



THE NDEGE GROUP

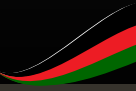
Africa's Sovereign Development Trust®

NDEGE MONEY:
ARCHITECTING SOVEREIGN
DIGITAL CURRENCY
INFRASTRUCTURE FOR
AFRICAN ECONOMIC
INTEGRATION



David Okiki Amayo Jr.

Founder & Chairman THE NDEGE GROUP





THE NDEGE GROUP

Africa's Sovereign Development Trust®

TABLE OF CONTENTS

SECTION	PAGE	SECTION	PAGE
1. ABSTRACT.....	4	6. GLOBAL TRAJECTORY ANALYSIS.....	12
2. INTRODUCTION.....	5	6.1 The Inevitability of Digital Currency Dominance	
2.1 The Remittance Imperative		6.2 The End of Physical Currency: Evidence-Based Forecast	
2.2 The Bank for International Settlements (BIS) and Global Payment Architecture		6.3 Comparative Analysis: Ndege Money vs. Existing Models	
2.3 The World Trade Organisation and Financial Infrastructure Sovereignty		7. CONCLUSION.....	13
2.4 Coinbase Base Infrastructure: Democratising Currency Issuance		8. CALLS TO ACTION.....	13
2.5 Research Questions and Objectives	6	8.1 To African Governments and Central Banks	
3. LITERATURE REVIEW.....	7	8.2 To Technology Partners	
3.1 The Political Economy of Global Payment Systems		8.3 To Diaspora Communities	
3.2 Digital Currency Scepticism: Addressing Legitimate Concerns		9. REFERENCES.....	14
3.3 The Inexorable Shift: From Fiat to Digital Asset		10. ACKNOWLEDGEMENTS.....	15
3.4 African Digital Currency Initiatives: Lessons and Limitations	8	11. APPENDICES	15
3.5 BRICS Payment Architecture and New Development Bank			
3.6 OmniGaza: The Sovereignty-Preserving Substrate			
4. THE NDEGE MONEY MODEL.....	9		
4.1 Technical Architecture			
4.2 Governance Architecture			
4.3 Operational Ecosystem			
4.4 The Coinbase Base Layer and Currency Democratisation	10		
4.5 Last-Mile Integration: Mobile Money Interoperability			
4.6 Infrastructure Finance Syndication via OmniGaza®			
4.7 PAPSS, BRICS, and New Development Bank Integration			
4.8 Differentiation from Surveillance Infrastructure	11		
4.9 Risk Scenarios and Contingency Planning			
5. BENEFITS, CHALLENGES & RISK MITIGATION.....	11		
5.1 Benefits Analysis			
5.2 Challenges and Risks			
5.3 Risk Mitigation Strategies			

WHITEPAPER

Working Paper

This working paper presents the **Ndege Money** initiative as part of The Ndege Group's broader continental financial sovereignty architecture. Views expressed are those of the author and do not necessarily reflect positions of affiliated organisations.

© 2025 David Okiki Amayo Jr. All rights reserved.

A handwritten signature in blue ink, appearing to be 'DA' with a large, stylized 'A' and a horizontal line crossing through it.

Section 1: Abstract

Ndege Money represents Africa's sovereign response to the digital currency revolution, architected to resolve the systemic paradoxes of continental development through a high-performance, asset-backed infrastructure. Built upon Coinbase's Base infrastructure whilst retaining full African institutional control, Ndege Money targets the multi-billion Euro remittance market and the massive opportunity cost of African fragmentation. Africa currently forfeits approximately €290 billion annually due to security fragmentation, illicit financial flows, and trade barriers (Ndege Group, 2025). Ndege Money is positioned within a tripartite ecosystem that bridges pro-African payment providers, traditional SWIFT infrastructure, and grassroots mobile money platforms such as M-Pesa. Integration objectives include the Pan-African Payment and Settlement System (PAPSS), emerging BRICS payment architectures, and New Development Bank (NDB) frameworks.

The initiative is developed concurrently with OmniGaza® as the underlying sovereignty-preserving technological substrate. Unlike surveillance-oriented platforms, OmniGaza® is engineered as a transparent, equitable, and traceable development infrastructure (Amayo Jr., 2025). By anchoring currency value in the African Rare Earth Mineral Fund (AREMF), the model transitions the continent from raw material extraction to high-value manufacturing, capturing 10x value multipliers (Ndege Group, 2026). The vision is to provide seamless, low-cost, and immediate cross-border payments that underpin syndicated infrastructure finance on ethical terms, reclaiming Africa's economic and data sovereignty for present and future generations.

