



**Vodafone
Wholesale**

Vodafone Wholesale Ghana

Nobody connects West Africa like we do

Ghana provides a potentially excellent access point for telecoms service providers to West Africa and the rest of the continent. With its position at the centre of West Africa's south coast and the five submarine cables that land in Ghana, it is ideally placed to serve customers who want to gain a foothold in the subregion.

Such considerations are key as international carriers seek to find a way to establish a competitive edge on a continent where internet and data use are surging – with no signs that this will slow any time in the near future.

These providers therefore need strong, solid and reliable partners with whom to link up, and preferably ones who can offer them as close as possible to a one-stop-shop for network access between their landing point in the country and their connection onwards from the border to other markets.

Step forward to Vodafone Wholesale Ghana.

New gateway

Vodafone Wholesale is connected to all five of the submarine cables that land on the shores of Ghana – SAT-3, WACS, ACE, Main One and GLO-1. This gives Vodafone Wholesale a prime position as a partner of choice for customers seeking to enter Ghana, with a diversity of access possibilities.

Vodafone Wholesale also has more than 40 points of presence, including nationwide fibre MPLS and SDH networks, with a broad footprint of over 4,000Km provided by a combination of both buried fibre cable and overhead optical ground wire (OPGW) – plus microwave technology in areas where fibre is unavailable.

This hybrid infrastructure gives telecoms players who want to connect to Ghana and beyond an ideal partner.

In a bid to further boost customer confidence in the network, Vodafone Wholesale has deployed another access point into the landlocked countries in West Africa.

This became operational in September 2016 through the establishment of a network gateway in the town of Dakola near the border with Burkina Faso in the northern part of Ghana. This alternative connection point adds to the existing one at Cinkasse, near the border with both Burkina Faso and Togo at Ghana's north-eastern tip.

Opening up the market

For Vodafone Wholesale Ghana, a second gateway into the landlocked countries allows it to offer customers both network resilience and redundancy.

By connecting to different telecom operators as partners at each of the gateways, Vodafone Wholesale Ghana is best-placed to offer its customers operational variety and diversity.

In the coming years, Vodafone Wholesale expects the new gateway to present significant benefits to the market, allowing it to put in place additional services and provide new opportunities.



This presents an attractive proposition for both new and existing customers, by reinforcing their assurance of reliable services. Vodafone Wholesale has already generated significant interest from customers and prospects.

The new fibre connectivity is significant by dint of the fact that it facilitates internet access to areas that hitherto lacked or had inadequate connectivity. In addition, it offers existing customers an opportunity to buy more while also attracting new ones – thereby ultimately increasing internet penetration in the subregion.

These potential outcomes are very much in line with programmes such as the World Bank-backed West Africa Regional Communications Infrastructure Project, which seeks to fill connectivity gaps in markets such as Burkina Faso and other West African countries.

Pragmatic approach

Vodafone Wholesale has adopted a flexible approach to its network across Ghana, offering both buried fibre cable and overhead optical ground wire (OPGW) installed via overhead lines on the country's electricity network through an arrangement with power-grid company GRIDCo.

Furthermore, the company's provision of microwave technology in harder-to-reach areas of Ghana offers a third option that enables Vodafone Wholesale to cover even locations where fibre is unavailable and thus bring high-quality services to the whole country.

The three-ring infrastructure also allows traffic to be rerouted within 50 milliseconds in the event of fibre cuts, giving it an almost uninterrupted service, with 99.95 per cent availability throughout the year.

Vodafone Wholesale plans to continue with this ethos of flexibility in Ghana going forward, to help ensure that it continues to optimise its network coverage and the service it provides to customers.

The company is aiming to do this through a pragmatic and open approach that aims to make the most of the resources that the country has, leading to more efficient and effective services.

One potential way of being pragmatic in this regard is through asset-sharing, an initiative which the company is currently discussing with other operators. This could help Vodafone Wholesale Ghana extend its fibre network without having to make additional investments, thus facilitating cost savings and network resilience for each party.

Vodafone Wholesale Ghana's customers can rest assured that the operator is constantly seeking the best possible options to make its network as robust and efficient as possible – paving the way for a bright and promising future.

