Undersea Cables: Africa's Digital Lifeline

AiCE Africanism & Pan-African Studies — The physical internet

The Physical Internet

The internet feels like a wireless, cloud-like technology — data flowing invisibly through the air. In reality, approximately 97% of all international internet traffic travels through physical cables on the ocean floor. These undersea cables are the actual physical infrastructure of the global internet — and who owns them determines who controls the arteries of global digital communication.

For most of Africa's digital history, the continent was connected to the global internet by a small number of undersea cables, creating both limited capacity and significant vulnerability. A single cable cut — caused by a ship's anchor, an earthquake, or equipment failure — could slow or sever internet connectivity for entire countries. In 2009, a cable failure knocked out internet connectivity for much of West Africa for weeks. In 2024, simultaneous damage to multiple cables serving East Africa caused significant regional disruptions.

The situation has improved dramatically. The 2Africa cable — a 45,000-kilometre ring cable funded partly by Meta/Facebook — is the longest undersea cable ever built and will encircle the African continent when complete, connecting 33 African countries. The Equiano cable, funded by Google, runs from Portugal to South Africa with branches serving West African countries. These cables dramatically increase Africa's international bandwidth and reduce the vulnerability of single-cable dependence.

Africa's Undersea Cable Landscape: Key Facts
Total undersea cables serving Africa: over 30 active and planned (as of 2024) — up from 5 in 2010.
2Africa cable: 45,000km — the world's longest undersea cable; funded partly by Meta; connects 33 African countries.
Equiano cable: Google-funded; Portugal to South Africa with West African branches; operational from 2022.

Africa's Undersea Cable Landscape: Key Facts
DARE1 cable: Djibouti-France-Horn of Africa, connecting East Africa to Europe via the Red Sea.
The critical problem: most cables are owned by foreign entities — Meta, Google, telecom consortia — not by Africa.
Cross-continent routing: a data packet from Lagos to Nairobi often travels via European routing points, due to insufficient direct terrestrial connectivity.
African-owned alternative: the African Union has proposed an Africa-owned undersea cable network — not yet funded or built.
Cable landing stations are often located in former colonial port cities, reinforcing inherited infrastructure patterns.

The Sovereignty Question: Who Owns the Cables?

The ownership of undersea cables by foreign technology corporations raises the same sovereignty questions raised earlier in this course about mineral resources and financial infrastructure. If the cables that carry Africa's internet traffic are owned by Facebook and Google, those corporations have physical visibility into — and physical control over — the arteries of African digital communication. They can prioritise their own traffic. They can grant or withhold access to other services. They can provide data to foreign intelligence services. And they make investment decisions based on their commercial interests, not Africa's development needs.

The argument for African ownership of undersea cable infrastructure is straightforward: critical national and continental infrastructure should be owned and controlled by the people it serves. The counterargument — that foreign investment in cable infrastructure is better than no cable infrastructure — has merit as a short-term position, but should not become a permanent arrangement. African governments and the African Development Bank have the financing capacity to invest in African-owned cable infrastructure if they choose to make it a priority. The question is political will.

Key Takeaways

Approximately 97% of international internet traffic travels through undersea cables, and Africa's rapidly expanding cable network — over 30 cables, up from 5 in 2010 — remains predominantly foreign-owned, giving corporations like Meta and Google physical control over the arteries of African digital communication. The next lesson examines the constraint underneath all of this: electricity.