

April 22, 2024



Barometer of mobile Internet connections in Kenya

04/01/2023 - 03/31/2024



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**nPerf Network
assessment**

Expert in the telecom network optimization

nPerf is an independent French company based in Lyon (France). For over a decade, nPerf has been a trusted partner for both fixed and mobile operators, providing comprehensive network testing solutions and analysis. Our mission is to accurately measure, evaluate, and enhance the understanding of Internet connectivity around the world.



300k+ tests daily
worldwide.



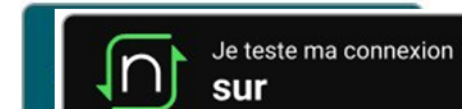
26Md+ coverage
scans in total.



3k+ servers all
around the world.

Test your Internet connection with nPerf!

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2. Executive Summary



The subscribers of Safaricom enjoyed the best mobile Internet performances in Kenya during 2024.

Cellular Internet connections in Kenya

	Airtel Mobile	Faiba	Safaricom	Telkom
Download bitrates (Mb/s)	16.87	10.67	21.65	2.73
Upload bitrates (Mb/s)	4.25	5.44	9.25	1.65
Latency (ms)	55.10	39.98	55.29	77.60
Web browsing (%)	35.92	37.73	36.38	15.54
Youtube streaming (%)	75.65	73.99	77.20	43.40
nPerf Score (nPoints)	40 028	40 034	46 323	9 793

Source : nperf.com



Best mobile Internet performance in 2024



Source : nperf.com



Source : nperf.com

In this analysis, we explore the mobile market in Kenya over the period from April 2023 to March 2024, focusing on key performance indicators (KPIs) such as download and upload speeds, latency, browsing, streaming experiences, and overall scores for the leading service providers: Safaricom, Airtel mobile, Faiba, and Telkom. These KPIs help to understand each provider's service quality and user experience.

Safaricom leads with robust performance across all metrics

Safaricom, the market leader, has consistently demonstrated superior performance across various KPIs. With download speeds averaging 22 mb/s and upload speeds at 9 mb/s, Safaricom not only offers robust internet connectivity but also ensures reliable and swift data handling capabilities. Notably, Safaricom's streaming quality average score stands out at 77, reflecting a high-quality user experience in video streaming services. The average score across all KPIs for Safaricom is a high 46,323 nPoints, suggesting a strong overall performance.

Airtel mobile: a strong contender

Airtel mobile shows commendable performance with an average download speed of 17 mb/s and an upload speed of 4 mb/s. Their streaming service scored an average of 76, which is comparable to the market leader, indicating Airtel's capability to provide quality streaming experiences. The overall average KPI score for Airtel is 40,028 nPoints, placing them as a competitive second in the market.

Faiba: competitive in niche areas

Faiba, while smaller in scale compared to Safaricom and Airtel, shows strength in specific areas. With an average download speed of 11 mb/s and an upload speed of 5 mb/s, Faiba offers competitive data services. Their streaming score averages at 74, slightly lower than its competitors but still within a good range. The overall score for Faiba stands at 40,034 nPoints.

Telkom: room for improvement

Telkom trails behind with significantly lower performance indicators. The average download and upload speeds are at 3 mb/s and 2 mb/s, respectively, which are considerably lower than the other providers. The streaming quality score is also low at 43. Telkom's overall performance score is just 9,793 nPoints, highlighting a substantial gap in service quality compared to its competitors.

Conclusion

The Kenyan mobile market shows a clear stratification with Safaricom leading, closely followed by Airtel mobile and Faiba in specific strengths, while Telkom lags significantly behind.

4. Methodology



nPerf provides a **free tool to assess Internet connection** quality via its website and mobile apps (Android, iOS). Daily, thousands of people rely on nPerf for speed tests in their country, contributing to a comprehensive crowdsourced database covering all operators.

The study employs a strong filtering method to reflect real customer experiences on a specific network (mobile or fixed line). Measures are taken to prevent probes and measurement robots from affecting the results.

For mobile connections, we assess:

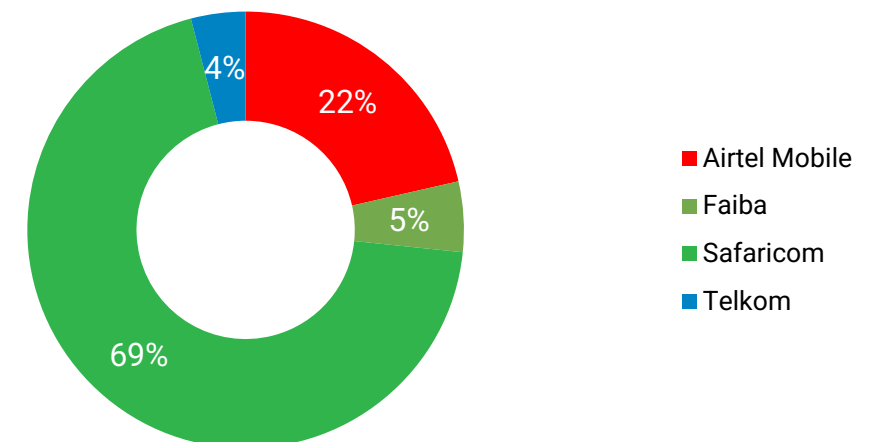
- ▼ **Download bitrate:**
Indicates the amount of data your connection can receive in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.
- ▲ **Upload bitrate:**
Indicates the amount of data your connection can send in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.
- ◀▶ **Latency (ping) :**
It indicated the delay a small packet of data requires to make a round-trip from your computer to the nPerf server. The shorter the delay, the most reactive your connection is. The main is the minimum value.
- 🌐 **Browsing performance :**
The browsing test assesses the load time of the fully loaded pages, including images, JavaScript, CSS, and fonts, for the five most popular sites. This indicator reflects the user's perceived quality of the Internet network.
- 📺 **Streaming performance :**
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the user's perceived quality of the Internet network.

