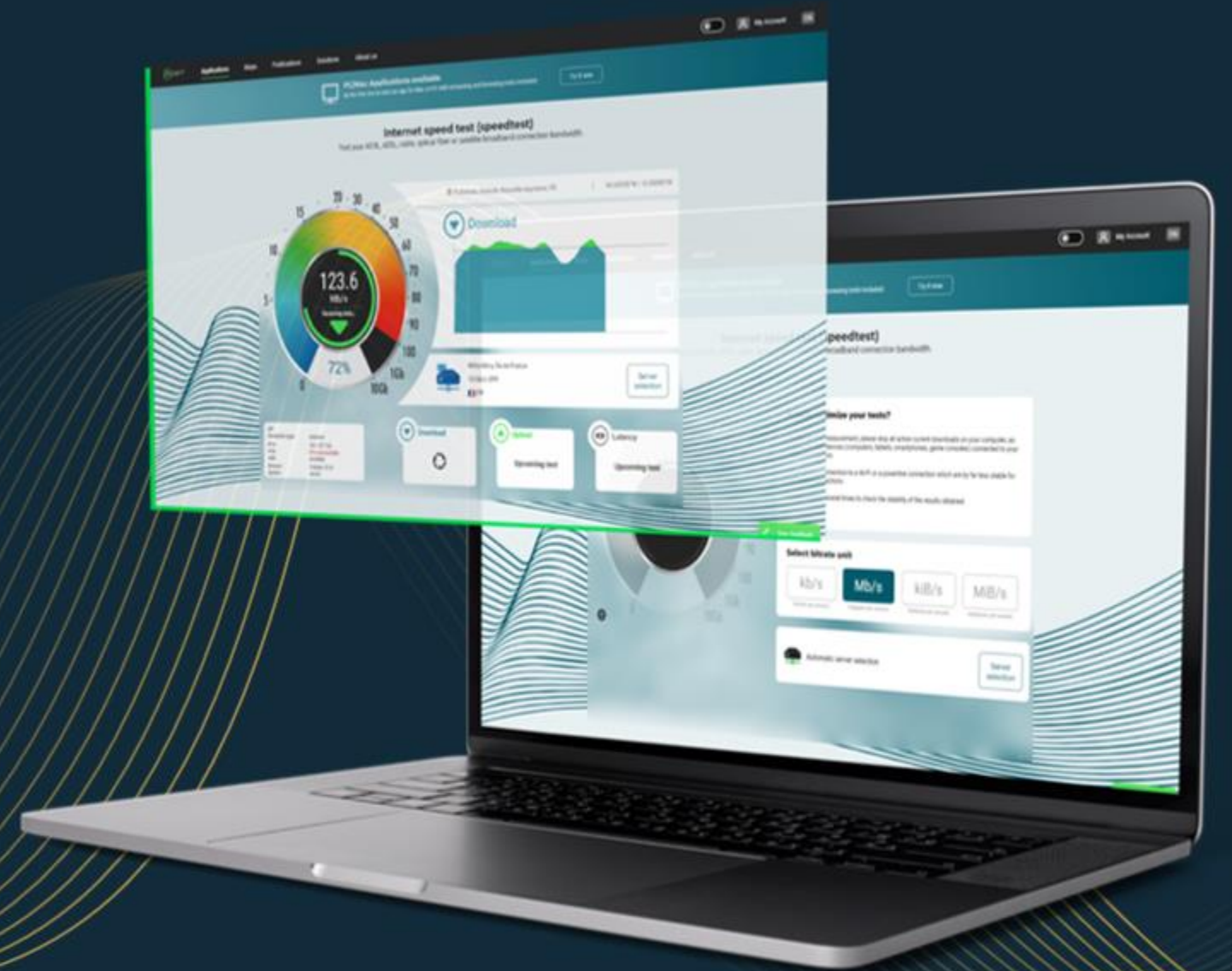


01/15/2025

# Barometer of fixed Internet connections in Portugal

01/01/2024 - 12/31/2024



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**Introducing  
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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.

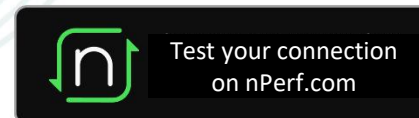
 **300k+** tests daily worldwide.

 **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 MEO and Vodafone enjoyed the best fixed Internet performances in 2024.

### Fixed Internet connections in Portugal

	<u>MEO</u>	NOS	Nowo	<u>Vodafone</u>
▼ Download bitrates (Mb/s)	224,45	222,45	141,24	234,91
▲ Upload bitrates (Mb/s)	128,05	78,23	21,32	109,14
◀▶ Latency (ms)	19,77	18,40	24,28	17,64
🌐 Web browsing (%)	75,50	73,93	72,04	76,87
📺 Youtube streaming (%)	89,36	88,36	84,95	88,03
nPerf Score (nPoints)	129 851	125 576	103 884	131 048

Source : nperf.com



Best fixed Internet performance in 2024



Source : nperf.com



Source : nperf.com

The subscribers of NOS and Vodafone enjoyed the best FTTH Internet performances in Portugal in 2024.


FTTH Fixed Internet connections in Portugal

	MEO	NOS	Nowo	Vodafone
▼ Download bitrates (Mb/s)	392,27	455,86	292,83	423,44
▲ Upload bitrates (Mb/s)	222,06	168,67	255,46	189,61
◀▶ Latency (ms)	15,45	12,10	20,23	10,98
🌐 Web browsing (%)	80,21	81,32	81,33	83,04
📺 Youtube streaming (%)	93,28	92,76	82,25	91,63
nPerf Score (nPoints)	151 512	154 972	136 370	156 171

Source : nperf.com

The subscribers of MEO and Vodafone enjoyed the best WIFI Internet performances in Portugal in 2024.

