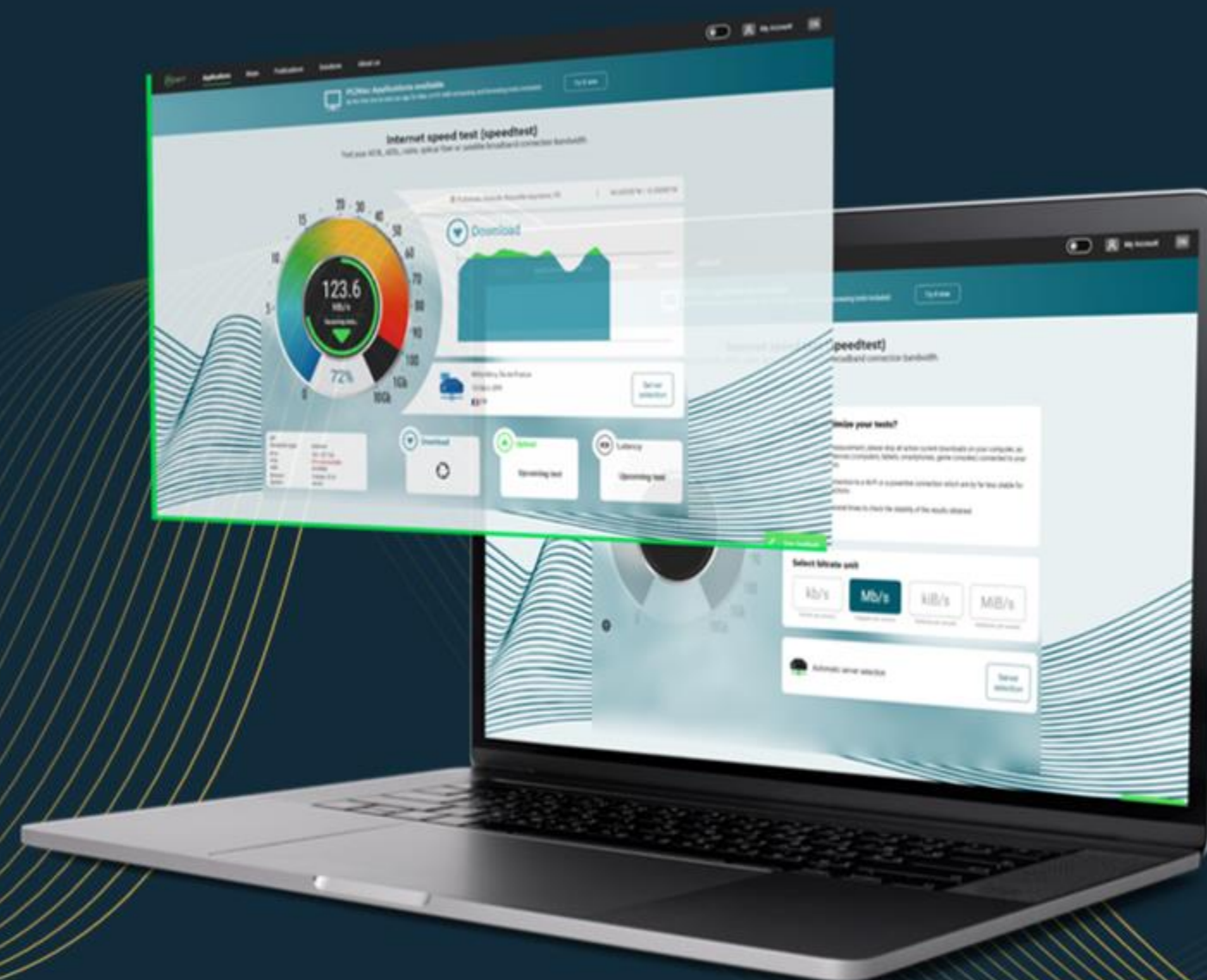
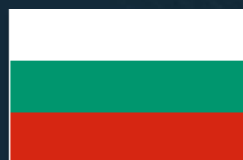


# Barometer of fixed Internet connections in Bulgaria

01/01/2024 - 12/31/2024



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**Introducing  
nPerf**

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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.

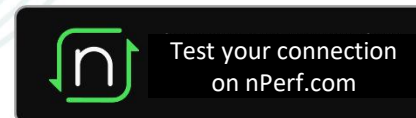
 **300k+** tests daily worldwide.

 **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 Vivacom enjoyed the best fixed Internet performances in 2024.

### Fixed Internet connections in Bulgaria

	A1	Vivacom
▼ Download bitrates (Mb/s)	90,32	104,00
▲ Upload bitrates (Mb/s)	51,91	83,09
◀▶ Latency (ms)	30,12	30,62
🌐 Web browsing (%)	77,47	78,01
📺 Youtube streaming (%)	86,37	87,38
nPerf Score (nPoints)	104 963	110 590

Source : nperf.com

# VIVACOM

Best fixed Internet performance  
in 2024



Source : nperf.com

# A1




# VIVACOM



Source : nperf.com

The subscribers of Vivacom enjoyed the best WIFI Internet performances in Bulgaria in 2024.