Statistical precision is crucial in accurately determining winners. At nPerf, we prioritize test quality, precise reporting, and transparency. Analyzing a large volume of tests in this study, we've achieved 6.1% precision for absolute values, highlighting the reliability and accuracy of our data.

For a more comprehensive understanding of the user experience, our report features test results during both Busy hours (6 PM to 11 PM) and Idle hours (the rest of the day). Busy hours, marked by network strain, can impact user experience through congestion. This approach helps in understanding how network performance fluctuates throughout the day.

We only include national Internet service providers with test share above 4% share. The chart below shows the overall test distribution for each service provider.

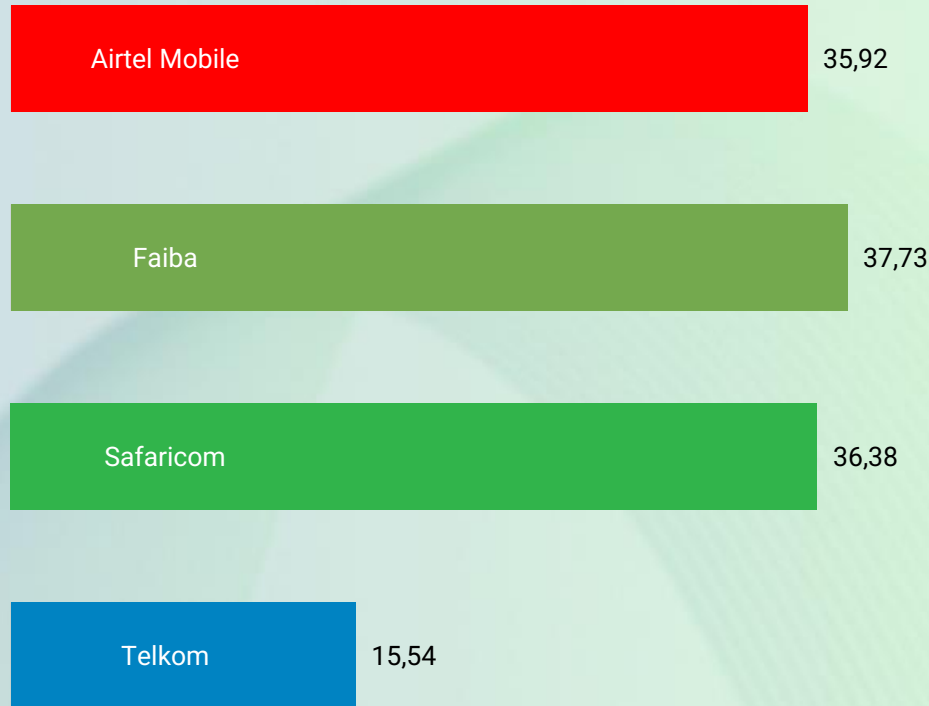
Overall distribution of the tests per provider (ISPs Share)



Source : nperf.com



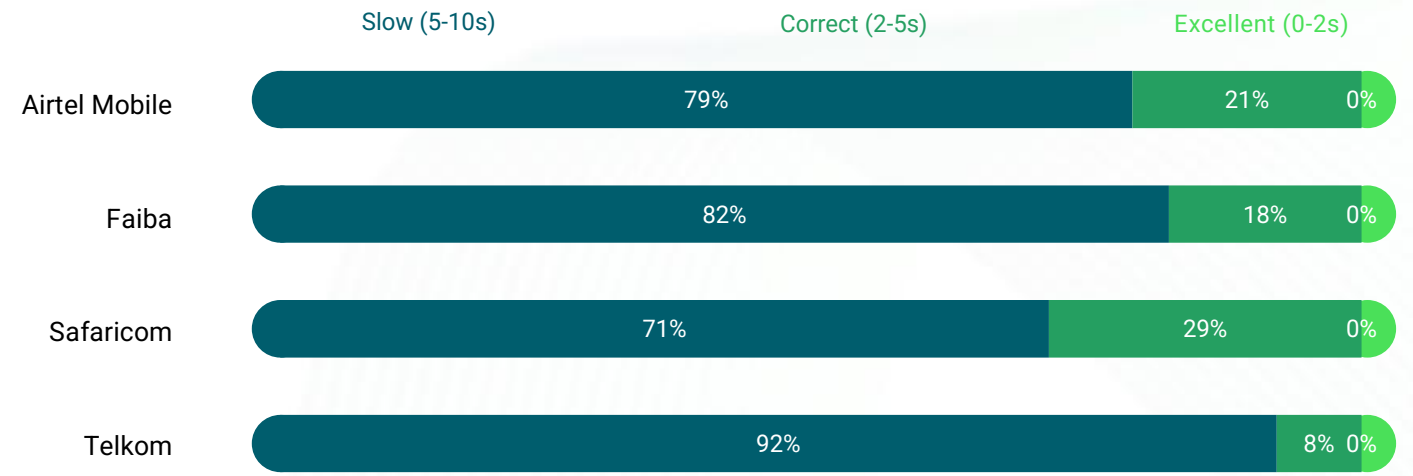
Browsing Performance rate (average)



Source : nperf.com

The subscribers of Airtel Mobile , Faiba and Safaricom enjoyed the best mobile Internet browsing performance in 2024.

