

■ CROSSDEX

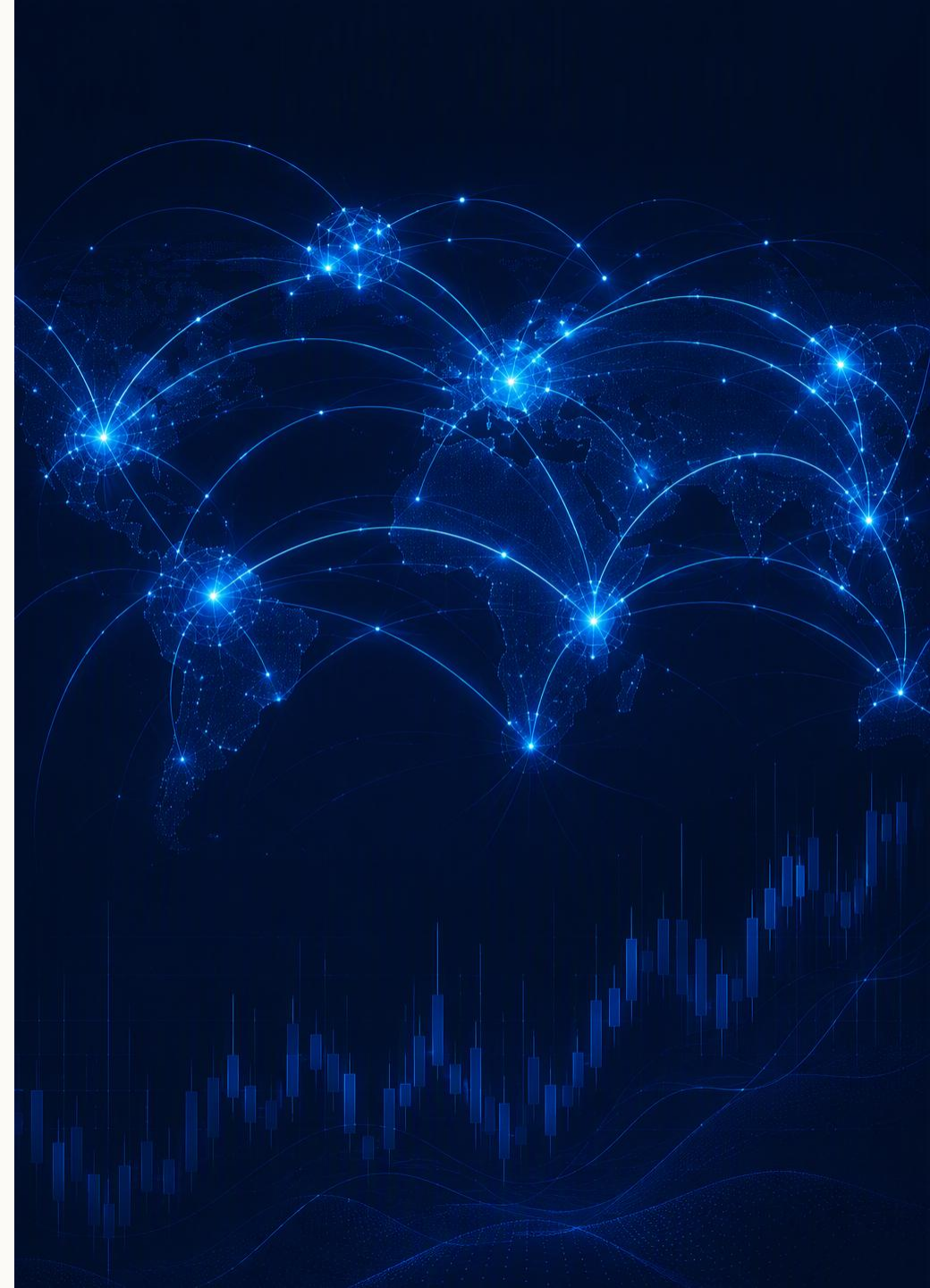
WHITEPAPER · V1.0

Cross-Chain DEX Aggregator

A unified liquidity gateway and execution layer for the multi-chain era

Connect every chain. Unlock every pool of liquidity.