### Fixed Internet connections in Portugal

	MEO	NOS	Nowo	Vodafone
▼ Download bitrates (Mb/s)	169,61	169,29	129,35	184,46
▲ Upload bitrates (Mb/s)	106,24	60,79	19,05	93,13
◀▶ Latency (ms)	21,46	22,71	25,44	19,53
🌐 Web browsing (%)	76,13	74,34	75,13	77,62
📺 Youtube streaming (%)	89,80	88,54	85,32	88,59
 nPerf Score (nPoints)	124 583	117 836	103 625	126 446

Source : nperf.com

### Introduction

In 2024, the fixed-line market in Portugal has seen significant developments. Vodafone and MEO have emerged as co-leaders in the market, indicating a shift in leadership from the previous period. The market showcases strong performance in various KPIs, with Vodafone leading in download speed, latency, and browsing, while MEO excels in upload speed and video streaming. These trends highlight the competitive landscape and the strengths of the operators in the market.

#### **Vodafone: Co-leader of the market and domination in download, latency, and browsing.**

For the period analyzed, Vodafone has secured its position as a co-leader in the market with impressive performances across multiple categories. Vodafone leads in download speed, recording the highest speed, and also excels in latency and browsing, setting a benchmark in these areas. The operator maintains a strong presence in WiFi and FTTH, reinforcing its leadership in fixed-line technologies.

#### **MEO: Co-leader of the market and excellence in upload and video streaming.**

MEO stands out as a co-leader in the market alongside Vodafone, demonstrating remarkable capabilities in upload speed and video streaming. The operator's consistent performance in these areas, coupled with its focus on WiFi, underscores its significant contribution to the market's overall progress.

#### **NOS: Excellence in FTTH focus.**

Although NOS is not a market leader, it shows strong performance in the FTTH category, marking its presence in this technology focus. NOS's advancements in download speed and its contribution to the market are noteworthy, supporting the overall competitiveness of the industry.

#### **Nowo: Excellence in browsing.**

Nowo distinguishes itself with notable achievements in browsing and streaming, showcasing its capabilities in delivering efficient web experiences. While not a market leader, Nowo's focus on improving browsing and maintaining competitive streaming performance adds value to the market dynamics.

### Conclusion

Vodafone and MEO have emerged as co-leaders in the Portuguese fixed-line market, demonstrating significant strength across various KPIs and technology focuses such as WiFi and FTTH. The market is characterized by its competitiveness and the ability of operators to deliver high-performance services, contributing to a positive outlook for future advancements.

## 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

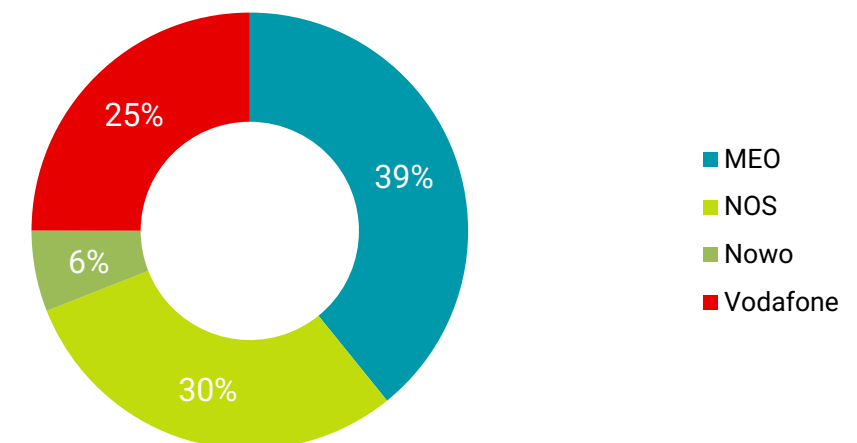
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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 2% 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)

