Okay, here is the merged checklist compiled from the five documents you provided, with duplicates removed and structured according to your instructions.

**Synergy Network Master Development Checklist**

**Phase 1: Planning & Foundation**

**1.1 Tasks**

* 1.1.1 (req. external simulation logs) (loc. 1.2.2) Write PoSy simulation summary from logs
* 1.1.2 (loc. 1.2.1) Write Business Model content
* 1.1.3 (loc. 1.2.2) Finalize Tokenomics logic and charts
* 1.1.4 (loc. 1.2.3, 1.2.4) Define DAO Roles and Flow
* 1.1.5 (loc. 1.2.4) Build DAO Constitution ruleset
* 1.1.6 (loc. 1.2.5) Draft Legal Disclaimer
* 1.1.7 (loc. 1.2.6) Outline Regulatory Guide (GDPR, AML, SEC)
* 1.1.8 (loc. 1.2.7) Conduct Security Threat Analysis
* 1.1.9 (loc. 1.2.8) Write Emergency Rollback scenarios
* 1.1.10 (loc. 1.2.9, 1.2.10) Build Address Formatting model
* 1.1.11 (loc. 1.2.9) Implement UMA prototype (HD derivation + verifier)
* 1.1.12 (loc. 1.2.11) Define Multi-Signature Security Model / Define Initial Validator Set Criteria / Define Consensus Mechanism Requirements / Design Identity Verification Logic (for Identity Attestation Contract) *(Note: These appear related but distinct; combined entry for clarity)*
* 1.1.13 (loc. 1.2.12) Create Formal Protocol Specification / Draft Competitor Analysis Report / Create Risk Management Plan *(Note: These appear related but distinct; combined entry for clarity)*
* 1.1.14 (loc. 1.2.13) Develop Security-First Development Framework / Draft Community Engagement Strategy *(Note: These appear related but distinct; combined entry for clarity)*
* 1.1.15 (loc. 1.2.14) Design Incentive Alignment Model

**1.2 Deliverables**

* 1.2.1 Business Model Document
* 1.2.2 Tokenomics Whitepaper
* 1.2.3 Governance Organizational Chart
* 1.2.4 DAO Constitution
* 1.2.5 Legal Disclaimer
* 1.2.6 Regulatory Compliance Guide
* 1.2.7 Security Risk Assessment Report
* 1.2.8 Emergency Governance Rollback Policy
* 1.2.9 UMA System Prototype
* 1.2.10 Synergy Naming System Architecture + CLI/GUI Integration Task Plan
* 1.2.11 Multi-Signature Wallet Specification / Initial Validator Set Criteria / Consensus Mechanism Design Document / Identity Verification Framework *(Note: These appear related but distinct; combined entry for clarity)*
* 1.2.12 Formal Protocol Specification Document / Competitor Analysis Report / Risk Management Plan *(Note: These appear related but distinct; combined entry for clarity)*
* 1.2.13 Security-First Development Framework / Community Engagement Strategy Document *(Note: These appear related but distinct; combined entry for clarity)*
* 1.2.14 Network Participant Incentive Alignment Model

**Phase 2: Core Development**

**2.1 Tasks**

* 2.1.1 (loc. 2.2.1) Write Network Architecture Specification
* 2.1.2 (req. 1.1.1) (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 (req. 1.2.2) (loc. 2.2.5) Develop & Polish 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, 2.3.18 / 2.3.13) Define Governance Parameter Adjustment Mechanisms / Develop Multisig Wallet Contract / Develop Validator Registration & Slashing Contract / Formal Verification Process for Critical Contracts *(Note: These appear related but distinct; combined entry for clarity)*
* 2.1.10 (req. 2.2.6) (loc. 2.2.10, 2.3.19 / 2.3.14) Implement Token Vesting Mechanisms / Develop Vesting Contract / Draft Treasury Management Contract Logic / Coordinate Third-Party Audits *(Note: These appear related but distinct; combined entry for clarity)*
* 2.1.11 (loc. 2.2.11, 2.3.17) Design Tokenomics Simulation Framework / Define and Develop Native NFT Standard Contract / Integrate Oracle Framework (for Oracle Aggregator Contract) *(Note: These appear related but distinct; combined entry for clarity)*
* 2.1.12 (loc. 2.2.12, 2.3.16) Develop Comprehensive Interoperability Blueprint / Develop General Purpose Registry Contract / Develop Multi-Sig Module (for Multi-Sig Treasury Contract) *(Note: These appear related but distinct; combined entry for clarity)*
* 2.1.13 (loc. 2.2.13) Set up Dev/Test Environments & CI/CD Pipelines / Implement Upgradeability Framework *(Note: These appear related but distinct; combined entry for clarity)*