Version 1.0 · August 2026



CONTENTS

Table of Contents

SIX CHAPTERS · 30 PAGES

- 01 **Executive Summary** Overview & Value
- 02 **Market Context** Fragmentation & Pain Points
- 03 **Vision & Architecture** Product & Tech Stack
- 04 **Tokenomics** The CDT Token Model
- 05 **Incentives & Governance** Mining & DAO
- 06 **Security & Roadmap** Ecosystem & Team

Executive Summary

A decentralized exchange aggregation protocol for the multi-chain ecosystem — a unified cross-chain liquidity engine, smart routing, one-signature trading, and a deflationary token economy.

One Liquidity Gateway for the Multi-Chain Era

CrossDex is a decentralized exchange aggregation protocol built for the multi-chain ecosystem. Its unified cross-chain liquidity engine aggregates pools across Ethereum, BSC, Polygon, Arbitrum, Optimism and other major networks, while smart routing and bridge aggregation deliver best-price execution, minimal slippage and maximum capital efficiency. The native CDT token — fixed supply of 1 billion — powers governance, fee discounts, liquidity incentives, revenue sharing and bridge-fee subsidies.

FOUR CORE VALUE PROPOSITIONS

Best Price Discovery

Scans pools across chains in real time to compute the globally optimal execution path.

One-Signature Swaps

Complex cross-chain flows compressed into a single user signature — no manual bridging.

Bridge Aggregation

No single point of failure — dynamic scoring selects the safest, cheapest bridge route.

Deflationary Model

Dual-track burns — fee buybacks plus per-trade burning — steadily increase CDT scarcity.

Enabling any user, on any chain, to swap any asset at the best price, the lowest cost, and the highest level of security.

02

CHAPTER 02 · MARKET CONTEXT

Market Context

Fragmented liquidity, operational complexity and security risk across parallel chains all point to the same gap — a unified cross-chain liquidity infrastructure.

A Fragmented Multi-Chain Landscape

By 2026, the industry has evolved from single-chain dominance to a multi-chain equilibrium. Ethereum, BSC, Solana, Avalanche, Arbitrum, Optimism, Base and other L1/L2 networks each sustain their own DeFi ecosystems, creating deep liquidity fragmentation. Per DeFiLlama, TVL is scattered across dozens of independent protocols — the best price on any single chain rarely reflects true market-wide pricing.

7+

Major L1/L2 networks
operating in silos

50+

Independent DEX
protocols splitting
liquidity

Exp.

Growth in cross-chain
transfer demand



Illustration of the global multi-chain network: chain ecosystems exist as islands, with value flowing through inefficient bridge corridors.

Demand and headroom. As modular blockchains and L2 scaling proliferate, the multi-chain equilibrium is here to stay. Demand for cross-chain asset movement is growing exponentially while infrastructure lags behind — CrossDex is built to become the unified liquidity gateway for multi-chain DeFi.

Five Structural Pain Points in Cross-Chain Trading

- 01 **Fragmented liquidity** Pools are isolated per chain; large orders executed on one chain suffer severe slippage with no access to deeper liquidity elsewhere.

- 02 **Operational complexity** Users must manually bridge, swap, then bridge again — juggling multiple protocols, repeated signatures and multiple gas payments.

- 03 **Inefficient price discovery** Without a unified cross-chain order view, traders cannot compare prices across chains in real time and repeatedly miss best execution.

- 04 **Cross-chain security risk** Bridges frequently suffer from centralized custody, contract exploits and validator collusion — the trust cost of moving assets is high.

- 05 **Compounding gas costs** Multi-chain workflows mean paying gas several times over; bridging via Ethereum mainnet can erode a meaningful share of returns.

All five point to one gap — a unified gateway that aggregates liquidity, abstracts complexity and secures assets.

03

CHAPTER 03 · VISION & ARCHITECTURE

Vision & Architecture

From the layered aggregation engine to virtual liquidity pools, from smart routing to bridge aggregation — the complete CrossDex technology stack.

03 · VISION & MISSION

OUR VISION

Build a borderless, permissionless, high-efficiency liquidity infrastructure — where any user, on any chain, can swap any asset at the best price, the lowest cost and the highest security.

OUR MISSION

Unify Liquidity

Break down inter-chain barriers into one global liquidity network.

Simplify the Experience

Wrap complex cross-chain flows into a single-click trade.

