## NATIONAL COMMUNICATIONS AUTHORITY



# THE COST OF 1GB OF MOBILE DATA IN GHANA

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## **Executive Summary**

The Billing Verification Unit of NCA conducted a market surveillance on the price of internet data to determine the cost of 1GB of data per month. At the end of the exercise, it was realized that the, average cost of a gigabyte of data per month was GH¢6.3005 (\$0.4864); the cost of the cheapest gigabyte of data per month was GH¢1.0781 (\$0.0832) and the most expensive gigabyte of data per month available was GH¢16.7731 (\$1.2949).

#### Introduction

A report on Worldwide Mobile Pricing League published by cable.co.uk ranked Ghana 3<sup>rd</sup> position in the Sub-Saharan Africa Region as the country with the cheapest cost of 1GB of data per month. Ghana was ranked 2<sup>nd</sup> in the West African Region. The report indicated that the average cost of a gigabyte of data per month was GHs5.36 (\$0.40).

Please find below the graphical representation of the results from cable.co.uk

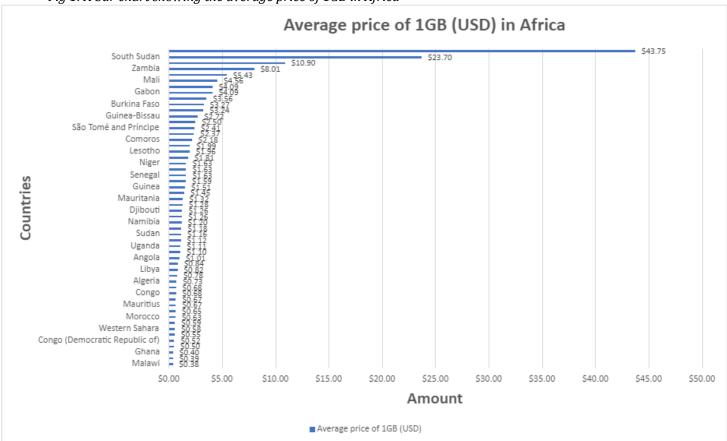
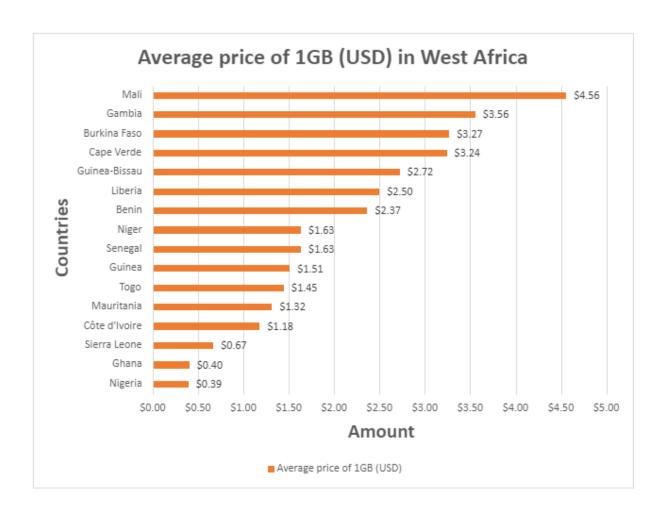


Fig 1: A bar chart showing the average price of 1GB in Africa

Fig 2: A bar chart showing the average price of 1GB in West Africa



The Billing Unit conducted a similar survey using a similar methodology to obtain the average cost of a gigabyte of data in West Africa to compare results.

## **Guidelines Used for Data Collation**

The following were considered in the data-gathering process;

- 1. All data bundle information (prices and allocation) was obtained from the official websites of the various Mobile Operators in each West African country.
- 2. A total of four hundred and ninety-two (492) data plans were collated.
- 3. Data plan prices were recorded in their advertised currencies and then converted to the US Dollar using the rates from Google Finance as of 9th April, 2024.

#### **METHODOLOGY**

Below are the steps followed in the ranking of West African countries according to their tariffs and bundle offers:

- Data Extraction: Collection and collation of all bundles from operator websites of all West African countries.
- Tariff Conversion: The collected data underwent Tariff Conversion to create a standardized and comparable basis for assessing tariffs across the different countries. Exchange rates from Google Finance were used to convert the tariffs to the United States (US) dollar. The conversion was done on 9th April 2024 using the exchange rates shown in Table 1.