### WIFI Fixed Internet connections in Bulgaria

	A1	Vivacom
▼ Download bitrates (Mb/s)	80,09	93,05
▲ Upload bitrates (Mb/s)	46,21	77,54
◀▶ Latency (ms)	32,10	31,28
🌐 Web browsing (%)	77,90	78,49
📺 Youtube streaming (%)	86,63	87,65
 nPerf Score (nPoints)	102 089	108 847

Source : nperf.com

### Introduction

In the current analysis period from Q1 2024 to Q4 2024, the fixed-line Internet market in Bulgaria exhibits strong competition, particularly focusing on WiFi technology. The market shows a notable evolution with Vivacom emerging as the sole leader in 2024, compared to the previous year where the title was shared. This consolidation of leadership highlights Vivacom as a new distinct leader. In terms of market winners, Vivacom dominates across multiple categories, indicating its strong market presence. Key performance indicators such as Download speed, Upload speed, Browsing, and Video streaming have Vivacom as the winner, while A1 maintains leadership in Latency. The market is characterized by positive trends and robust performances, particularly in the WiFi focus area.

### **Vivacom: Leader of the market with exceptional performances.**

For the period from Q1 2024 to Q4 2024, Vivacom stands out as the market leader with a strong nPerf Score. The operator demonstrates leadership in Download speed, Upload speed, and Browsing, establishing itself as a dominant force in these key performance indicators. Additionally, Vivacom excels in WiFi technology, underscoring its pioneering position in the fixed-line Internet segment. Significant improvements are noted, including a substantial increase in Upload speed, reinforcing Vivacom's contribution to the market's overall growth and competitiveness.

### **A1: Excellence in Latency and Video streaming.**

A1, although not the market leader, showcases its strengths in specific categories, particularly in Latency and Video streaming. The operator maintains its superiority in Latency, offering users a seamless online experience. Furthermore, A1's excellence in Video streaming positions it as a strong contender in the streaming sector, contributing significantly to the market's diverse and competitive landscape.

### **Conclusion**

In summary, Vivacom emerges as the market leader, with notable achievements in Download speed, Upload speed, and Browsing. A1 also demonstrates excellence in Latency and Video streaming. The market is characterized by competitive dynamics and positive trends, with operators continuously enhancing their services to deliver superior Internet experiences to users.

## 4. Methodology



nPerf provides a free application 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.

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 to 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 perceived quality by the user.

### 📺 Streaming performance

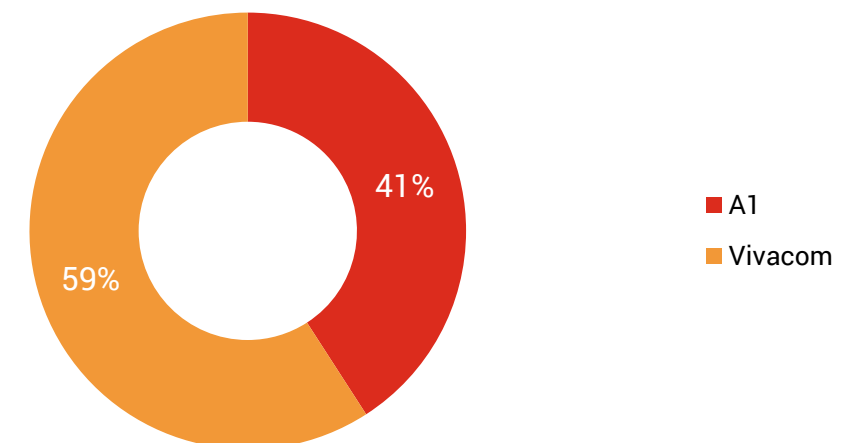
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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% 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



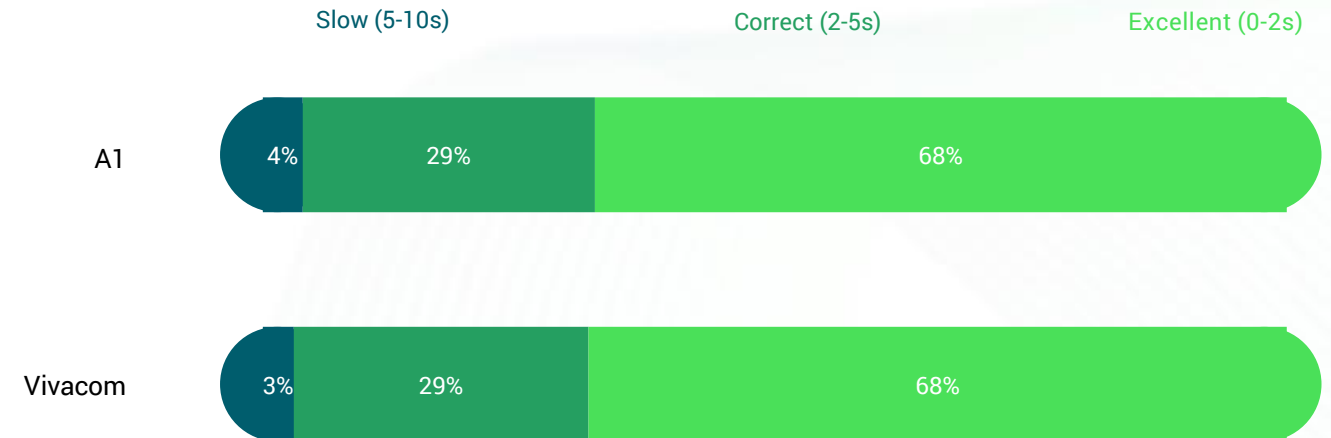
## Browsing Performance rate (average)