**2.2 Deliverables**

* 2.2.1 Network Architecture Specification (Overview + Layered Design)
  + 2.2.1.1 (req. 2.1.1) Synergy Testnet Deployment Documentation
  + 2.2.1.2 (req. 2.1.1) Synergy Mainnet Deployment Documentation

* 2.2.2 (req. 2.1.2) PoSy Consensus Algorithm (Spec + Contracts)
* 2.2.3 (req. 2.1.3) Ledger Data Model
* 2.2.4 (req. 2.1.4) Quantum-Safe Cryptography Integration Guide
* 2.2.5 (req. 2.1.5) SYN Token Smart Contract
* 2.2.6 (req. 2.1.6) ICO Strategy Document
* 2.2.7 (req. 2.1.7) Developer SDK Documentation
* 2.2.8 (req. 2.1.8) Union Wallet User Guide
* 2.2.9 (req. 2.1.9) Governance Parameter Contract Documentation / Multisig Wallet Contract / Validator Registration & Slashing Contract / Formal Verification Report *(Note: These appear related but distinct; combined entry for clarity)*
* 2.2.10 (req. 2.1.10) Token Vesting Contract Documentation / Vesting Contract / Treasury Management Contract Specification / Third-Party Audit Coordination Plan *(Note: These appear related but distinct; combined entry for clarity)*
* 2.2.11 (req. 2.1.11) Tokenomics Simulation and Testing Reports / Native NFT Standard Contract / Oracle Framework Documentation *(Note: These appear related but distinct; combined entry for clarity)*
* 2.2.12 (req. 2.1.12) Comprehensive Interoperability Plan / Registry Contract / Multi-Sig Treasury Module *(Note: These appear related but distinct; combined entry for clarity)*
* 2.2.13 Dev/Test Environment Setup Guide / Upgradeability Framework Specification *(Note: These appear related but distinct; combined entry for clarity)*

**Phase 3: Network & Portal Infrastructure**

**3.1 Tasks**

* 3.1.1 (req. 2.1.1, 2.1.2, 2.3.7) (loc. 3.2.1) Deploy Synergy Testnet (validators, endpoints, faucet)
* 3.1.2 (req. 3.1.1) (loc. 3.2.3) Build Synergy Testnet Explorer (UI + blockchain hooks)
* 3.1.3 (req. 3.1.2) (loc. 3.2.3) Build Synergy Mainnet Explorer (theme + data sources)
* 3.1.4 (req. 3.1.1) (loc. 3.2.4) Implement Network Selector Component
* 3.1.5 (req. 2.1.1) (loc. 3.2.2) Build Synergy Portal skeleton (navigation, content, layout)
* 3.1.6 (req. 2.3.11, 3.1.1) (loc. 3.2.1, 4.2.2) Implement Gas Station for testnet (wallet connect + faucet)
* 3.1.7 (req. 2.3.1, 3.1.5) (loc. 3.2.2) Build DAO Interface on Portal (proposals, voting)
* 3.1.8 (req. 2.3.3, 3.1.5) (loc. 3.2.2) Build ICO / Pre-Sale Interface (on-chain payments + vesting)
* 3.1.9 (req. 2.1.7) (loc. 3.2.5) Build CLI version of Synergy Utility Tool (wallet, name system, transactions)
* 3.1.10 (req. 3.2.5 / 3.2.6, 3.2.7) (loc. 3.2.6) Build GUI version of Synergy Utility Tool (wallet, name system, tokens)
* 3.1.11 (req. 3.1.9, 3.1.10 / 3.2.5, 3.2.6) Implement cross-tool wallet/token/name sync
* 3.1.12 (req. 2.3.8, 1.1.10) (loc. 3.2.7, 2.3.8) Build Synergy Naming System (register, resolve, query)
* 3.1.13 (req. 2.3.13) (loc. 3.2.8, 2.3.15) Implement Identity & Reputation System / Define Oracle Interface Contract
* 3.1.14 (req. 2.3.15 / 3.2.1, 3.2.2, 3.2.3) (loc. 3.2.9) Deploy Oracle Network Infrastructure / Perform Security Hardening of Deployed Infrastructure
* 3.1.15 (req. 2.3.20) (loc. 3.2.10) Implement Privacy Layer Protocol

