

# How far behind

🔍 are we really? ✕

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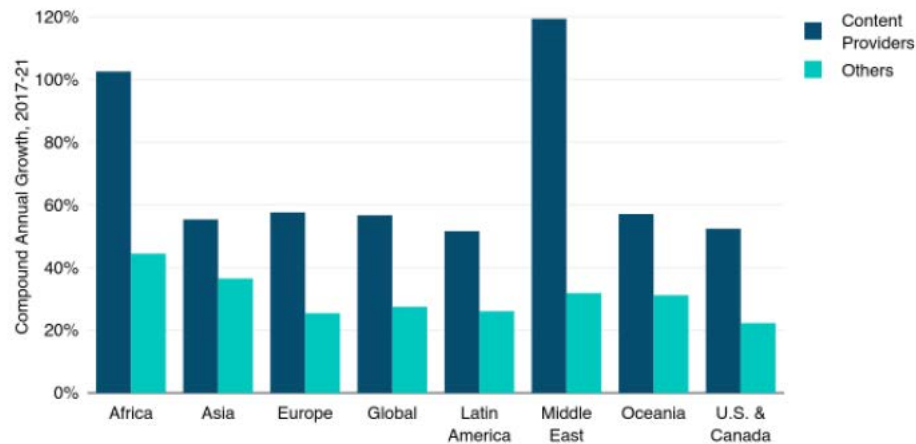
# Subsea Cables & Capacity



In 2010 there were 30 cables in service and by year-end 2022 there were 60. If you add planned cables, there will be at least 71 cable systems by 2025.

Total used international capacity in YE2021 is 37.8 Tbps – this includes internet (public IP backbone, content provider capacity and private networks)

FIGURE 4  
Content Providers versus Others Bandwidth Growth by Region



Source: TeleGeography

© 2023 TeleGeography

Region	Year	Tbps	Annual Change
Africa	2017	7.205792012	0.629819522
Africa	2018	10.95351066	0.520098088
Africa	2019	15.6251954	0.426501137
Africa	2020	25.51540273	0.632965353
Africa	2021	37.84567274	0.483248105

# Subsea Cables & Capacity

**1,300,000km**

As of 2021, it is believed that there are over **1.3 million kilometers of submarine cables** in service globally with a total of ~450 submarine cable systems in-service around the world. Some cables are quite short, like the 7-km Groix4 cable between Petit Perello and Port Nâl, France.

**45,000km / 33 Countries / 3 Continents**

The 2Africa cable initiated by Meta, is the **longest cable in the world spanning 45,000 km and will connect 33 countries on 3 continents**; Africa, Europe, and Asia, representing 3 billion people, when it is fully operational in 2024. The moon is 384 400 km from earth, which in theory means that we can do two loops around the moon and back to earth.