Maximize Capital Efficiency

Smart routing and multi-hop algorithms find the optimal path for every trade.

Advance Multi-Chain Synergy

Connect value across ecosystems and accelerate multi-chain DeFi.

Five Core Modules of the Platform

Five cooperating modules cover the full trade lifecycle, from liquidity discovery to on-chain settlement.

<i>Module</i>	<i>Function</i>
<i>Aggregation Engine</i>	<i>Scans multi-chain pools in real time and computes optimal trade routes</i>
<i>Smart Routing Protocol</i>	<i>Multi-hop routing and order-splitting strategies minimize slippage</i>
<i>Bridge Integration Layer</i>	<i>Aggregates multiple bridges and dynamically selects the best route</i>
<i>Unified Trading Interface</i>	<i>Standardized API and front-end that abstract away underlying complexity</i>
<i>Settlement Layer</i>	<i>Atomic cross-chain settlement executed by smart contracts</i>

Together they compress "discover → route → bridge → settle" into a single user signature.

The Aggregation Engine: A Three-Layer Design

LAYER 01
Data Layer

Indexing nodes on each chain stream pool data in real time — depth, fees and prices across Uniswap V2/V3, PancakeSwap, Curve, Balancer and more. The Graph subgraphs and proprietary event listeners keep state in millisecond sync, while Chainlink / CCIP oracles cross-validate prices against manipulation.

LAYER 02
Computation Layer

Off-chain compute clusters run path-optimization algorithms that weigh price, slippage, gas, bridge fees and execution time. Multi-hop routing splits large trades into sub-paths across chains; order splitting distributes volume across pools in optimal proportions to minimize price impact.

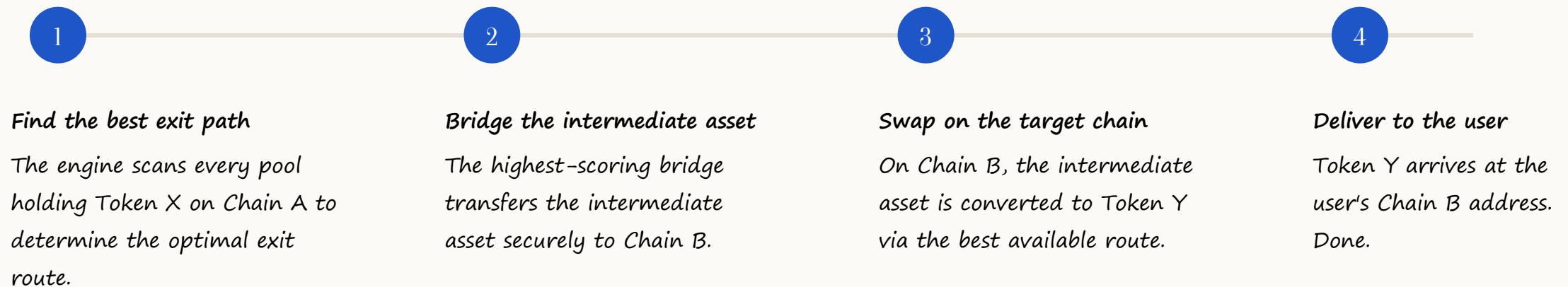
LAYER 03
Execution Layer

Cross-chain messaging protocols such as LayerZero, Axelar and Wormhole coordinate atomic execution across chains. A pre-execution simulator replays every trade on an off-chain EVM before submission, verifying path validity and final proceeds.

Data senses the market, computation plans the route, execution settles atomically — each layer upgrades independently.

Virtual Liquidity Pools: One Signature, Fully Automated

CrossDex Vault contracts deployed on each target chain act as the custody and execution vehicle, aggregating multi-chain depth into virtual liquidity pools. When a user swaps Token X on Chain A for Token Y on Chain B, the flow is:



1 signature

Throughout the entire cross-chain journey, the user signs once on Chain A — every intermediate step is executed automatically by smart contracts, with all complexity sealed inside the protocol.

Smart Routing and Best-Price Discovery

ROUTE OPTIMIZATION MODEL

Built on an enhanced Dijkstra algorithm with linear programming

Objective

Minimize total cost = slippage + gas + bridge fees + time cost

Constraints

Path depth $\geq$ sub-order size; bridge time $\leq$ user threshold; price impact per path $\leq$ configured cap

Solving for the global optimum across price, speed, cost and security — not a local one.