Source : nperf.com

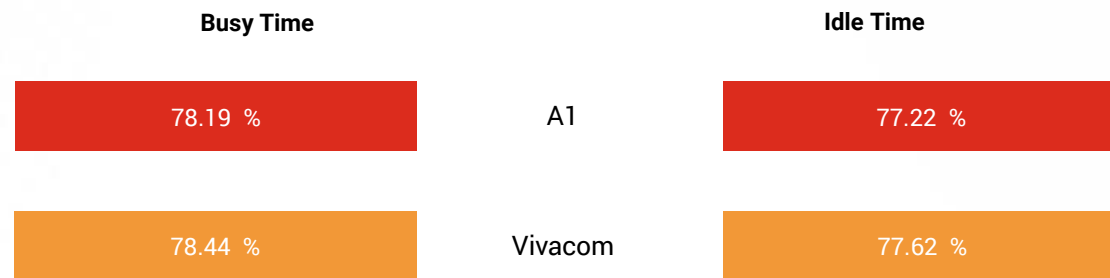
The subscribers of Vivacom enjoyed the best fixed Internet browsing performance in 2024.

## Browsing Performance results ventilation (average)



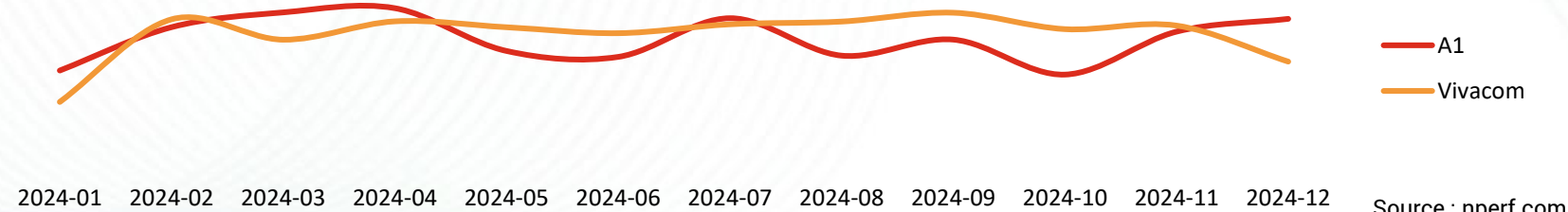
Source : nperf.com

## Browsing Performance rate (average)



Source : nperf.com

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



Source : nperf.com





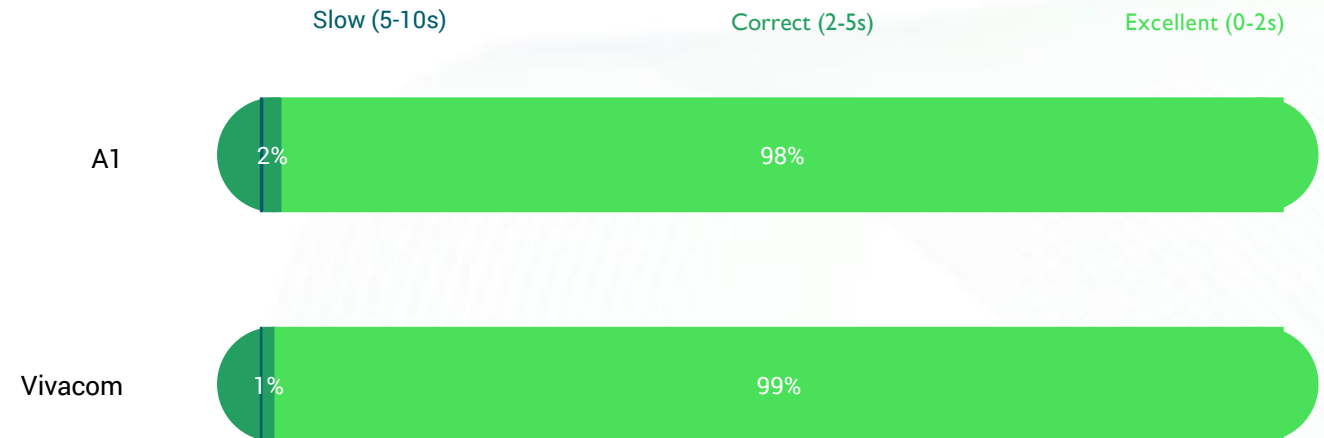
## Streaming Performance rate (average)