Browsing Performance results ventilation (average)



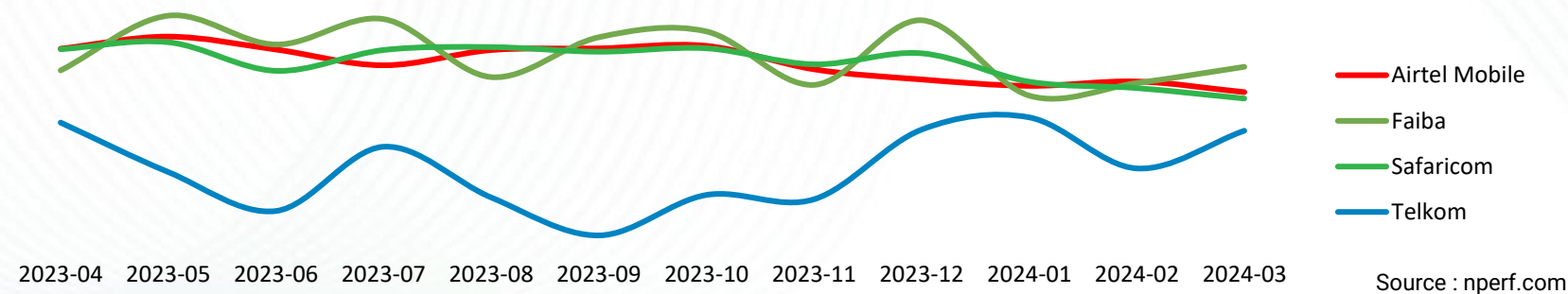
Source : nperf.com

Browsing Performance rate (average)



Source : nperf.com

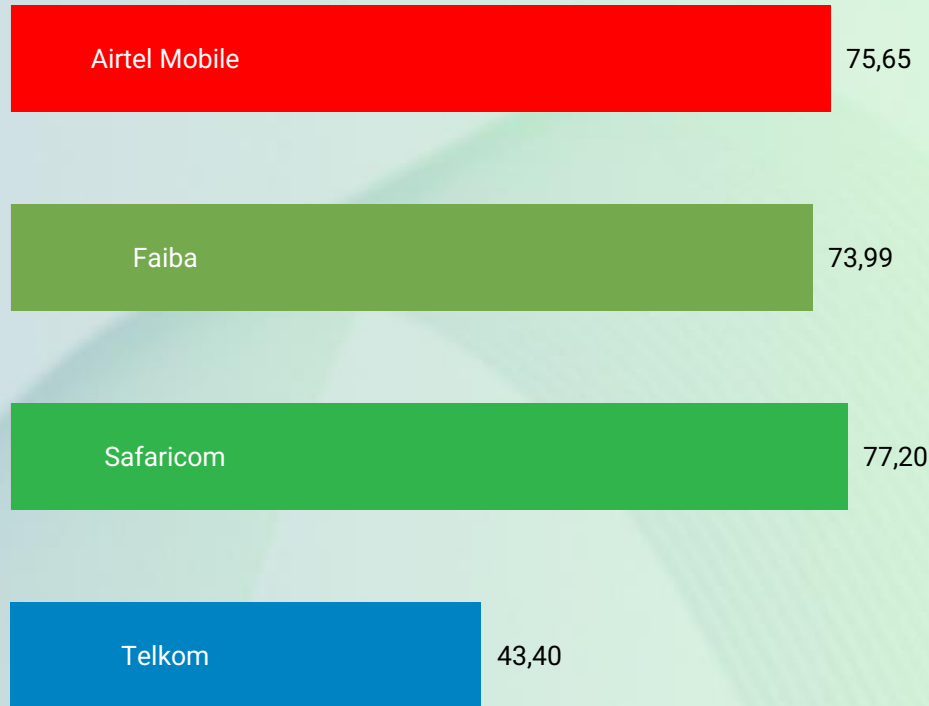
Browsing performance rate (average) evolution over the year



Source : nperf.com



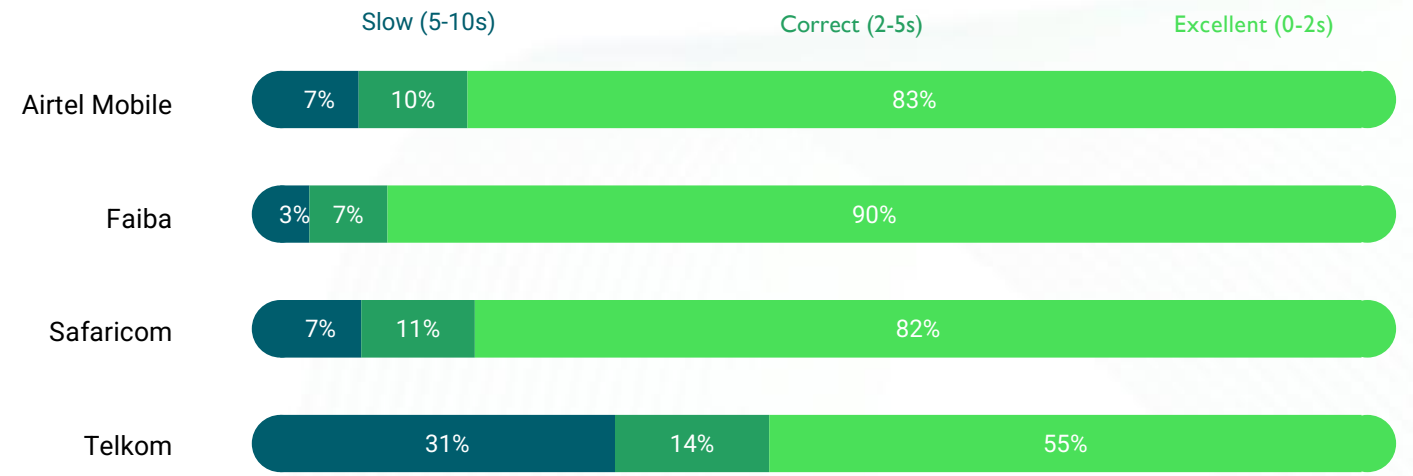
Streaming Performance rate (average)