Section 2: Introduction

2.1 The Remittance Imperative

The pursuit of African economic integration is hindered by a profound structural misalignment between discrete national sovereignty and the collective puissance required for global competition. Africa currently forfeits €290 billion annually through systematic inefficiencies: €150 billion to security fragmentation, €88.6 billion to illicit financial flows, and €51.4 billion to trade barriers (Ndege Group, 2025). Diaspora remittance flows have emerged as the most significant non-debt source of financial inflows, matching or exceeding official development assistance (ODA) and foreign direct investment (FDI) (African Development Bank, 2025). In 2024, remittance flows into Africa reached \$96.4 billion (Ratha et al., 2024). However, the "remittance tax" remains extractive, with Sub-Saharan Africa being the most expensive region globally to receive funds; average costs for sending \$200 stood at 8.78 per cent in Q1 2025 (World Bank, 2024). This economic haemorrhaging perpetuates dependency and underscores the urgent need for a sovereign digital alternative.

2.2 The Bank for International Settlements (BIS) and Global Payment Architecture

The BIS, through the Committee on Payments and Market Infrastructures (CPMI), plays a central role in establishing international payment standards (Bank for International Settlements, 2020). However, BIS frameworks, particularly those concerning central bank digital currencies (CBDCs), have historically centred G7 and G20 priorities (IMF, 2025). While the "Innovation BIS 2025" agenda has successfully delivered 90 per cent of its strategic goals, including Project Nexus for interlinking instant payment systems, African representation in these foundational hub projects remains limited (Bank for International Settlements, 2024). The G20 Roadmap for Enhancing Cross-border Payments identifies cost, speed, and transparency as structural objectives, yet progress in low-income regions continues to lag behind global targets (Financial Stability Board, 2025; BIS, 2021).

2.3 The World Trade Organisation and Financial Infrastructure Sovereignty

The WTO's General Agreement on Trade in Services (GATS) defines trade in services across four modes, including "commercial presence" (Mode 3), which is a prerequisite for many financial services (WTO, 2025). Historically, GATS frameworks have constrained the ability of African nations to

implement capital controls and protect nascent digital infrastructure, as mercantilistic bargaining often led to liberal commitments in underdeveloped sectors (IMF, 1997). African participation in the WTO Dispute Settlement Mechanism (DSM) is minimal; only four nations, South Africa, Egypt, Morocco, and Tunisia, have been parties to disputes, primarily involving trade remedies rather than financial infrastructure (Carnegie Endowment, 2025). The paralysis of the Appellate Body since 2020 further highlights the necessity for indigenous African settlement systems that operate outside vulnerable multilateral regimes (Carnegie Endowment, 2025).

2.4 Coinbase Base Infrastructure: Democratising Currency Issuance

Deployment of Ndege Money begins on Coinbase's Base Layer-2 solution, an Optimistic Rollup built on Ethereum's OP Stack. This choice democratises currency issuance by providing a secure, scalable, and low-cost environment for institutional currency creation (Coinbase, 2025; CryptoEQ, 2024). Base achieves high throughput, handling bursts of hundreds of transactions per second (TPS), with real-time settlement speeds and block times of 2 seconds (Nansen, 2023; Chainspect, 2025). Transaction costs on Base are typically a fraction of a cent, representing 95 per cent savings over the Ethereum mainnet (Ledger, 2023; Volity, 2025). Whilst utilising this infrastructure, Africa's Sovereign Development Trust (ASDT) maintains sovereign control over governance and monetary policy through the OmniGaza substrate, ensuring the technology serves continental interests rather than speculative capital.

2.5 Research Questions and Objectives

1. Can blockchain-based digital currency infrastructure restore African monetary sovereignty whilst integrating with global payment systems?
2. How does Ndege Money's architecture address the trilemma of cost efficiency, regulatory compliance, and sovereign control?
3. What governance mechanisms ensure Ndege Money serves continental development rather than speculative capital?
4. How does concurrent OmniGaza development create systemic resilience against neocolonial digital extraction?