FOUR ADVANCED ROUTING STRATEGIES

Small orders

Direct routing

Single path, single DEX execution — lowest cost.

Shallow pairs

Multi-hop routing

Hop across pools via intermediate tokens such as USDC or ETH.

Large orders

Cross-chain split routing

Orders split across chains and executed in parallel to spread price impact.

Non-urgent orders

Time-weighted routing TWAP execution in tranches further reduces impact.

Bridge Integration: Never Depend on a Single Bridge

Bridge	Characteristics	Best For
LayerZero	Omnichain interoperability with arbitrary message passing	General asset transfers
Axelar	Decentralized validator network with strong security	Large-value transfers
Wormhole	Multi-chain NFT and token transfers	Special asset types
CCIP (Chainlink)	Enterprise-grade cross-chain infrastructure	High-value transactions
Native bridges	Official bridging solutions of each chain	Chain-specific transfers

BRIDGE SELECTION · FOUR-DIMENSION DYNAMIC SCORING



Security

Incident history, node count,
audit status



Speed

Average cross-chain
confirmation time



Cost

Bridge fee plus destination-
chain gas



Liquidity

Bridge pool depth and
available capacity

Smart Contract Architecture & Security Design

CrossDexRouter.sol

Core router — path resolution and execution scheduling

CrossDexVault.sol

Cross-chain liquidity custody across all supported chains

BridgeAggregator.sol

Bridge aggregation wrapping multiple bridging protocols

PriceOracle.sol

Price oracle aggregating multi-source price feeds

CDTToken.sol

ERC-20 token contract with built-in governance support

Governance.sol

DAO governance for protocol parameters and upgrades

SECURITY DESIGN PRINCIPLES



Standard Libraries

Built on OpenZeppelin with ReentrancyGuard and Pausable modules



CEI Pattern

External calls strictly follow Checks-Effects-Interactions



Multisig + Timelock

Critical functions gated by multisig and time-delayed execution



Emergency Pause

Rapid response to extreme events

04

CHAPTER 04 · TOKENOMICS

Tokenomics

CDT allocation, five core utilities and a dual-track deflation mechanism — ecosystem-first, long-term aligned, continuously deflationary.

CDT: The Value Carrier of the CrossDex Ecosystem

TOTAL SUPPLY — HARD-CAPPED, NEVER INFLATED

1,000,000,000

One billion CDT

TOKEN PROFILE

Name *CrossDex Token*

Symbol *CDT*

Standard *ERC-20*

Deployment *Native on Ethereum, bridged to multiple chains*

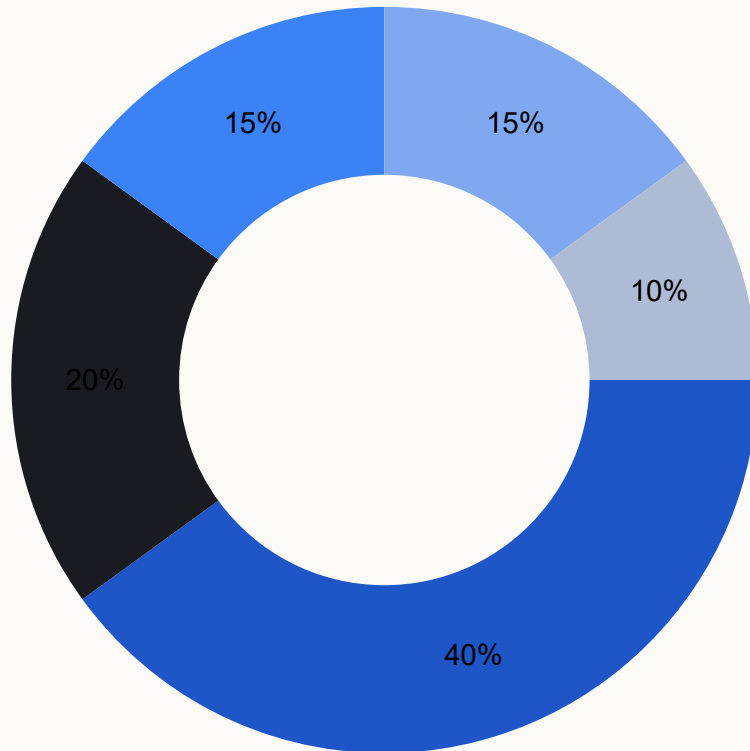
CORE FUNCTIONS

Governance · Fee discounts · Liquidity

incentives · Revenue sharing · Bridge-fee subsidies

A deflationary economic model — protocol-fee buyback-and-burn plus per-trade burning — steadily raises token scarcity and underpins long-term value.