Source : nperf.com

The subscribers of Airtel Mobile and Safaricom enjoyed the best mobile Internet streaming performance in 2024.

Streaming Performance results ventilation (average)



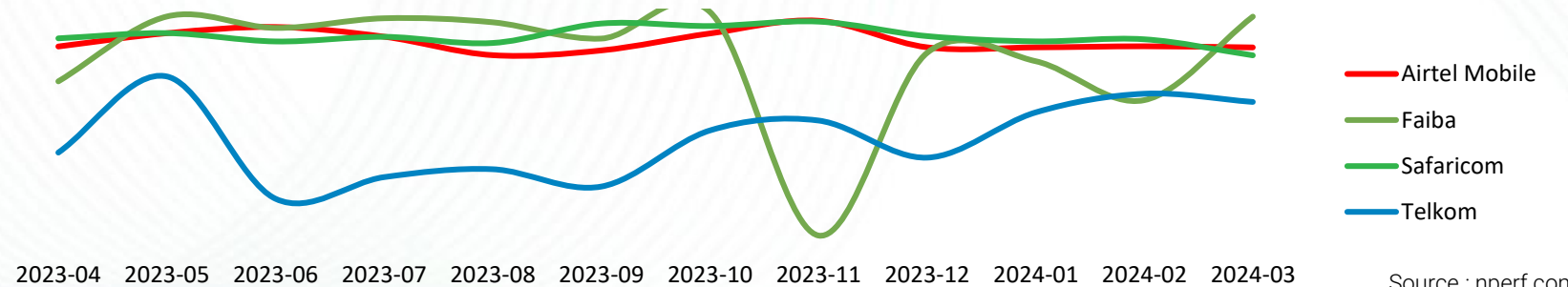
Source : nperf.com

Streaming Performance rate (average)



Source : nperf.com

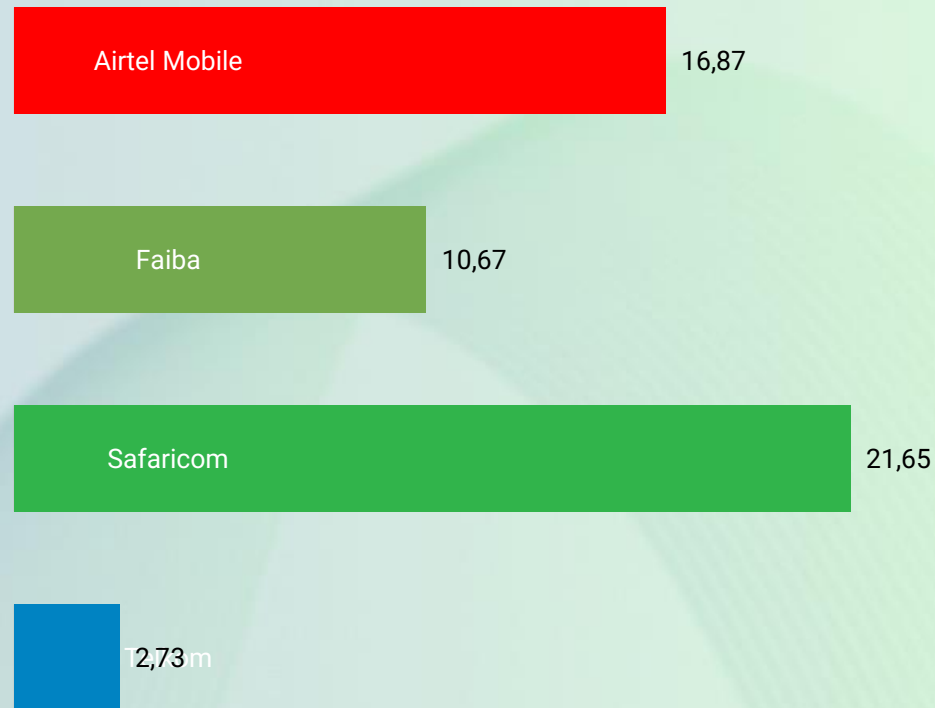
Streaming performance rate (average) evolution over the year



