The Growing Interconnect Ecosystem in Africa

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AfPIF 2023

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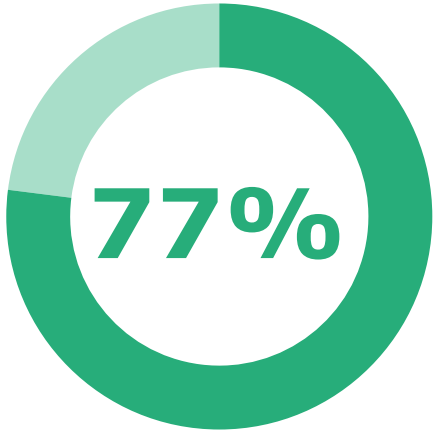
Looking back – Africa a decade ago

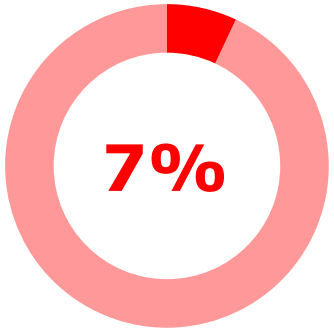
41%

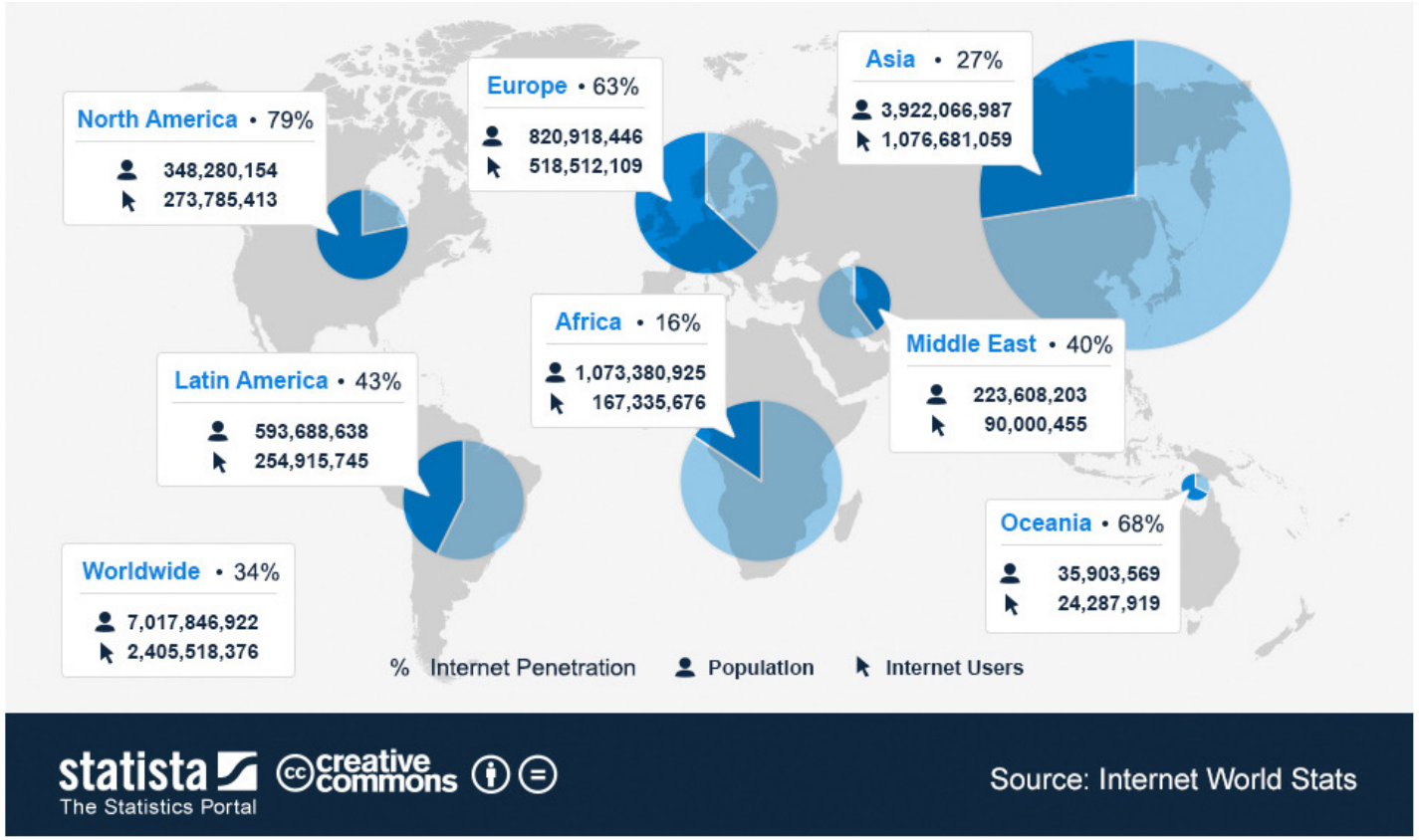
of the world's households were connected to the Internet