**100 Gbps -20%**

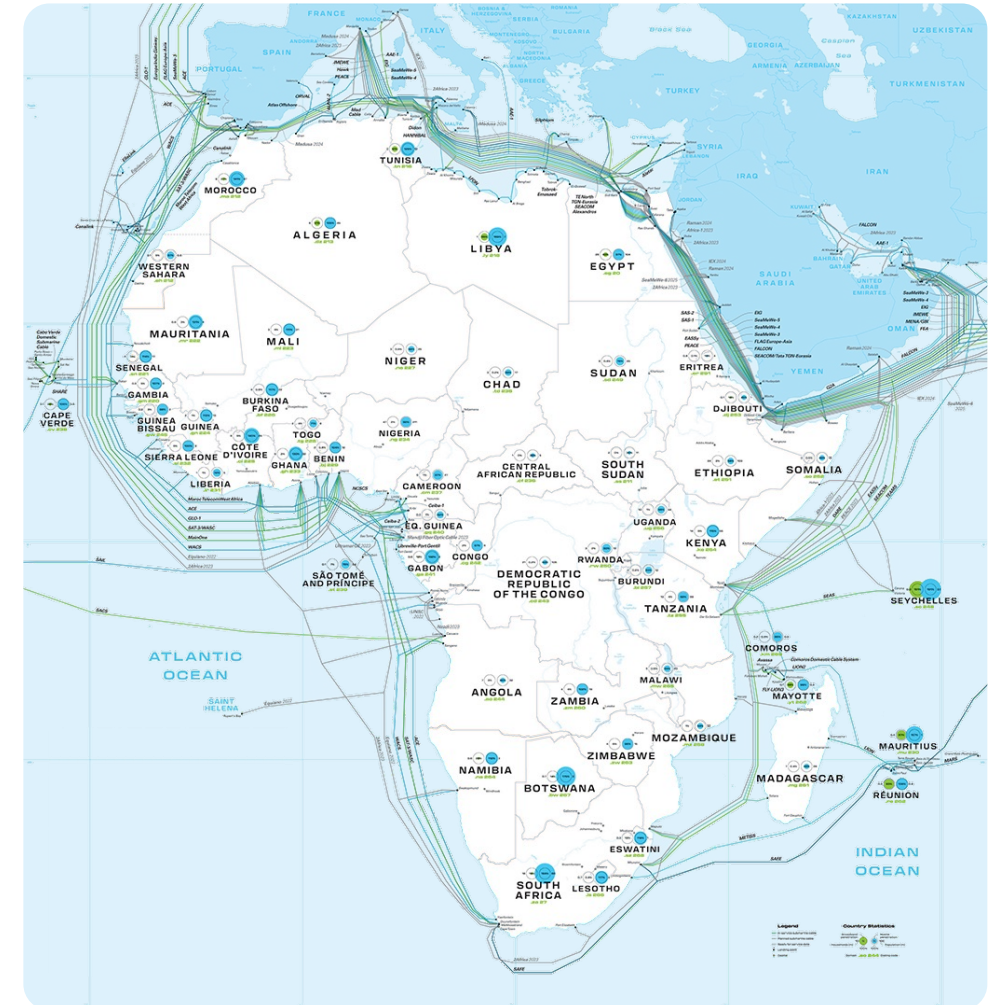
Prices continue to decline, but the bigger story this year has been how the pace of price erosion compares to previous years. **100 Gbps wavelength prices decreased an average of 12%** between 2018 and 2021. That's compared to **20% over the past five years**.

**DQL Index**

The **2022 Digital Quality of Life (DQL) Index**, a study on the quality of digital wellbeing across 117 countries (92% of the global population), found that South Africa's internet quality remains the best in Africa.

**51%**

With a **penetration rate of 51 per cent** of the total population of the country, Nigeria is one of the leading countries with the highest number of Internet users. Egypt ranks second in the number of Internet users. The penetration rate of countries like the South Africa, Kenya and Tanzania is more than 30 per cent.



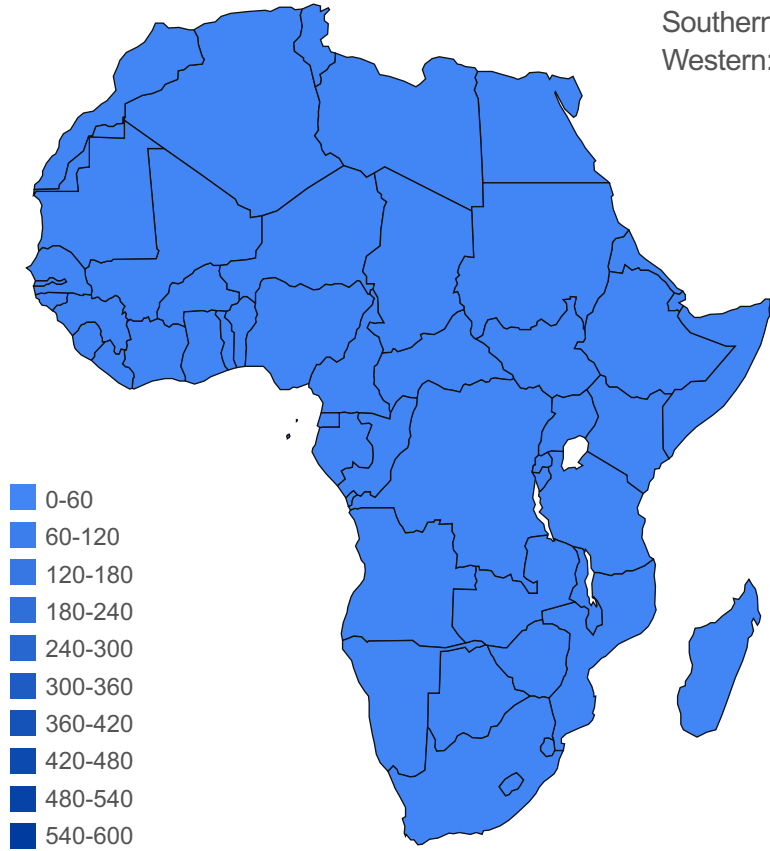
2013

Total ASN Allocated

132

Filter by Region

Central: 12  
Eastern: 21  
Indian Ocean: 7  
Northerns: 12  
Southern: 48  
Western: 32