**3.2 Deliverables**

* 3.2.1 (req. 3.1.1, 3.1.6) Synergy Testnet Infrastructure (nodes, faucet, explorer, endpoints)
* 3.2.2 (req. 3.1.5, 3.1.7, 3.1.8) Synergy Portal (DAO, ICO, faucet, staking, documentation)
* 3.2.3 (req. 3.1.2, 3.1.3) Synergy Explorer (testnet + mainnet support)
* 3.2.4 (req. 3.1.4) Network Selector Component
* 3.2.5 (req. 3.1.9, 3.1.11) Synergy Utility Tool – CLI
* 3.2.6 (req. 3.1.10, 3.1.11) Synergy Utility Tool – GUI
* 3.2.7 (req. 3.1.12) Synergy Naming System Smart Contract & Integration Documentation
* 3.2.8 (req. 3.1.13) Identity & Reputation System Documentation / Oracle Interface Specification
* 3.2.9 (req. 3.1.14) Oracle Network Deployment Report / Security Hardening Report
* 3.2.10 (req. 3.1.15) Privacy Layer Implementation Guide

**Phase 4: Testing & Security Audits**

**4.1 Tasks**

* 4.1.1 (req. 3.1.1) (loc. 4.2.1) Run Testnet Stress Tests (transactions, consensus)
* 4.1.2 (req. 3.1.2, 3.1.3) (loc. 4.2.3) Audit Explorer Data Accuracy & UI
* 4.1.3 (req. 3.2.1, 3.2.2) (loc. 4.2.1) Conduct Penetration Testing on Testnet & Portal
* 4.1.4 (req. 2.3.1-2.3.22) (loc. 4.2.4) Perform Full Smart Contract Audits (internal + external)
* 4.1.5 (req. 4.1.4) (loc. 4.2.4) Implement Audit Recommendations
* 4.1.6 (req. 4.1.1) (loc. 4.2.5) Set up Monitoring and Alerting Systems
* 4.1.7 (req. 3.1.9, 3.1.10) (loc. 4.2.6) Execute Synergy Utility Tool Test Plan
* 4.1.8 (req. 1.2.7, 1.2.8) (loc. 4.2.7) Test Emergency Governance Procedures
* 4.1.9 (req. 3.1.13) (loc. 4.2.8) Verify Identity System Security
* 4.1.10 (req. 2.2.11) (loc. 4.2.9) Validate Tokenomics Simulation Results
* 4.1.11 (req. 2.3.22) (loc. 4.2.10) Test Validator Slashing Mechanisms
* 4.1.12 (loc. 4.2.11) Initiate Bug Bounty Program

**4.2 Deliverables**

* 4.2.1 Testnet Performance & Security Report
* 4.2.2 (req. 3.1.6) Testnet Faucet Documentation & Usage Guide
* 4.2.3 Explorer Audit Report
* 4.2.4 (req. 4.1.4, 4.1.5) Smart Contract Audit Reports (Internal & External)
* 4.2.5 Monitoring & Alerting System Configuration
* 4.2.6 Synergy Utility Tool Test Results
* 4.2.7 Emergency Governance Test Report
* 4.2.8 Identity System Security Audit
* 4.2.9 Tokenomics Simulation Validation Report
* 4.2.10 Validator Slashing Test Results
* 4.2.11 Bug Bounty Program Launch Announcement & Rules