Allocation: Community First, Long-Term Alignment



Slice colors correspond to the table rows top to bottom.

Category	Share	Lockup & Vesting
Community incentives & mining	40%	No lockup; linear release per mining schedule
Core team & advisors	20%	4-year lockup, 6.25% unlocked quarterly
Strategic partners & early investors	15%	2-year lockup, 25% unlocked semi-annually
Ecosystem fund	15%	1-year lockup, then released as projects require
Public sale (ICO/IEO/IDO)	10%	No lockup; 100% released at TGE

Five Core Utilities of CDT

- 01 **Trading fee discounts** Paying fees in CDT grants 25%–50% off: holdings of 1,000 / 10,000 / 100,000 CDT unlock tiers of 25% / 35% / 50%.

- 02 **Governance voting power** 1 CDT = 1 vote on protocol upgrades, fee adjustments, new-chain onboarding and ecosystem-fund appropriations.

- 03 **Liquidity mining rewards** Supply assets to designated cross-chain pools and stake CDT for rewards — longer lockups raise the boost multiplier, up to 3x.

- 04 **Revenue sharing** 30% of platform trading fees buy back CDT for the staking pool; stakers share proceeds pro rata (paid in CDT or USDC).

- 05 **Bridge-fee subsidies** Paying bridge fees in CDT earns a 20% subsidy funded by the ecosystem fund, lowering the cost of cross-chain transfers.

Hold to earn, spend to save, vote to govern — utility grows in step with the platform.

Dual-Track Deflation: More Volume, More Burns

TRACK 1 · BUYBACK & BURN

Protocol Fee Buyback & Burn

Each month, 20% of trading fees fund open-market CDT buybacks. Of the repurchased tokens, 50% are burned outright (sent to a black-hole address) and 50% replenish the staking reward pool.

TRACK 2 · TRADE BURNING

Per-Trade Burning

In every trade whose fees are paid in CDT, 10% of those tokens are burned immediately. As volume grows, the burn rate compounds into a self-reinforcing deflationary loop.

8%–12%

Projected cumulative burn as a share of total supply in the first three years

The Deflationary Flywheel

Volume growth → more fees and burns → shrinking CDT float → rising scarcity → stronger value support — attracting more users and liquidity in turn.

Note: projections are based on a volume-growth model; actual burns depend on real on-chain trading activity.

05

CHAPTER 05 · INCENTIVES & GOVERNANCE

Incentives & Governance

Dual-token mining, tiered lockup rewards and a progressive DAO — every contribution to the ecosystem earns its reward.

Liquidity Mining: Dual Rewards + Tiered Lockup Incentives

DUAL REWARD MODEL

Base rewards CDT distributed linearly by share of capital and duration staked.

Bonus rewards 70% of in-pool trading fees go to liquidity providers; 30% accrue to the protocol treasury.

THREE MINING POOL TIERS

Stablecoin pools e.g. USDC cross-chain bridged pairs — lower yield, lower risk.

Major-token pools e.g. ETH cross-chain bridged pairs — medium yield, medium risk.

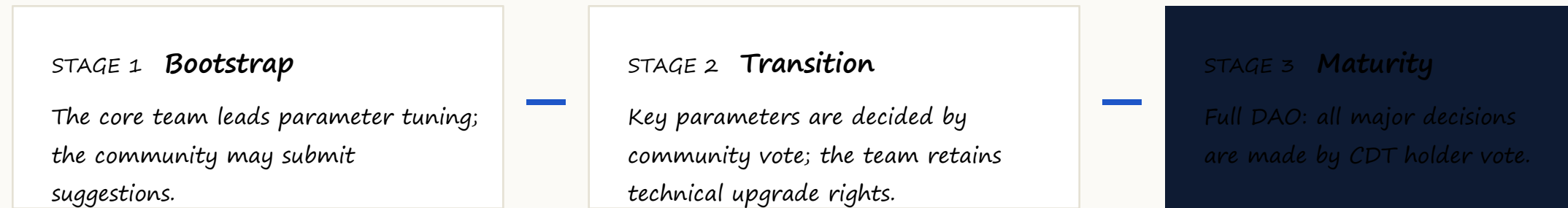
Long-tail pools Higher yield and risk, backed by an impermanent-loss insurance fund.