Level of household internet penetration in Europe (2013)

Level of household internet penetration in Africa (2013)





Source: Mobile economy sub-Saharan Africa 2023, statista, ITU world

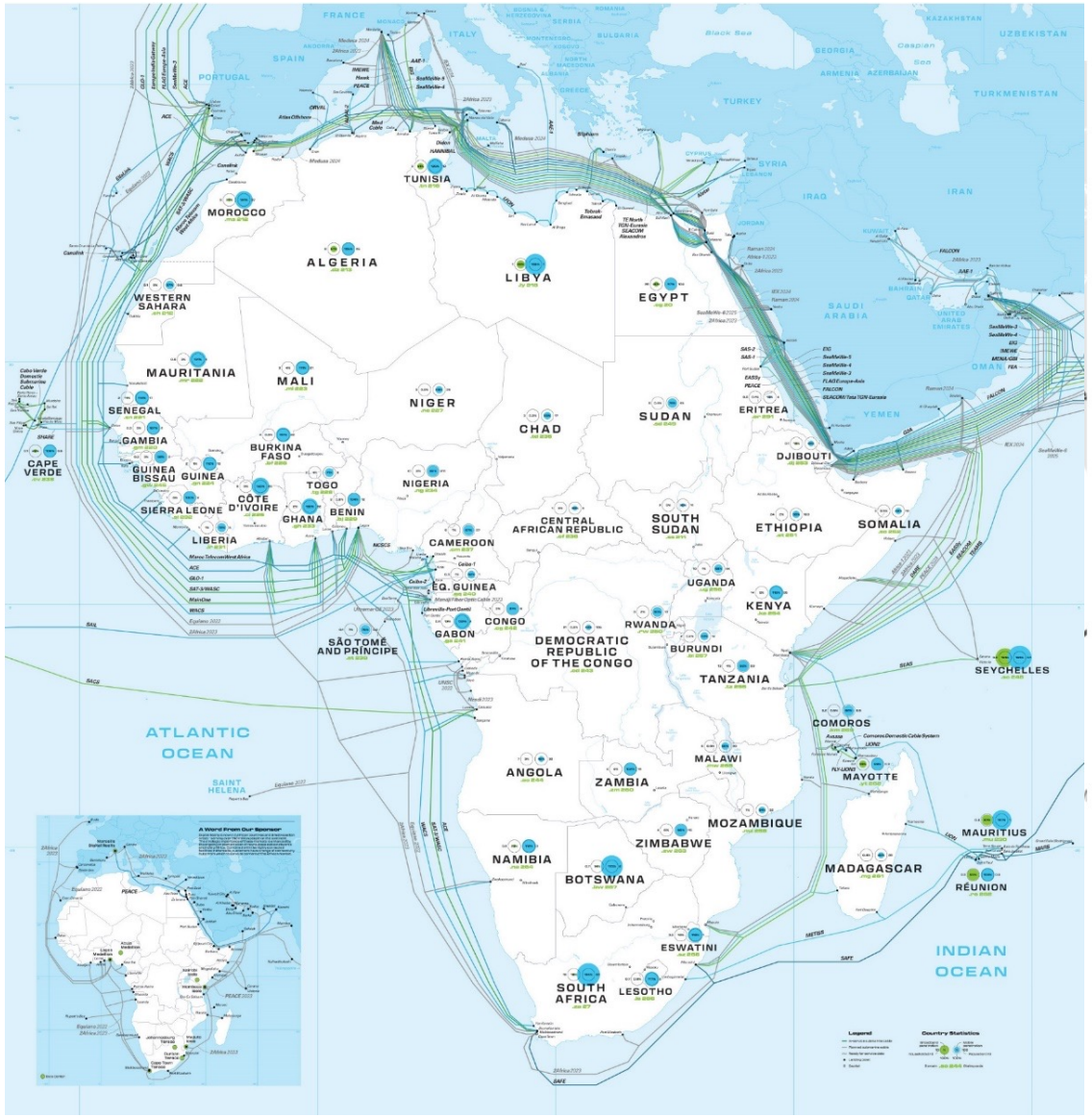
Growth in Africa from a decade ago

Submarine Cable Connectivity – Africa today

Among the 54 African countries recognized by United Nations, there are 38 countries that have seashore. Out of these 38 countries that have seashore, **37 countries** have at least one submarine cable landing

Africa's total inbound international Internet bandwidth (2022)

26.9 Tbps



Source: stats.afrinic.net, internetworldstats, NAPAfrica, Regional Internet Registries Statistics

