# Phased Development & Implementation Roadmap

Project: Project Chimera
Version: 1.2 (Comprehensive Build)
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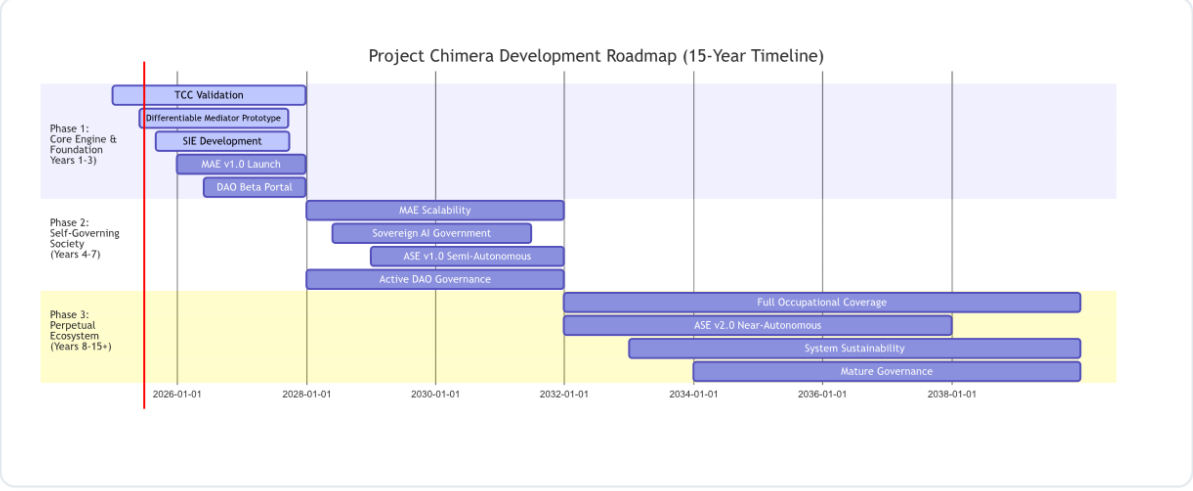
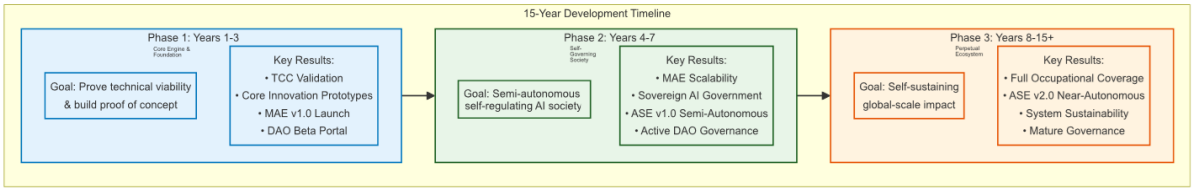
## Introduction

This document outlines the strategic, multi-year roadmap for the development and deployment of the Project Chimera AGI ecosystem. The roadmap is divided into three distinct phases, each with specific goals, detailed key results, and end-of-phase success criteria. This timeline has been revised based on expert feasibility analysis to reflect the significant research and development challenges involved in the core innovations and to provide a realistic pathway to completion.



## Phase 1 (Years 1-3): The Core Engine & Foundational Framework (Focused R\&D)

**Goal:** To prove the core technical viability of the architecture by solving the fundamental research challenges. The singular focus of this phase is to build a functional, small-scale proof of concept that validates the key architectural breakthroughs.

**Key Results:**

- **KR 1.1: TCC Validation:**
- Successfully build and validate a functional prototype of the Tiered Cognitive Cycle (TCC) within a limited, well-defined problem domain (e.g., medical diagnostics or complex logistics).
- Demonstrate that the TCC can ingest multimodal data, generate "affective context" about its own state, and make verifiable decisions based on its Logic and Creative Engines.
- **KR 1.2: Core Innovation Prototypes:**
- **Differentiable Mediator:** Implement and train a functional Differentiable Mediator (GNN) that successfully fuses symbolic logic graphs with LLM-based reasoning, measurably improving output quality and logical consistency over a baseline LLM.
- **Simulated Intervention Environment (SIE):** Demonstrate a working SIE that can take a hypothesis, run a sandboxed counterfactual simulation, and generate novel interventional data packets that improve the TCC's causal reasoning on a benchmark set of problems.
- **KR 1.3: MAE v1.0 Launch:**
- Expand the existing CodeMAD prototype into the Multi-Agent Ecosystem (MAE) v1.0, capable of supporting over 100 specialized agents.
- Implement and stress-test the initial version of the Cognitive Packet Communication Protocol (CPCP), NOAP, and PMPP for efficient communication and collaboration between agents in the test environment.
- **KR 1.4: DAO Beta Portal:**
- Launch the beta version of the secure Human Governance DAO portal with basic functionality for member registration, proposal viewing, and voting.
- Onboard the founding group of administrators ("Proof-of-Brain" and "Proof-of-Stake" pioneers) and successfully ratify the v1.0 Constitution as the first official act.

