Barometer of mobile Internet connections in Portugal

01/01/2024 - 12/31/2024













Executive summary

Analysis



Methodology



nPerf Network assesment

1. Introducing nPerf

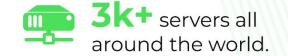


Expert in the telecom network optimization

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.







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! Dowload our app or visit our website!







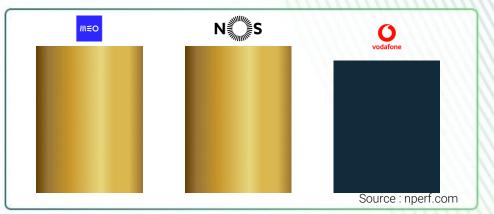
2. Executive Summary



The subscribers of MEO and NOS enjoyed the best mobile Internet performances in 2024.

_	MEO	NOS	Vodafone
Download bitrates (Mb/s)	206,17	204,15	111,79
Upload bitrates (Mb/s)	29,29	25,90	19,43
Latency (ms)	32,23	29,48	33,50
Web browsing (%)	69,15	68,88	69,65
Youtube streaming (%)	85,08	84,68	84,99
nPerf Score (nPoints)	104 348	104 355	94 116







The subscribers of MEO enjoyed the best 5G Internet performances in Portugal in 2024.

	MEO	NOS	Vodafone	
▼ Download bitrates (Mb/s)	377,52	321,19	192,27	
☐ Upload bitrates (Mb/s)	47,85	35,97	28,68	
◀▶ Latency (ms)	26,60	27,08	28,81	
Web browsing (%)	75,93	74,59	77,00	
Youtube streaming (%)	89,16	87,64	87,43	
nPerf Score (nPoints)	125 806	119 460	111 993	

Source : nperf.com

3. Analysis



Introduction

Our 2024 analysis reveals a dynamic landscape in Portugal mobile telecom sector. The focus on 5G technology has brought significant changes, with MEO emerging as a new leader, surpassing last year's performance figures. The current market coleaders, NOS and MEO, have both shown remarkable performance, sharing the title of market winner. In terms of the best mobile Internet performance in 2024, both operators have demonstrated strong capabilities in various key performance indicators (KPIs) such as download and upload speed, latency, browsing, and video streaming.

NOS: Co-leader of the market with domination in download and latency.

For the period analyzed, NOS maintains its strong position with a notable score of 104,355. The operator excels in download speed, achieving a leading position alongside MEO, and also demonstrates superior performance in latency. In the realm of browsing, NOS is a co-leader with Vodafone and MEO, showcasing its prowess in delivering a seamless internet experience. While NOS did not secure the top position in video streaming, it remains competitive in this category.

MEO: Co-leader of the market and dominance in upload and 5G.

MEO has secured its position as a co-leader with a remarkable improvement in its score, showing a 14.4% increase. It leads the market in upload speed, marking a significant achievement in enhancing upload speeds for consumers. Additionally, MEO has taken the lead in the 5G focus, surpassing NOS from the previous year. This accomplishment underlines MEO's strategic focus on cutting-edge mobile

technologies.

Vodafone: Excellence in consumer experience

Vodafone, while not a market leader, demonstrates excellence in browsing and video streaming. The operator is a co-leader in browsing, sharing the spotlight with NOS and MEO, and showcases its strengths in video streaming, where it rivals the leading operators. Vodafone's performance in these areas highlights its contribution to providing high-quality internet services, particularly in content consumption and user experience.

Conclusion

2024 has seen NOS and MEO as the co-leaders of the market, both excelling in various aspects of mobile internet performance. NOS leads in download speed and latency, while MEO shines in upload speed and 5G technology. Vodafone stands out for its exceptional performance in browsing and video streaming. The competitive environment and the advancements in 5G technology position the market for continued growth and innovation, benefiting consumers with enhanced connectivity and services.

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 birate

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 birate

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.

