
- Company
- Nodes whitelist




Roles

- Auditor
- Manager
- User
- Company

Permissions

- ERC20 transfers
- Value based transfers
- Contract deployment
- View public info
- View private info

Auditors' contracts

- Access to private data
- Access to KYC info
- De-anonimising of transactions

Customer contracts

- Tracking and de-anonimising of own company
- Tracking and de-anonimising of companies he has permission for

Black box and cloud version node configuration

- Local node setup and its verification, with the possibility of all dApps connection to local network
- Connection to whitelisted addresses, one-step setup from Stobox's side

Contract types

- Securities
- Other: swaps, yielding, etc

## Rules

1. Smart contract deployment is available only to authorized accounts who passed KYC
2. To confirm a transaction in L1, additionally, the fee in L2ETH will be paid, in addition to the L1 network fee
3. To be a miner, account must have ETH in L1

4. Every Stobox's customer will have to deploy and own a node to ensure good level of decentralization
5. Minimal stake for becoming a stake holder and miner - 100k STBU

## Roadmap