Primary access point

The vision for Vodafone Wholesale Ghana is facilitated by these initiatives – making Ghana a gateway to West Africa.

This requires a fully functional, widespread and reliable network with the right partnerships to give customers the best possible options. Vodafone Wholesale Ghana currently provides these and is working towards making them even better in the future.

Vodafone Wholesale Ghana's aim is to eventually link its network to neighbouring Ivory Coast across Ghana's western border, in a bid to provide an alternative to the subsea cable link which runs between the two countries.

Mobile data looks set to accelerate faster in Africa than in other global regions over the next five years. This makes it imperative to have an effective and efficient mechanism to serve consumers there. Market data suggests that the compound annual growth in data traffic in the Middle East and Africa will be over 60 per cent during this period, compared with less than 50 per cent in other global regions.

In this environment, Vodafone Wholesale Ghana presents itself as a reliable and trustworthy partner in the region.

Vodafone Wholesale Ghana is fully equipped to give customers exactly what they need to aid their expansion in West Africa.



Comprehensive support

Customers who choose Vodafone Wholesale will benefit from an effective and efficient customer service experience. The company, for example, offers 24/7 support to clients via its Network Operating Centre, with trained and specialised engineers who can answer your needs to agreed timelines. On top of this, it provides specific account managers for customers to resolve complaints and provide feedback, helping build a relationship and trust with clients.

Customers can also access convenient online self-service capabilities, giving them an efficient, quick and hassle-free way to access all the information and services they need. These allow them to view the products and services they have with Vodafone Wholesale, request new ones and get updates. They can also log in to their invoices to view and check them over.

In addition, the portal enables clients to view root cause analysis (RCA) and reason for outage (RFO) reports if a fault occurs – meaning they have all the appropriate information easily to hand if there are any issues with the network.

To enhance the customer experience further, Vodafone Wholesale Ghana has put in place its own internal online portal for its frontline support team. When a fault occurs, this allows the team to check configurations for client services and see where customers are located, the equipment they have and the ports they are connected to.

Greater ease of use

All this allows the customer service team to identify faults and resolve them more quickly, creating a better experience for clients. The company's idea is to bring even more of the fault-reporting system online over time, simplifying the process and making it more convenient. Customers will be able to report issues on the self-service portal and immediately get their reference number, making the system more automated.

Customer-focused products

Vodafone Wholesale Ghana has a host of offerings that make its service comprehensive and attractive to potential partners, including:

- **National leased lines:** three fibre rings in the north, centre and south of Ghana, with terrestrial fibre links nationwide.
- **Layer 2 and Layer 3 VPN services (IP/MPLS)**
- **Last-mile fibre connectivity.**
- **Dedicated internet over SAT - 3 and WACS.** There is also a connection between SAT -3 and all submarine cables landing on the shores of Ghana (WACS, ACE, Main One and GLO-1) offering a robust link into West Africa.
- **International Private Leased Circuit (IPLC).**
- **Fibre connectivity across the border to other countries:** fibre connectivity into neighbouring nations at two gateways, offering redundancy and resilience:
 1. Cinkasse, near the border with Burkina Faso and Togo at Ghana's north-eastern tip; and
 2. Dakola in the north.