Source : nperf.com



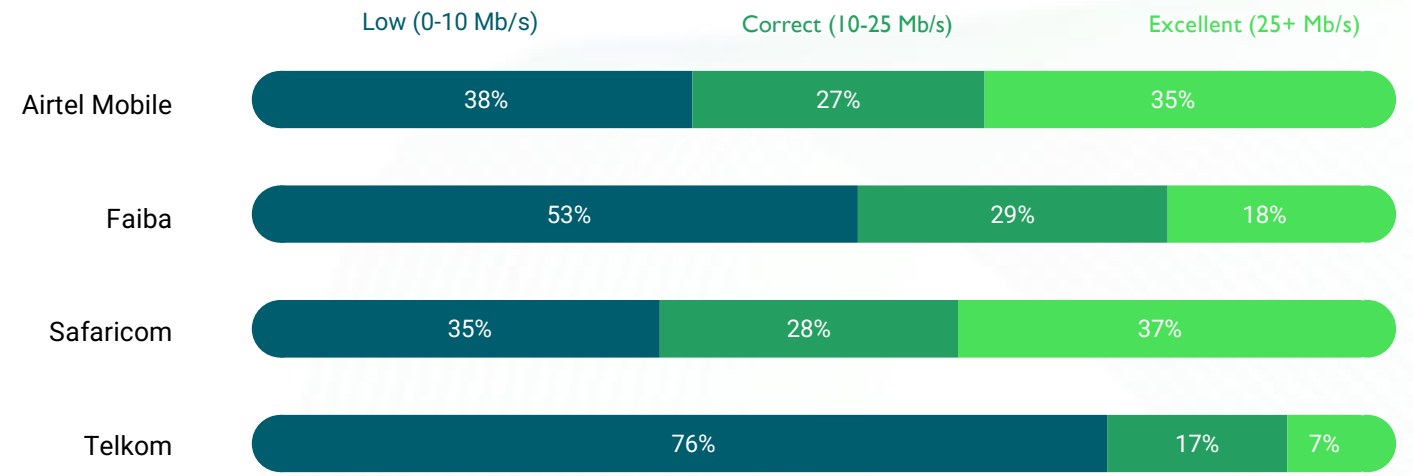
Download Speed (average)



Source : nperf.com

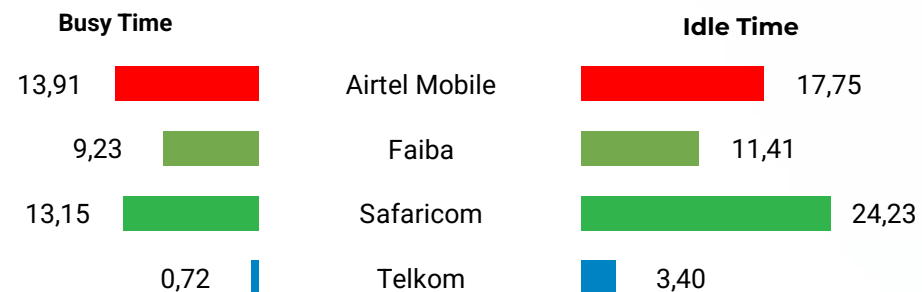
The subscribers of Safaricom enjoyed the best average mobile Internet download speed in 2024.

Download Speed results ventilation (average)



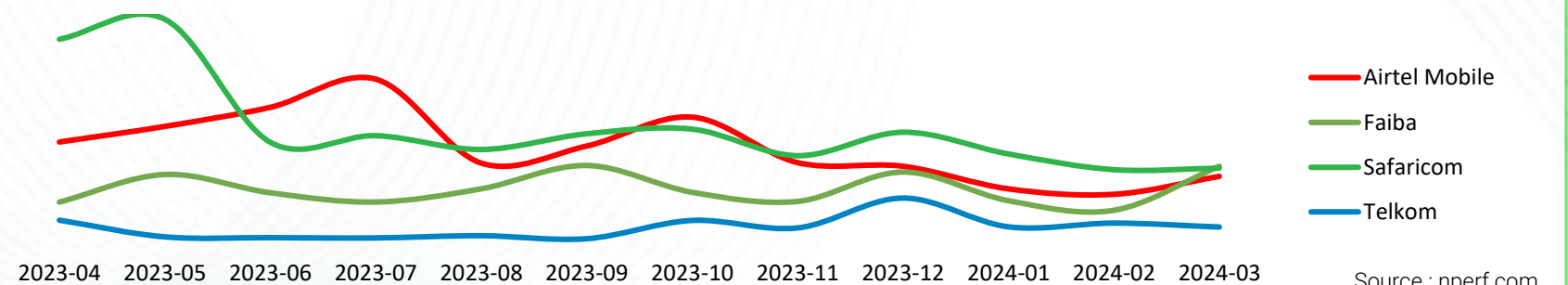
Source : nperf.com

Download Speed (average)



Source : nperf.com

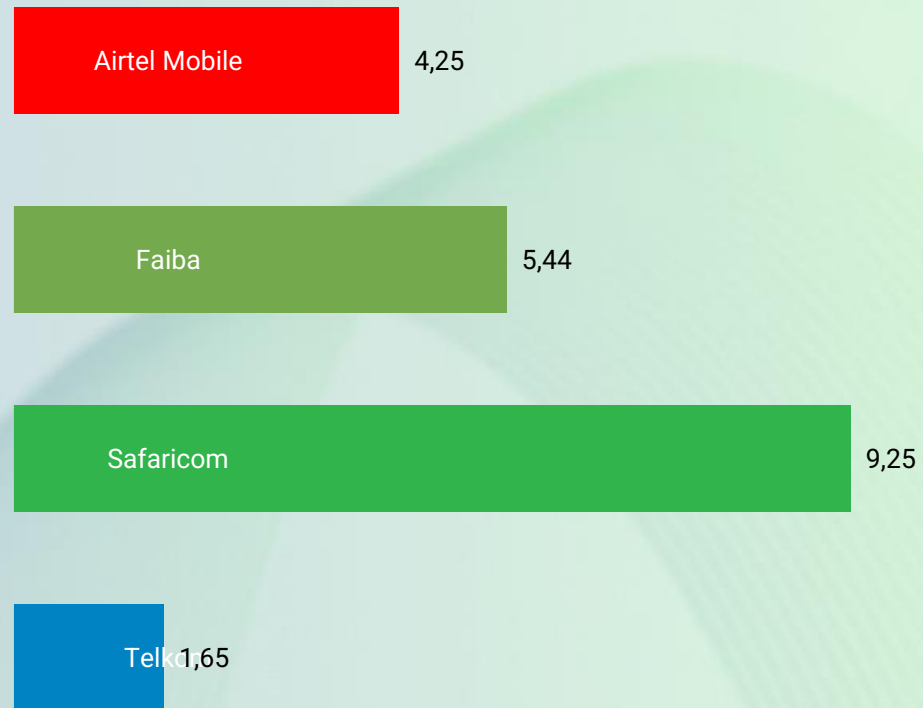
Download Speed evolution over the year (average)