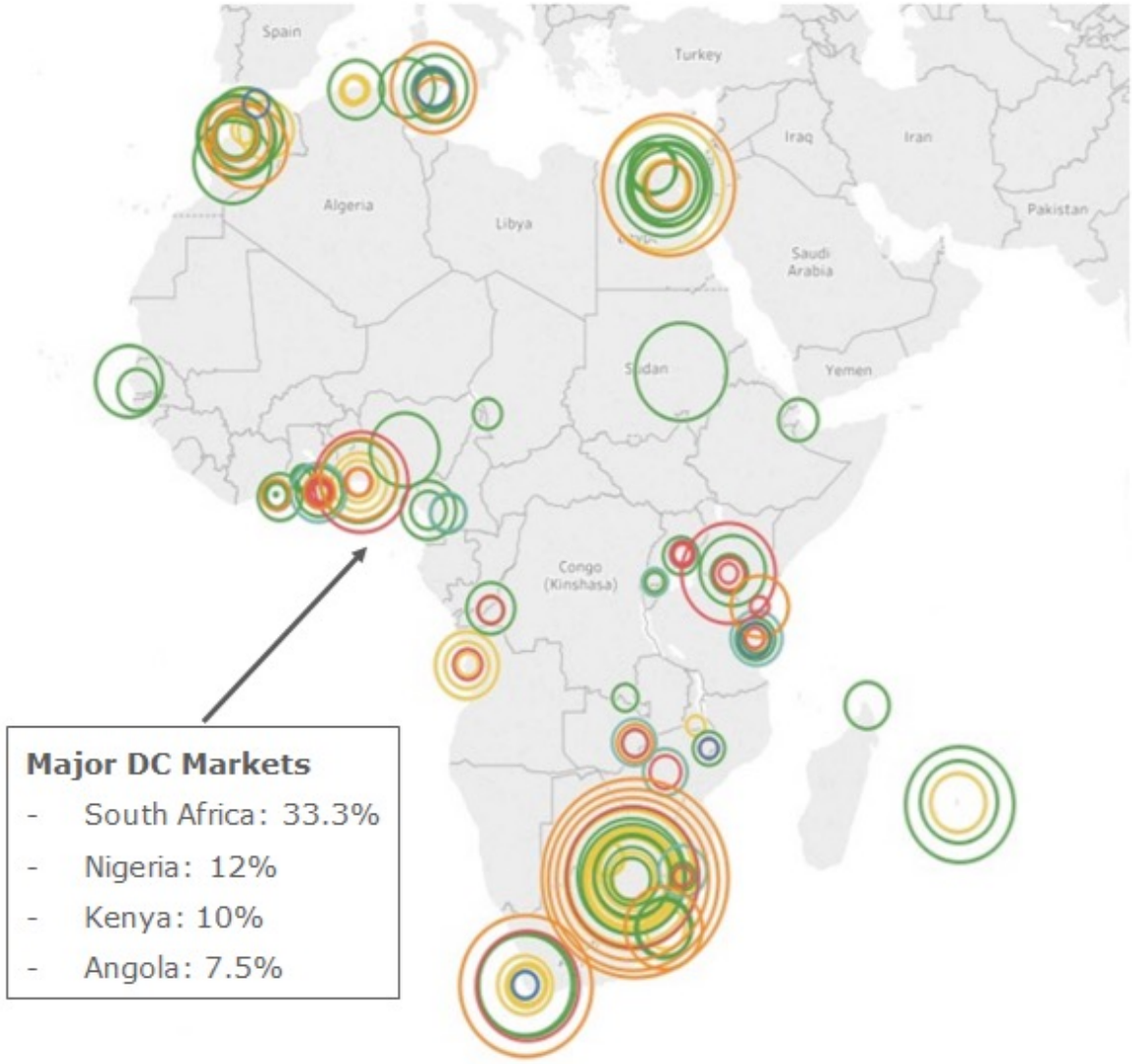
Interconnection and Terrestrial Reach

	No. of Data Centers	DC Size (MW)	Average MW per DC
South Africa	25	196	7.8
Rest of South Africa	31	15	0.5
North Africa	36	48	1.3
East Africa	32	21	0.7
West Africa	34	70	2.1

In **South Africa**, the average data centre size (as of the end of 2022) was 7.8 Megawatts.
This is more than three-times (3x) the size of the next largest region – **West Africa.**

There is a substantial difference in scale between South Africa and the other regions based on current installed base.

The gap in scale is projected to narrow within the next decade as more wholesale capacity is being planned across all regions.



Source: www.sadc.int, www.africabandwidthmaps.com, techcabal.com

Interconnection and Terrestrial Reach

South Africa Region

Use Case: South Africa

