

# East Africa's Digital Port.

*Kenya's digital infrastructure modernization framework — a US\$1.5 billion strategy to turn connectivity into regional technology services.*

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## From infrastructure expansion to infrastructure orchestration

Kenya's opportunity is no longer only expanding internet access. It is converting subsea landings, national fibre, green baseload power, data centres, public digital services and a young workforce into a regional technology-services platform.

The proposition: Kenya should treat digital infrastructure as a national logistics system for the data economy. Just as ports, roads, rail and energy corridors move goods, an upgraded backbone should move data securely, cheaply, locally and regionally — turning connectivity into jobs, investment, productivity and exportable technology services.

Kenya's first digital cycle was mobile adoption, mobile money and "Silicon Savannah"; the second was government digitization, data-centre growth and international bandwidth. *The third will be decided by whether Kenya can support data-intensive services* — cloud, AI workloads, digital public infrastructure, regional BPO, e-health, digital finance — which need deeper fibre, lower latency, redundant routes, reliable power and cybersecurity by design.

## The starting point

The challenge is not that nothing exists; it is that existing assets must be connected into one resilient national and regional operating system.

76.69m SIM subscriptions

45.79m mobile broadband

2.14m fixed (+42.9% a year)

19,381 Gbps international bandwidth

7 subsea cables at Mombasa

93%+ of KenGen capacity renewable

4.6bn cyber threats detected (Q4 FY24/25)

36,000 GBS workers (2025)

Kenya can compete on more than labour cost. It can offer a **full stack**: subsea access through Mombasa, regional routing through internet exchanges, national fibre through the Digital Superhighway, cloud capacity in Nairobi and Mombasa, renewable baseload energy from geothermal and hydro, and a large English-speaking youth workforce.

The evidence points to one conclusion: digital infrastructure should not be framed as a single construction project but as an **economic conversion system** — fibre into access, access into enterprise adoption, interconnection into latency advantage, data centres into cloud services, green power into hosting competitiveness, and skills into exportable work.

## Six modernization pillars

A **US\$1.5 billion** framework that aligns public investment, concessional finance, private capital, operators, counties and skills providers around a single modernization agenda. A further US\$100 million funds programme management, policy reform, safeguards and evaluation.

|                                    |                                                                                                                                                                                                                       |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 · Fibre-deep backbone</b>     | Accelerate the planned 100,000 km of fibre, prioritized by demand — schools, clinics, government offices, markets, BPO campuses — with a national-county wayleave and infrastructure-sharing compact. <b>US\$420m</b> |
| <b>2 · Regional gateway</b>        | Link Mombasa's subsea landings, data centres and internet exchanges to Nairobi and to Uganda, Tanzania, Rwanda, Ethiopia and South Sudan, with route diversity and more local traffic exchange. <b>US\$230m</b>       |
| <b>3 · Green data-centre zones</b> | Investable sites where power, fibre redundancy, water, land and permitting are solved together — Nairobi, Mombasa, geothermal corridors, Konza-linked zones. <b>US\$260m</b>                                          |
| <b>4 · Secure government cloud</b> | Shared standards and reusable digital public goods — hosting, APIs, audit logging, incident response — plus a secure-by-design standard and a government security operations capability. <b>US\$170m</b>              |
| <b>5 · Digital work corridors</b>  | Technology export corridors combining broadband, workspace, cloud access, skills certification and employer partnerships for BPO, AI-data and SME digitization. <b>US\$180m</b>                                       |

**6 • Resilience & trust** Redundant routes, protected corridors, rapid repair, cyber monitoring and DDoS mitigation, with a public infrastructure dashboard. **US\$140m**

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The investment is sequenced to crowd private capital in, not out. Public funds focus on shared infrastructure, underserved areas, public institutions, resilience and digital public goods; private capital leads commercially viable data-centre, cloud, enterprise connectivity, BPO and last-mile services where demand is strong. The World Bank's US\$390 million first phase of the Kenya Digital Economy Acceleration Project gives the effort momentum.