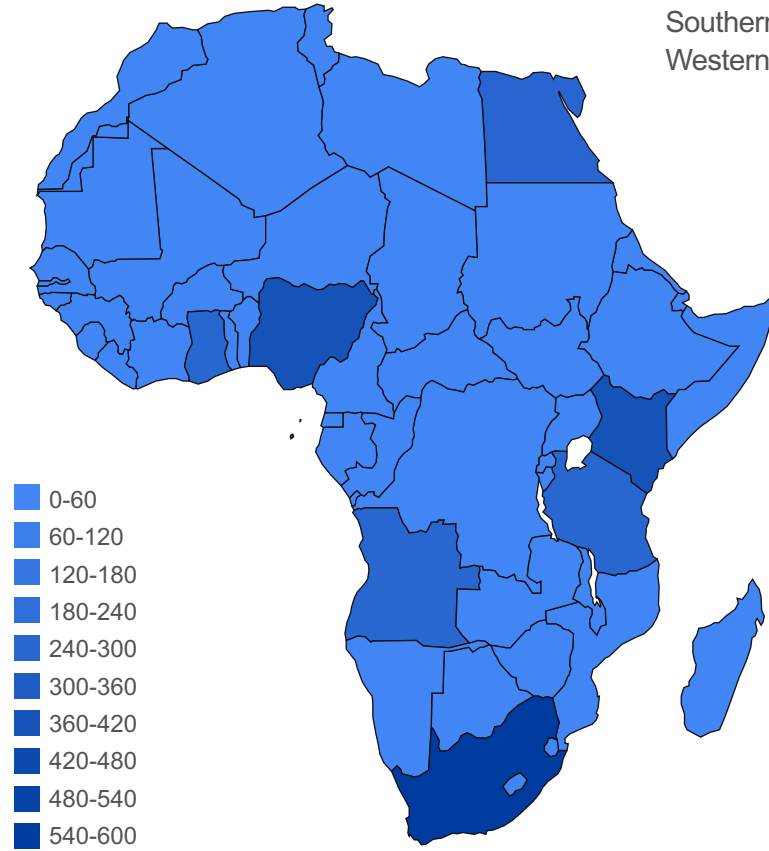
2023

Total ASN Allocated

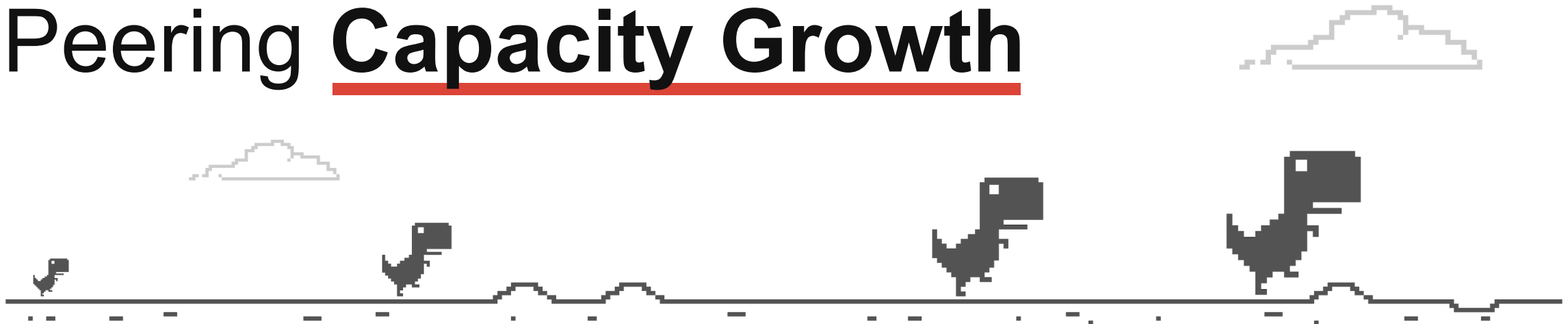
2,257

Filter by Region

Central: 111  
Eastern: 369  
Indian Ocean: 78  
Northerns: 213  
Southern: 959  
Western: 527



