**Synergy Network Master Development Checklist**

**Phase 1: Planning & Foundation**

**1.1 Tasks**  
1.1.1 (req. external simulation logs) Write PoSy simulation summary from logs (loc. 1.2.1)  
1.1.2 (loc. 1.2.2) Write Business Model content  
1.1.3 (loc. 1.2.3) Finalize Tokenomics logic and charts  
1.1.4 (loc. 1.2.4, 1.2.5) Define DAO Roles and Flow  
1.1.5 (loc. 1.2.5) Build DAO Constitution ruleset  
1.1.6 (loc. 1.2.6) Draft Legal Disclaimer  
1.1.7 (loc. 1.2.7) Outline Regulatory Guide (GDPR, AML, SEC)  
1.1.8 (loc. 1.2.8) Conduct Security Threat Analysis  
1.1.9 (loc. 1.2.9) Write Emergency Rollback scenarios  
1.1.10 (loc. 1.2.10) Build Address Formatting model  
1.1.11 (loc. 1.2.11) Implement UMA prototype (HD derivation + verifier)  
1.1.12 (loc. 1.2.12) Define Consensus Mechanism Requirements  
1.1.13 (loc. 1.2.13) Draft Competitor Analysis Report  
1.1.14 (loc. 1.2.14) Design Identity Verification Logic  
1.1.15 (loc. 1.2.15) Create Risk Management Plan  
1.1.16 (loc. 1.2.16) Draft Community Engagement Strategy

**1.2 Deliverables**  
1.2.1 PoSy Simulation Summary  
1.2.2 Business Model Document  
1.2.3 Tokenomics Whitepaper  
1.2.4 Governance Organizational Chart  
1.2.5 DAO Constitution  
1.2.6 Legal Disclaimer  
1.2.7 Regulatory Compliance Guide  
1.2.8 Security Risk Assessment Report  
1.2.9 Emergency Governance Rollback Policy  
1.2.10 UMA System Prototype  
1.2.11 Synergy Naming System Architecture + CLI/GUI Integration Task Plan  
1.2.12 Consensus Mechanism Design Document  
1.2.13 Competitor Analysis Report  
1.2.14 Identity Verification Framework  
1.2.15 Risk Management Plan  
1.2.16 Community Engagement Strategy Document

**Phase 2: Core Development**

**2.1 Tasks**  
2.1.1 (loc. 2.2.1) Write Network Architecture Specification  
2.1.2 (req. 1.2.1) (loc. 2.2.2) Integrate PoSy contracts + validator clustering algorithm  
2.1.3 (loc. 2.2.3) Document Ledger Format and State Logic  
2.1.4 (loc. 2.2.4) Write Quantum-Safe Cryptography Explainer  
2.1.5 (loc. 2.2.5) Polish and confirm SYN Token contract  
2.1.6 (loc. 2.2.6) Create ICO Plan and Vesting Tiers Table  
2.1.7 (loc. 2.2.7) Finalize SDK Documentation (JS + Python)  
2.1.8 (loc. 2.2.8) Build Wallet User Guide  
2.1.9 (loc. 2.2.9) Formal Verification Process for Critical Contracts  
2.1.10 (loc. 2.2.10) Coordinate Third-Party Audits  
2.1.11 (loc. 2.2.11) Integrate Oracle Framework  
2.1.12 (loc. 2.2.12) Develop Multi-Sig Module  
2.1.13 (loc. 2.2.13) Implement Upgradeability Framework  
2.1.14 (loc. 2.2.14) Develop Validator Registration & Slashing Contract

**2.2 Deliverables**  
2.2.1 Network Architecture Specification (Overview + Layered Design)  
 2.2.1.1 Synergy Testnet Deployment Documentation  
 2.2.1.2 Synergy Mainnet Deployment Documentation  
2.2.2 PoSy Consensus Algorithm (Spec + Contracts)  
2.2.3 Ledger Data Model  
2.2.4 Quantum-Safe Cryptography Integration Guide  
2.2.5 SYN Token Smart Contract  
2.2.6 ICO Strategy Document  
2.2.7 Developer SDK Documentation  
2.2.8 Union Wallet User Guide  
2.2.9 Formal Verification Report  
2.2.10 Third-Party Audit Coordination Plan  
2.2.11 Oracle Framework Documentation  
2.2.12 Multi-Sig Treasury Module  
2.2.13 Upgradeability Framework Specification  
2.2.14 Validator Registration & Slashing Contract

