

A world map with a dark blue background and light blue outlines of continents. The continent of Africa is highlighted in a solid, medium blue color, with the sub-Saharan region being a slightly darker shade of blue. The text is overlaid on the map.

# Opportunity amid economic disparity

The key to seamless internet access in sub-Saharan Africa

**GNX**

Country Guide | 2024

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# Sub-Saharan Africa: great potential, but gaps to be bridged

Foreigners working in the nations of sub-Saharan Africa have a saying: TIA, or “This Is Africa”. Not in a bad way. Rather, it’s a statement of acceptance that you’re in a different place with different customs and practices, and success comes from working with those rules rather than ignoring them. Understand the place, and you’ll find opportunities for business-class connectivity are greater than expected, even in the most unlikely places.

Southern Africa – dominated by regional leader South Africa – spans fewer than a dozen countries, but the sub-Saharan region of which it’s part ranges thousands of kilometers to the east and west too; three of its nations could fit the whole of Western Europe inside their borders. Broadly defined as the area south of the Sahara Desert, it’s home to 46 countries, a young population of 1.2 billion with an average age of just 19, and a GDP of around US\$2tn.

While regional disparities are large, many areas are experiencing excellent growth. And in the sheer breadth of human diversity and potential, Africa leaves the rest of the world far behind.

Today, the vastness below the Sahara encompasses over 2,000 ethnic groups, with improving healthcare driving population growth above 2% in many areas. Literacy and graduate numbers are also growing, giving the region more homegrown talent. And business broadband provision is improving to serve them.

Initiatives like Google’s Project Link and Meta’s 2Africa are adding thousands of kilometers to existing cabling of 500,000km or so, led by South Africa with 150,000. Many major subsea cables terminate in the region, including WECS (West Africa Cable System) reaching out 14,000km, the Eastern Africa Submarine Cable System (EASSy) at 10,000km, SEACOM with 17,000km, and MainOne with 7,000km.

That doesn’t mean connectivity is easy, however. It’s characterized by gaps: interconnects between infrastructure, underserved areas, and limited choice where you need it most. Here are the key questions to answer.

# Connecting across borders and barriers

Countries in the sub-Saharan region aren't as joined up as (for example) the nations of ASEAN and the EU. Connectivity often means mixing together multiple services on a case-by-case basis. And while mobile networks provide consistent service to consumers, it's rare to see them used for business connectivity. Custom wireless solutions are often employed instead. But as long as you're aware of the challenges, they can be solved.



## Challenge 1

### Connectivity dependent on more basic services

Electricity shortages are common across the continent. "Never Expect Power Always" is a joke aimed at Nigeria's NEPA energy supplier – but it affects more than the giant on the western coast.

Total generation capacity of 160GW sounds a lot, but 60GW of that is a single country (South Africa) and only 48% of the region's population has access to grid power. When building out network infrastructure, it's often necessary to wait for energy investment too.

A related issue is the lack of other infrastructure to build alongside. In many countries road and rail provide a base for fiber providers to contract with, taking advantage of routes already defined. But sub-Saharan Africa has far fewer roads per capita than Europe or North America; in Congo just two main roads cross an area the size of Western Europe. Slowing buildouts to the pace of land rights and equipment availability.

So, when planning broadband for your business in the region, remember to consider a full stack of basic services in addition to networking equipment.

## Challenge 2

Your connections will connect



**For connectivity or for business in general, your connections – meaning, relationship-building – will matter.**

That relationship-building, however, is where a lot of international companies make mistakes. Business culture is less formal than the West in some ways, more formal in others. Local ISPs and MSPs often need close attention to project management; deadlines are more guidelines than contracts.

And don't mistake high fluency in English or French for a sign of your ideal partner; some of the best people speak no western tongue, but may speak many local ones. The sub-Saharan region is home to over 2,000 languages.

The good news: with the right approach and understanding, it works brilliantly.

Case in point: When delivering services for one of our customers in Chad – a huge but poor country lacking in infrastructure – we were able to run a textbook-perfect project, with rollup completed and services running in less than a month. All because, at GNX, we take time to build the relationship with the right local experts.



### Challenge 3

#### Low bandwidth issues with an effect on SLAs

Africa below the Sahara is plagued by limited bandwidth. Of course, it's not solely a southern problem—capacity crunches are continent-wide. But it's a particular problem given the region's vast distances and high urban populations contrasted with low rural ones.

VSAT, or satellite broadband, is available but expensive. Bandwidth is also in short supply, with a 20Mbps connection representing the best case today. And the nature of satellite technology means all capacity is contended, and Service Level Agreements tend to be basic. So satellite is definitely in the mix – but as yet the scale is small.



Fiber in the ground, of course, has the capacity, but there's a shortage of coverage, meaning fiber-to-the-office is rare, and even fiber-to-the-curb is only available in cities. In other words, the last-mile and last-meter problems loom large. And this happens at all scales: a customer needing secured capacity on a subsea cable may need other technologies to connect to that resource.