Section 3: Literature Review

3.1 The Political Economy of Global Payment Systems

Global payment systems, specifically SWIFT, have been increasingly instrumentalised as tools of geopolitical exclusion. For peripheral economies, reliance on these systems creates strategic vulnerabilities and subjects them to the "exorbitant privilege" of dominant reserve currencies (Eichengreen, 2011). Barry Eichengreen illustrates how this privilege allows the United States to finance large deficits at low interest rates, extracting seigniorage from dollars held abroad (Eichengreen, 2013). Concurrently, the retreat of correspondent banking, the "de-risking" phenomena, has disproportionately affected African markets, where correspondent relationships declined by 23 per cent between 2011 and 2022 due to stricter regulatory compliance (Rice et al., 2020). This structural underdevelopment, as framed by Rodney (1972) and Stiglitz (2002), is being challenged by the concept of "productive incoherence," which identifies meaningful change emerging from ad hoc, pragmatic innovations in the Global South (Gabel, 2017).

3.2 Digital Currency Scepticism: Addressing Legitimate Concerns

Volatility remains a primary critique of digital assets. Ndege Money counters this through governance-stabilised design and tangible asset-backing via the African Rare Earth Mineral Fund (Ndege Group, 2025). Regarding environmental concerns, the transition of Ethereum to Proof-of-Stake (PoS) has reduced energy consumption by 99.988 per cent; as a Layer-2 on Ethereum, Base inherits this efficiency (Gramlich et al., 2024). Regulatory ambiguity is addressed by positioning sovereign backing as a clarity mechanism, whilst illicit finance concerns are mitigated by on-chain transparency. Chainalysis data demonstrates that blockchain traceability offers significant advantages over the opacity of traditional correspondent banking (Chainalysis, 2024).

3.3 The Inexorable Shift: From Fiat to Digital Assets

Global central banks are rapidly exploring CBDCs, with 94 per cent of banks surveyed by the BIS in 2024 actively researching these tools (Bank for International Settlements, 2024). Sweden serves as a global exemplar, where cash usage has dropped to just 8 per cent of the population, and the Riksbank's e-krona pilot aims to provide a digital complement to ensure stability (Sveriges Riksbank, 2025). India's Unified Payments Interface (UPI) further demonstrates the power of interoperable,

real-time systems to drive massive financial inclusion (India Times, 2025). Projections estimate that digital transactions will constitute over 95 per cent of global commerce by 2040, rendering physical currency a numismatic relic within our lifetime (IMF, 2025).

3.4 African Digital Currency Initiatives: Lessons and Limitations

Nigeria's eNaira provides a roadmap for sovereign digital issuance but has faced adoption challenges due to the underlying weaknesses of its fiat counterpart (Arotile & Ajepe, 2025). Grassroots mobile money platforms like M-Pesa have achieved immense success, particularly in East Africa, but remain limited by fragmented liquidity and high cross-border transaction costs (ISS, 2025). The Pan-African Payment and Settlement System (PAPSS) represents a critical step forward, enabling real-time transactions in local currencies and saving the continent an estimated \$5 billion annually (African Business, 2025). However, full adoption requires overcoming currency confidence issues, which Ndege Money addresses through its asset-backed framework.

3.5 BRICS Payment Architecture and New Development Bank

The BRICS Pay initiative aims to create a decentralised, interoperable messaging system to reduce dollar reliance and safeguard monetary autonomy (Insights on India, 2025). Operationalised at the 16th BRICS Summit in Kazan, the platform integration involves national infrastructures like India's UPI and China's CIPS (Watcher Guru, 2024). The New Development Bank (NDB) serves as an incubator for these tools, emphasising local currency financing to reduce exposure to external volatility (NDB, 2025). Ndege Money seeks to bridge these multipolar architectures with African national platforms.

3.6 OmniGaza: The Sovereignty-Preserving Substrate

OmniGaza® serves as the "central nervous system" of the ASDT architecture, providing a sovereign blockchain infrastructure for managing trade, investment, and governance (Amayo Jr., 2025). It contrasts with surveillance-oriented platforms by prioritising African data ownership and encrypted storage within continental jurisdictions (Amayo Jr., 2024). Whilst analytical firms like Palantir offer robust data integration capabilities, any collaboration with such entities must occur exclusively on pro-African terms: data residency in African jurisdiction, algorithm transparency, and no extraterritorial access (ResearchGate, 2025).