TIERED LOCKUP REWARDS

Lockup	Boost	Extra Rewards
30 days	1.2x	Base CDT rewards
90 days	1.5x	Base CDT + fee dividends
180 days	2.0x	Base CDT + dividends + governance airdrop
365 days	3.0x	Base CDT + dividends + airdrop + NFT badge

Lockup rewards stabilize the token price and reduce sell pressure — long-term holders share first in ecosystem growth.

Progressive Decentralization: Three Stages to a Full DAO



PROPOSAL & VOTING LIFECYCLE

01 Submit

Holders of $\geq 100,000$ CDT may propose, posting a 10,000 CDT bond.

02 Debate

A 7-day discussion period with open debate on the community forum.

03 Vote

A 5-day voting window follows; 1 CDT equals 1 vote.

04 Execute

Passes with $> 50\%$ approval and $\geq 5\%$ quorum of circulating supply; the Timelock executes automatically after 48 hours.

Proposal types Parameter proposals (fees, reward splits, lockup multipliers) · Technical proposals (protocol upgrades, contract migration) · Ecosystem proposals (fund appropriations, partnerships, new-chain onboarding)

Governance Parameters & Permission Tiers

Parameter	Amendment Authority	Execution
Base fee rate	DAO vote	Automatic contract execution
Mining reward allocation	DAO vote	Automatic contract execution
Emergency pause	Multisig committee	Immediate execution
Contract upgrades	DAO vote + multisig confirmation	Timelock-delayed execution
Ecosystem-fund appropriations	DAO vote	Multisig execution

GOVERNANCE PORTAL



Proposals & Forum
Submission and open discussion



On-Chain Voting
Transparent, auditable ballot interface



Governance Dashboard
Vote history, stake distribution, turnout



Vote Delegation
Delegate voting power to representatives

Governance mining — holders of $\geq 1,000$ CDT earn CDT for every valid vote; six consecutive months of participation earn the "Governance Pioneer" NFT and airdrop priority. Referral rebates — 10% of an invitee's trading fees returned in CDT.

06

CHAPTER 06 · SECURITY & ROADMAP

Security, Ecosystem & Roadmap

Multiple audits and an insurance fund anchor security; the ecosystem fund and partner network drive growth; a five-phase roadmap leads to global liquidity infrastructure.

Security & Compliance: Four Lines of Defense

Smart Contract Audits

Internal unit-test coverage above 95%; independent audits commissioned from CertiK, Trail of Bits and OpenZeppelin; formal verification of critical contracts; a standing bug bounty of up to \$500k equivalent in CDT after launch.

Cross-Chain Asset Protection

Large holdings under 3-of-5 multisig custody; a cross-chain risk insurance fund seeded with \$5M in assets; daily transfer caps per bridge; 24/7 monitoring that auto-triggers alerts and pauses.

Risk Controls

Chainlink price anchoring rejects execution when DEX prices deviate from the oracle by more than 5%; large orders are force-split with a 3% per-trade price-impact cap; impermanent-loss compensation up to 50%; same-block flash-loan loops banned; TWAP oracles resist transient manipulation.

On-Chain Transparency

Token allocations, pool states and revenue distributions are queryable on-chain in real time; monthly transparency reports cover volume, fee income, buyback-and-burn totals, insurance-fund balance and security incidents; core contract code is open-sourced for community scrutiny.

Security is not a one-off audit — it is a continuous system spanning code, assets, prices and information.

