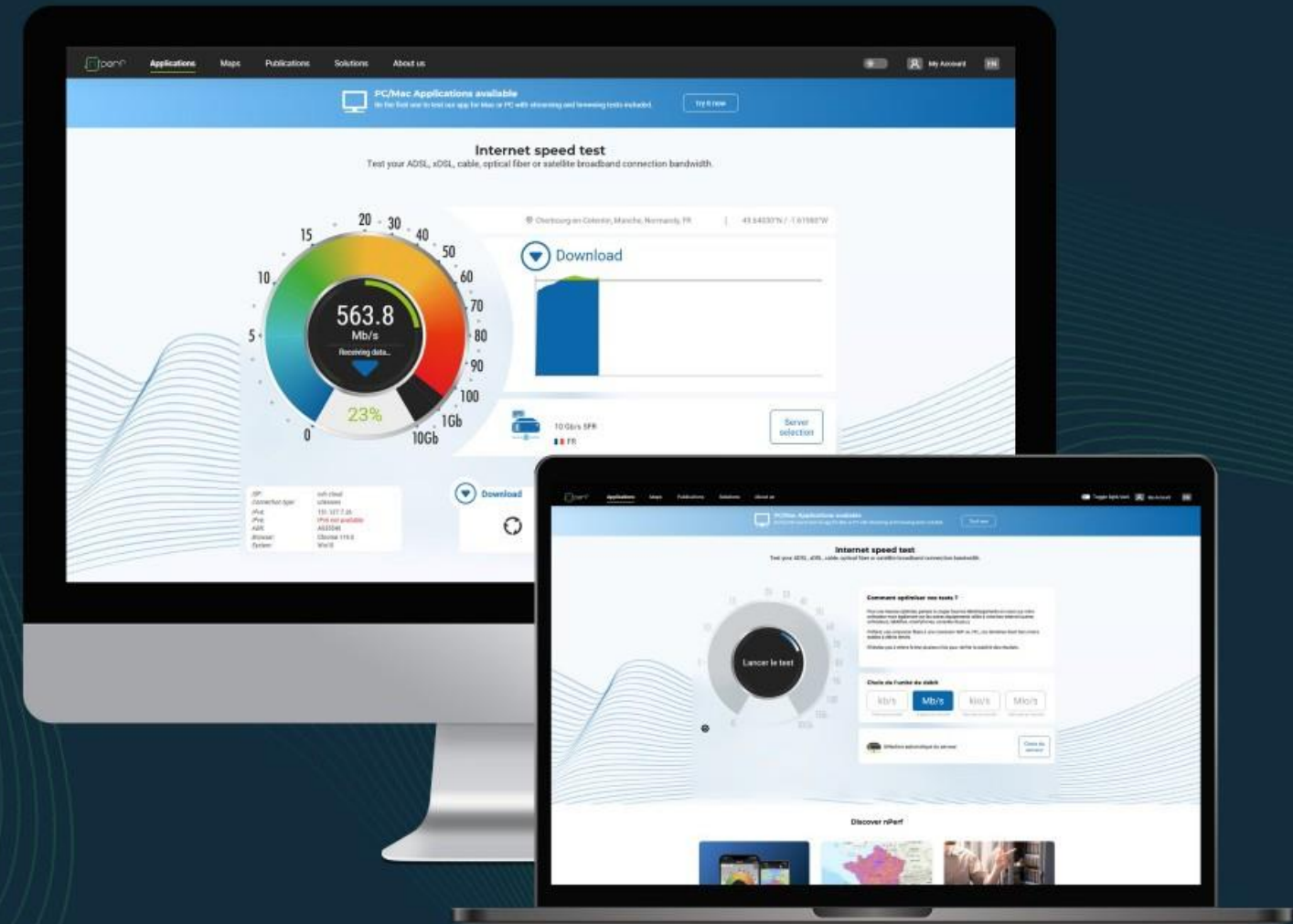




# Barometer of fixed Internet connections in Kenya

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.



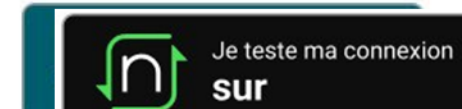
**26Md+** coverage scans in total.



**3k+** servers all around the world.

## Test your Internet connection with nPerf!

nPerf allows you to test the quality of your fixed, mobile, or Wi-Fi Internet connections up to 10 Gb/s! Download our app or visit our website!



## 2. Executive Summary



The subscribers of Faiba enjoyed the best fixed Internet performances in Kenya during 2024.

### Fixed Internet connections in Kenya

|                          | Faiba  | Mawingu WiFi | Safaricom | Telkom | Zuku   |
|--------------------------|--------|--------------|-----------|--------|--------|
| Download bitrates (Mb/s) | 27.73  | 7.16         | 19.76     | 33.04  | 22.75  |
| Upload bitrates (Mb/s)   | 21.63  | 6.82         | 15.81     | 27.97  | 17.04  |
| Latency (ms)             | 45.17  | 40.93        | 51.48     | 68.39  | 39.46  |
| Web browsing (%)         | 37.74  | 29.89        | 36.93     | 27.50  | 36.76  |
| Youtube streaming (%)    | 70.81  | 58.56        | 74.53     | 57.13  | 65.99  |
| nPerf Score (nPoints)    | 51 712 | 29 538       | 47 591    | 39 776 | 47 589 |

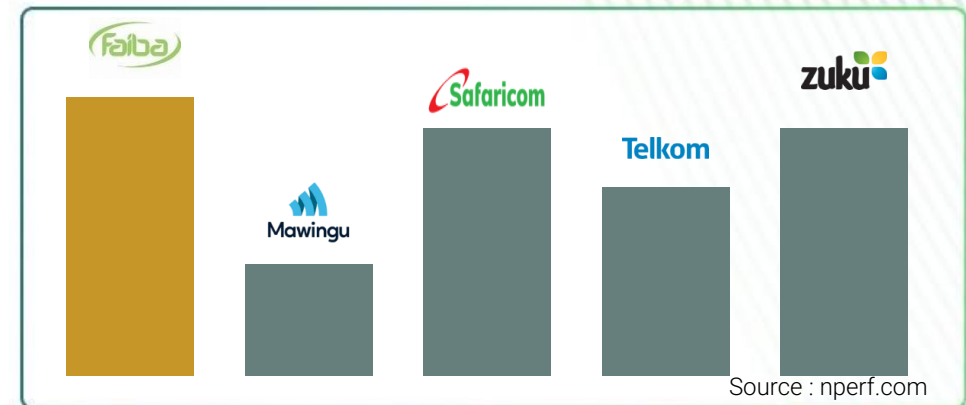
Source : nperf.com



Best fixed Internet performance in 2024



Source : nperf.com



Source : nperf.com

This report provides a detailed analysis of the fixed internet performance in Kenya from April 2023 to March 2024. The key performance indicators (KPIs) considered include download and upload speeds (converted to Mb/s), latency, browsing, streaming performance, and overall nPerf scores.