## A credible path to 150,000+ jobs

The jobs target is an **ecosystem target, not a single payroll promise**. Construction creates important but time-bound work; sustainable employment comes when infrastructure lets enterprises sell digital work locally, regionally and globally.

### Estimated contributions by channel:

- ✓ **55,000–70,000** in BPO and Global Business Services;
- ✓ **30,000–40,000** in SME digitization, e-commerce and platform-enabled work;
- ✓ **20,000–25,000** in fibre deployment, civil works and maintenance;
- ✓ **12,000–16,000** in training, certification and local technology vendors; and
- ✓ **7,000–12,000 each** in data-centre and cloud operations, cybersecurity, and digital public-service support.

The estimate builds on Kenya's own trajectory: a Global Business Services sector of about US\$700 million in 2025, with BPO projected to reach US\$639 million–US\$1.0 billion by 2030, and a national goal of one million digital workers. The framework does not claim to deliver all of them; it builds the infrastructure, locations, reliability and skills-to-market path that make the goal more achievable.

## Delivery and reform

A dedicated **Kenya Digital Infrastructure Modernization Delivery Unit** coordinates across ministries, regulators, counties, utilities, operators, investors and development partners — not replacing agencies, but solving the coordination failures between them. It manages one project pipeline, publishes quarterly dashboards, coordinates blended-finance transactions, standardizes public connectivity procurement and keeps a live risk register.

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|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Phase I · 2026–27</b>   | Mobilize and design: delivery unit, national asset map, county wayleave compact, bankable project pipeline and financing plan.                |
| <b>Phase II · 2027–29</b>  | Build and integrate: priority fibre corridors, institutional links, Mombasa–Nairobi redundancy, green data-centre zones and cyber resilience. |
| <b>Phase III · 2029–32</b> | Scale and export: cross-border services, cloud and content providers, deeper BPO and AI-data services.                                        |

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**Reforms are bankability conditions.** A predictable wayleave regime; open-access and infrastructure-sharing rules on fair wholesale terms; procurement that pays for service levels — uptime, latency, repair time, affordability — rather than inputs; clear data-centre and cloud standards for energy, environment, data protection and security; and skills and BPO incentives tied to verified jobs, exports, worker protection and county inclusion. Investors finance fibre, data centres and BPO campuses when they can trust permitting timelines, power, wholesale access and demand aggregation.

The highest risks are fibre deployment delays, stranded public assets and cybersecurity escalation — mitigated by a national-county wayleave compact, anchor-demand contracts with schools, clinics, government offices and BPO firms, and secure-by-design standards with security operations capacity.

## Why it is investable

The framework rests on existing demand, official policy alignment, visible private-sector activity, regional geography and measurable conversion pathways. It does not ask investors to believe in a speculative digital future — it asks them to finance the modernization of a digital economy that is already growing, and it separates public-good infrastructure from commercial opportunity.

The modern economy does not reward countries merely for having cables. It rewards countries that use them to host data, route traffic, protect systems, train workers and export services.

## About CentPol

CentPol is a **global community of people — from wildly different professional backgrounds — curious enough to understand, shape, and build the future of AI** rather than watch it happen to them.

We produce **policy intelligence for the next technology era** through community, stakeholder dialogue, and research. This concept note is part of CentPol's work on digital infrastructure, investment and technology-services growth in Africa.

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This brief summarizes *Kenya's Digital Infrastructure Modernization Framework* (CentPol Papers No. 4) by Samuel Abinsinguza, published 8 June 2026.

## Read the full concept note.

The evidence base, the investment table, the jobs model by channel, reform priorities, the risk register and the 2030 results dashboard — with 12 references.

[centpol.com/proposals/kenya-digital-port](https://centpol.com/proposals/kenya-digital-port)