Source : nperf.com

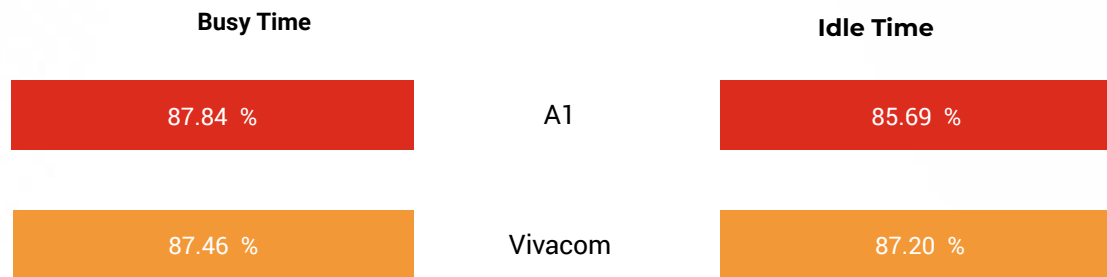
The subscribers of Vivacom enjoyed the best fixed Internet streaming performance in 2024.

## Streaming Performance results ventilation (average)



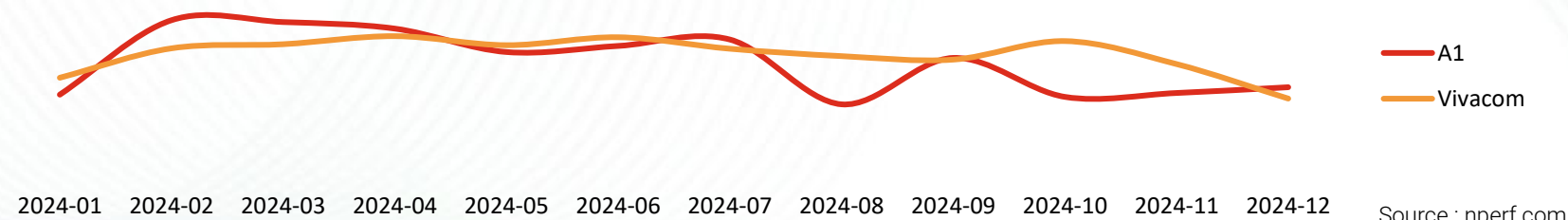
Source : nperf.com

## Streaming Performance rate (average)



Source : nperf.com

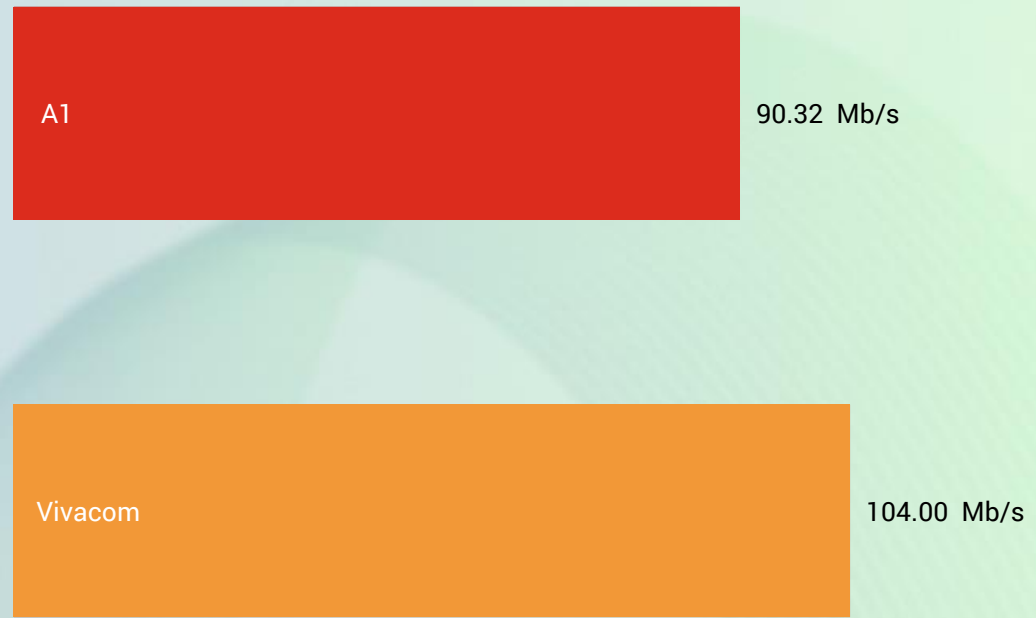
## Streaming performance rate (average) evolution over the year