### **Faiba: leader with a balanced results across all metrics**

Faiba leads the market with impressive performance across most metrics. Over the year, Faiba averaged download speeds of 28 Mb/s and upload speeds of 22 Mb/s. Their latency average stood at 45 ms, supporting a smooth user experience in real-time applications. In terms of user experience, the streaming score averaged 71, while browsing recorded a lower average of 38%, suggesting some room for improvement in website loading times. Faiba's total nPerf score for the year was an admirable 51,712 nPoints, highlighting its robust network capabilities.

### **Safaricom: consistent and reliable**

Safaricom shows strong performance with average download and upload speeds of 20 Mb/s and 16 Mb/s, respectively. Latency at 52 ms is slightly higher compared to Faiba, impacting sensitive real-time applications. Streaming performance is robust at an average score of 75, and browsing performance holds at 37%. Safaricom's total nPerf score stands at 47,591 nPoints, indicating reliable service provision.

### **Zuku: strong in streaming and download speeds**

Zuku offers competitive download and upload speeds of 23 Mb/s and 17 Mb/s, respectively, with a relatively low latency of 40 ms. It excels in streaming with a score of 66%, though browsing performance is on par with the market at 37%. Zuku's total nPerf score of 47,589 nPoints suggests it is a strong contender, especially for users prioritizing video content.

### **Telkom: focus on speed**

Telkom shows potential with the highest download speed average of 33 Mb/s and an upload speed of 28 Mb/s, indicating strong network capabilities. However, its latency average is higher at 68 ms, which may affect user experience in time-sensitive applications. Browsing and streaming scores are lower at 28% and 57%, respectively. Telkom's total nPerf score of 39,776 nPoints suggests variability in its service quality across different usages.

### **Mawingu WiFi: room for improvements**

Mawingu WiFi offers average download and upload speeds of 7 Mb/s. The latency performance is competitive at 41 ms, close to industry leaders. However, browsing and streaming experiences are lower, with averages of 30% and 59%, respectively. The total nPerf score of 29,538 nPoints reflects a decent performance.

### **Conclusion**

The fixed market in Kenya shows a dynamic range of performances with Faiba leading overall. Safaricom and Zuku provide strong alternatives with consistent services, especially in streaming capabilities. Telkom, despite its high speeds, shows variability that may affect user experience. Mawingu WiFi remains a viable option for those seeking basic services.

## 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:

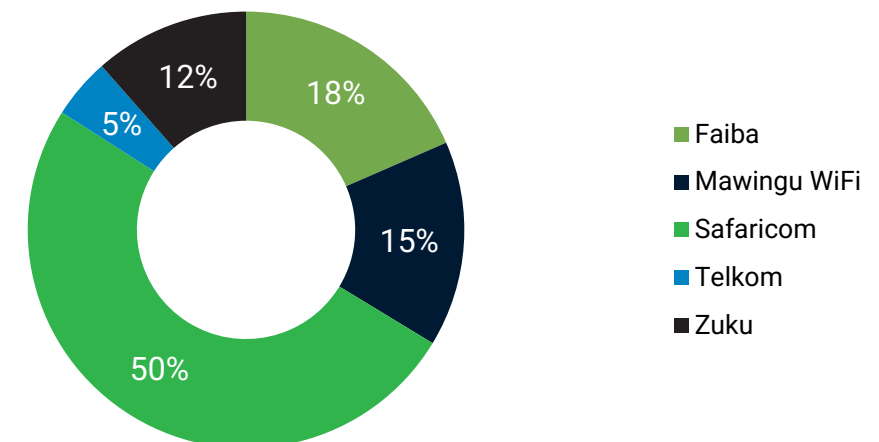
- ▼ **Download bitrate:**  
Indicates the amount of data your connection can receive in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.
- ▲ **Upload bitrate:**  
Indicates the amount of data your connection can send in one second from the 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 3.4% 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 5% share. The chart below shows the overall test distribution for each service provider.

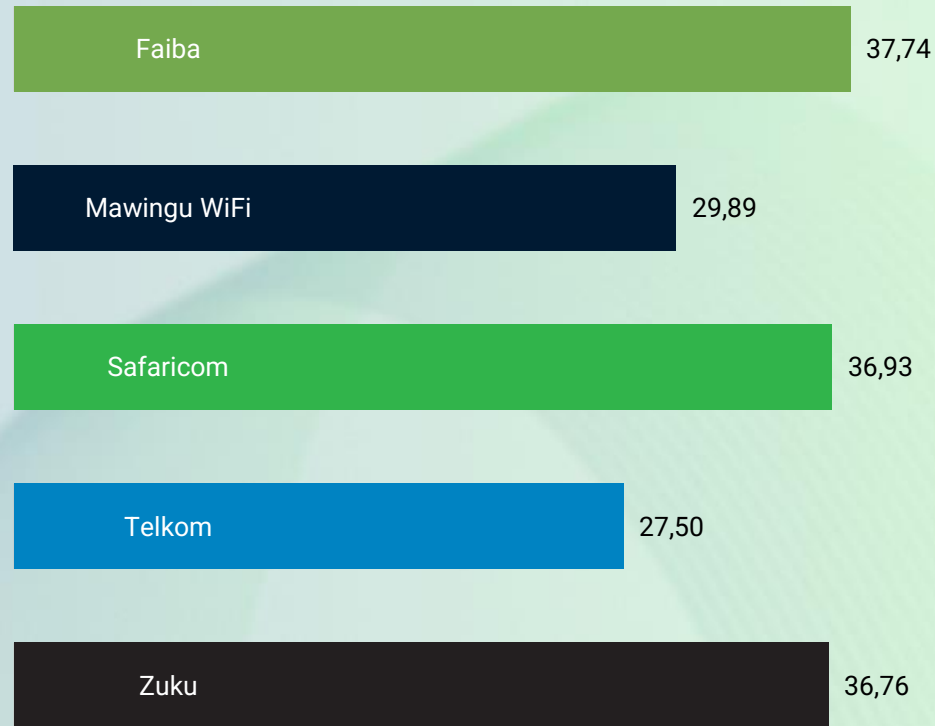
Overall distribution of the tests per provider (ISPs Share)