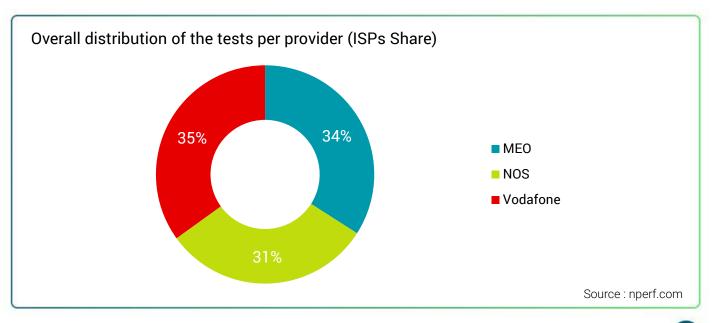
Streaming performance

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.

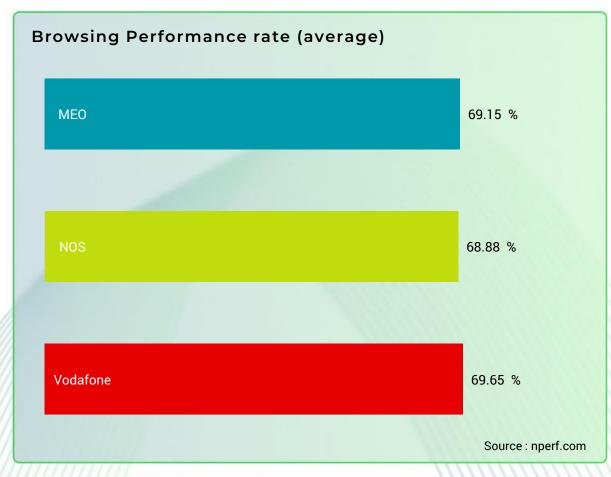
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



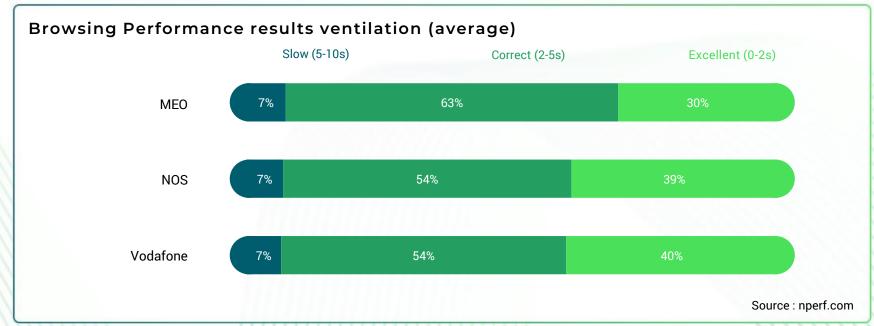


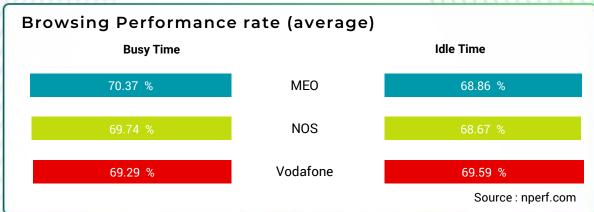
Quality of Experience: Browsing

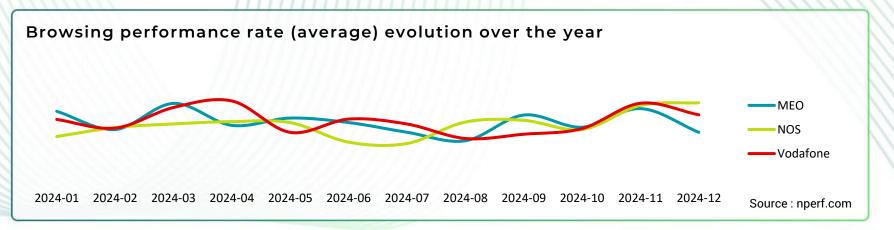




The subscribers of MEO, NOS and Vodafone enjoyed the best mobile Internet Internet browsing performance in 2024.