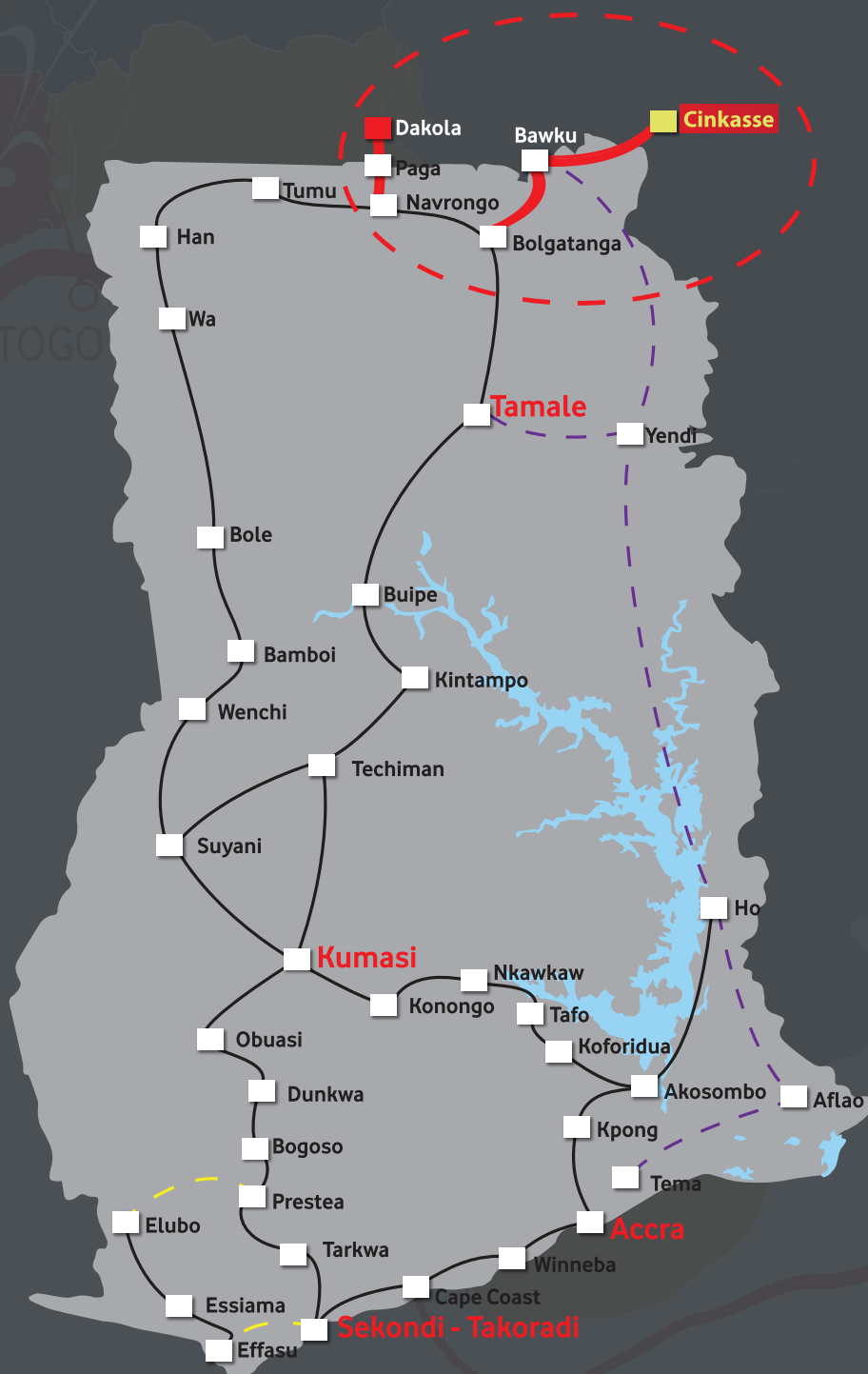
The two access points provide links to Burkina Faso and Togo, with the ability to also serve Niger and Mali through Burkina Faso.
- **Colocation:** Leasing of tower, floor or shelf space for microwave radio.

Capacities on many of Vodafone Wholesale Ghana's products are available at various capacities ranging from 2Mbps to 10Gb as specified by the customer.

With its broad product set and network coverage, Vodafone Wholesale Ghana provides a great option for access to West Africa.



National Fibre Backbone



- Existing Fibre Backbone
- Cross border connectivity
- - - Takoradi-Elubo route - Considering MNO Swap
- - - Eastern Corridor fibre (planned swap)
- Major Point of Presence (PoP)

Awards won

- Best African Product – Global Carrier Awards 2013
- Best Wholesale Provider – Ghana Telecom Awards 2013
- Telecom Wholesale Company of the Year – Ghana Telecom Awards 2014
- Telecom Wholesale Company of the Year – Ghana Information Technology & Telecom Awards 2015
- Telecom Wholesale Company of the Year – Ghana Information Technology & Telecom Awards 2016
- Telecom Wholesale Company of the Year – Ghana Information Technology & Telecom Awards 2017