Source : nperf.com



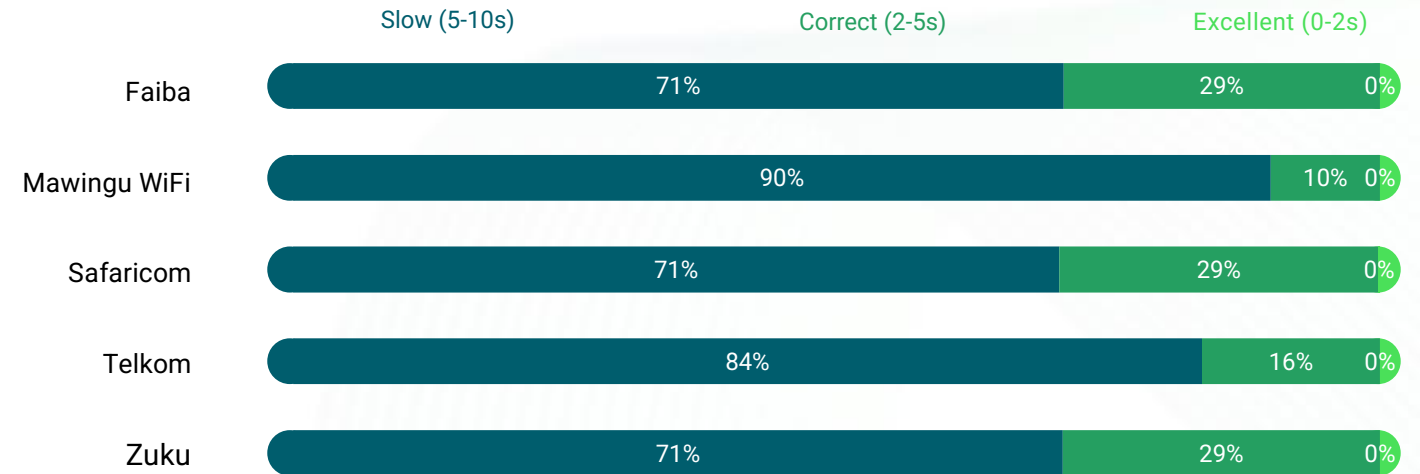
## Browsing Performance rate (average)



Source : nperf.com

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

## Browsing Performance results ventilation (average)



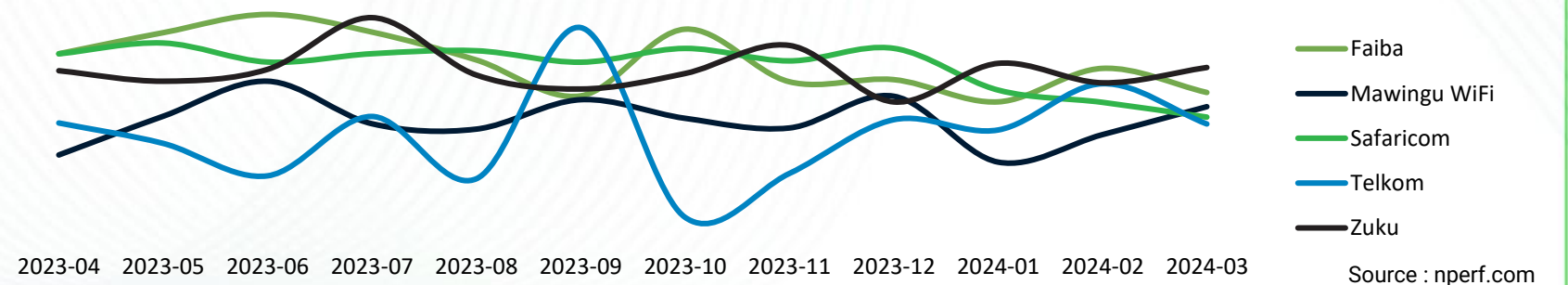
Source : nperf.com

## Browsing Performance rate (average)



Source : nperf.com

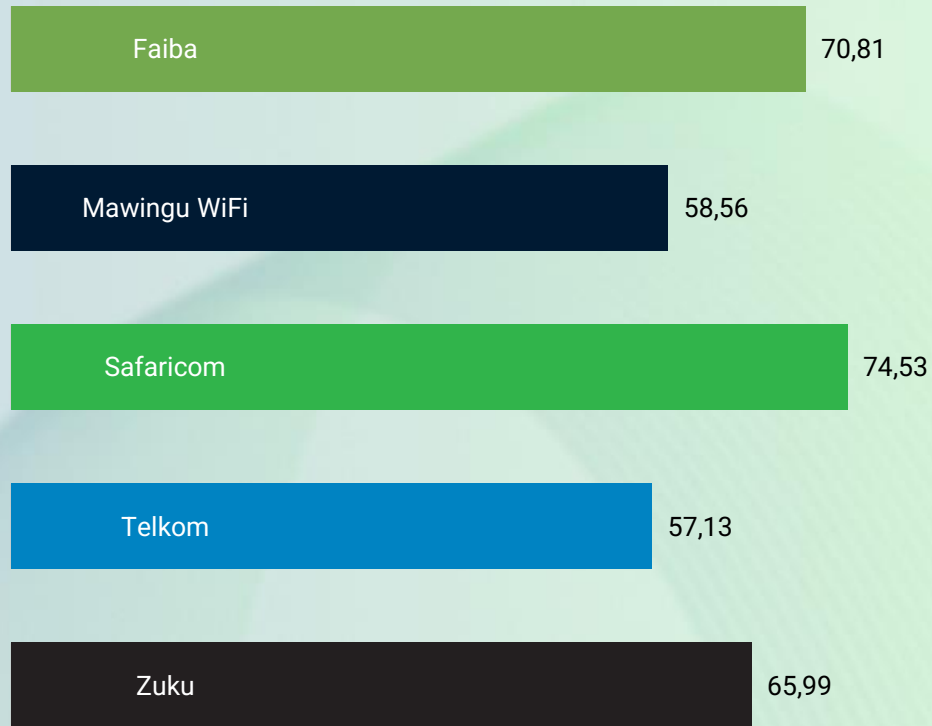
## Browsing performance rate (average) evolution over the year