Source : nperf.com



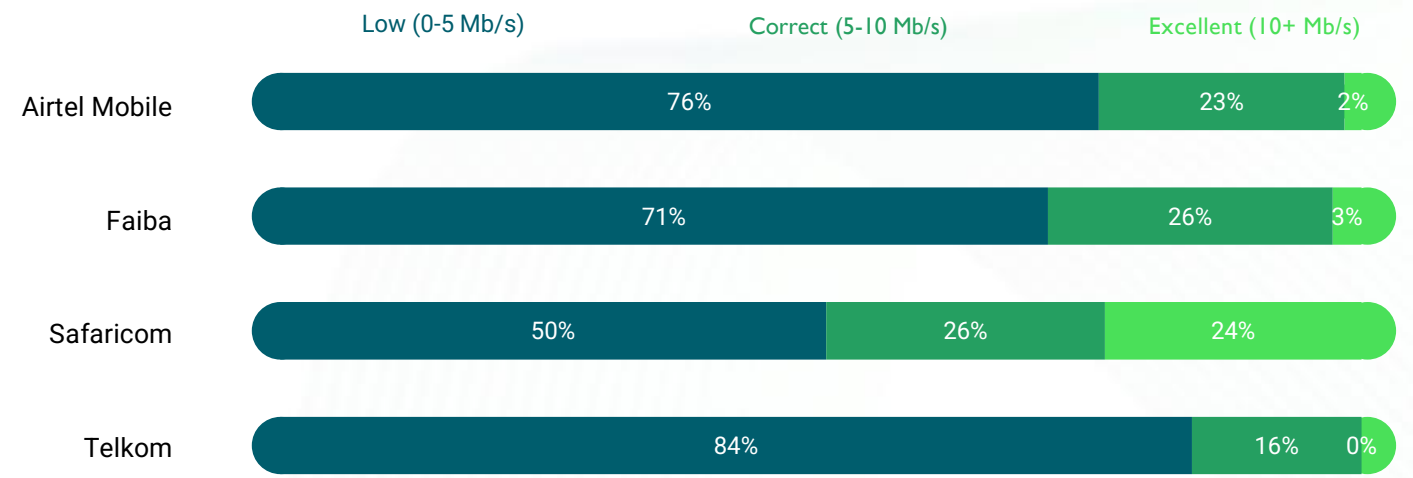
Upload Speed (average)



Source : nperf.com

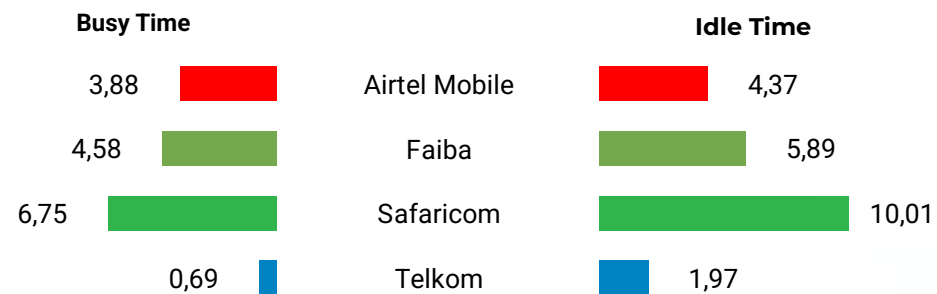
The subscribers of Safaricom enjoyed the best average mobile Internet upload speed in 2024.

Upload Speed results ventilation (average)



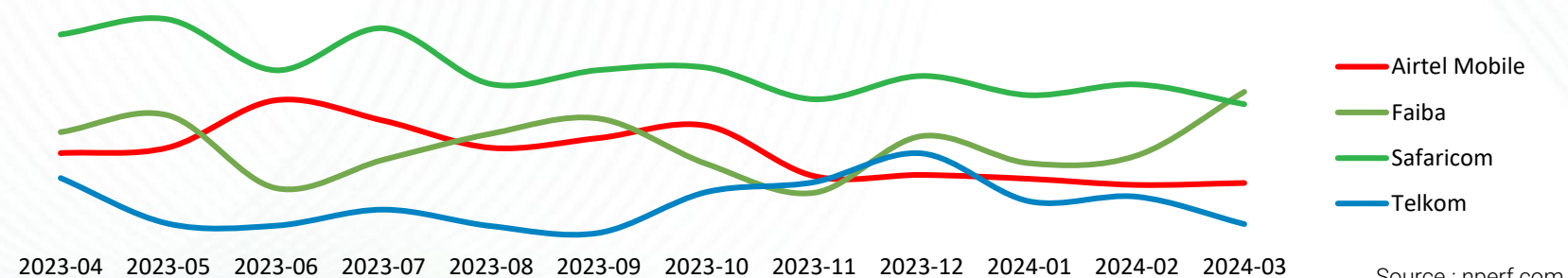
Source : nperf.com

Upload Speed (average)