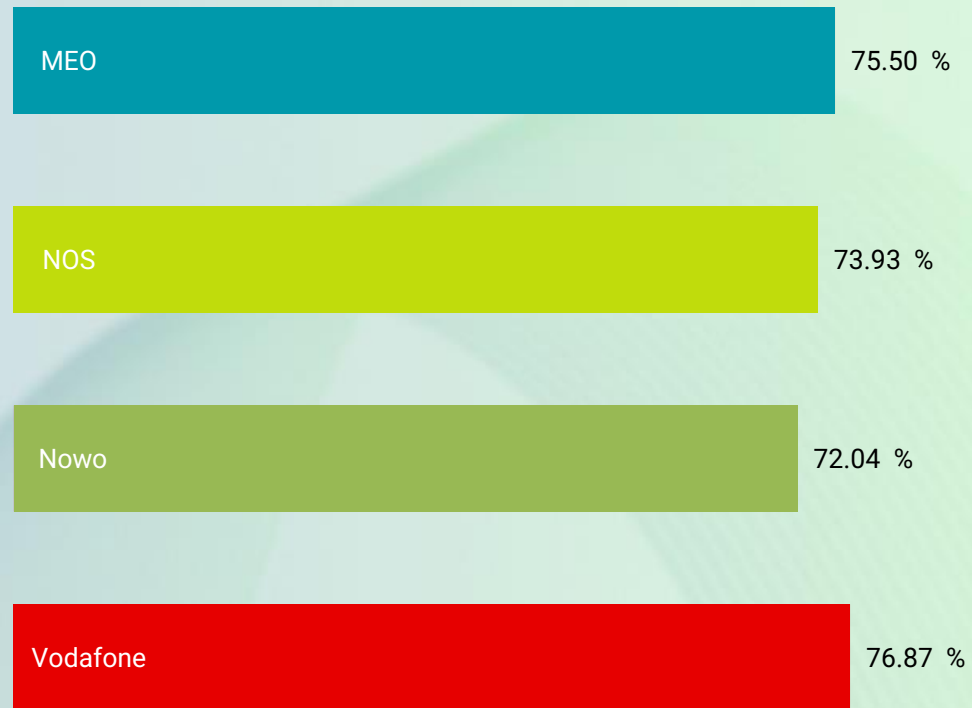


Source : nperf.com





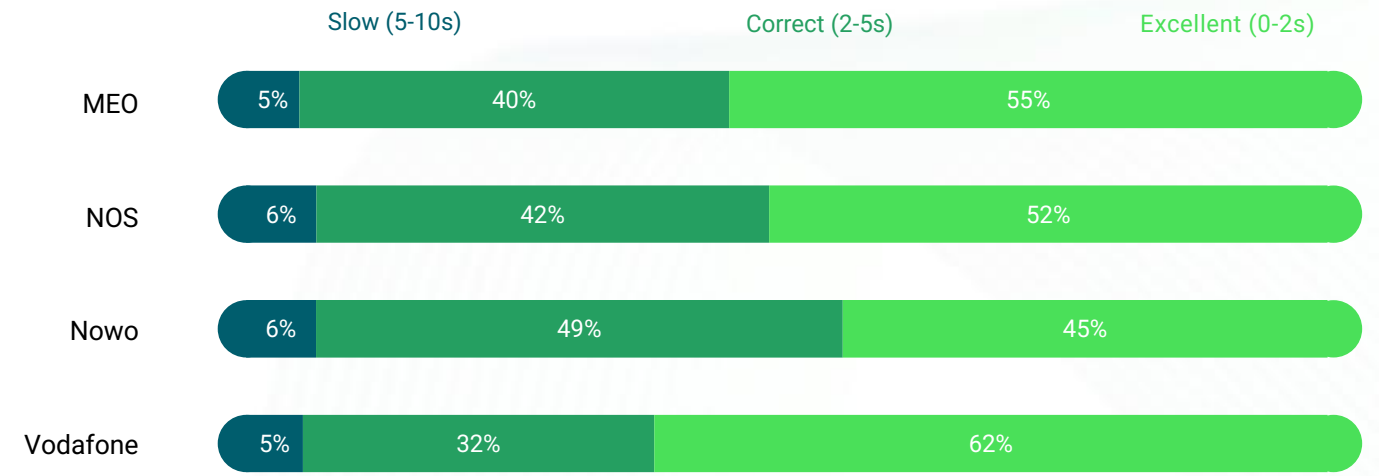
## Browsing Performance rate (average)



Source : nperf.com

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

## Browsing Performance results ventilation (average)



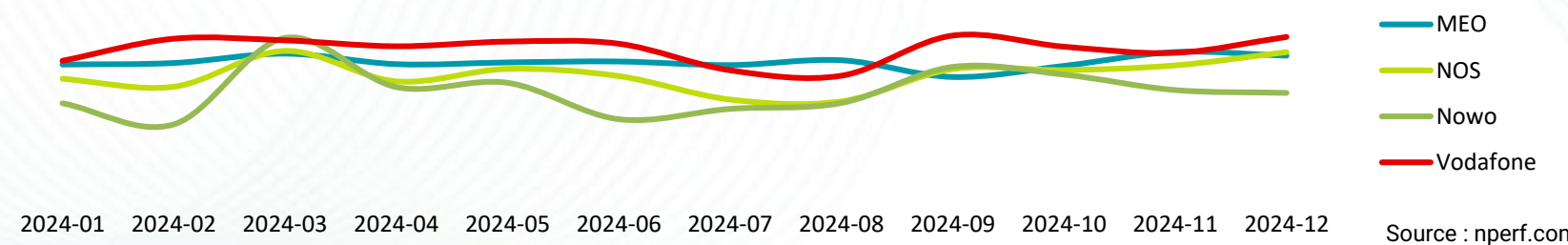
Source : nperf.com

## Browsing Performance rate (average)



Source : nperf.com

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



Source : nperf.com



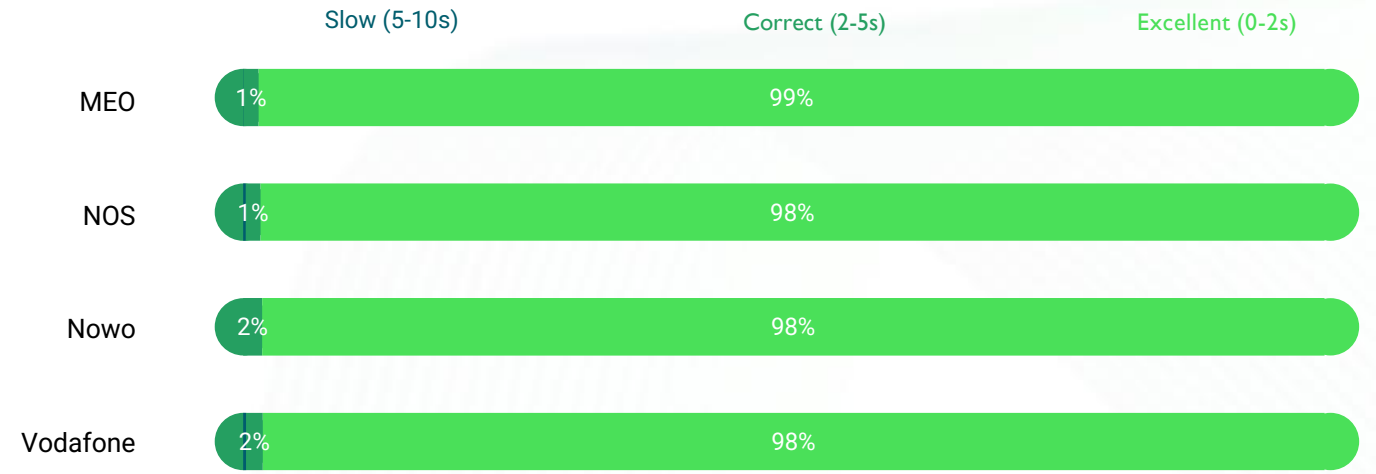
## Streaming Performance rate (average)



