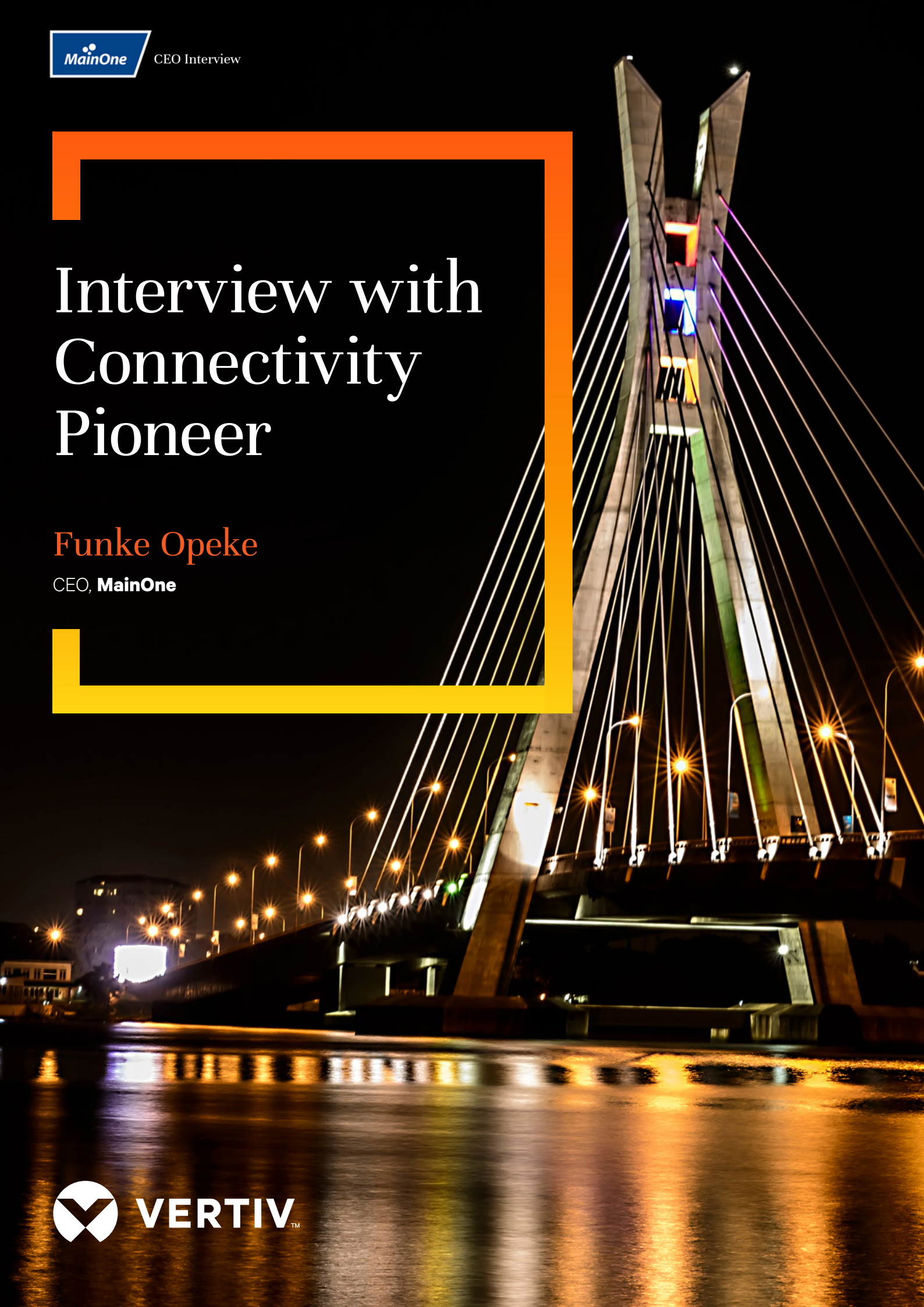
MainOne CEO Interview

Interview with Connectivity Pioneer

Funke Opeke

CEO, **MainOne**



VERTIV.