Section 4: The Ndege Money Model

4.1 Technical Architecture

The technical foundation of Ndege Money leverages Coinbase's Base Layer-2 on Ethereum, utilising Optimistic Rollup mechanics to bundle transactions for secure settlement on the L1 (CryptoEQ, 2024). This architecture ensures 2-second block times and low transaction fees, often less than \$0.01 (Chainspect, 2025). The currency is ERC-20 compliant, enabling programmable smart contract features such as automated escrow, conditional payments, and compliance hooks (Coinbase, 2025). Stabilisation is achieved through the African Rare Earth Mineral Fund (AREMF), which anchors the value in sovereign-refined precious stones and metals managed in the Seychelles (Ndege Group, 2026).

4.2 Governance Architecture

Sovereign control is maintained through a Tripartite System:

1. The Apex (ASDT): The Ultimate Beneficial Owner and custodian of The African Charter and The African Federation Treaty Framework, domiciled in the Seychelles (Ndege Group, 2026).
2. The Manager: The Ndege Group Nominees Limited, executing strategic decisions (Ndege Group, 2026).
3. The Protector: An independent body with veto power over constitutional amendments, ensuring strict mandate adherence (Amayo Jr., 2025).

Multi-stakeholder representation ensures that the needs of participating states and diaspora communities are integrated into monetary policy issuance protocols.

4.3 Operational Ecosystem

The Ndege Money ecosystem serves diaspora remitters, cross-border traders, and institutional treasury operations. A user journey for a diaspora worker in London involves depositing funds into a Ndege Money wallet, followed by instant settlement and beneficiary withdrawal via M-Pesa in Nairobi in under 60 seconds (Access Bank, 2025). The target cost structure is 2 per cent, significantly lower than the 7-10 per cent average of traditional remittance oligopolies (World Bank, 2024).

4.4 The Coinbase Base Layer and Currency Democratisation

Ndege Money is built on **Base**, leveraging its permissionless issuance and Optimism-powered scalability (Bitcoin.com, 2025). This addresses the sovereignty paradox: whilst utilising global technology, ASDT retains control through its own governance substrate. Base provides the "Superchain" vision, allowing for future seamless interoperability with other OP-Stack chains (Optimism, 2025).

4.5 Last-Mile Integration: Mobile Money Interoperability

Integration with mobile money operators (M-Pesa, MTN MoMo, Airtel Money) is achieved through dedicated APIs and USSD pathways.

- **Kenya-Nigeria Corridor:** Transactions initiated on Ndege Money settle through OmniGaza® clearing to local wallets in seconds (Afriwise, 2025).
- **Cost Comparison:** Traditional international transfers through M-Pesa cost 7-10%; Ndege Money targets <1% fees by bypassing correspondent detours (World Bank, 2024).

4.6 Infrastructure Finance Syndication via OmniGaza®

Ndege Money underpins syndicated project finance bidding for infrastructure. The lifecycle involves:

1. Project Listing: E.g., a €500M railway project listed on OmniGaza®.
2. Investor Accreditation: Pre-vetted KYC on-chain.
3. Bidding room mechanics: Transparent, blockchain-recorded bidding.
4. Ndege Money Denomination: Eliminates FX risk for African borrowers.
5. Smart Contract Escrow: Milestone-based disbursements and automated compliance verification for ESG standards (Ndege Group, 2026).

4.7 PAPSS, BRICS, and New Development Bank Integration

ASDT seeks formal representation from the PAPSS board to ensure technical alignment (Ndege Group, 2026). Ndege Money interoperates with PAPSS through messaging protocol translation, reducing the current 120-second settlement time to near-instant results (PAPSS, 2026). Proposals for the NDB include denominations of project financing in Ndege Money to align with the bank's local currency mandate (Brasil de Fato, 2025).

4.8 Differentiation from Surveillance Infrastructure

OmniGaza®'s transparency-as-anti-surveillance ensures that all transactions are auditable by authorised African institutions, not foreign agencies. Any exploratory dialogue with firms like Palantir is governed by the principle that they function as service providers under African constitutional authority, not data owners (ResearchGate, 2025).

4.9 Risk Scenarios and Contingency Planning

- Platform Failure: Mitigation through core supercomputer infrastructure wholly owned by The Ndege Group (Amayo Jr., 2025).
- Sovereign Defection: National sovereignty overrides are built into the AFTF protocols to manage regional exit strategies (Ndege Group, 2025).
- Cyberwarfare: Implementation of the Sovereign Digital Defence Shield and scheduled quantum-resistant upgrades by 2030 (Ndege Group, 2026).