Source : nperf.com

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

## Streaming Performance results ventilation (average)



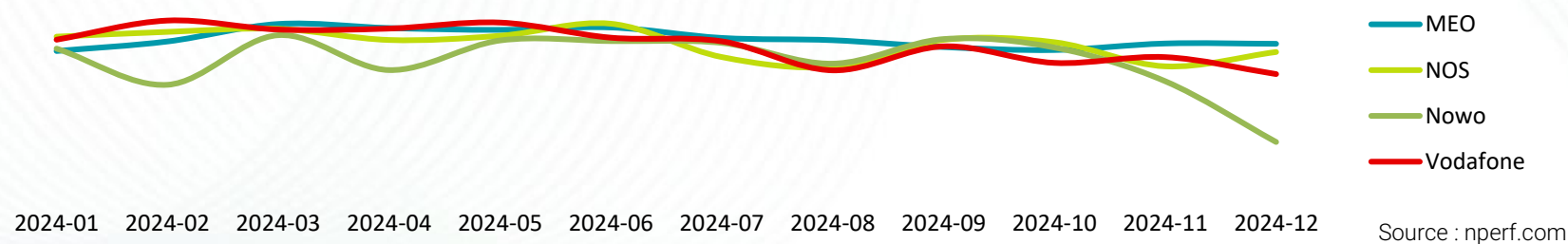
Source : nperf.com

## Streaming Performance rate (average)



Source : nperf.com

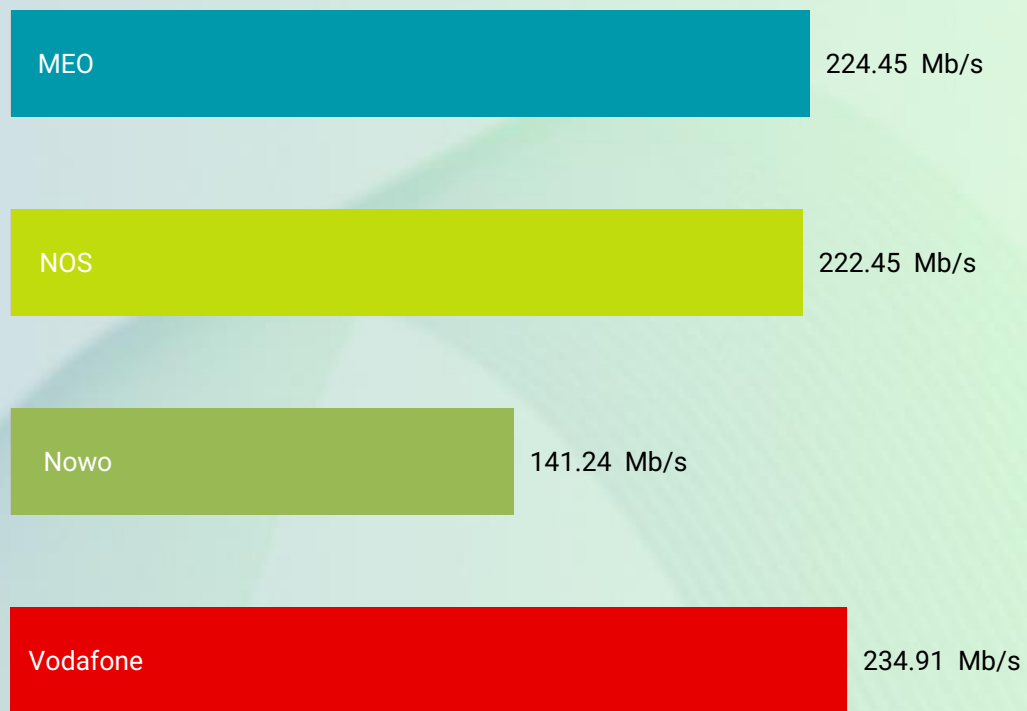
## Streaming performance rate (average) evolution over the year



Source : nperf.com



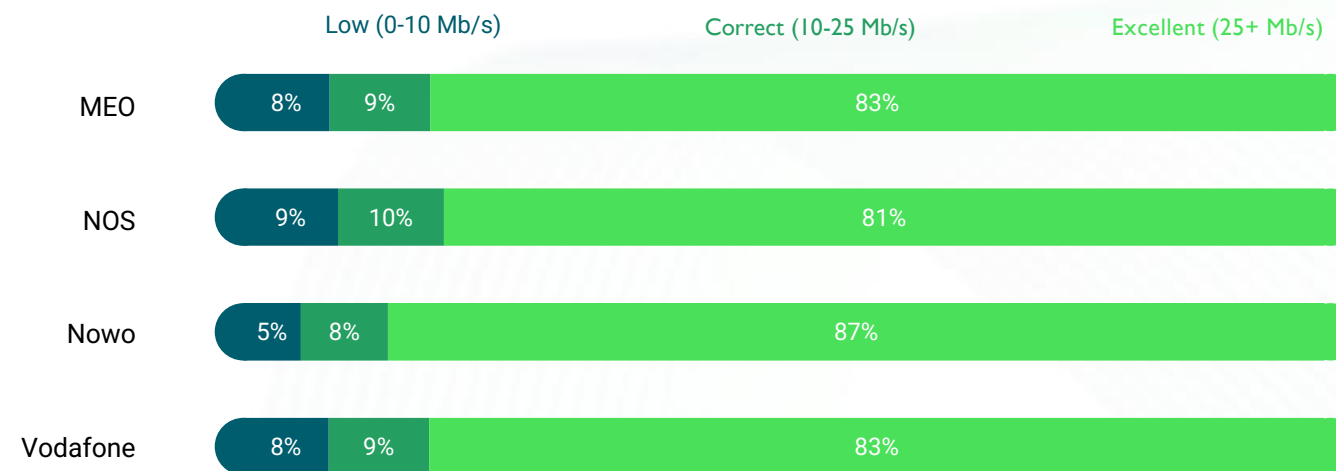
## Download Speed (average)