Source : nperf.com



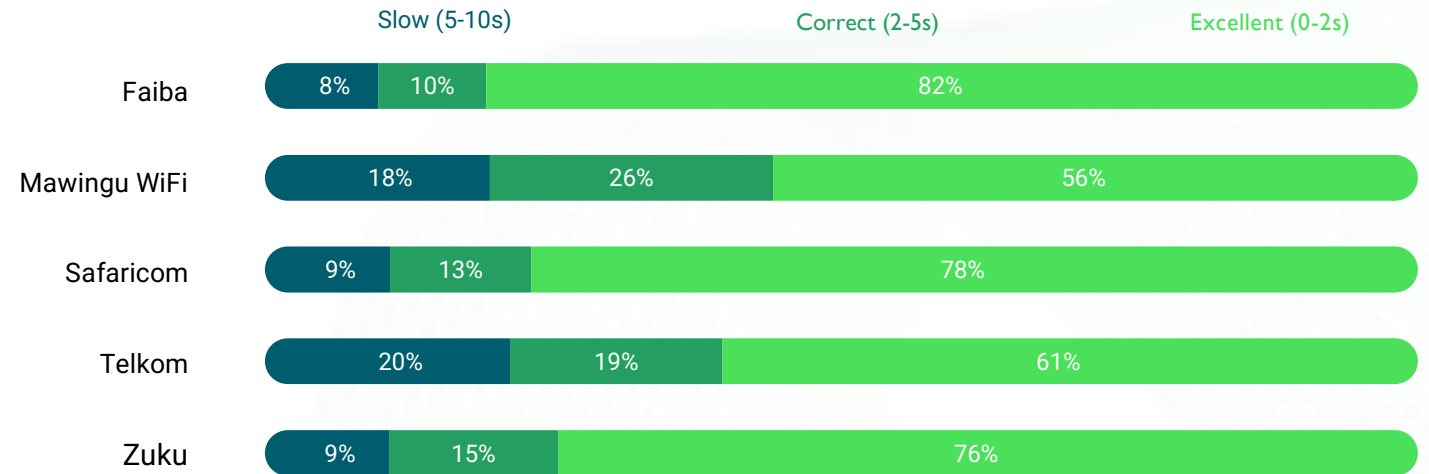
## Streaming Performance rate (average)



Source : nperf.com

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

## Streaming Performance results ventilation (average)



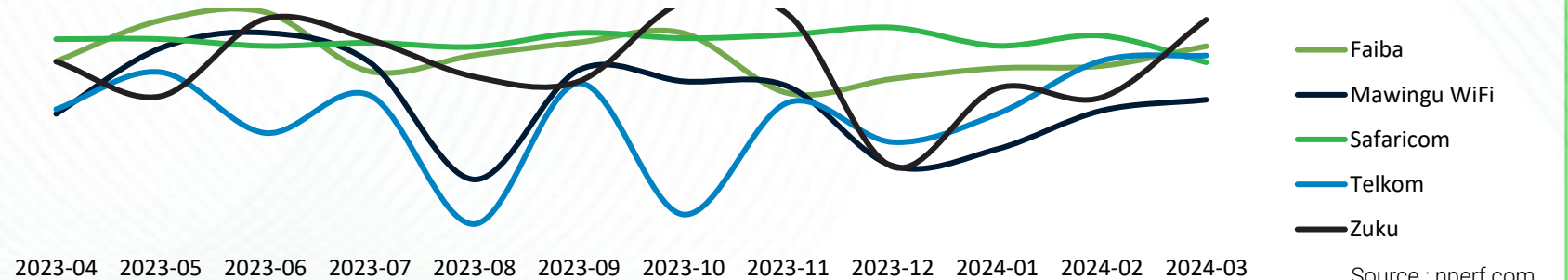
Source : nperf.com

## Streaming Performance rate (average)



Source : nperf.com

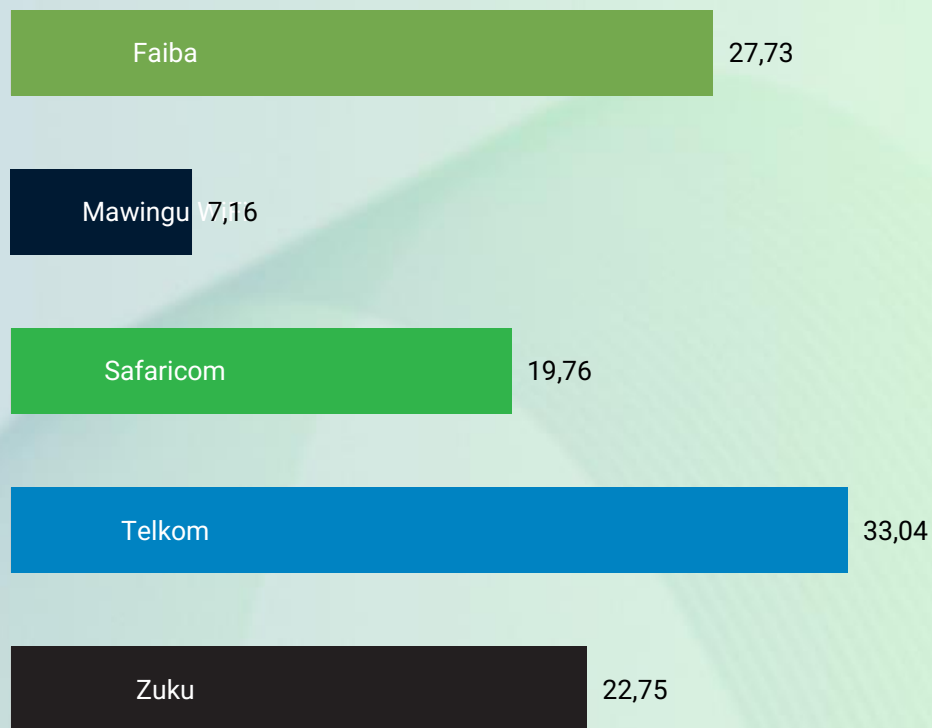
## Streaming performance rate (average) evolution over the year