**Phase 5: Mainnet Launch & Governance**

**5.1 Tasks**

* 5.1.1 (req. 4.2.1, 4.2.4) (loc. 5.2.1) Prepare Mainnet Genesis Configuration & Deployment Plan
* 5.1.2 (req. 2.3.3, 2.3.2) (loc. 5.2.2) Execute Token Generation Event (TGE) & Initial Distribution
* 5.1.3 (req. 2.3.6) (loc. 5.2.3) Summarize Validator & Staking Rewards
* 5.1.4 (req. 2.3.1, 2.3.12) (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 (req. 2.3.13) Deploy Validator Onboarding Process / (loc. 5.2.7) Develop Partnership Framework *(Note: These appear related but distinct; combined entry for clarity)*
* 5.1.8 (req. 2.3.17 / 2.1.10, 2.3.19) (loc. 2.2.10) Activate Token Vesting Contract
* 5.1.9 (req. 2.3.21) (loc. 5.2.7) Deploy Fee Distribution Mechanisms
* 5.1.10 (req. 1.2.13) Launch Community Channels & Support Systems
* 5.1.11 (req. 5.1.1) (loc. 5.2.1) Execute Mainnet Deployment
* 5.1.12 (loc. 5.2.8) Establish Incident Response Team & Plan
* 5.1.13 (req. 1.2.11) Finalize Initial Validator Set Selection
* 5.1.14 (req. 2.3.9) Recruit and Train Bridge Node Operators
* 5.1.15 (req. 1.1.14) Finalize Pre-Launch Community Communication

**5.2 Deliverables**

* 5.2.1 (req. 3.1.1, 4.2.1, 5.1.1, 5.1.11) Mainnet Deployment Guide
* 5.2.2 (req. 5.1.2) Token Migration Documentation
* 5.2.3 (req. 5.1.3, 2.3.6) Staking Incentives Guide
* 5.2.4 (req. 5.1.4, 2.3.1, 2.3.12) Governance Smart Contracts (Audited & Finalized)
* 5.2.5 (req. 5.1.5, 2.3.9) Bridge Node Operator Manual
* 5.2.6 (req. 5.1.6) Enterprise Integration Guide
* 5.2.7 (req. 5.1.9) Fee Distribution Contract Documentation / Pre-Launch Community Engagement Report / Validator Onboarding Documentation / Partnership Framework Document *(Note: These appear related but distinct; combined entry for clarity)*
* 5.2.8 (req. 5.1.12) Incident Response Plan

**Phase 6: Ecosystem Growth**

**6.1 Tasks**

* 6.1.1 (req. 5.2.1 / 2.3.4, 2.3.5) (loc. 6.2.1) Draft uDEX Documentation
* 6.1.2 (req. 2.3.5) (loc. 6.2.2) Finalize Liquidity Pool Deployment Scripts
* 6.1.3 (req. 2.3.4 / 2.3.9, 5.2.5) (loc. 6.2.3) Merge Cross-Chain Swap Logic
* 6.1.4 (req. 2.3.10) (loc. 6.2.4) Document Task Market Deployment
* 6.1.5 (req. 5.2.1-5.2.7) (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 (req. 4.2.3) (loc. 6.2.7) Design Continuous Audit Flow
* 6.1.8 (req. 5.2.6) (loc. 6.2.8) Write Use Case Report (from field data)
* 6.1.9 (req. 5.2.1) (loc. 6.2.9) Create Five-Year Network Upgrade Plan
* 6.1.10 (req. 2.3.16 / 2.3.18) (loc. 6.2.10) Implement Conditional Payment Systems / Deploy Multisig Governance Contract / Launch Developer Grant Program *(Note: These appear related but distinct; combined entry for clarity)*
* 6.1.11 (req. 2.3.17 / 2.3.19) (loc. 6.2.11) Integrate NFT Marketplace Logic / Integrate RNG Contract with dApps / Design Insurance Mechanism *(Note: These appear related but distinct; combined entry for clarity)*
* 6.1.12 (req. 3.1.15 / 2.3.18) (loc. 3.2.10) Finalize Decentralized Storage Integration

**6.2 Deliverables**

* 6.2.1 (req. 6.1.1) uDEX Smart Contract Documentation
* 6.2.2 (req. 6.1.2) Liquidity Pool Launch Guide
* 6.2.3 (req. 6.1.3, 2.3.4, 2.3.9) Cross-Chain Swap User Guide
* 6.2.4 (req. 6.1.4, 2.3.10) Task Market User Documentation
* 6.2.5 (req. 6.1.5) Developer & User Growth Plan
* 6.2.6 (req. 6.1.6) DAO Grant Program Guidelines
* 6.2.7 (req. 6.1.7) Continuous Audit Process Document
* 6.2.8 (req. 6.1.8) Network Usage & Adoption Report
* 6.2.9 (req. 6.1.9) Long-Term Network Roadmap
* 6.2.10 (req. 6.1.10, 2.3.16) Escrow Contract Documentation / Multisig Governance Documentation / Developer Grant Program Launch Materials *(Note: These appear related but distinct; combined entry for clarity)*
* 6.2.11 (req. 6.1.11, 2.3.17) NFT Marketplace Documentation / RNG Integration Guide / Insurance Pool Contract & Documentation *(Note: These appear related but distinct; combined entry for clarity)*
* 6.2.12 (req. 6.1.12, 2.3.18) Decentralized Storage Integration Guide