**Phase 3: Network & Portal Infrastructure**

**3.1 Tasks**  
3.1.1 (req. 2.2.1.1) (loc. 3.2.1) Deploy Synergy Testnet (validators, endpoints, faucet)  
3.1.2 (loc. 3.2.2) Build Synergy Testnet Explorer (UI + blockchain hooks)  
3.1.3 (loc. 3.2.3) Build Synergy Mainnet Explorer (theme + data sources)  
3.1.4 (loc. 3.2.4) Implement Network Selector Component  
3.1.5 (loc. 3.2.5) Build Synergy Portal skeleton (navigation, content, layout)  
3.1.6 (req. 2.2.5) (loc. 3.2.6) Implement Gas Station for testnet (wallet connect + faucet)  
3.1.7 (loc. 3.2.7) Build DAO Interface on Portal (proposals, voting)  
3.1.8 (loc. 3.2.8) Build ICO / Pre-Sale Interface (on-chain payments + vesting)  
3.1.9 (loc. 3.2.9) Build CLI version of Synergy Utility Tool  
3.1.10 (req. 3.1.9) (loc. 3.2.10) Build GUI version of Synergy Utility Tool  
3.1.11 (loc. 3.2.11) Implement cross-tool wallet/token/name sync  
3.1.12 (loc. 3.2.12) Build Synergy Naming System (register, resolve, query)  
3.1.13 (loc. 3.2.13) Deploy Network Monitoring Tools  
3.1.14 (loc. 3.2.14) Launch Bug Bounty Program  
3.1.15 (loc. 3.2.15) Build Storage Integration Layer

**3.2 Deliverables**  
3.2.1 Synergy Testnet Infrastructure (nodes, faucet, explorer, endpoints)  
3.2.2 Synergy Testnet Explorer  
3.2.3 Synergy Mainnet Explorer  
3.2.4 Network Selector Component  
3.2.5 Synergy Portal (DAO, ICO, faucet, staking, documentation)  
3.2.6 Gas Station Contract + Web UI  
3.2.7 DAO Interface  
3.2.8 ICO/Pre-Sale Interface  
3.2.9 Synergy Utility Tool — CLI  
3.2.10 Synergy Utility Tool — GUI  
3.2.11 Cross-Tool Sync Mechanism  
3.2.12 Synergy Naming System Smart Contract + UI  
3.2.13 Network Monitoring Dashboard  
3.2.14 Bug Bounty Program Documentation  
3.2.15 Decentralized Storage Integration Guide

**Phase 4: Testing & Validation**

**4.1 Tasks**  
4.1.1 (req. 3.2.1) (loc. 4.2.1) Write Testnet Deployment Guide  
4.1.2 (loc. 4.2.2) Deploy and document Faucet Smart Contract  
4.1.3 (loc. 4.2.3) Gather Audit Logs and Security Reports  
4.1.4 (loc. 4.2.4) Simulate and Document Sybil Attacks  
4.1.5 (loc. 4.2.5) Benchmark Network with Stress Tests  
4.1.6 (req. 2.3.1-2.3.22) (loc. 4.2.6) Test and Write Unit Tests for Smart Contracts  
4.1.7 (loc. 4.2.7) Simulate Voting Cycles + Governance Reports  
4.1.8 (loc. 4.2.8) Collect UI/UX Testing Feedback  
4.1.9 (loc. 4.2.9) Finalize API Reference  
4.1.10 (loc. 4.2.10) Conduct Bridge Contract Penetration Testing  
4.1.11 (req. 2.2.10) (loc. 4.2.11) Engage Third-Party Security Auditors

**4.2 Deliverables**  
4.2.1 Testnet Deployment Guide  
4.2.2 Faucet Contract Documentation  
4.2.3 Security Audit Logs  
4.2.4 Sybil Attack Simulation Report  
4.2.5 Load Benchmark Reports  
4.2.6 Smart Contract Unit Tests  
4.2.7 Governance Voting Test Reports  
4.2.8 UI/UX Feedback Reports  
4.2.9 Finalized API Documentation  
4.2.10 Cross-Chain Bridge Stress Test Report  
4.2.11 External Security Audit Reports