Interview with Funke Opeke

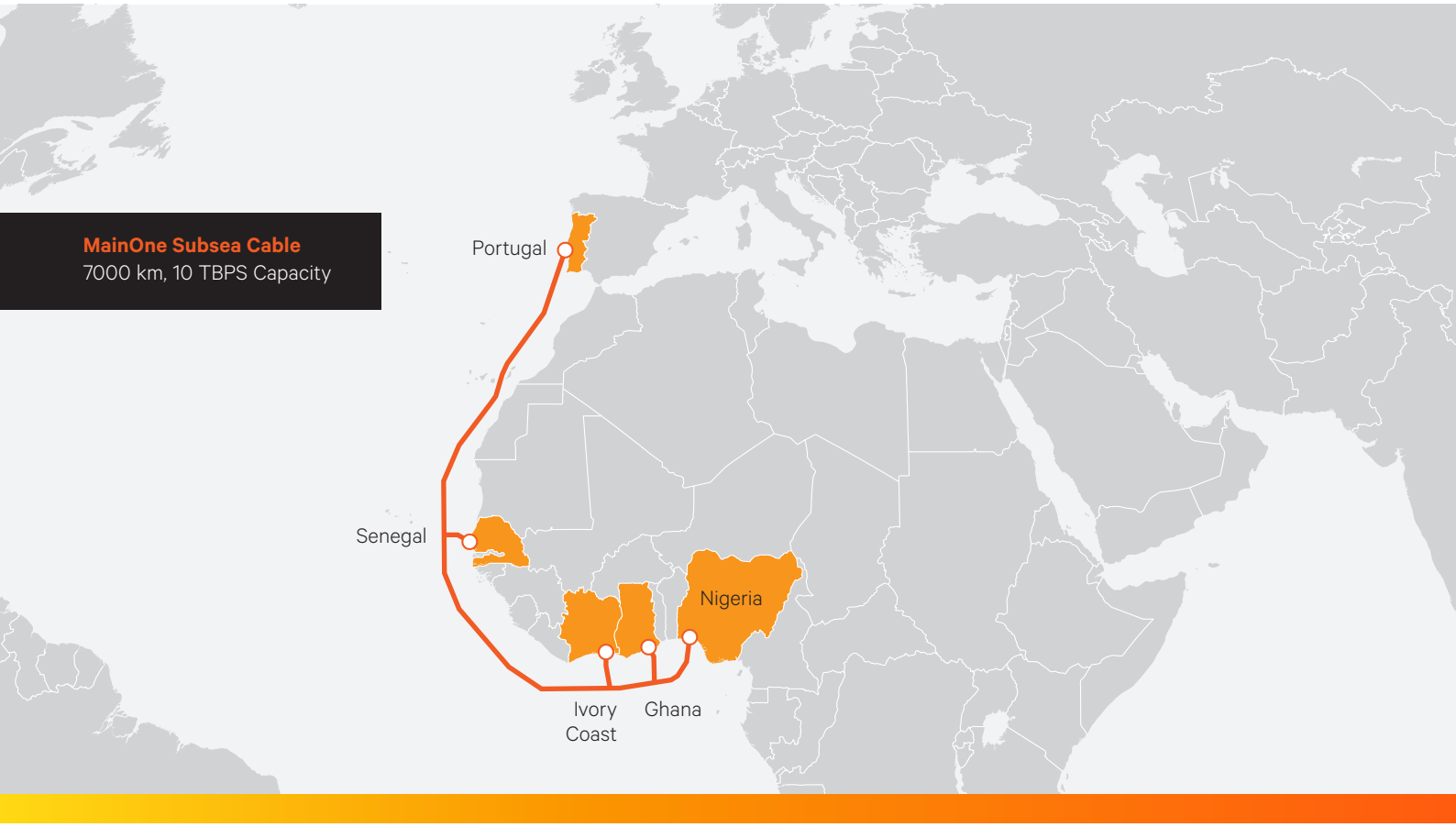
West Africa, home to some of the fastest-growing populations in the world, was left behind in the connectivity revolution that swept the world in the 1990s and 2000s. The region was served by just one low-capacity undersea cable connection and a severe lack of terrestrial fibre optic networks until 2010.

2010, when MainOne embarked on their mission to connect West Africa to the world with a submarine cable, 10 times the capacity of anything seen previously. The company's journey has not been an easy one, presenting a range of technical, financial, and regulatory hurdles to overcome. Nearly half of all capital projects in West Africa experience delays of over six months. While the region's most populous nation, Nigeria, offers many examples of projects that were delayed for more than two years and spent more than double their original budget estimates.