Source : nperf.com

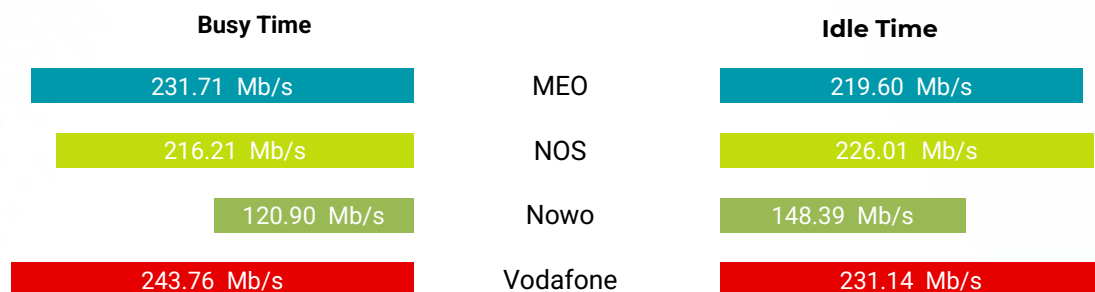
The subscribers of Vodafone enjoyed the best average fixed Internet download speed in 2024.

## Download Speed results ventilation (average)



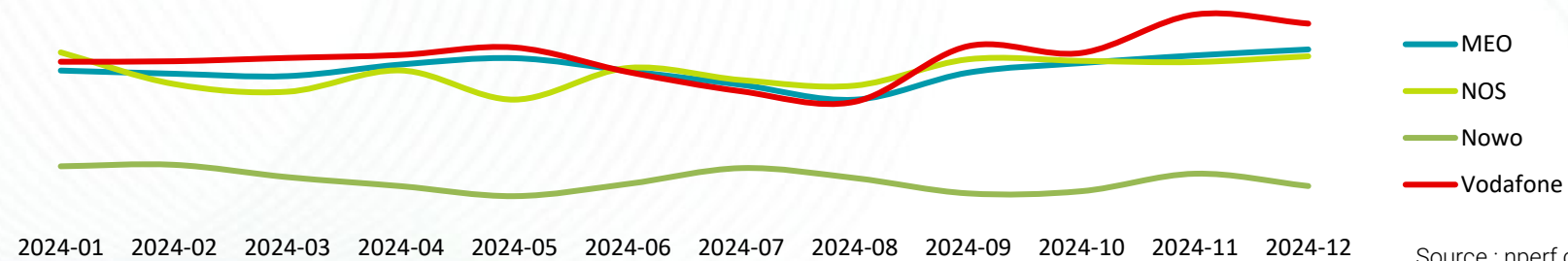
Source : nperf.com

## Download Speed (average)



Source : nperf.com

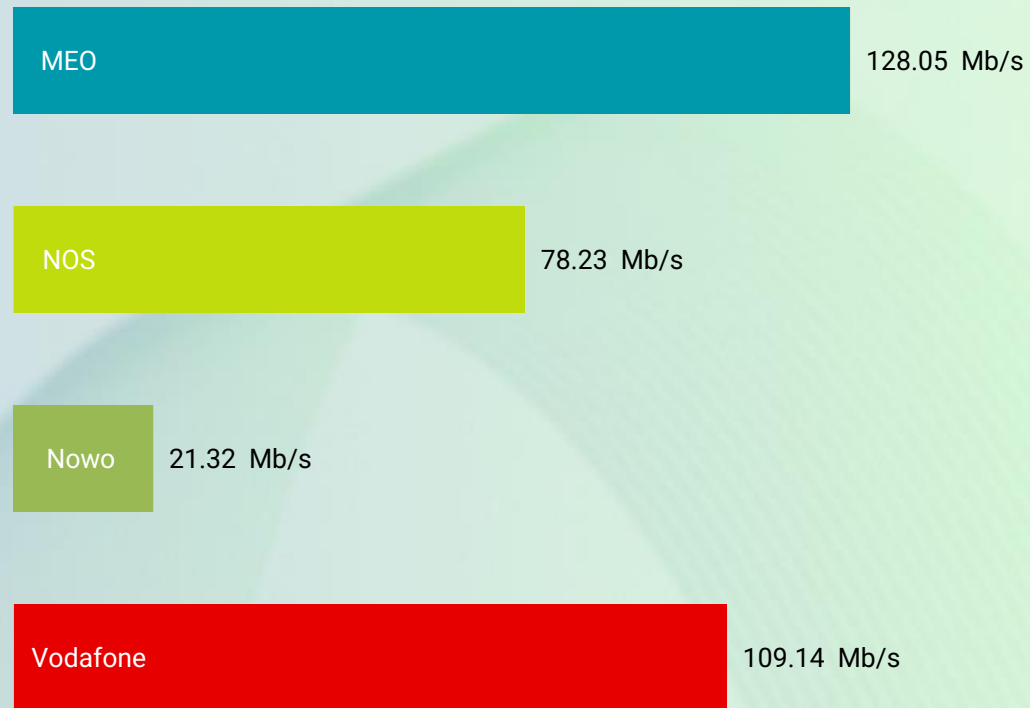
## Download Speed evolution over the year (average)