**End-of-Phase 1 Status:** The core science is proven. The project has moved from theoretical to practical, with working prototypes of its key differentiators. The foundational agent and governance frameworks are in place, and the project is ready to attract Series A funding and scale its team.

## Phase 2 (Years 4-7): The Self-Governing Society

**Goal:** To achieve a semi-autonomous, self-regulating AI society capable of robust self-improvement and complex problem-solving at scale, building upon the validated successes of the initial R\&D phase.

**Key Results:**

- **KR 2.1: MAE Scalability & Optimization:**
- Scale the MAE framework to support thousands of active specialist and governance agents concurrently.
- Deploy a fully optimized CPCP and a dedicated Resource Optimization Layer to ensure low-latency communication and efficient computational resource management at scale.
- **KR 2.2: Sovereign AI Government Implementation:**
- Implement the full Sovereign AI Government, including a fully operational Orchestrator with its TCC.
- Deploy the first guilds of Governance Agents: Auditors to perform real-time data verification, Regulators to manage the ASE's "school," and Enforcers to apply the Punitive Enforcement Protocol.
- The Sovereign Feedback Loop becomes active, with the Orchestrator's Executive Advisory Council beginning to propose and simulate minor policy adjustments.
- **KR 2.3: ASE v1.0 (Semi-Autonomous):**
- Achieve a functional Agent Synthesis Engine (ASE) capable of semi-autonomously generating new agents by combining and fine-tuning existing models and architectures.
- All new agent deployments will require human-in-the-loop (HITL) validation via the DAO portal, with a formal review process for safety and alignment.
- **KR 2.4: Active DAO Governance:**
- The Human Governance DAO is fully operational, with established procedures for voting, debate, and proposal submission.

- The DAO begins actively monitoring ecosystem health via the portal's dashboards and ratifying minor policy proposals submitted by the AI Government, testing the human-AI governance feedback loop.

**End-of-Phase 2 Status:** The system is a functional, self-governing AI society. It can manage its own internal affairs, create new specialist agents under human supervision, and scale effectively. The project has demonstrated a viable path to sustainable, large-scale operation.

## Phase 3 (Years 8-15+): The Perpetual Ecosystem

**Goal:** To realize the full vision of a perpetual AGI ecosystem that is self-sustaining, self-improving, and robustly aligned with its constitution, achieving a global-scale impact.

**Key Results:**

- **KR 3.1: Full Occupational Coverage:**
- Iteratively expand the MAE to approach the target of 12,000+ specialist agents, covering the full spectrum of human professional knowledge domains.
- The "Mandatory Web Research Protocol" is fully integrated, allowing agents to maintain the currency of their knowledge bases in near real-time.
- **KR 3.2: ASE v2.0 (Near-Autonomous):**
- The ASE achieves near-fully autonomous operation, capable of generating novel agent architectures for new problem domains with high reliability, moving beyond simple recombination of existing parts.
- HITL is required only for constitutional-level changes or the creation of entirely new classes of agents (e.g., a new type of Governance Agent).
- **KR 3.3: System Sustainability:**
- The Resource Optimization Layer is mature, leveraging specialized AI agents to actively manage and reduce the system's computational and energy footprint, making long-term, perpetual operation economically and environmentally sustainable.
- **KR 3.4: Mature Governance:**
- The system operates with full autonomy under its constitution. The Human DAO's role transitions to high-level constitutional oversight, akin to a supreme court, responding only to rare, critical HITL escalations or proposals for constitutional amendments.

**End-of-Phase 3 Status:** Project Chimera is a mature, perpetual AGI ecosystem, fulfilling its mandate as a powerful and beneficial tool for humanity, safeguarded by a decentralized and proven human-machine trust protocol.