Population **60** million

NAPAfrica (JB, CT & DB)

500+	1,540+	3000 Gbps
ASN		
Connected networks	Connected Ports	Peak traffic

West Africa Region

Use Case: Nigeria

Population **221** million

Internet Exchange Point of Nigeria

122+	188	+400 Gbps
ASN		
Connected networks	Connected Ports	Peak traffic

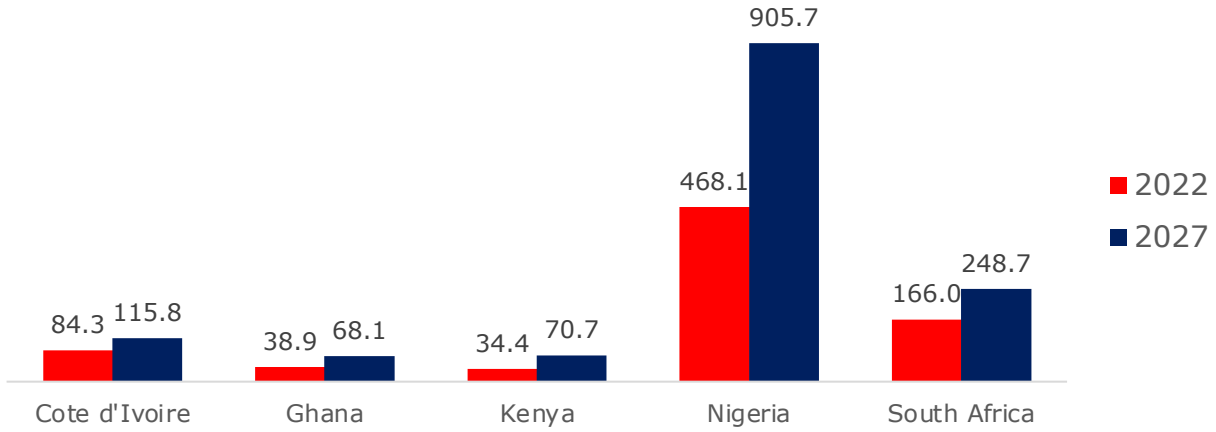
Source: TeleGeography, www.africabandwidthmaps.com, techcabal.com, speedtest.net

Why Africa? Interconnection Drivers

Content Demand

- Public peering capacity has grown at a CAGR of 67% since 2017 across major markets in Africa.
- Top CDNs and content origins (Akamai, Netflix, Fastly, Edge, etc) will also increasingly roll out in new regions or scale up existing deployments to meet demand for content.
- Emergence of new local African content producers and distributors (Iroko TV, Filmhouse, Nollywood etc.)