MainOne's CEO now speaks with us about their mission, their journey, and their most recent project, a new cable landing station and data centre in Ivory Coast.

Funke Opeke

CEO, **MainOne**



Q Tell us a little about MainOne

Founded in 2008 and launched in 2010, MainOne is a leading provider of connectivity and data centre services for businesses in West Africa. Over the last decade, we have developed a reputation for reliability and superior telecommunications service provision. This growing reputation has made us the preferred provider of wholesale internet services to major telecom operators, ISPs, government agencies, large enterprises, and educational institutions across the region.

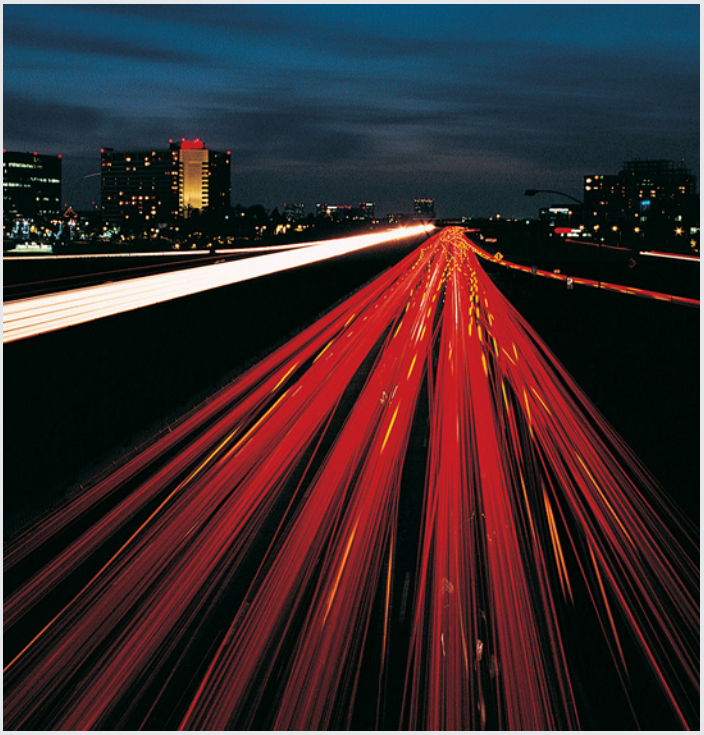
Q At that time, there was very limited ICT infrastructure in West Africa to support such a business case. How did the MainOne story begin?

MainOne set out on a mission to bridge the digital divide between Africa and the rest of the world. Our goal was to fill the huge gaps in internet infrastructure that existed across all nations in West Africa. It all began with the deployment of a landmark undersea cable from Europe to Nigeria, bringing much needed high-speed internet to the region.

The world-class submarine cable system is the first privately owned cable in West Africa. Spanning 7000 km with a capacity of 10 TBPS and currently the cable connects Africa to Europe via a landing in Portugal and multiple routes to London, Paris and Amsterdam. Paired with a state-of-the-art IP network, new dense optic wavelength division multiplexing (DWDM) technology and data centre facilities, MainOne provides the capacity for enterprises and smaller ISPs to enable broadband solutions for businesses across the region.

When MainOne launched commercially in July 2010, it heralded an unprecedented crash in the wholesale bandwidth price, dropping by as much as 80% in Nigeria. The company soon became the first choice and most reliable carrier of traffic for a majority of Nigerian and Ghanaian based telecom operators and ISPs.

MainOne
Driving fibre optic connections to businesses around West Africa



Q A 7000 km submarine cable connecting potential customers across a wide region with rough terrain and limited infrastructure is no easy feat. What challenges did you face during this pioneering start?

Prior to MainOne's entry into the market, the limited undersea cable connections held back the development of West Africa's internet infrastructure. When cables began to land, under-developed distribution networks meant they remained virtually stranded on the coastline, unable to deliver the services required to push internet access in-land.

One of the first major challenges we encountered came from the lack of a metro fibre infrastructure and terrestrial cable networks in Nigeria. Such networks are necessary to provide access and push the traffic to various customers around the country. Our undersea cable connection triggered investments in metro fibre infrastructure for the country's most populous city, Lagos, and more recently in the states of Ogun and Edo.