Source : nperf.com



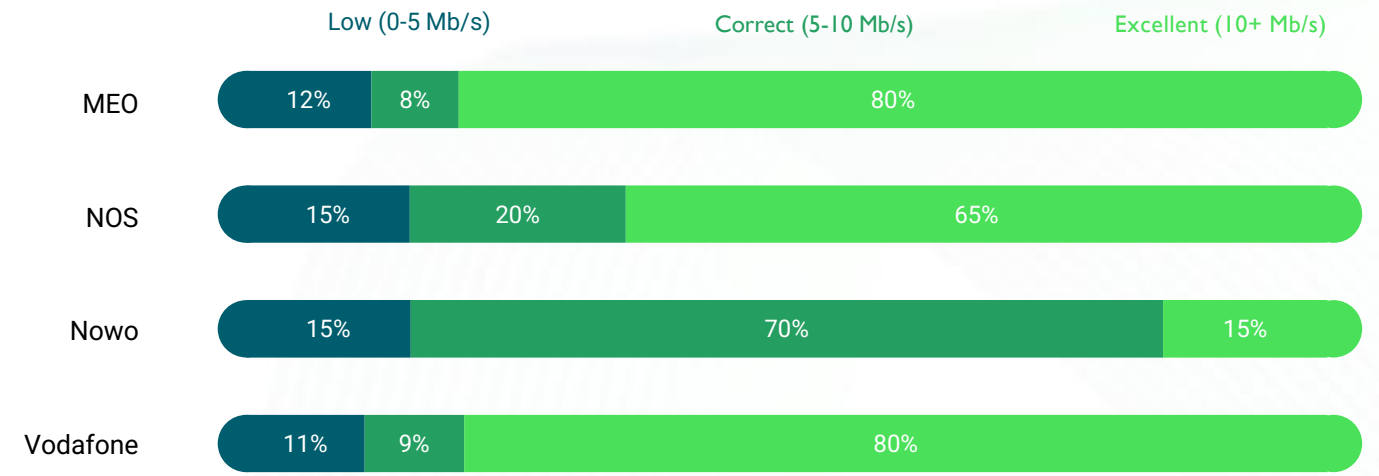
## Upload Speed (average )



Source : nperf.com

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

## Upload Speed results ventilation (average)



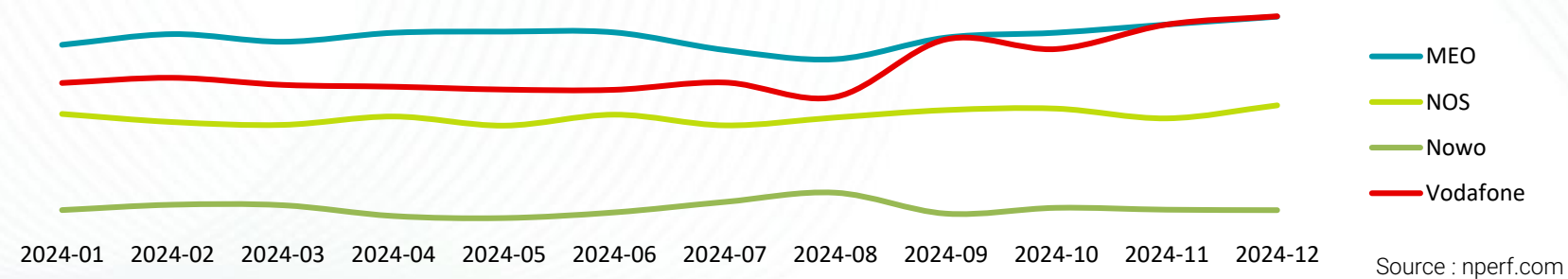
Source : nperf.com

## Upload Speed (average )



Source : nperf.com

## Upload Speed evolution over the year (average)



Source : nperf.com



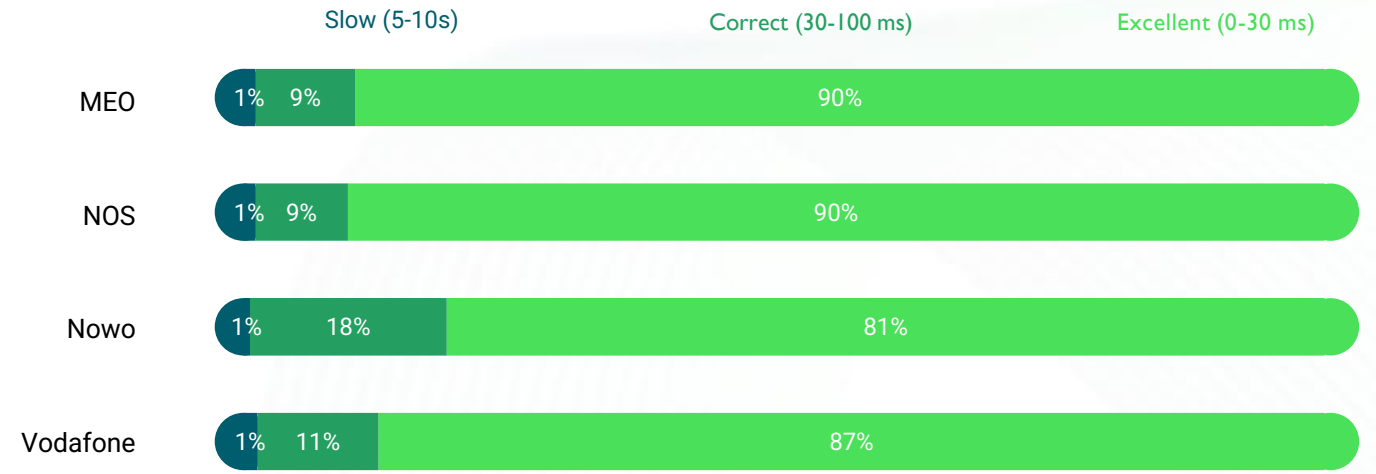
## Latency Speed (average)



Source : nperf.com

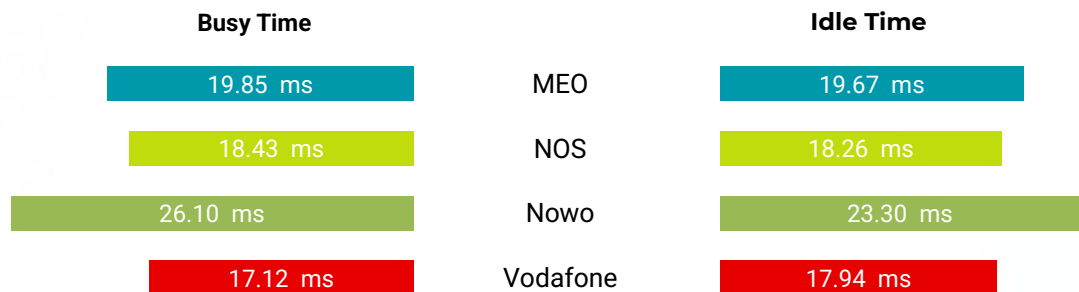
The subscribers of Vodafone enjoyed the best average fixed Internet latency speed in 2024.