Forecasted Video Streaming Market (2022 - 2027), $m



Source: Statista, Africa News, Peering DB, World Bank, GSMA

Cloud Entry

- AWS, Google and Microsoft have announced or rolled out regions in African markets
- Multiple cloud players have begun peering and leasing small amounts of space in select African markets
- As the African market continues to evolve, deployment size and peering capacities would increase

	Public Peering (Tbps)	Peering Growth (`17 – '22)	Cloud players (Azs)	Cloud On-Ramps
Accra	0.16	177%	0	1
Nairobi	0.68	77%	1	0
Lagos	1.17	72%	2	0
Cape Town	6.64	71%	3	2
Johannesburg	17.57	64%	2	3
Cairo	0.14	82%	0	0

Growth Forecast – West Africa

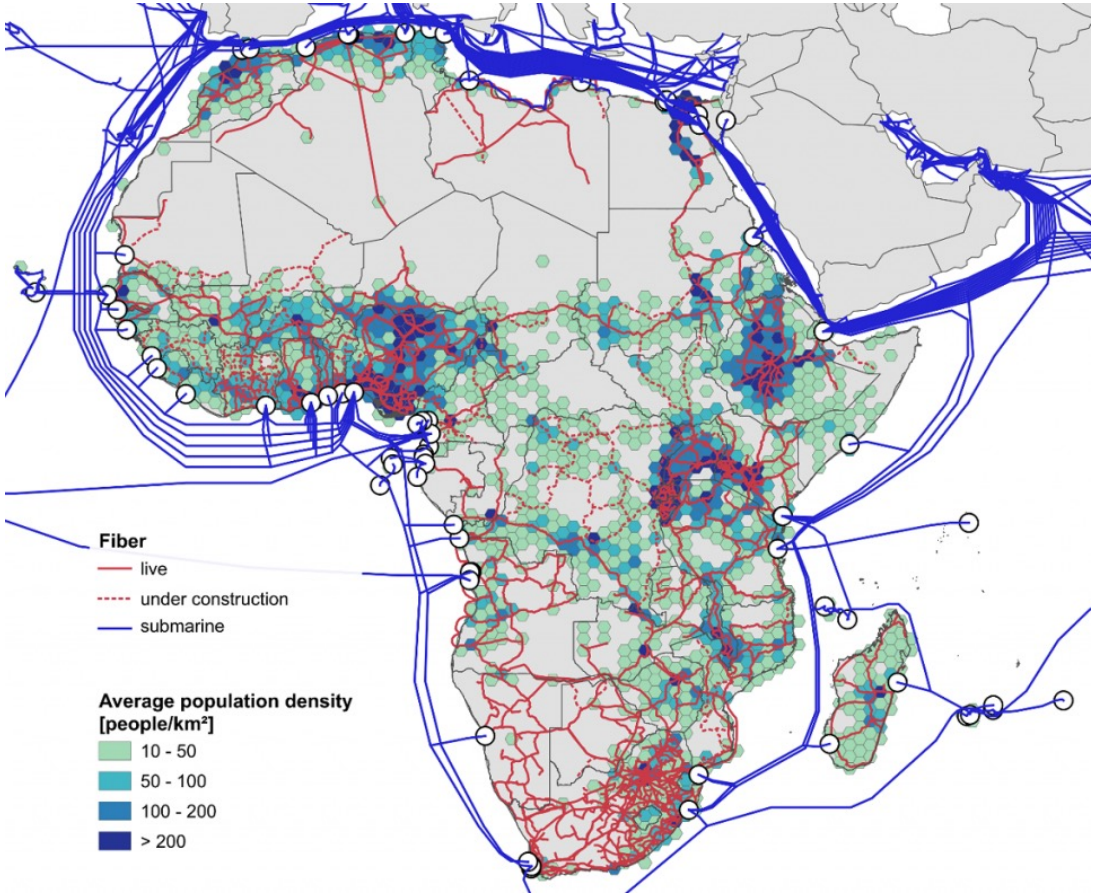
The African fiber market has witnessed significant infrastructure build over the past decade.

25

Africa-focused Submarine cables

since 2010

More than **500 Tbps** of potential international capacity brought in



Enabling growth in the region requires:

- **Investments in terrestrial fiber infrastructure**
- **Policies that foster intra-regional interconnections**
- **Data Center and Regional IXP investments**

Source: CBRA Africa Market Report 2022

Growth Forecast – West Africa

There is a substantial difference between South Africa and other regions based on current infrastructure.
Between 2022 – 2027, there is a forecasted increase in wholesale capacity across other regions

The introduction of new wholesale data centers in **West Africa** are substantially responsible for the forecasted increase in capacity, growing to over 1GW.
The regions have advertised powers ranging from **25MW** to **64MW** or more per wholesale data center.