Ecosystem Fund & Strategic Partner Network

ECOSYSTEM FUND · 150M CDT (15% OF TOTAL SUPPLY)

Project Incubation

Funding cross-chain
arbitrage tools, yield
aggregators and other
derivatives

On-Chain Rewards

Liquidity bootstrap
incentives for newly
onboarded chains

Developer Grants

Grant program rewarding
code, tooling and
documentation

Security Research

Funding blockchain security
research to harden the
protocol

STRATEGIC PARTNER NETWORK

Chain ecosystems Foundations of Ethereum, BSC, Polygon, Arbitrum, Optimism, Base and more

DEX protocols Liquidity sharing with leading DEXs — Uniswap, PancakeSwap, Curve, Balancer

Cross-chain infrastructure Deep collaboration with LayerZero, Axelar, Wormhole and Chainlink CCIP

Wallets & institutions MetaMask, Trust Wallet and Rainbow integrations; market makers and institutional capital

Community & developers Regular cross-chain trading competitions · Weekly AMAs and meetups in key cities · Multilingual support (EN/ZH/JA/KO) · Full developer toolkit — JS/TS SDK, Python SDK, contract templates, GraphQL API

Five Phases: From Testnet to Global Infrastructure

PHASE 1 2026 Q3-Q4	PHASE 2 2027 Q1-Q2	PHASE 3 2027 Q3-Q4	PHASE 4 2028 Q1-Q2	PHASE 5 2028 Q3+
Foundations & Testnet	Mainnet & Core Features	Multi-Chain Expansion	Full DAO Governance	Global & Institutional
· Core protocol & contract development · Internal audit + CertiK third-party audit · Testnet launch with community beta · Whitepaper & technical documentation · Early community building	· Ethereum mainnet launch · Uniswap V3 & Curve integrations · CDT token & liquidity mining live · Two-way Ethereum ↔ BSC bridging · Public sale (IDO)	· Polygon, Arbitrum, Optimism onboarded · LayerZero & Axelar integrations · Governance portal live · Developer SDK & grant program · Institutional liquidity partners join	· All core parameters DAO-governed · Bridge aggregator goes live · Long-tail token cross-chain trading · Mobile app release · Global brand campaign	· 10+ major chains connected · Institutional-grade API & custody · Cross-chain derivatives trading · Licenses in key jurisdictions · Core liquidity venue for multi-chain DeFi

Core Team & Advisory Board

Thaddeus Voss Founder & CEO

Former technical architect in Goldman Sachs' digital-asset division; 8 years in blockchain; led the design and delivery of multiple cross-chain protocols.

Seraphina Draycott Chief Security Officer

Former senior security auditor at OpenZeppelin; led audits of 50+ DeFi projects; CISSP- and CEH-certified.

Elowen Kessler Co-Founder & CTO

Former core engineer at Chainlink; smart-contract security specialist with 5 blockchain patents; speaker at DEF CON and Black Hat.

Caius Pemberton Chief Operating Officer

Former head of European operations at Binance; drove multiple DeFi projects past one million users.

Magnus Thorbjörn Chief Architect

Former protocol engineer at Avalanche; ETH Zürich PhD focused on consensus algorithms and cross-chain communication.

Isolde Fairweather Chief Economic Advisor

Former digital-currency policy researcher at the Federal Reserve; Columbia PhD in economics; designer of deflationary models for top DeFi protocols.

ADVISORY BOARD

Alaric St. Clair Strategy Advisor

Former investment partner at a16z crypto, focused on cross-chain infrastructure and DeFi.

Branwen Halloway Technical Advisor

Researcher at the Ethereum Foundation; specialist in Layer-2 scaling.

Dorian Kincaid Compliance Advisor

Former senior policy advisor at the U.S. SEC; versed in U.S., EU and Singapore frameworks.

Risk Disclosure & Disclaimer

Technical Risk

Despite multiple audits, smart contracts may harbor unknown vulnerabilities; reliance on third-party bridges means an exploit could cause asset losses that the insurance fund may not fully cover; network congestion may delay trades or spike

Market Risk

CDT's price may fluctuate sharply with supply and demand, investor sentiment and macro conditions; in extreme markets some pools may dry up, blocking execution or causing excessive slippage; cross-chain aggregation is a highly competitive field.

Regulatory Risk

Regulation of crypto-assets and DeFi remains unsettled and evolving worldwide; future restrictive rules could affect platform operations and token circulation. Users are responsible for understanding and complying with the laws of their own jurisdictions.

Disclaimer

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CrossDex — Connect every chain. Unlock every pool of liquidity.