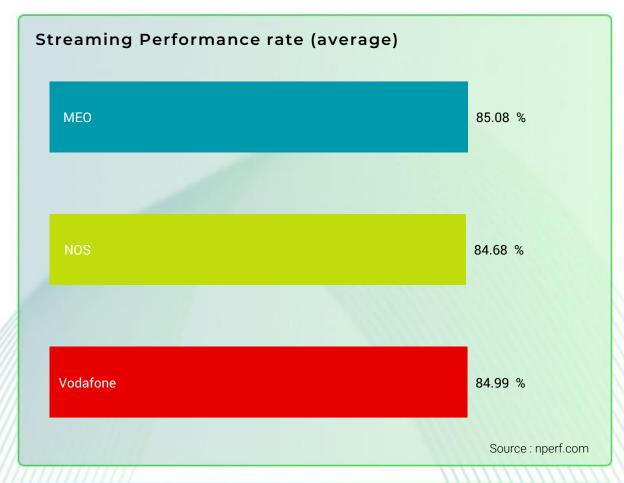




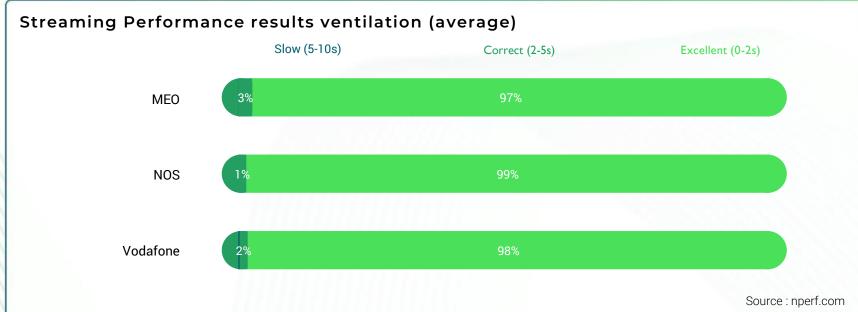


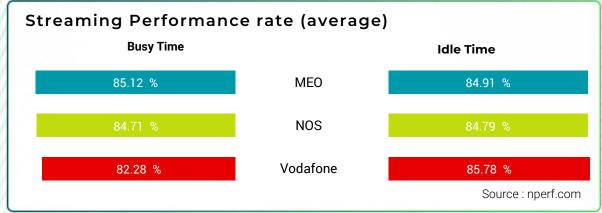
Quality of Experience: Streaming

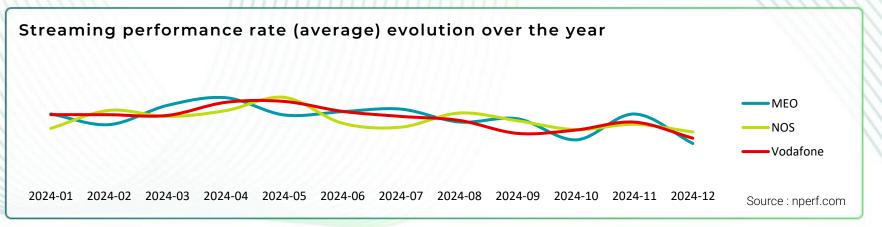




The subscribers of MEO, NOS and Vodafone enjoyed the best mobile Internet streaming performance in 2024.