Source: CBRA Africa Market Report 2022

Hyperscale Demand

It is only a matter of time before the large hyperscale users invest in new cloud regions outside South Africa – West and East Africa.

Regulation and data sovereignty

Government interventions will spur the use of domestic cloud in the larger data center markets in West Africa.

Acceptance of Latency

Cloud regions would be set up in regions with better latency for connections between Africa and Europe.

Equinix IBX Colocation & Interconnection

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EQUINIX

10,000	240+	71	32	>99.9999%
Customers	Data Centers	Metros	Countries	Uptime Record

1,000
On-net customers

7,000 KM
Subsea Cable

+1,200 KM
Metro Fibre Network

Peering
AMS-IX, Lagos

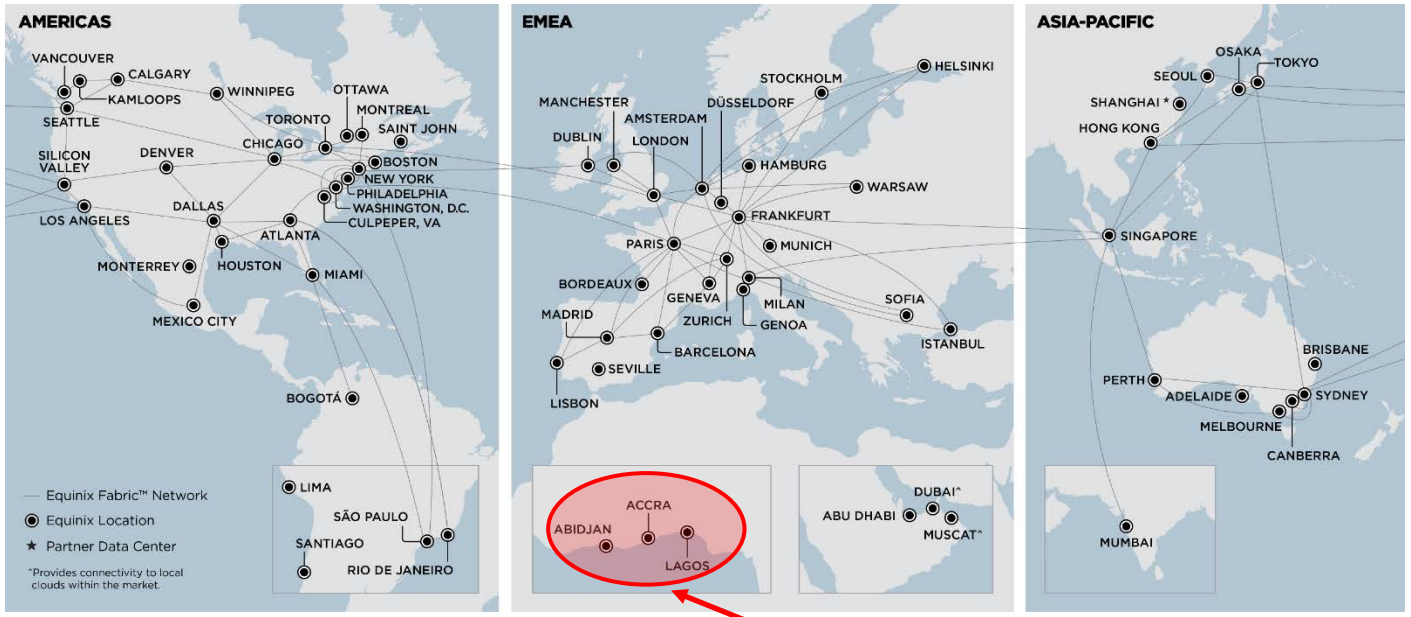
Peering
IXPN, Lagos

Peering
LINX, London

Peering
AMS-IX, Amsterdam

Peering
DE-CIX, Lisbon

Peering
GIX Ghana and CIVIX, CIV



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LG1, LG2, LG3, AP1, AC1

MainOne Terrestrial & Subsea Network

49+	9+	2+	25+	20+
Network Services	Content & Media	Cloud Services	Financial Services	Enterprises

Thank you

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