# Peering Capacity Growth



2013

0	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	783	826	349
AMS	278	102	61
AF	48	2	1
EU	4,253	5,751	3,086
AS	501	742	386
WO	0	0	0
	5,863	7,423	3,883
	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	13.35 %	11.13 %	8.99 %
AMS	4.74 %	1.37 %	1.57 %
AF	0.82 %	0.03 %	0.03 %
EU	72.54 %	77.48 %	79.47 %
AS	8.55 %	10.00 %	9.94 %
WO	0.00 %	0.00 %	0.00 %

2023

0	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	3,791	13,837	6,870
AMS	162	5,820	2,190
AF	502	3,120	0
EU	5,107	35,780	10,881
AS	749	7,559	1,495
WO	0	0	0
	10,311	66,116	21,436
	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	36.77 %	20.93 %	32.05 %
AMS	1.57 %	8.80 %	10.22 %
AF	4.87 %	4.72 %	0.00 %
EU	49.53 %	54.12 %	50.76 %
AS	7.26 %	11.43 %	6.97 %
WO	0.00 %	0.00 %	0.00 %

10 Years Growth

	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	3,008	13,011	6,521
AMS	-116	5,718	2,129
AF	454	3,118	-1
EU	854	30,029	7,795
AS	248	6,817	1,109
WO	0	0	0
	Members	Max throughput (Gbit/s)	Av throughput (Gbit/s)
AMN	484.16 %	1675.19 %	1968.51 %
AMS	58.27 %	5705.88 %	3590.16 %
AF	1045.83 %	156000.00 %	0.00 %
EU	120.08 %	622.15 %	352.61 %
AS	149.50 %	1018.73 %	387.20 %
	0	0	0

# Internet in Africa



## 52.17 Mbps / 28.62 Mbps / 19.29 Mbps

The **average internet download speed** in Sub-Saharan Africa was highest in **Rwanda, South Africa, and Madagascar** in 2022. These countries registered internet speeds reaching **52.17 megabits per second (Mbps), 28.62 Mbps, and 19.29 Mbps**, respectively.

## 10,9% / 13,7%

**South Sudan:** Has 10.9% internet penetration.

**Somalia:** Has 13.7% internet penetration. (Lowest in Africa)

## 43%

Despite the rising number of users, the internet penetration rate stood at around 43 percent in 2021, below a global average of 66 percent.

## 88,1%

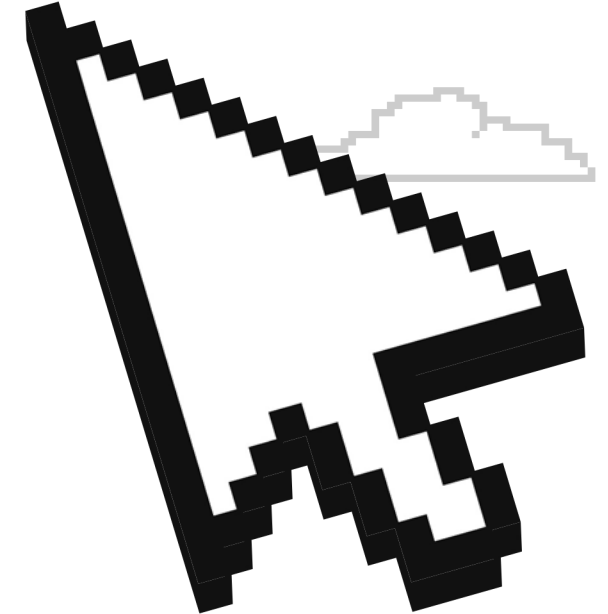
**Morocco has the highest internet penetration rate** reaching 88.1 percent, up from 84.1 percent the year before.

## 80%

As of 2022, the share of the **total population of South Africa using the internet was nearly 80 percent**. This share is estimated to grow up to 90 percent by 2027.

## 13%

**In 2021, roughly 13 percent of internet users worldwide were located in Africa.** The share of internet users in Africa has grown significantly in the last few years. In 2009, only about four percent of internet users worldwide were in Africa. Internet penetration in Africa is about 40 percent. Even if the rates increased considerably in the last year, internet penetration is still under the global average.