Source : nperf.com



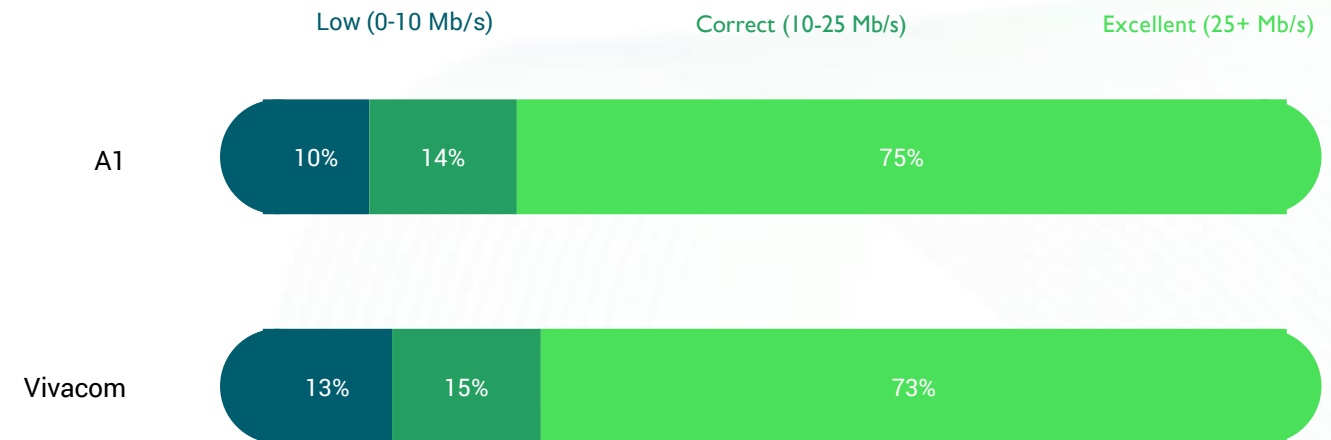
### Download Speed (average)



Source : nperf.com

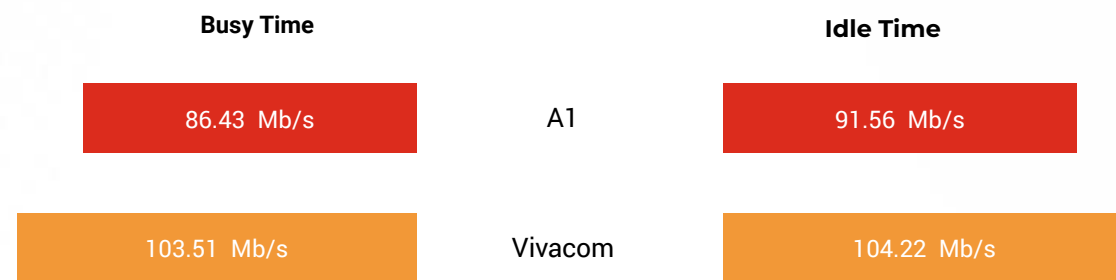
The subscribers of Vivacom enjoyed the best average fixed Internet download speed in 2024.