Section 5: Benefits, Challenges, and Risk Mitigation

5.1 Benefits Analysis

The adoption of Ndege Money returns approximately €9 billion annually to African treasuries through the compression of the "African Risk Premium" (Ndege Group, 2025). Socially, it enables unbanked populations to participate in the digital economy via mobile money integration, providing a counter-cyclical buffer during crises (ISS, 2025).

5.2 Challenges and Risks

Regulatory fragmentation across 54 states remains a primary hurdle (Global Africa Network, 2025). Technological barriers, including internet penetration and digital literacy gaps, risk excluding rural populations (Global Africa Network, 2025). Incumbency resistance from traditional financial institutions and remittance oligopolies is anticipated as decentralised models challenge established power dynamics (IMF, 1997).

5.3 Risk Mitigation Strategies

Proactive dialogue with central banks is supported by the ASDT's unique sovereign status. Technical robustness is ensured through partnerships with blockchain security firms like **Sentnl**, who have

audited the OmniGaza® specifications (ASDT, 2025). Reserve management maintains conservative asset-backing ratios via the AREMF to ensure long-term stability (Ndege Group, 2026).

Section 6: Global Trajectory Analysis

6.1 The Inevitability of Digital Currency Dominance

Generational preference shifts indicate that 78 per cent of Gen-Z prefer digital assets over traditional savings (African Development Bank, 2025). Digital platforms have become the dominant business model, necessitating a public money anchor to maintain monetary sovereignty (Brunnermeier & Payne, 2025).

6.2 The End of Physical Currency: Evidence-Based Forecast

Evidence from Sweden suggests a trajectory where digital transactions will constitute 95+ per cent of global commerce by 2040 (Sveriges Riksbank, 2025). Printed currency is projected to be relegated to numismatic collections by 2045, retained only for ceremonial purposes in advanced economies (IMF, 2025).

6.3 Comparative Analysis: Ndege Money vs. Existing Models

Model	Asset-Backing	Technology	Sovereignty Preservation
Ndege Money	100% AREMF (Minerals)	Coinbase Base L2	Tripartite ASDT Control
eNaira	Fiat-linked	Hyperledger	Centralised (CBN)
Sand Dollar	Fiat-linked	Distributed Ledger	Centralised
e-CNY	Fiat-linked	Distributed Ledger	Centralised (PBoC)

Source: (Arotile & Ajepe, 2025; Chainspect, 2025)

Section 7: Conclusion

Ndege Money represents the convergence of technological possibility (Coinbase Base), geopolitical necessity (de-dollarisation), and African sovereignty imperatives. The concurrent development of OmniGaza® ensures this power serves African interests through an authentically African-led solution. Within our lifetime, this architecture will redefine the continent's trajectory, ensuring Africa is no longer a subject of global systems, but a sovereign architect of its own future.

Section 8: Calls to Action

8.1 To African Governments and Central Banks

- Ratify the African Federation Treaty Framework protocols to establish a legal foundation for integration (Ndege Group, 2025).
- Pilot Ndege Money as an approved settlement mechanism for intra-African trade under AfCFTA (African Union, 2025).

8.2 To Technology Partners

- Deepen collaboration with Coinbase to optimise Base infrastructure for African use cases (Bitcoin.com, 2025).
- Engage with blockchain security firms for ongoing technical audits and quantum-readiness (ASDT, 2025).

8.3 To Diaspora Communities

- Transition contribution from simple remittances to sustainable investment via ASDT products (African Diaspora Network, 2025).