## Latency Speed results ventilation (average)



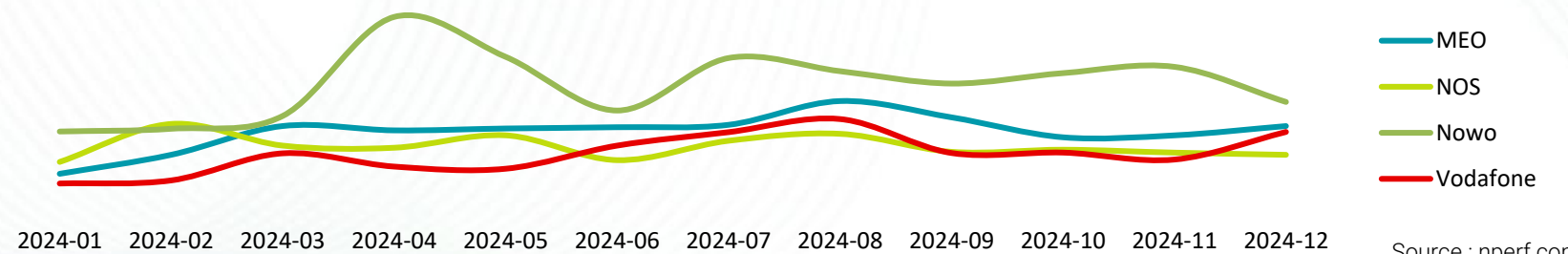
Source : nperf.com

## Latency Speed (average)



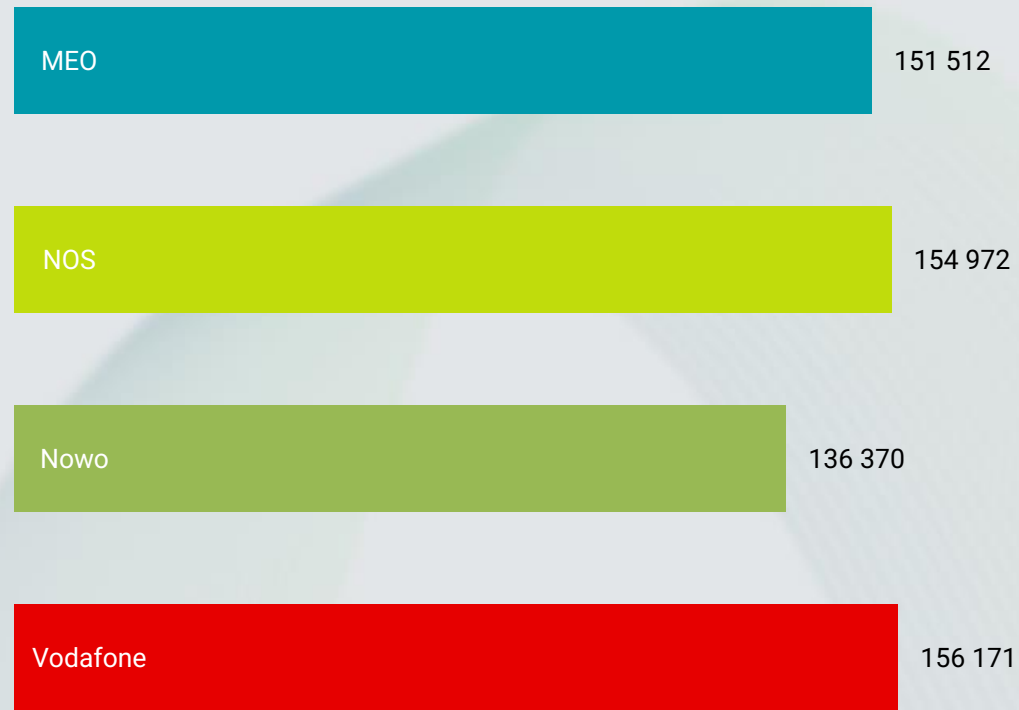
Source : nperf.com

## Latency Speed evolution over the year (average)



Source : nperf.com

nPerf Score (nPoints)

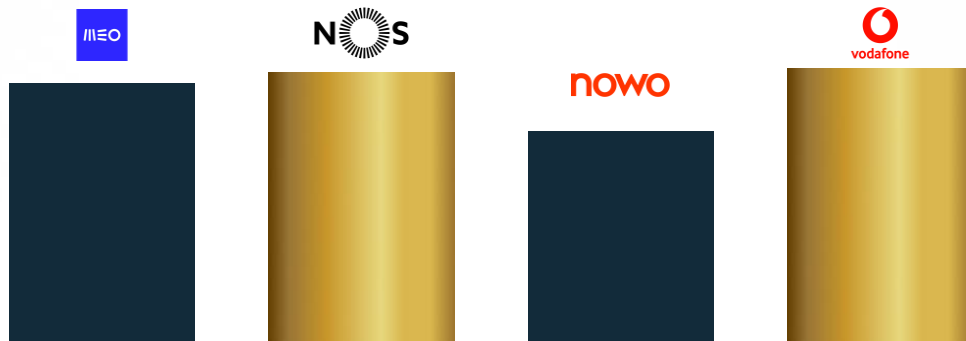


Source : nperf.com

The subscribers of NOS and Vodafone enjoyed the best FTTH Internet performances in 2024.