### Download Speed results ventilation (average)



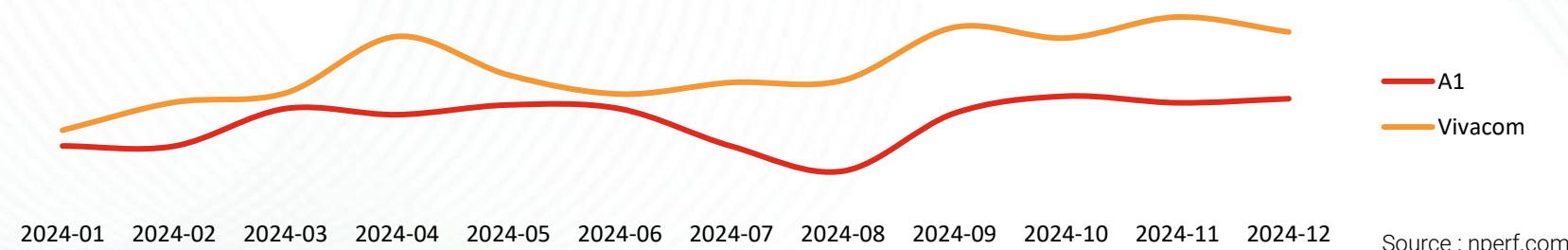
Source : nperf.com

### Download Speed (average)



Source : nperf.com

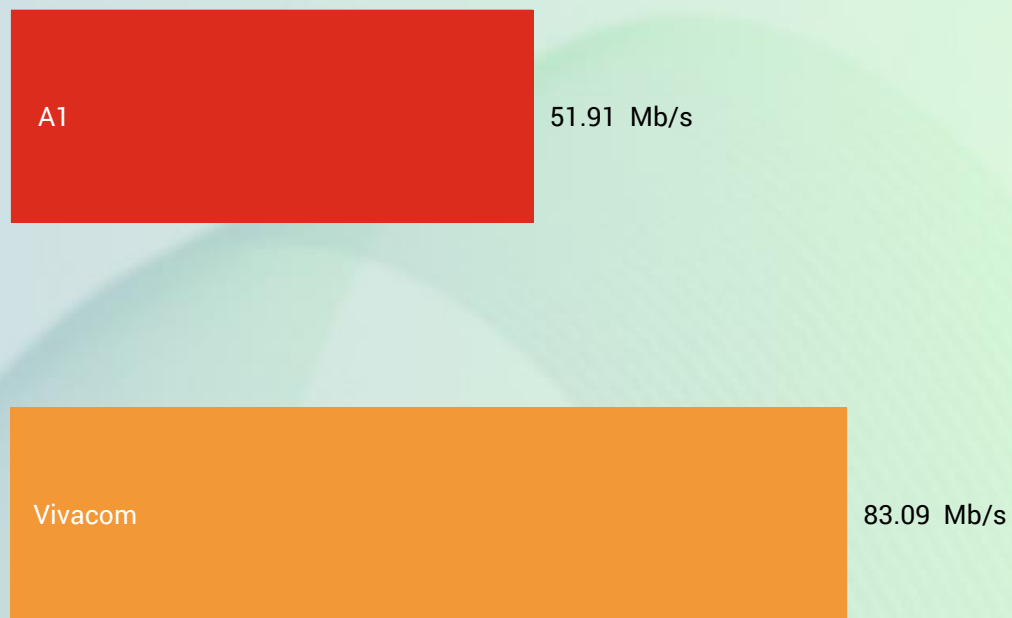
### Download Speed evolution over the year (average)



Source : nperf.com



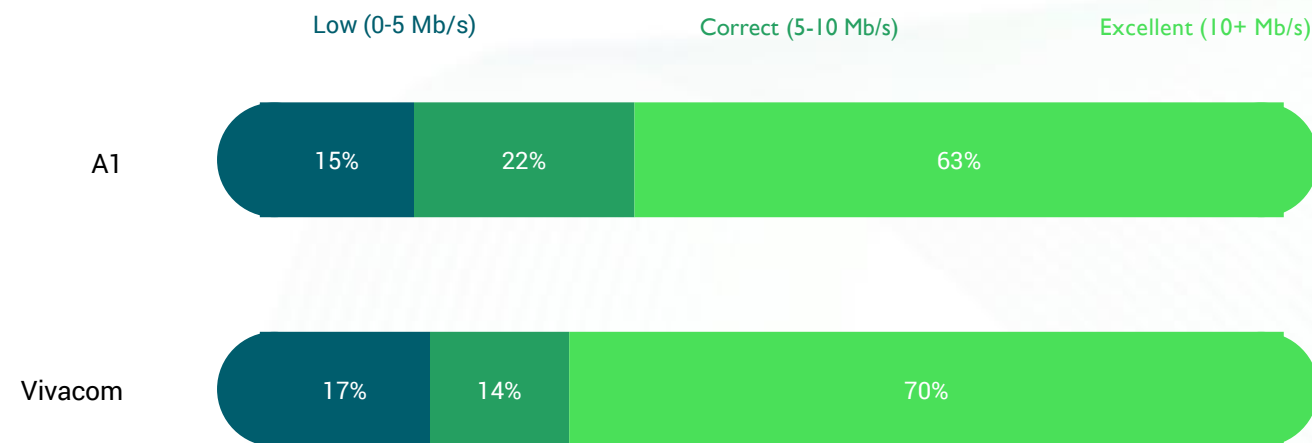
## Upload Speed (average )



Source : nperf.com

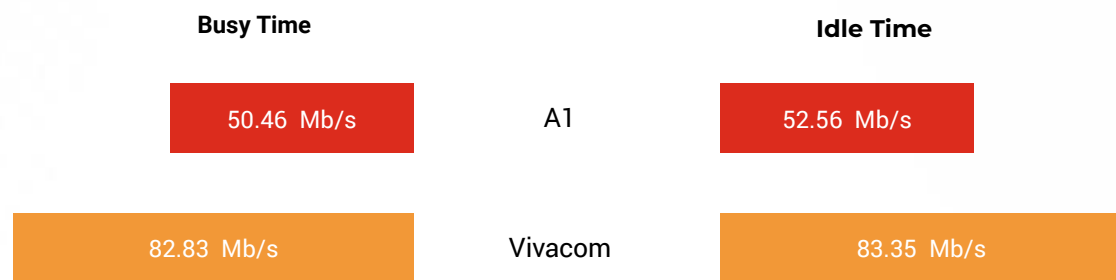
The subscribers of Vivacom enjoyed the best average fixed Internet upload speed in 2024.