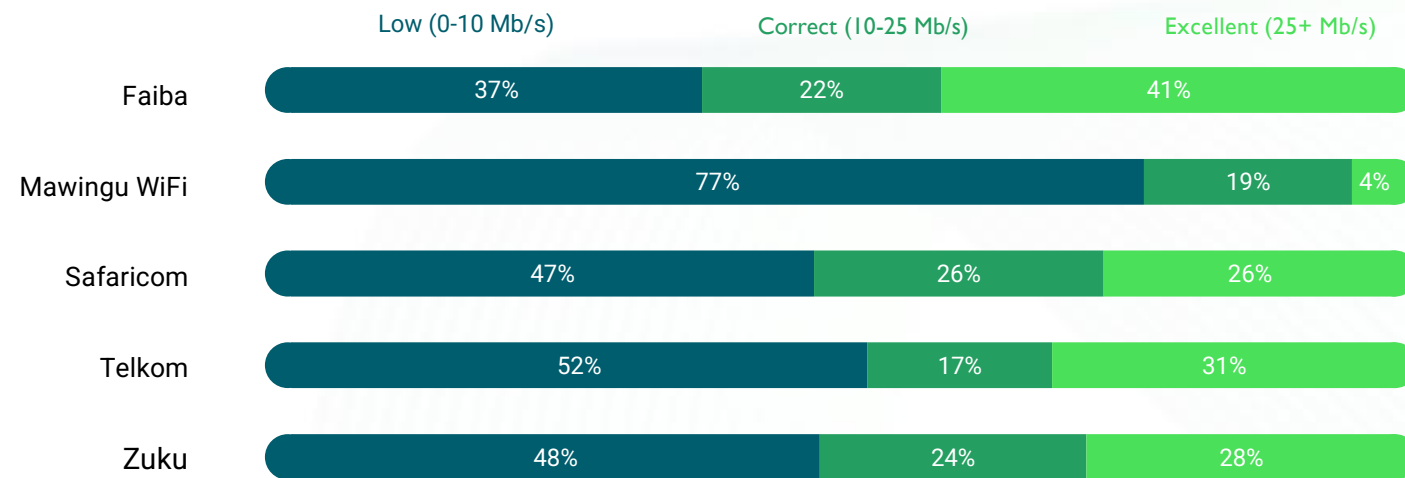
## Download Speed (average)



Source : nperf.com

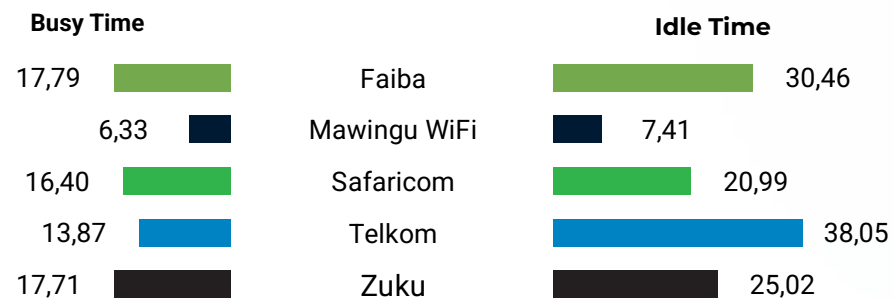
The subscribers of Telkom enjoyed the best average mobile Internet download speed in 2024.