Subsequent connectivity and power infrastructure developments have upgraded the quality of internet service to millions of users in these regions and greatly improves broadband access. It also triggered corollary benefits, such as employment generation, increased productivity, increased access to knowledge, and improved economic opportunities for the region's inhabitants.

Another significant challenge was access to funding. Interest rates were over 30% at the time, limiting the capacity for investment in domestic infrastructure. While the regulatory, license, and permit issues, coupled with taxes and bureaucratic bottlenecks in multiple regulatory agencies, also posed significant hurdles when establishing the business.

Q As you gradually drive fibre optic connections to businesses around West Africa, how has the demand for service grown and how has MainOne grown to meet that demand?

MainOne has grown with the huge demand to become the leading provider of wholesale and enterprise connectivity and data centre services across the West African region, and partners with major global technology companies to deliver quality services to its customers. The company continues to work towards bridging the digital divide in the continent by increasing broadband penetration through more fibre builds, data centre investments, and satellite partnerships.

To meet the growing demand for managed computing and network services, in 2015 we commissioned MDXi, our Tier III data centre and the largest in West Africa. MDXi granted direct access to MainOne's entire connectivity platform including fibre optic and internet backbone network access, while also providing interconnection with all the major networks in Nigeria. As a result organisations across the country were able to move their key business processes online, rapidly accelerating the evolution of a digital economy in Nigeria.

Our data centre subsidiary, MDXi, also partnered with Asteroid, a global IXP platform provider, to launch a carrier-neutral Internet Exchange Point for West Africa — The West African Internet Exchange (WAF-IX). With the objective of complementing national IXPs, the new Internet Exchange improves regional data traffic and ultimately fosters the development of a digital economy across the whole of West Africa.

Q The connectivity developments triggered by your arrival in Nigeria are incredible. What were the next steps for MainOne's mission to spread connectivity across the whole region?

In 2018, MainOne partnered with French telecoms giant, Orange, for co-investment in extending its submarine cables into two new cable landing stations in Dakar, Senegal, and Abidjan, Ivory Coast. This was the next logical step in our region-wide mission, the stations will benefit several under-served countries in West Africa with better connectivity at lower prices as well as access to new services.

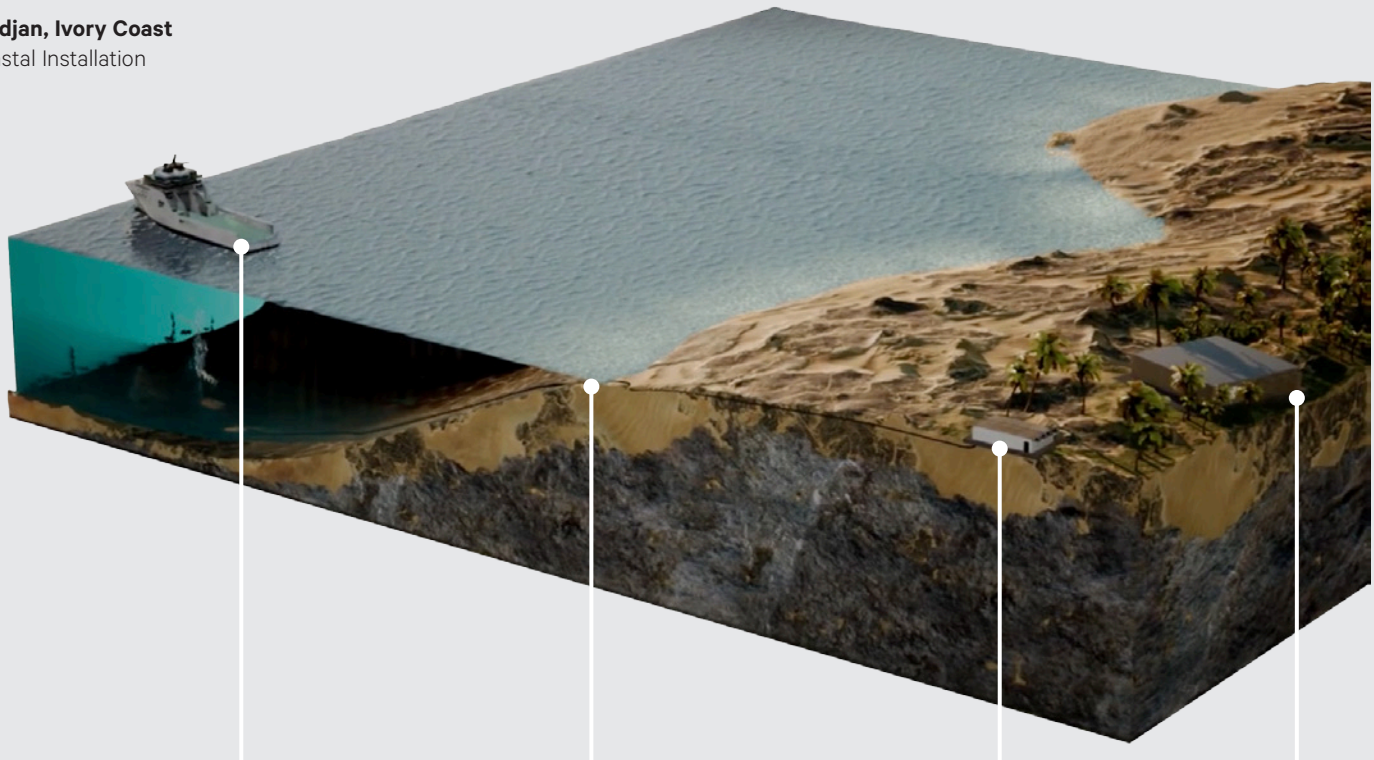
These partnerships and infrastructure investments, in addition to support for technology hubs and startup companies, boldly underline MainOne's vision for a better-connected region. The additional bandwidth these countries gain will also boost the development of fixed and mobile data to meet the increasing demands for Internet access via 3G and 4G networks. In addition to the broad benefits that mobile connectivity brings to regional economies and society as a whole.