Wireless microwave, however, is widely used to bridge these gaps – and often an excellent choice for today's enterprise, connecting Point-to-Point to span distances without the need for fiber. That's why it's often part of a GNX solution.



#### Challenge 4

### High prices for infrastructure, services, and expertise

As with neighboring region MENA, there's no standard price for service below the Sahara. But this isn't always obvious to newcomers. If you don't have expertise in the region, expect to pay full price when a discount may well be available.

You'll also see high prices for expertise; it's a true seller's market. Consultant prices in Kinshasa or Lagos are no different (even higher) than in London or San Francisco. And, of course, there's limited infrastructure on offer, so diversity of service often means your sensitive data has only a single option, even if you take contracts with multiple ISPs.

# 60%

### reduction in monthly cost

Thanks to GNX, one customer in Congo found a \$5000 monthly cost went down to \$2000 with the right approach and connections in-country. There are ways and means.

These are the issues. Let's look next at how GNX solves them.

# The GNX solution for connectivity in Sub-Saharan Africa

That's Africa: a long list of countries and cultures, an incredibly diverse set of skills and approaches, and services that often don't join up without a lot of work. The opportunity: for a company able to understand and work with these challenges, true competitive advantage is there for the taking.

GNX has built relationships from the Central African Republic to the southern most tip of South Africa – and we're ready to leverage them for you.

## Creative thinking that solves your problems

Africa is ripe for innovative ideas. A young population with energy and creativity is a surprising asset to your business – if you find the right people to help. There are numerous technologies outside “traditional” wired and wireless networks that can deliver reasonable performance at various levels from best-effort to enterprise SLA.

Perhaps a microwave antenna joining your offices point-to-point could leapfrog a long lead time your company can't afford. Or a private connection between two buildings could be the missing link that gets service guarantees to an acceptable standard. Let us show you.

## Regional relationships that smooth your rollouts

With 46 proudly independent countries, many with widely differing business cultures and societal customs, connectivity across sub-Saharan Africa means plenty of backs and forths, as you contract state-by-state and city-by-city. But what if you could handover those negotiations to someone who's been-there-done-that?

That's what GNX brings to the party, thanks to working relationships with over 1,500 Internet Service Providers, we can guarantee, you'll save on procurement costs. And we're 100% carrier-neutral and solution-agnostic: we don't play favorites or push one technology over another. It's about giving you a seamless experience, one contract, and one point for support for your global connectivity.



### Local knowledge that unlocks hidden advantages

The ideal solution isn't always obvious. Which is why GNX takes advantage of local ISPs and expertise to find the solutions that make most sense in each location. One size does not fit all. So, we create ours district by district, city by city, and across borders, using what works best for each situation and use case, each piece shaped to fit.

Imagine local knowledge that can find 60% savings on a "fixed" price. Services that can connect long sections of infrastructure on short timescales. And SLAs that give above-average performance on shared infrastructure. All available when you see both the Big Picture and the detail within it, ready to be optimized at every node.

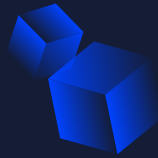
This is GNX and we'd like to work with you across sub-Saharan Africa ... and beyond.

# The connected way



## Global internet access

Our core offer is global internet connectivity. Working with over 1,500 ISPs, MSPs, and telcos worldwide – wired and wireless – GNX brings you business bandwidth over public infrastructure or private networks, all under a single contract. Turning complexity into simplicity.



## Point-to-point

Wherever you go, network coverage has gaps – and Point-to-Point is how you join them up. From private ethernet to microwave connections in the air, a dedicated link between two sites often offers great bandwidth and the best possible SLA at a competitive cost.



## Cloud fabric

It's not just how you connect; it's what you connect. Services like SD-WAN and cloud applications keep your business data secure and smooth, completing your connectivity private to public to hybrid, GNX can help put the Big Picture together.

# GNX+

## How GNX brings it together



The cherry on top is GNX+, our automated and carrier-neutral platform that lets you compare different connectivity services from thousands of providers. Much like browsing different travel deals when planning a trip, we'll show you all the options and information available – technologies, speeds, prices, and more.

And at all times, GNX+ gives you a clear view of your entire network setup, with management, monitoring, and support functions at your fingertips, making the complex world of connectivity as it should be: straightforward and simple.



# Get in touch

Based in Amsterdam, GNX is a carrier-neutral, solution-agnostic connectivity provider with established relationships with over 1,500 ISPs worldwide. We offer creative solutions to business broadband in all the world's regions, making use of both global perspective and local expertise. Make this the year you join our growing roster of over 200 enterprise customers.

Learn more about us at [gnx.net](https://gnx.net) or contact us at [contact@gnx.net](mailto:contact@gnx.net)

**GNX. Straightforward Connectivity.**

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The GNX logo is rendered in a bold, yellow, sans-serif font. The letters are thick and blocky, with a slight shadow effect. The 'G' and 'N' are connected at the top, and the 'X' is composed of two 'N' shapes. The logo is positioned in the bottom right corner of the page.