Section 9: References

1. ActionAid. (2023). Fifty Years of Failure: the IMF, Debt and Austerity in Africa.
2. African Business. (2025). Africa's Payment Revolution: PAPSS Network Expands.
3. African Development Bank. (2025). Making Remittances Work for Africa. AfDB Working Paper 386.
4. Amayo Jr., D. O. (2024). Data Protection Laws, Judicial Interpretations, and Global Governance. Nairobi: ASDT.
5. Amayo Jr., D. O. (2025). Decentralising Development: OmniGaza & The Future of Sovereign Finance in Africa. ASDT Whitepaper. DOI: 10.5281/zenodo.15061707.
6. Arotile, D. O., & Ajepe, A. O. (2025). Conceptualisation of eNaira's Prospects on Nigeria's Macroeconomic Challenges.
7. Bank for International Settlements. (2020). Enhancing cross-border payments: building blocks of a global roadmap.
8. Bank for International Settlements. (2024). Annual Report 2023/24: Innovation BIS 2025.
9. Bitcoin.com. (2025). What is Base by Coinbase? A Technical Overview.
10. Brasil de Fato. (2025). De-dollarisation: BRICS Leaders Propose Alternative to SWIFT.
11. Brunnermeier, M., & Payne, J. (2025). Big Techs, Credit, and Digital Money. BIS Working Paper 1306.
12. Carnegie Endowment. (2025). Africa and the Great Power Competition at the World Trade Organisation.
13. Chainalysis. (2024). The 2024 Geography of Cryptocurrency Report.
14. Chainspect. (2025). Base Scalability Metrics and Benchmarks.
15. Eichengreen, B. (2011). Exorbitant Privilege: The Rise and Fall of the Dollar. Oxford University Press.
16. Financial Stability Board. (2025). G20 Roadmap for Enhancing Cross-border Payments: Consolidated Progress Report.
17. Global Africa Network. (2025). Ensuring the Success of PAPSS: Overcoming Challenges.
18. Grabel, I. (2017). When Things Don't Fall Apart: Global Financial Governance in an Age of Productive Incoherence. MIT Press.
19. Gramlich, V., et al. (2024). Toward a Holistic Perspective on Blockchain Electricity Consumption. ICIS 2024.
20. IMF. (1997). Financial Services Liberalisation in the GATS. Working Paper 97/55.
21. IMF. (2025). Global Cross-Border Payments: A \$1 Quadrillion Evolving Market? Working Paper 2025/120.
22. Insights on India. (2025). BRICS is Challenging SWIFT: Building a Multipolar Financial Architecture.
23. ISS Africa. (2025). Rethinking Remittances: The Overlooked Billions Sustaining African Households.
24. Nansen. (2023). What is Base? Coinbase's Layer 2 Explained.
25. Ndege Group. (2024). The African Charter. ASDT Publication.
26. Ndege Group. (2025). The African Federation Treaty Framework (AFTF). DOI: 10.5281/zenodo.17770245.
27. Ndege Group. (2026). Executive Preamble. ASDT Publication.
28. PAPSS. (2026). About Us: The Pan-African Payments and Settlement System.
29. Ratha, D., et al. (2024). Remittances Slowed in 2023, Expected to Grow Faster in 2024. World Bank.
30. ResearchGate. (2025). From Geo-Strategic Technoscience to Corporate Geo-Strategic Technoscience.
31. Rodney, W. (1972). How Europe Underdeveloped Africa. Bogle-L'Ouverture.
32. Stiglitz, J. E. (2002). Globalisation and Its Discontents. W. W. Norton.
33. Sveriges Riksbank. (2025). Payments Report 2025: Trends on the Payments Market.
34. Watcher Guru. (2024). BRICS Challenges SWIFT: Bloc Builds Its Own Cross-Border Payment System.
35. World Bank. (2024). Remittance Prices Worldwide Quarterly, Issue 46.
36. WTO. (2025). Protocol on Trade in Services and Investment.

Section 10: Acknowledgements

Gratitude is first and foremost expressed to God for His guidance. We thank the ASDT Board of Trustees and our legal team consisting of **Atieno Kanyangi** (Kanyangi & Co. Advocates), **Benedict Nzioki** (Africa Law Partners) and **Cris Mbaka** (Mwenda Mbaka & Associates) for ensuring governance and operationalisation claims are legally defensible and actionable. We recognise the technical contributions of **Coinbase** and **Charles Holtzkampf** of the blockchain security firm **Sentnl** for their rigorous feasibility audits and development support, respectively.

Section 11: Appendices

Appendix A: Technical Specifications

- **Infrastructure:** Coinbase Base L2 (Optimistic Rollup).
- **Protocol:** OP Stack.
- **Throughput:** bursts up to hundreds of TPS; theoretical max 3,571 TPS (Chainspect, 2025).
- **Finality:** 2-second block confirmation; 13-minute L1 finality (Bitcoin.com, 2025).

Appendix B: Pilot Corridor Implementation Plan

- **Phase 1:** UK-Kenya (M-Pesa integration beta).
- **Phase 2:** UAE-Nigeria and US-Ghana (PAPSS bridging).
- **Phase 3:** Continental scaling under AFTF.