## Download Speed results ventilation (average)



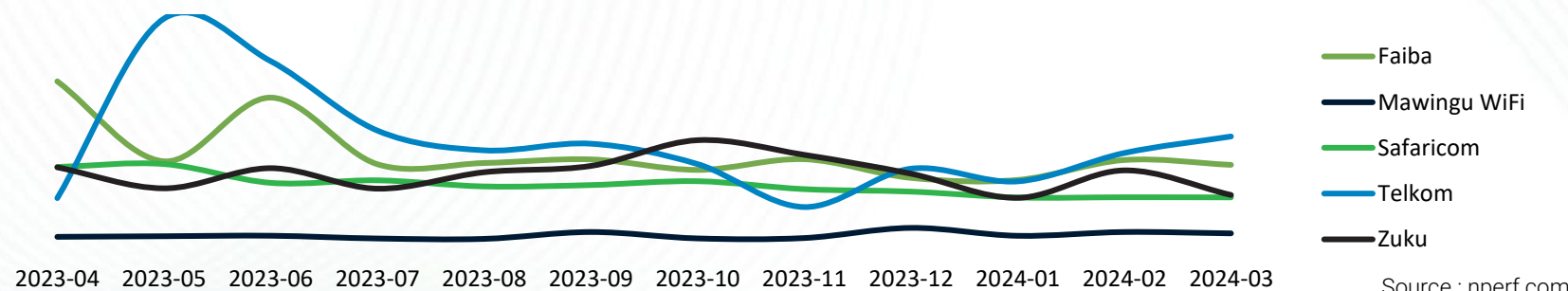
Source : nperf.com

## Download Speed (average)



Source : nperf.com

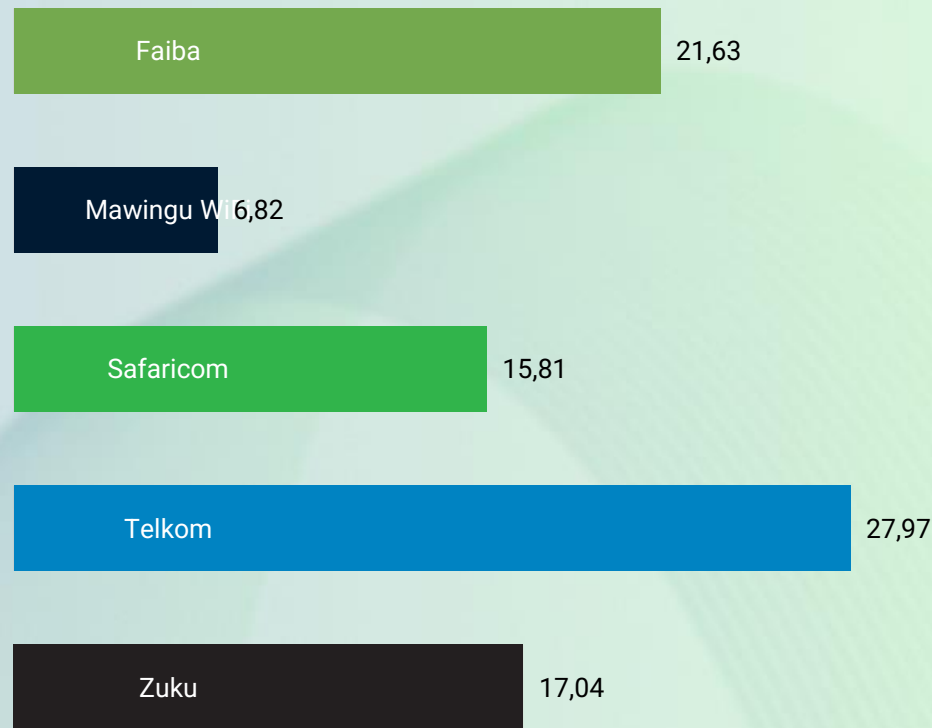
## Download Speed evolution over the year (average)



Source : nperf.com



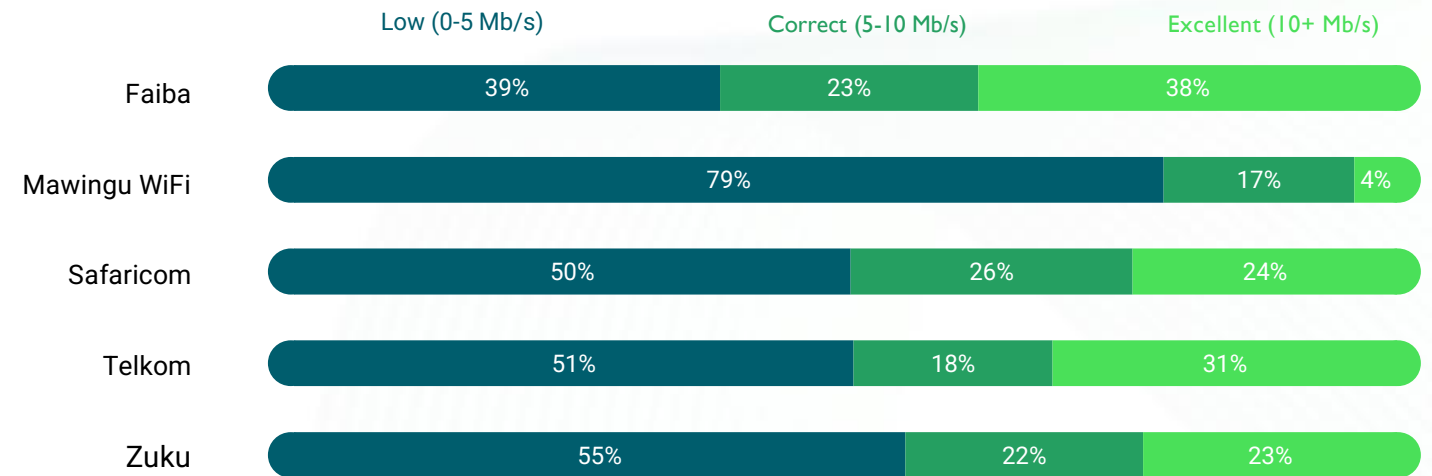
## Upload Speed (average )



Source : nperf.com

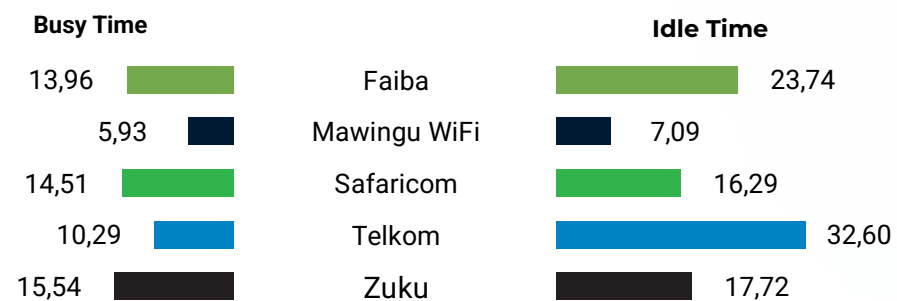
The subscribers of Telkom enjoyed the best average mobile Internet upload speed in 2024.