Source : nperf.com

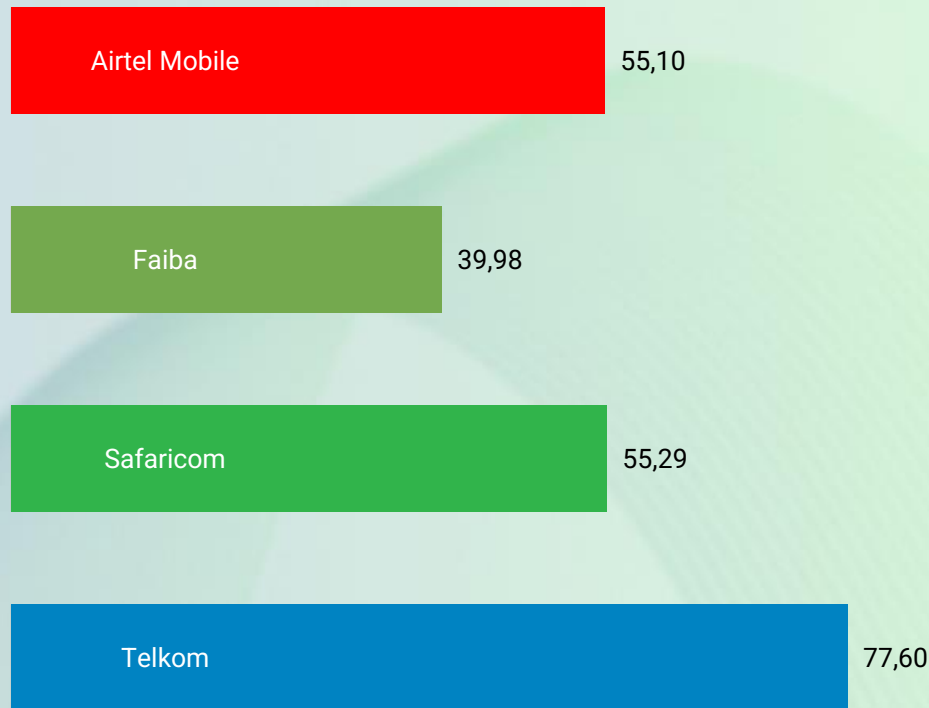
Upload Speed evolution over the year (average)



Source : nperf.com



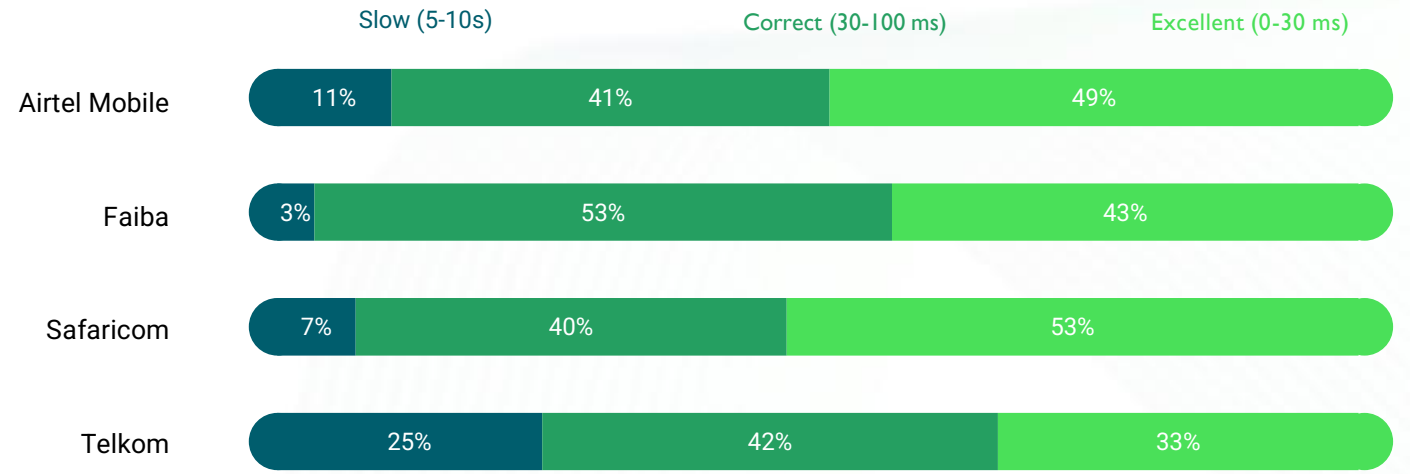
Latency Speed (average)



Source : nperf.com

The subscribers of Faiba enjoyed the best average mobile Internet latency speed in 2024.