Q A decade of experience pioneering high quality connectivity in Nigeria is significant but West Africa is a very diverse region. What challenges have you faced during the Ivory Coast project?

Our major challenge in the Ivory Coast was the location of the cable landing station and data centre site. Co-locating a data centre with the landing station ensures accessibility of the data centre content to local and international nodes, but we had to find an elevated coastal location with a gentle gradient. The site had to be within 5km of our beach manhole but avoid salinity issues associated with coastal data centres, while also offering a reliable clean power supply for rack cooling in this tropical environment. This proved challenging but we eventually found the ideal spot.

The landing station and data centre are located close to the Atlantic, built from prefabricated modules for flexibility and ease of expansion. The site provides an uninterruptible clean power solution, ensuring a controlled internal and external environment, and built with marine grade equipment as standard to protect against salinity. Other challenging requirements included IT efficiency, low OPEX, high availability, and high flexibility, which you may expect in any data centre.

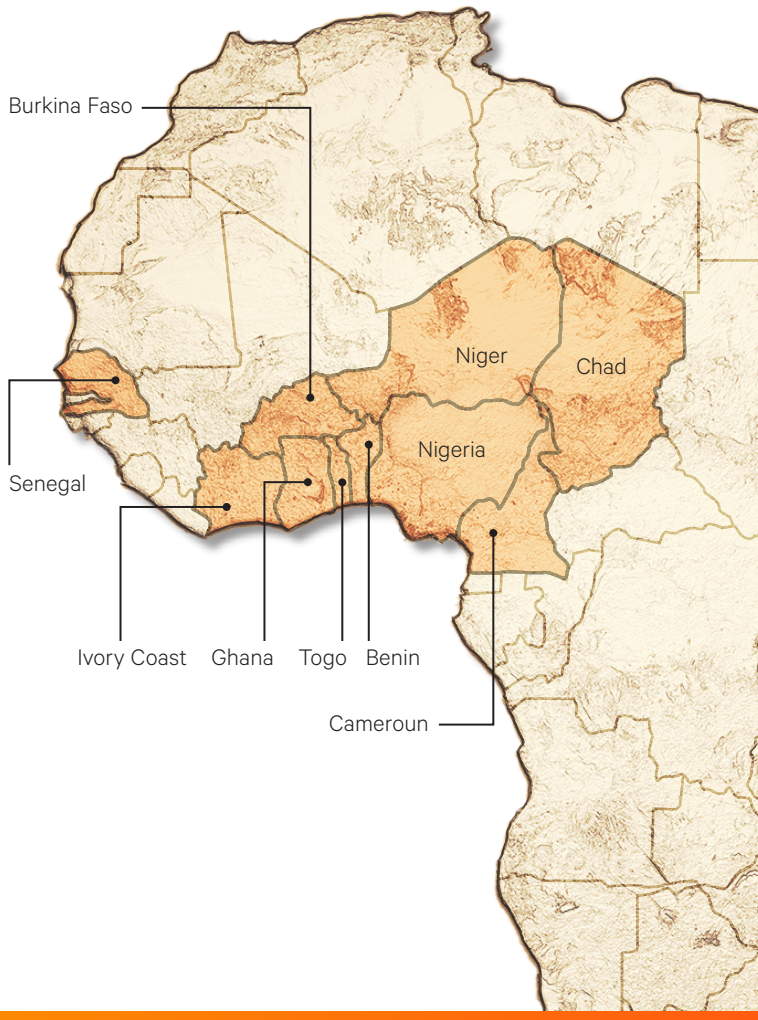
Abidjan, Ivory Coast
Coastal Installation