**Smart Contract Implementation List**

* (req. 1.1.4, 1.1.5) (loc. 5.2.4) Governance Contract
* (req. 2.1.5) (loc. 2.2.5) SYN Token Contract
* (req. 2.1.6) (loc. 2.2.6) Presale Contract
* (req. 2.1.12) (loc. 6.2.3) Universal Atomic Swap Contract
* (req. 2.1.12) (loc. 6.2.2) Liquidity Pool Contract
* (req. 2.1.3, 2.1.5) (loc. 5.2.3) Staking Contract
* (req. 2.1.2) (loc. 2.2.2) PoSy Consensus Contract
* (req. 1.1.10) (loc. 3.2.7) Synergy Naming System Contract
* (req. 2.1.12) (loc. 5.2.5) Bridge/Relay Contract (for cross-chain Synergy ↔ ETH/SOL/BTC) / Cross-Chain Bridge Contract *(Combined entry)*
* (req. 2.1.15 / 2.1.10) (loc. 6.2.4) Task Market Smart Contract (bounties, claims, dispute resolution)
* (req. 2.1.5 / 3.3.3) (loc. 4.2.2 / 4.3.2) Faucet Contract (testnet token distribution, rate limiting)
* (req. 1.1.4, 2.1.5) (loc. 5.2.4) DAO Treasury Contract (holds SYN, proposal-linked transfers)
* (req. 1.1.15) (loc. 3.2.8) Identity/Reputation Contract (verifiable credentials, reputation scoring)
* (req. 1.1.12 / 2.1.9) (loc. 1.2.11 / 2.2.9) Multi-Signature Wallet Contract / Multisig Governance Contract / (loc. 2.2.12) Multi-Signature Treasury Contract *(Note: Multiple related multisig contracts, combined entry for clarity)*
* (req. 2.1.12 / 3.1.13) (loc. 3.2.9 / 3.2.8) Oracle Contract / Oracle Interface Contract / Oracle Integration Contract / (loc. 2.2.11) Oracle Aggregator Contract *(Note: Multiple related oracle contracts, combined entry for clarity)*
* (req. 2.1.15) (loc. 6.2.10) Escrow Contract (conditional payments, milestone-based releases)
* (req. 2.1.12 / 2.1.11) (loc. 6.2.11 / 2.2.11) NFT Marketplace Contract / Native NFT Standard Contract / NFT standard contract *(Note: Multiple related NFT contracts, combined entry for clarity)*
* (req. 2.1.9) (loc. 2.2.9) Governance Parameter Contract
* (req. 2.1.10) (loc. 2.2.10 / 5.3.1) Vesting Contract
* (req. 2.1.12) (loc. 3.2.10) Privacy Layer Contract
* (req. 2.1.15) (loc. 5.2.7) Fee Distribution Contract
* (req. 2.1.15, 2.1.2 / 2.1.9) (loc. 4.2.10 / 2.2.9) Validator Slashing Contract / Validator Registration & Slashing Contract *(Combined entry)*
* (req. 2.1.12 / 2.1.16) (loc. 2.2.12) Registry Contract (General Purpose)
* (req. 1.1.2) Native token contract
* (loc. 2.2.10) Treasury Management Contract
* Decentralized Identity (DID) Contract
* Random Number Generator (RNG) Contract
* (req. 1.1.12)(loc. 1.2.11) Identity Attestation Contract
* (loc. 2.2.13) Upgradeable Proxy Contract
* (req. 6.1.11)(loc. 6.2.11) Insurance Pool Contract
* (req. 3.1.15 / 6.1.12)(loc. 3.2.10 / 6.2.12) Decentralized Storage Contract