Table 1: Conversion Rates of West African Currencies to USD

Currency	Amount	USD
West African CFA	1	0.0017
Cape Verdean Escudo	1	0.0098
Gambian Dalasi	1	0.015
Ghanaian Cedi	1	0.075
Nigerian Naira	1	0.00080
Liberian Dollar	1	0.0052
Guinean Franc	1	0.00012
Sierra Leonean Leone	1	0.000051

- Computation of average bundle tariff per megabyte per country: This is done by summing up all the bundle tariffs for all operators in a country and then dividing it by the total number of bundles considered.
- Computation of price per gigabyte. Results from the price per megabyte was then multiplied by 1000 to obtain the price per 1 gigabyte
- Ranking Criteria: Based on the computation, the West African countries were ranked according to their average price per gigabyte, with the lowest average tariff receiving the highest rank.

#### RESULTS

Please find below Table 2 which compares the rankings by cable.co.uk to that of the NCA:

Table 2: Comparison of rankings by cable.co.uk to the NCA

Country	Sample size of cable.co.uk	Sample size of NCA	Average price per 1GB cable.co.uk	Average price per 1GB NCA	Rank by cable.co.uk	Rank by NCA
Guinea Bissau	12	28	\$2.72	\$2.22	Nigeria - 1st	Sierra Leone - 1st
Guinea	18	0	\$1.51		Ghana - 2nd	Liberia - 2nd
Ghana	20	21	\$0.40	\$0.96	Sierra Leone - 3rd	Ghana - 3rd
Togo	22	21	\$1.45	\$1.56	Cote D'Ivoire - 4th	Cape Verde - 4th
Cape Verde	22	9	\$3.24	\$1.48	Togo - 5th	Togo - 5th
Gambia	24	41	\$3.56	\$2.31	Guinea - 6th	Nigeria - 6th
Mali	24	10	\$4.56	\$6.24	Senegal - 7th	Senegal - 7th
Senegal	28	29	\$1.63	\$1.89	Niger - 8th	Cote D'Ivoire - 8th
Sierra Leone	33	20	\$0.67	\$0.001	Benin - 9th	Guinea Bissau - 9th
Niger	34	37	\$1.63	\$3.00	Liberia - 10th	Benin - 10th
Cote D'Ivoire	38	24	\$1.18	\$1.97	Guinea Bissau - 11th	Gambia - 11th
Benin	40	60	\$2.37	\$2.31	Cape Verde - 12th	Niger - 12th
Liberia	43	25	\$2.50	\$0.01	Burkina Faso - 13th	Burkina Faso - 13th
Nigeria	55	92	\$0.39	\$1.88	Gambia - 14th	Mali - 14th
Burkina Faso	55	30	\$3.27	\$3.85	Mali - 15th	Guinea - 15th

https://www.cable.co.uk/mobiles/worldwide-data-pricing/ (Latest annual world rankings is September 2023. New publication is released every September)