Q With connectivity progressing well in Nigeria and Ghana, and new projects underway in Ivory Coast and Senegal, what does the future hold for MainOne?

MainOne will continue with its mission to bring internet connectivity closer for all West Africans. We are fully committed to deepening broadband access via investments in fibre infrastructure and data centres across West Africa. Using our 100G international submarine cable system, we aim to guarantee highly reliable connectivity to support the growing demand for Internet access in 10 countries; Nigeria, Ghana, Ivory Coast, Burkina Faso, Togo, Cameroun, Benin, Niger, Senegal and Chad.

In order to further accelerate the proliferation of broadband and trigger digital transformation in the region, MainOne will continue to invest in new data centre real estate, as we have already done in Nigeria, Ghana and Ivory Coast. Our objective is to put Africa on the map and precipitate the growth of industries powered by technology. By investing in and bringing meaningful technology solutions to businesses, we support West Africans in their quest for improved productivity and efficiency through dedicated and reliable connectivity services.



Q As you continue to drive major new projects in challenging markets you must place great importance in selecting your international partners and suppliers. What made you choose Vertiv for this project?

We had Three Key Requirements for a Successful Vendor Partnership

#1 Really important was we needed to be confident of a vendor who had an **established in-region presence** in the region with skilled people who understood the nuances of Africa and West Africa.

#2 As our business is scaling, we needed a solution and a vendor who could **scale with us**.

#3 As time is always against us, a solution and vendor that we could rely on to **rapidly deliver the solution** we needed was critical.

THIS IS WHY WE CHOSE VERTIV

The Solution

The customer required a cable landing station and a 10 racks data center, for its site in Abidjan, Ivory Coast, that serves the 7,000 km submarine cable system running down the coast of West Africa.

Vertiv supplied a Prefabricated Cable Landing Station module for 20 Telecom racks.

This integrated solution consisted of:

- **2 x NetSure™ 7100** cabinets with 7 rectifiers each, in a 2N configuration,
- **Battery system** providing 4h back-up at full load,
- **3 x Liebert® HPS014** cooling units.

Prefabricated Cable Landing Station
Abidjan, Ivory Coast

The second module will be a Tier III compliant SmartMod prefabricated data center, consisting of:

- **2N power** system configuration,
- **2 x Liebert APM** UPS with a 27' backup time,
- **3 x Liebert CR021RA** direct expansion cooling units in a N+1 configuration,
- **10 x Knurr Miracel** IT racks with **2 x Liebert MPE** PDUs each,
- In addition to **access control, fire detection** and **suppression,** and **CCTV** equipment.

The tailored solution needed to meet an aggressive deadline and be ready within less than six months including the full turnkey project. The Vertiv IMS team was responsible for the design, factory acceptance testing and shipment, local installation, and provided commissioning of the prefabricated buildings.

Vertiv.com | **Vertiv Middle East DMCC** | 801, OneJLT, Jumeirah Lake Towers | Dubai, PO Box 337122, United Arab Emirates