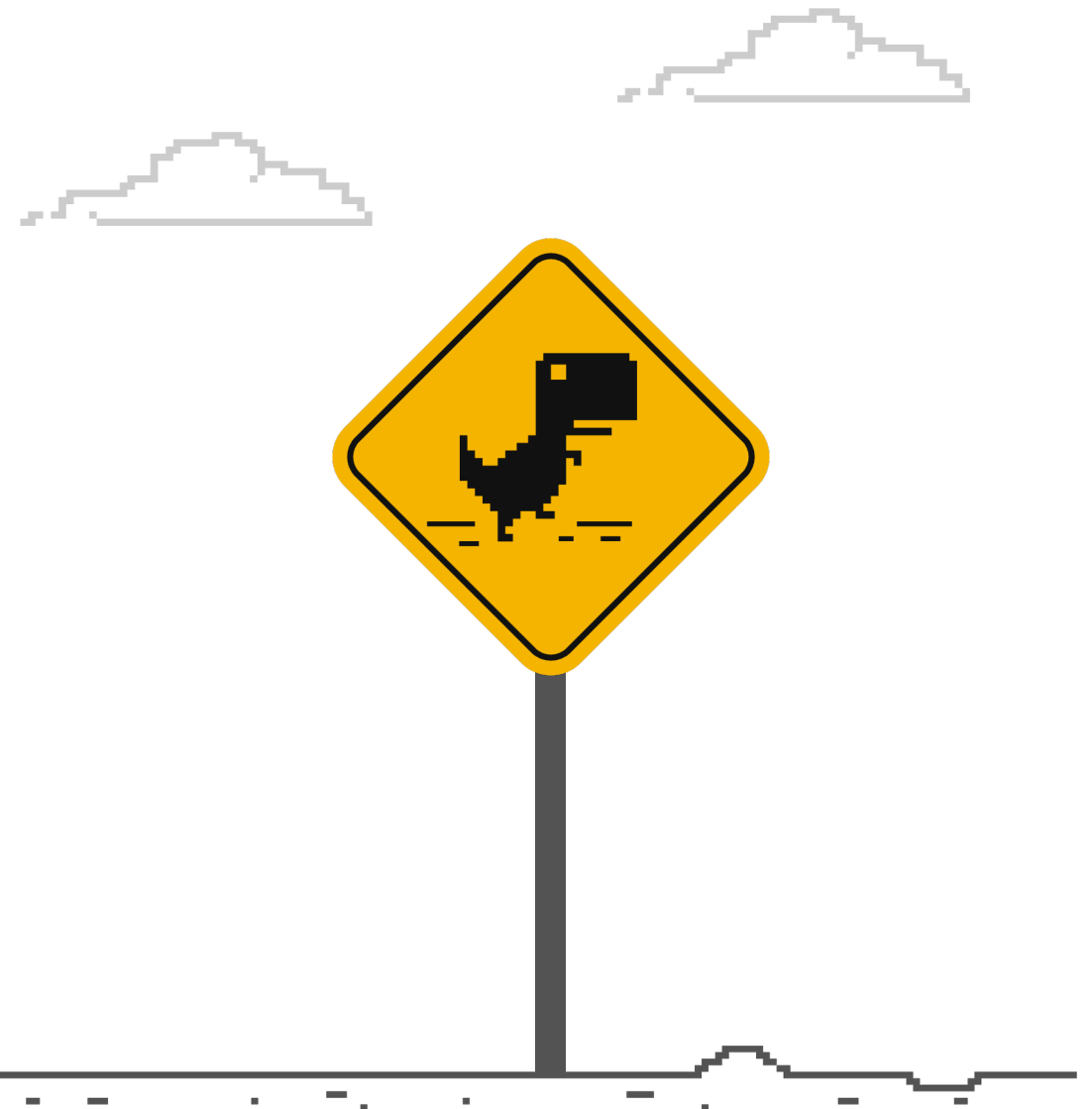
# The Challenges

Africa is well-known for its unstable power supply which has pushed data center's to be innovative and invest in alternative power supply.

Political restrictions.

High Layer 2 Connectivity Costs.

Poor infrastructure and the control that telecommunication operators have over consumer rates are among the leading causes of Africa's high data costs





Please cut the internet  
Dino some slack...

He's doing his  
best to keep us  
connected.