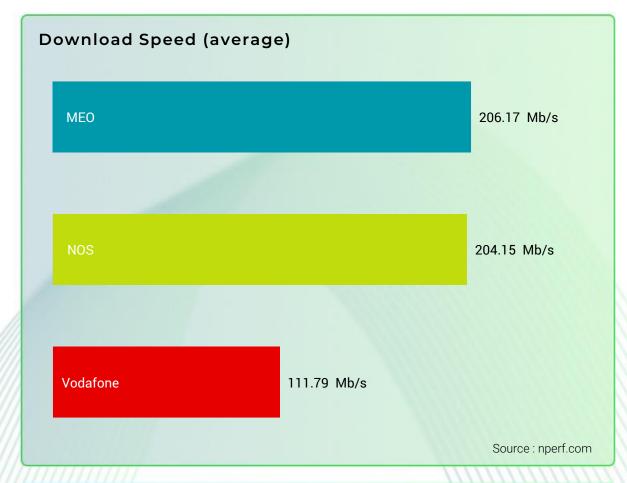




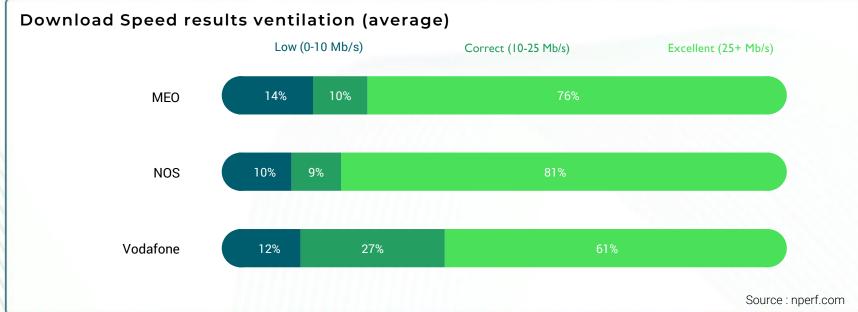


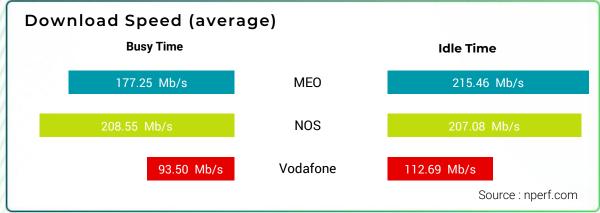
Speed: Download

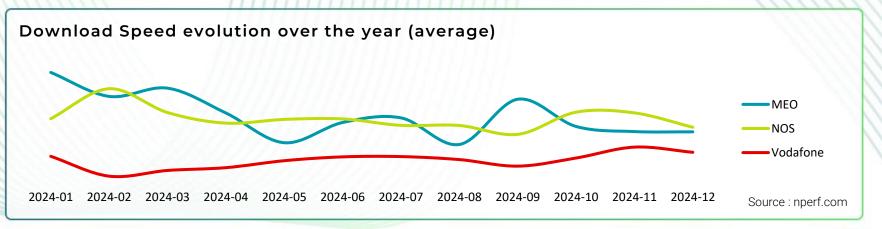




The subscribers of MEO and NOS enjoyed the best average mobile Internet download speed in 2024.