**Phase 5: Mainnet Launch & Adoption**

**5.1 Tasks**  
5.1.1 (req. 4.2.1) (loc. 5.2.1) Write Mainnet Launch Guide  
5.1.2 (loc. 5.2.2) Draft Token Migration Instructions  
5.1.3 (loc. 5.2.3) Summarize Validator & Staking Rewards  
5.1.4 (req. 4.2.7) (loc. 5.2.4) Finalize DAO Contract Review  
5.1.5 (req. 2.3.9) (loc. 5.2.5) Merge Operator Instructions for Cross-Chain Bridges  
5.1.6 (loc. 5.2.6) Compose Enterprise Integration Guide  
5.1.7 (loc. 5.2.7) Develop Partnership Framework  
5.1.8 (loc. 5.2.8) Activate Token Vesting Contract

**5.2 Deliverables**  
5.2.1 Mainnet Deployment Guide  
5.2.2 Token Migration Documentation  
5.2.3 Staking Incentives Guide  
5.2.4 Governance Smart Contracts (Audited & Finalized)  
5.2.5 Bridge Node Operator Manual  
5.2.6 Enterprise Integration Guide  
5.2.7 Partnership Framework Document  
5.2.8 Token Vesting Activation Report

**Phase 6: Ecosystem Growth**

**6.1 Tasks**  
6.1.1 (req. 2.3.4, 2.3.5) (loc. 6.2.1) Draft uDEX Documentation  
6.1.2 (loc. 6.2.2) Finalize Liquidity Pool Deployment Scripts  
6.1.3 (req. 5.2.5) (loc. 6.2.3) Merge Cross-Chain Swap Logic  
6.1.4 (loc. 6.2.4) Document Task Market Deployment  
6.1.5 (loc. 6.2.5) Write Growth Strategy for Devs & Users  
6.1.6 (req. 5.2.4) (loc. 6.2.6) Review DAO Grant Allocation Workflows  
6.1.7 (loc. 6.2.7) Design Continuous Audit Flow  
6.1.8 (loc. 6.2.8) Write Use Case Report (from field data)  
6.1.9 (loc. 6.2.9) Create Five-Year Network Upgrade Plan  
6.1.10 (loc. 6.2.10) Launch Developer Grant Program  
6.1.11 (loc. 6.2.11) Design Insurance Mechanism

**6.2 Deliverables**  
6.2.1 uDEX Smart Contract Documentation  
6.2.2 Liquidity Pool Launch Guide  
6.2.3 Cross-Chain Swap System Specification  
6.2.4 Task Market Smart Contract Documentation  
6.2.5 Community Growth Strategy Document  
6.2.6 DAO Grant Allocation Framework  
6.2.7 Continuous Audit Pipeline Plan  
6.2.8 Enterprise Use Case Reports  
6.2.9 Long-Term Upgrade Roadmap  
6.2.10 Developer Grant Program Guidelines  
6.2.11 Insurance Pool Deployment Guide

**Smart Contracts**

* Governance Contract (req. 1.1.4, 1.1.5)
* SYN Token Contract (req. 2.1.5)
* Presale Contract
* Universal Atomic Swap Contract (req. 2.1.12)
* Liquidity Pool Contract
* Staking Contract
* PoSy Consensus Contract (req. 2.1.2)
* Synergy Naming System Contract (req. 3.1.12)
* Bridge/Relay Contract (cross-chain Synergy ↔ ETH/SOL/BTC)
* Task Market Smart Contract
* Faucet Contract
* DAO Treasury Contract
* Oracle Aggregator Contract (req. 2.1.11)
* Identity Attestation Contract (req. 1.1.14)
* Multi-Signature Treasury Contract (req. 2.1.12)
* Upgradeable Proxy Contract (req. 2.1.13)
* Insurance Pool Contract (req. 6.1.11)
* Decentralized Storage Contract
* Validator Slashing Contract
* Vesting Contract
* NFT Standard Contract
* Registry Contract
* Random Number Generator (RNG) Contract