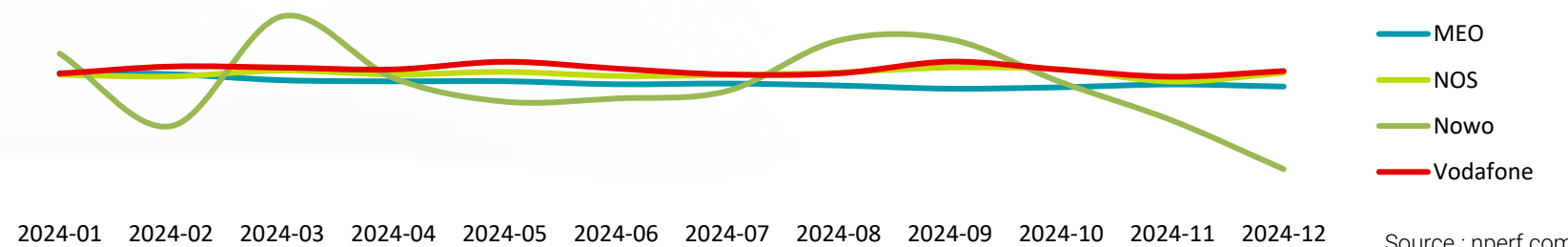
- Best performances FTTH: NOS and Vodafone
- Best web browsing performances FTTH: Vodafone
- Best video streaming performances FTTH: MEO
- Fastest performances (Download) FTTH: NOS
- Fastest performances (Upload) FTTH: Nowo
- FTTH connections with the lowest latency: Vodafone

Source : nperf.com



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

nPerf Score (nPoints)



Source : nperf.com

The subscribers of MEO and Vodafone enjoyed the best WIFI Internet performances in Portugal in 2024.

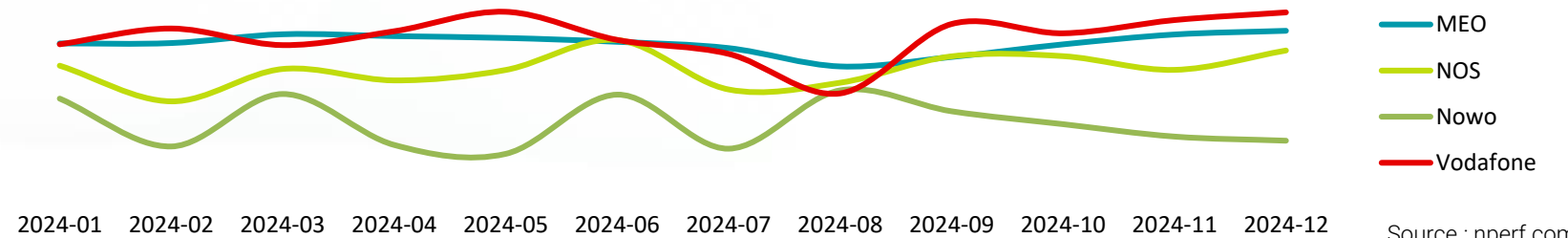
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- Best video streaming performances WIFI: MEO
- Fastest performances (Download) WIFI: Vodafone
- Fastest performances (Upload) WIFI: MEO
- WIFI connections with the lowest latency: Vodafone

Source : nperf.com



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

# Fixed Internet performance in Portugal



## nPerf Score (nPoints)



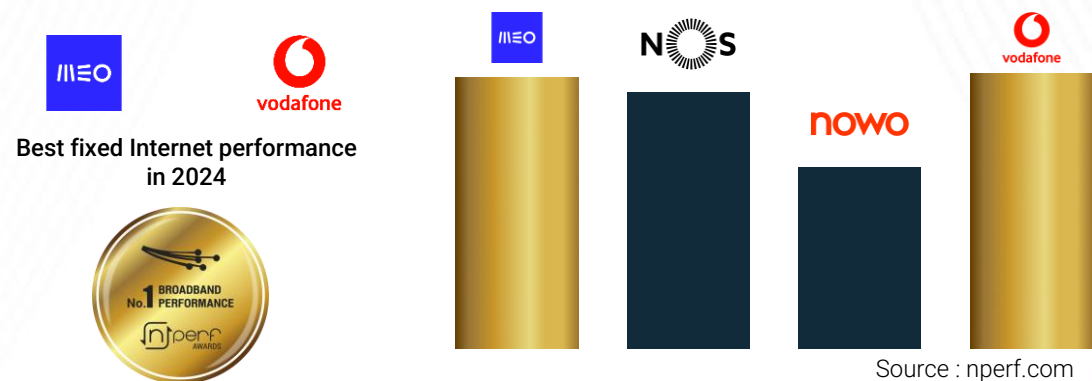
Source : nperf.com

The subscribers of MEO and Vodafone enjoyed the best fixed Internet performances in 2024.

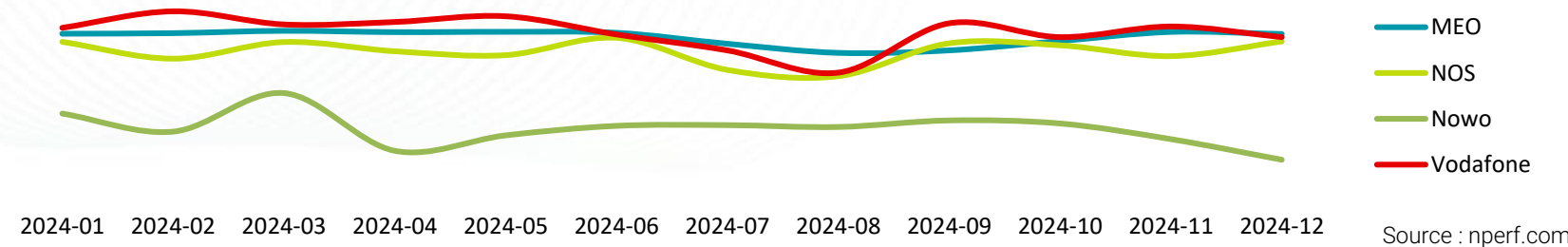
The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

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

Source : nperf.com



## 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.

**n**perf