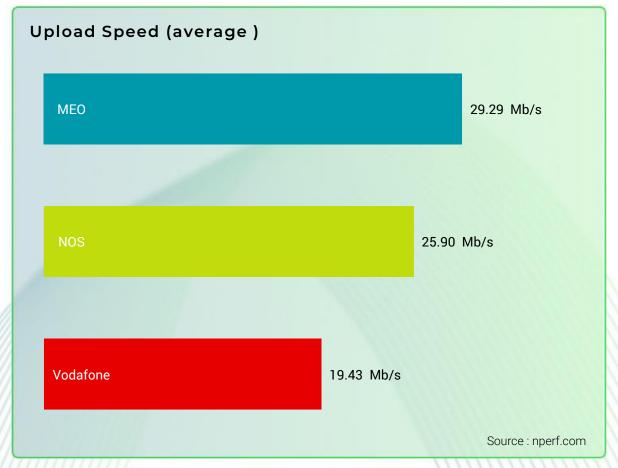




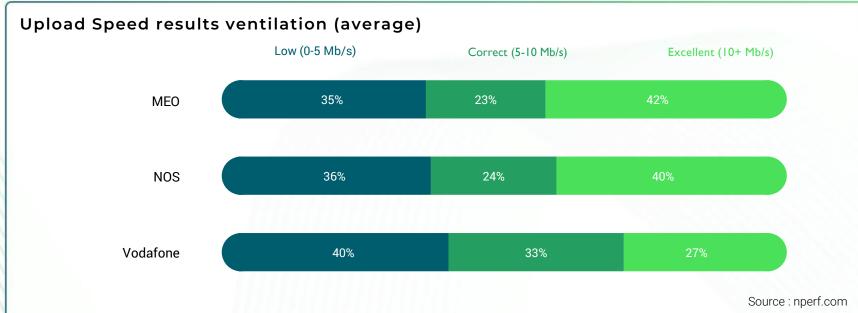


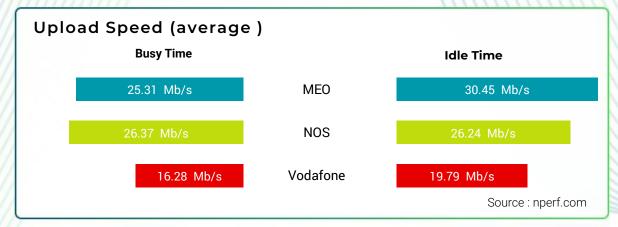
Speed: Upload

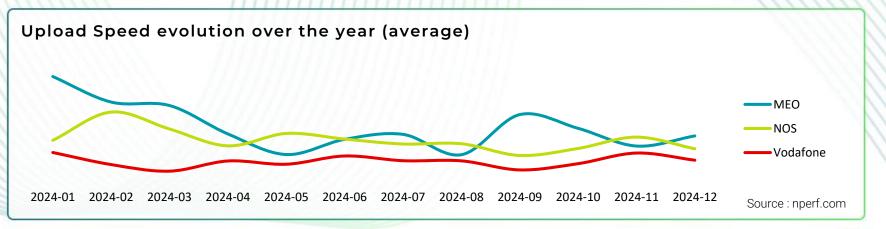




The subscribers of MEO enjoyed the best average mobile Internet upload speed in 2024.