## Upload Speed results ventilation (average)



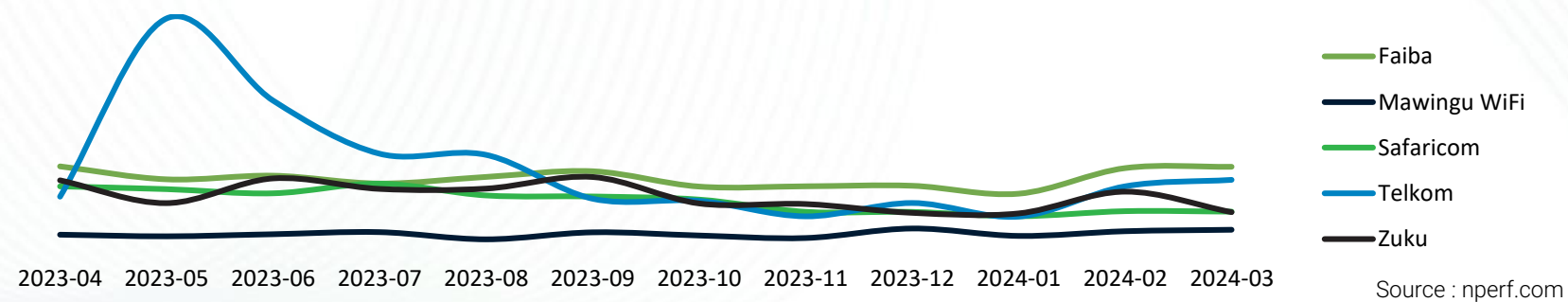
Source : nperf.com

## Upload Speed (average )



Source : nperf.com

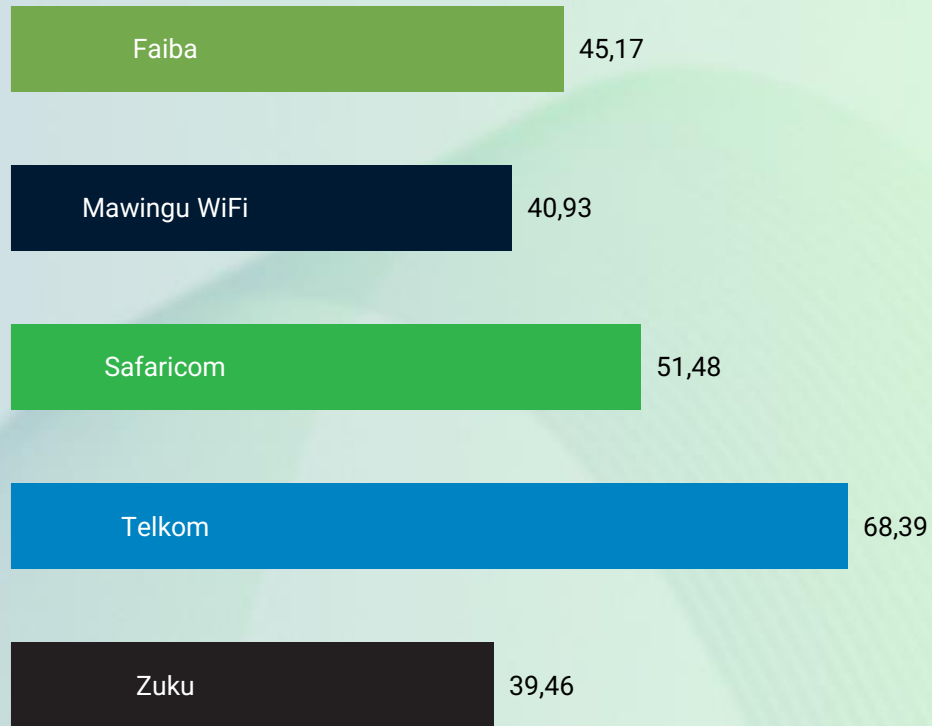
## Upload Speed evolution over the year (average)



Source : nperf.com



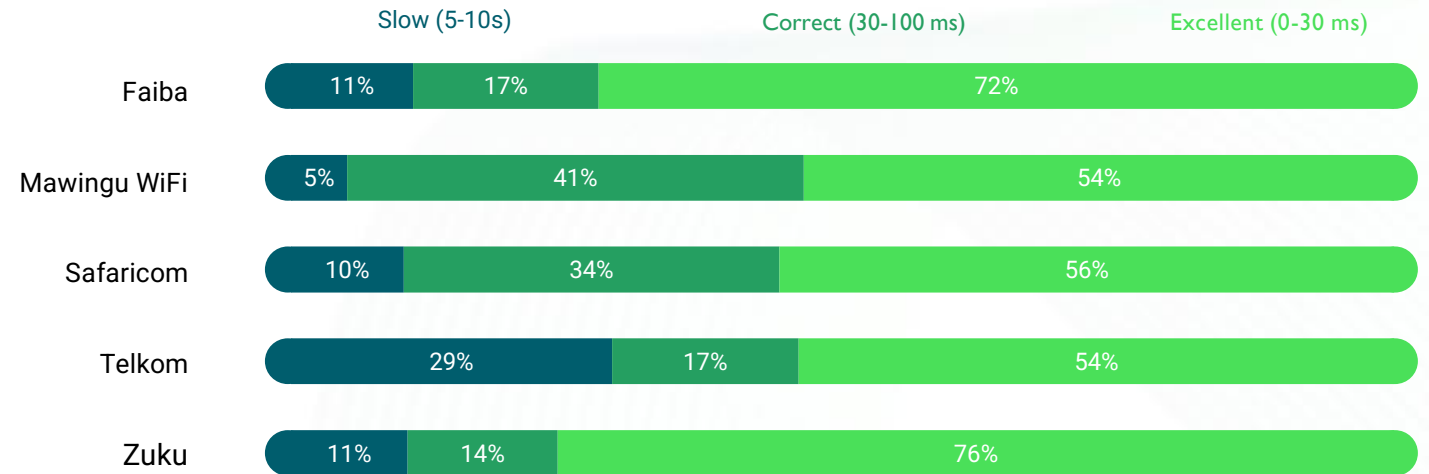
## Latency Speed (average)



Source : nperf.com

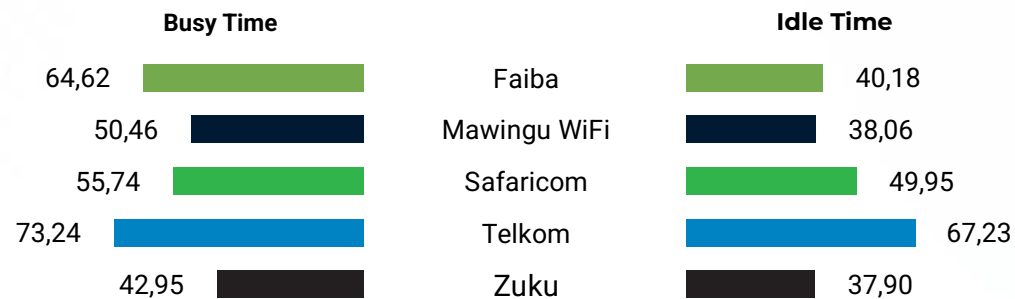
The subscribers of Mawingu WiFi and Zuku enjoyed the best average mobile Internet latency speed in 2024.