## Upload Speed results ventilation (average)



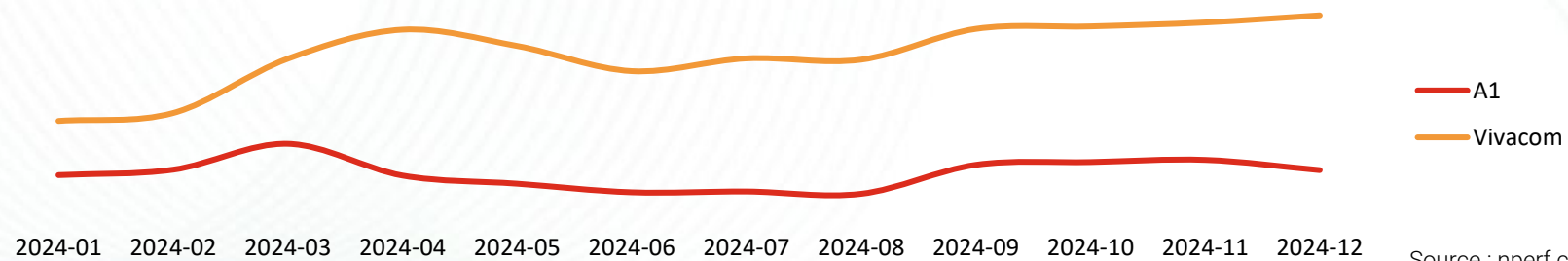
Source : nperf.com

## Upload Speed (average )



Source : nperf.com

## Upload Speed evolution over the year (average)



Source : nperf.com



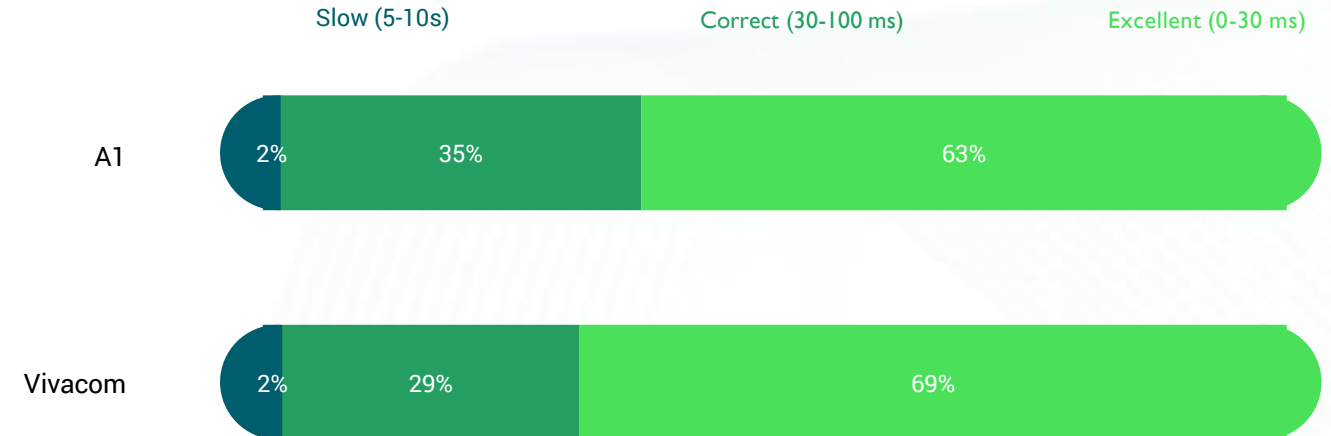
## Latency Speed (average)



Source : nperf.com

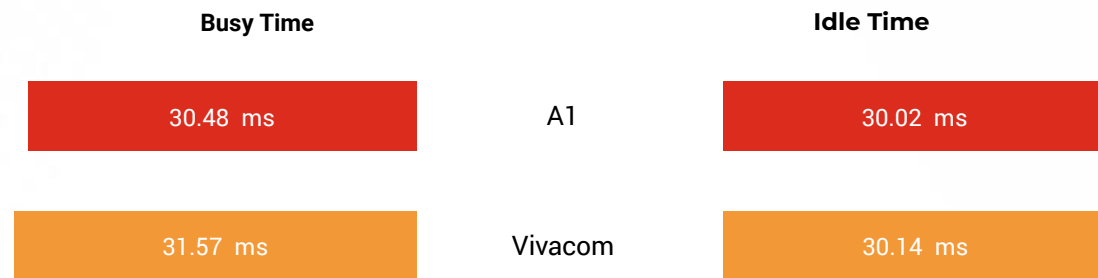
The subscribers of A1 and Vivacom enjoyed the best average fixed Internet latency speed in 2024.