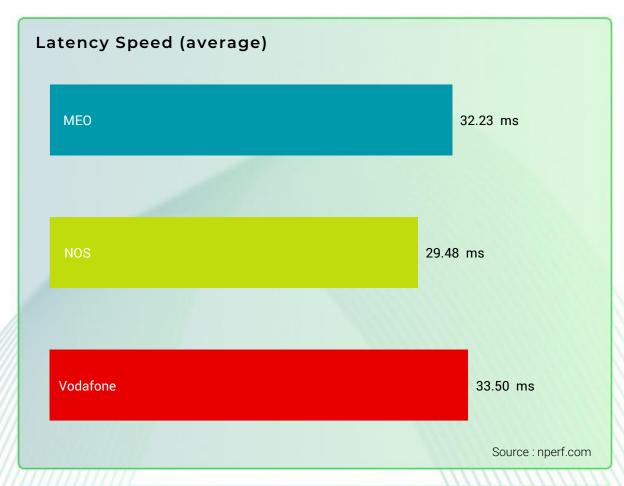




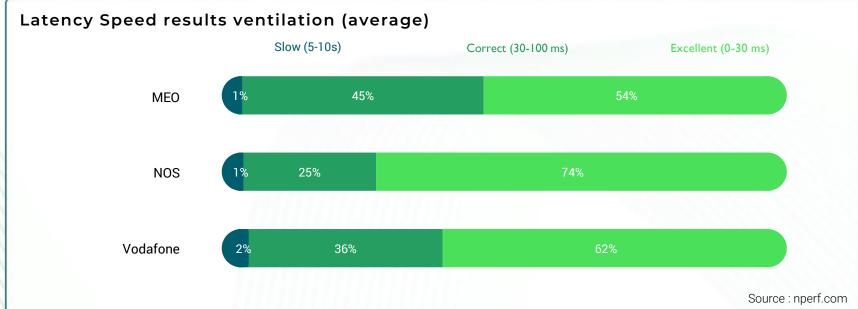


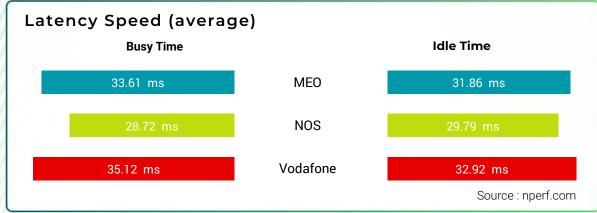
Speed: Latency

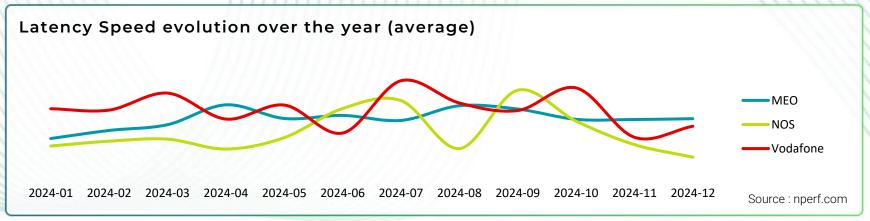




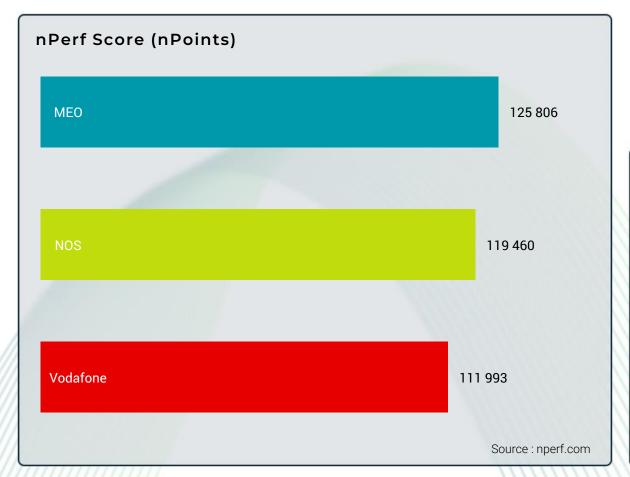
The subscribers of NOS enjoyed the best average mobile Internet latency speed in 2024.







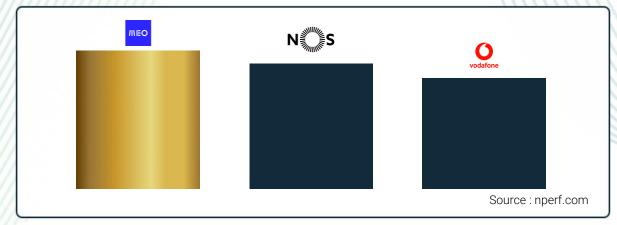


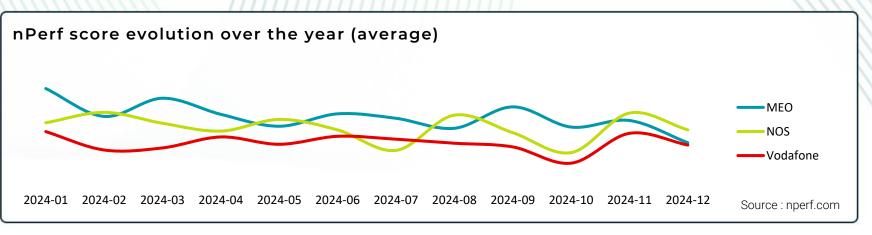


The subscribers of MEO enjoyed the best 5G Mobile Internet performances in 2024.

- Best performances 5G: MEO
- Best web browsing performances 5G: Vodafone
- Best video streaming performances 5G: MEO
- Fastest performances (Download) 5G: MEO
- Fastest performances (Upload) 5G: MEO
- 5G connections with the lowest latency: MEO and NOS

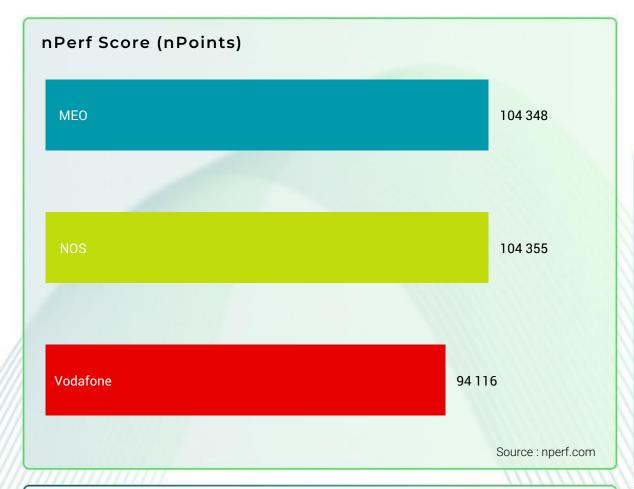
Source: nperf.com





Mobile Internet performance in Portugal





The subscribers of MEO and NOS enjoyed the best mobile 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