#### **Conclusion:**

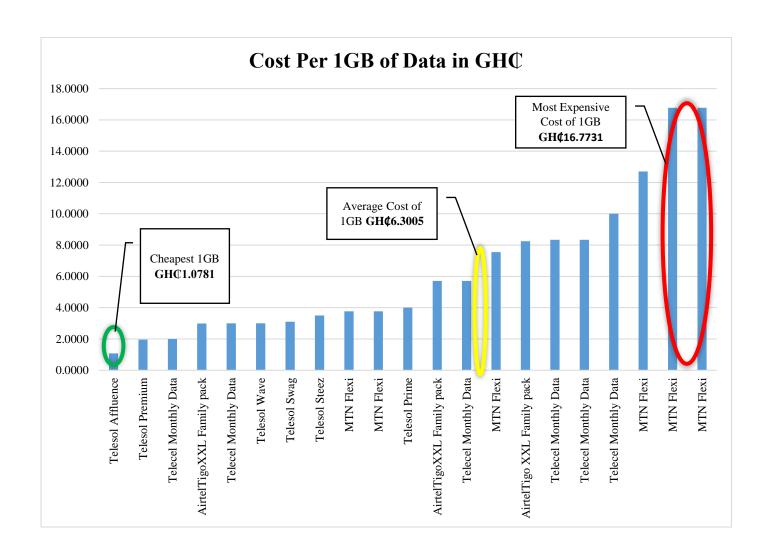
- Ghana has been positioned as the second-ranked country in terms of the lowest average price per one gigabyte, according to findings by cable.co.uk. This contrasts with the latest data compiled by the National Communications Authority (NCA), which positioned Ghana as the third-ranked country in this regard. This disparity can be attributed to variations in the sample sizes utilized and fluctuations in the value of the Ghanaian cedi. Notably, the sample size employed in the NCA's rankings was three times larger than that used by cable.co.uk.
- Similarly, Nigeria was initially identified as the top-ranked country by cable.co.uk.
  However, upon examination of the collated data, Nigeria's ranking dropped to sixth
  place. This discrepancy is attributable to disparities in sample sizes and fluctuations
  in the value of the Nigerian Naira. Cable.co.uk's conversion rate, as of September

2023, stood at 1 Naira = 0.0013. However, since then, the Naira has experienced devaluation, with the current rate at 1 Naira = 0.0008.

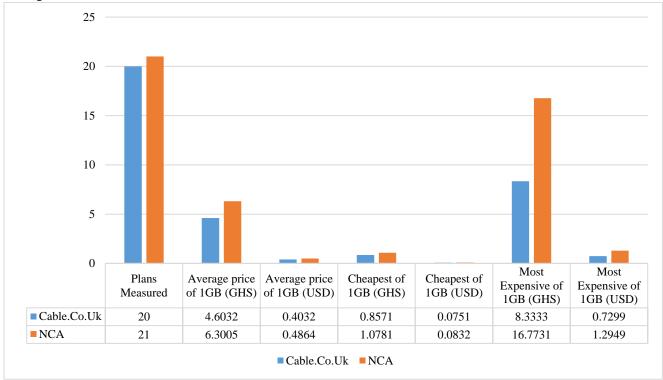
## **APPENDIX 1**

Cost of 1GB per Operator plans in Ghana

Provider	Data Type	GB	Price GHC	Cost Per 1GB of Data in GHC	Cost Per 1GB of Data in US\$
AT	AT XXL Family pack	12	99	8.2500	0.6369
	AT XXL Family pack	35	200	5.7143	0.4412
	AT XXL Family pack	117	350	2.9915	0.2310
Telecel	Telecel Monthly Data	2.4	20	8.3333	0.6434
	Telecel Monthly Data	5	50	10.0000	0.7720
	Telecel Monthly Data	12	100	8.3333	0.6434
	Telecel Monthly Data	35	200	5.7143	0.4412
	Telecel Monthly Data	100	300	3.0000	0.2316
	Telecel Monthly Data	200	400	2.0000	0.1544
Telesol	Telesol Wave	15	45	3.0000	0.2316
	Telesol Prime	10	40	4.0000	0.3088
	Telesol Steez	20	70	3.5000	0.2702
	Telesol Swag	50	155	3.1000	0.2393
	Telesol Premium	120	235	1.9583	0.1512
	Telesol Affluence	320	345	1.0781	0.0832
MTN	MTN Flexi	1	20	16.7731	1.2949
	MTN Flexi	3	50	16.7731	1.2949
	MTN Flexi	8	100	12.7078	0.9811
	MTN Flexi	27	200	7.5469	0.5826
	MTN Flexi	80	300	3.7683	0.2909
	MTN Flexi	93	350	3.7683	0.2909
Median (used as average of the study)				4.0000	0.3088
Average (Normal MEAN)				6.3005	0.4864
Cheapest Cost of 1GB per Month				1.0781	0.0832
Most Expensive Cost of 1GB per Month				16.7731	1.2949







## Limitations

- While most providers published internet bundles in data volumes (GB), MTN publishes bundles in Currency Format (GHS).
- MTN Ghana data is not expiry against whilst other Operators offered data has validity periods.