## Latency Speed results ventilation (average)



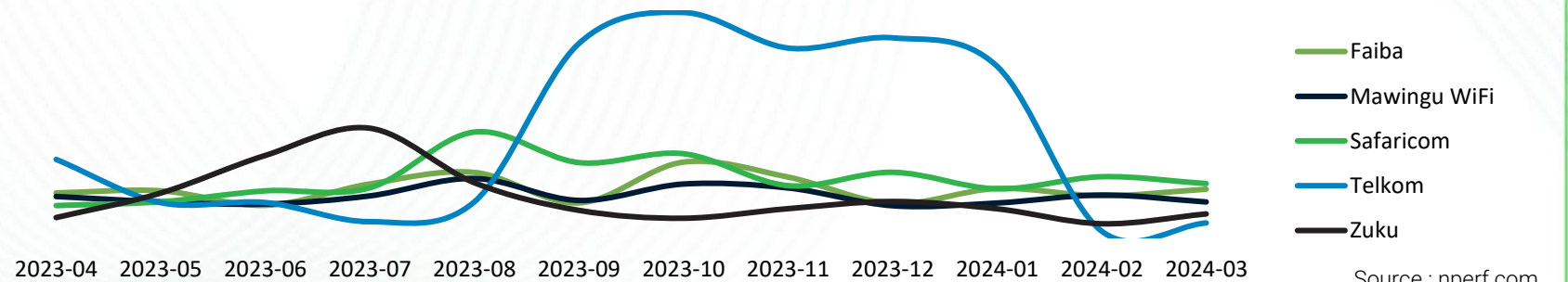
Source : nperf.com

## Latency Speed (average)



Source : nperf.com

## Latency Speed evolution over the year (average)

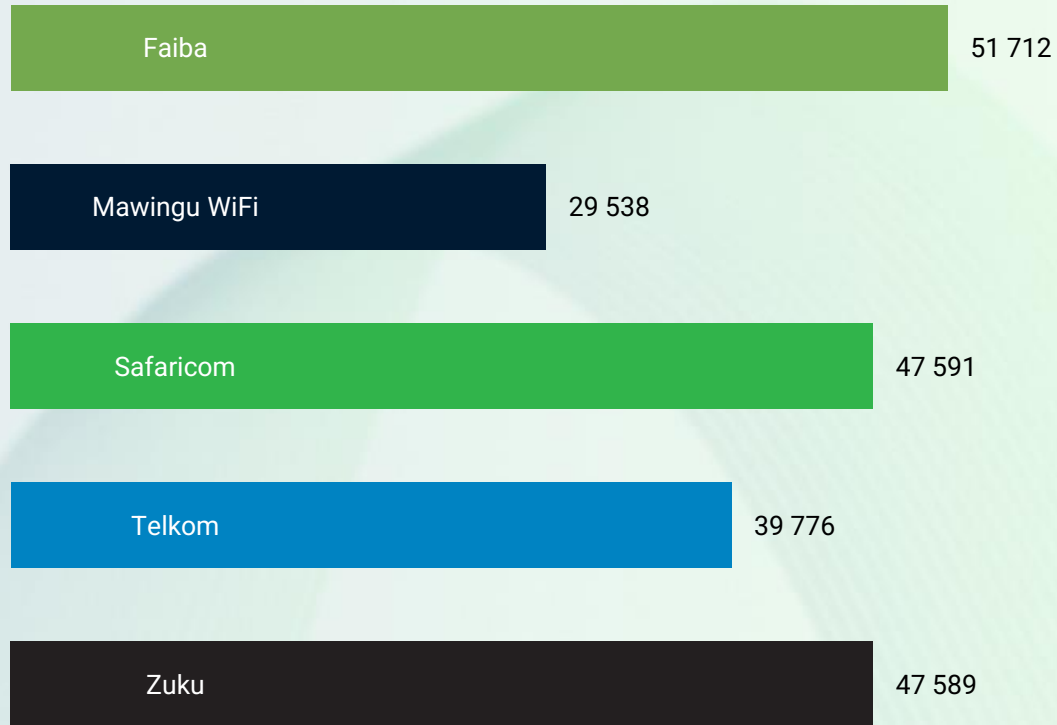


Source : nperf.com

# Fixed Internet performance in Kenya



## nPerf Score (nPoints)



Source : nperf.com

The subscribers of Faiba enjoyed the best fixed 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.

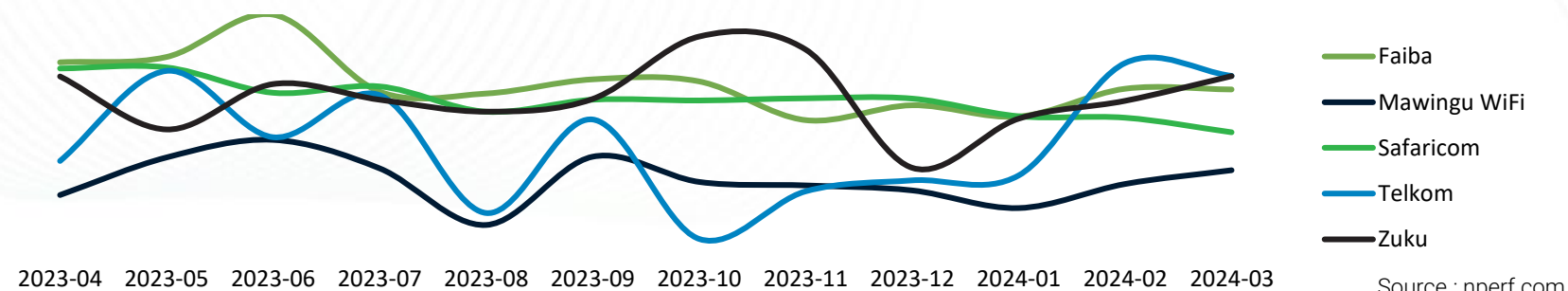
Thus, this score reflects the overall quality of the connection experienced by the user.

Source : nperf.com



Source : nperf.com

## nPerf score evolution over the year (average)



Source : nperf.com



We qualify your connection