## Latency Speed results ventilation (average)



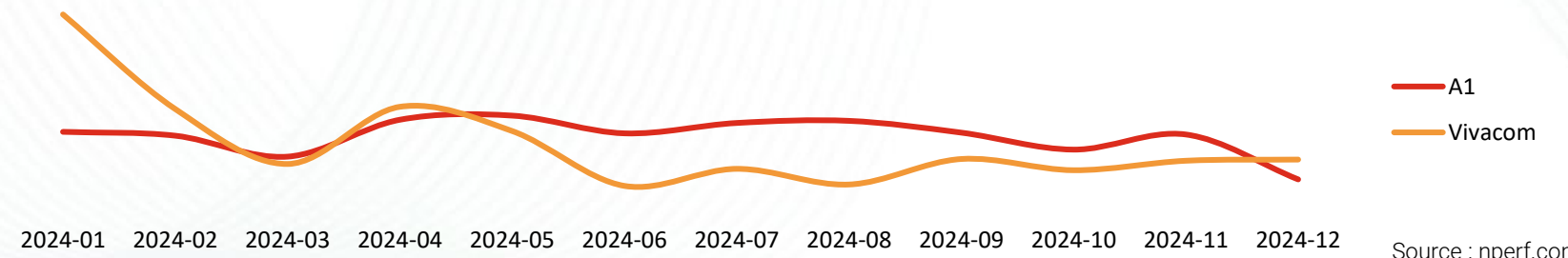
Source : nperf.com

## Latency Speed (average)



Source : nperf.com

## Latency Speed evolution over the year (average)



Source : nperf.com

### nPerf Score (nPoints)



Source : nperf.com

The subscribers of Vivacom enjoyed the best WIFI Internet performances in 2024.

- Best performances WIFI: Vivacom
- Best web browsing performances WIFI: Vivacom
- Best video streaming performances WIFI: Vivacom
- Fastest performances (Download) WIFI: Vivacom
- Fastest performances (Upload) WIFI: Vivacom
- WIFI connections with the lowest latency: A1 and Vivacom

Source : nperf.com

A1

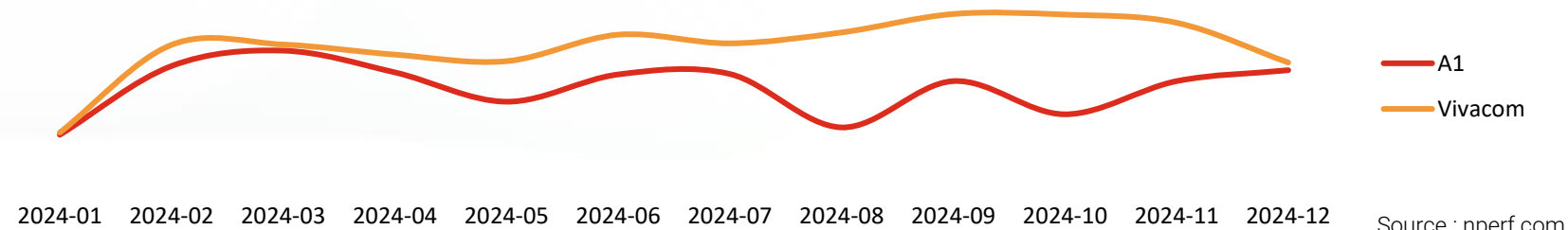


VIVACOM



Source : nperf.com

### nPerf score evolution over the year (average)



Source : nperf.com

## nPerf Score (nPoints)



Source : nperf.com

The subscribers of Vivacom enjoyed the best fixed Internet performances in 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

VIVACOM

Best fixed Internet performance in 2024



A1

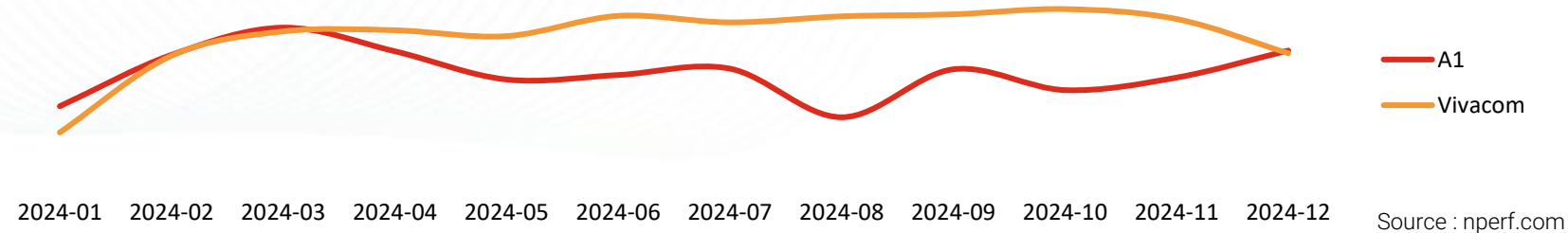


VIVACOM



Source : nperf.com

## nPerf score evolution over the year (average)



Source : nperf.com

The background features a series of thin, light-colored wavy lines that create a sense of motion and depth, set against a dark blue background.

↳ perf