Latency Speed results ventilation (average)



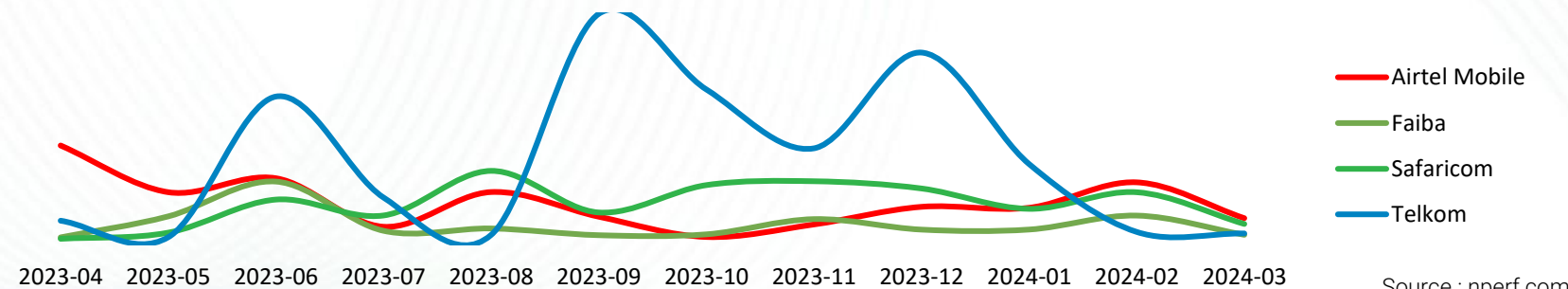
Source : nperf.com

Latency Speed (average)



Source : nperf.com

Latency Speed evolution over the year (average)

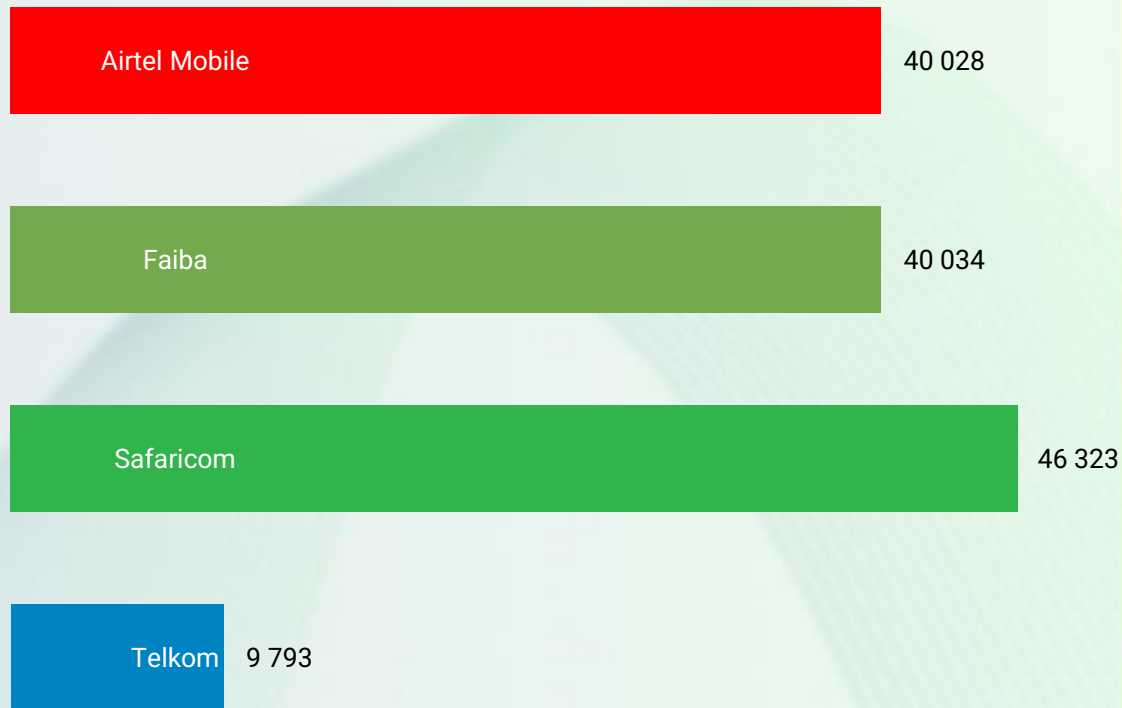


Source : nperf.com

Mobile Internet performance in Kenya



nPerf Score (nPoints)



Source : nperf.com

The subscribers of Safaricom enjoyed the best mobile Internet performances in Kenya during 2024.

The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

Thus, this score reflects the overall quality of the connection experienced by the user.

Source : nperf.com

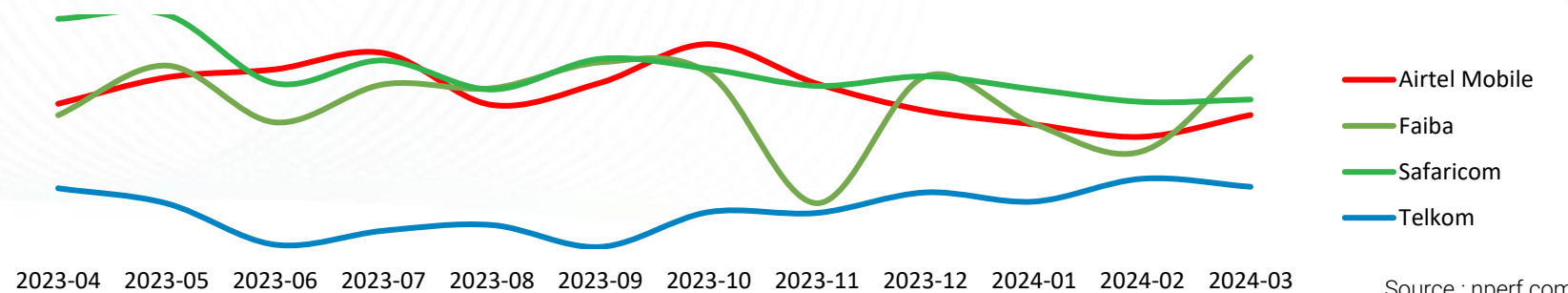


Best mobile Internet performance in 2024



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com



We qualify your connection