

01/24/2025

# Barometer of mobile Internet connections in Czechia

01/01/2024 - 12/31/2024



**1**

**Introducing  
nPerf**

**2**

**Executive  
summary**

**3**

**Analysis**

**4**

**Methodology**

**5**

**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.



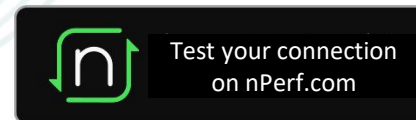
**26Md+** coverage  
scans in total.



**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 O2 enjoyed the best mobile Internet performances in 2024.

### Mobile Internet connections in Czechia

	O2	T-Mobile	Vodafone
▼ Download bitrates (Mb/s)	102,02	85,96	58,11
▲ Upload bitrates (Mb/s)	27,93	27,27	26,60
◀▶ Latency (ms)	29,02	31,33	31,68
🌐 Web browsing (%)	72,45	72,11	71,82
🎥 Youtube streaming (%)	86,86	85,60	84,40
📶 nPerf Score (nPoints)	100 280	95 834	89 800

Source : nperf.com

O<sub>2</sub>

Best mobile Internet performance  
in 2024

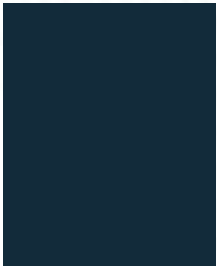
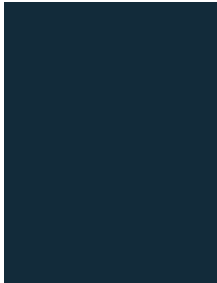


Source : nperf.com

O<sub>2</sub>

T

vodafone



Source : nperf.com

The subscribers of O2 enjoyed the best 5G Internet performances in Czechia in 2024.

5G mobile Internet connections in Czechia

	O2	T-Mobile	Vodafone
▼ Download bitrates (Mb/s)	163,36	131,32	87,52
▲ Upload bitrates (Mb/s)	41,04	42,41	41,01
◀▶ Latency (ms)	24,68	26,96	26,44
🌐 Web browsing (%)	78,49	77,32	77,24
🎬 Youtube streaming (%)	87,85	86,73	87,76
📶 nPerf Score (nPoints)	115 985	110 380	105 848

Source : nperf.com



### Introduction

In 2024, the Czech mobile technology market has seen significant developments and shifts in leadership positions. Notably, O2 has emerged as the new market leader for 2024, marking a shift in leadership dynamics compared to previous years. O2's dominance is particularly highlighted in their global market standing, as they are identified as the sole market leader this year. In terms of KPIs, O2 leads in Download speed, Latency, and Video streaming. However, T-Mobile shares the spotlight with O2 in Upload speed, and browsing sees a competitive landscape with co-leaders including T-Mobile, Vodafone, and O2. The market continues to show positive trends, notably in 5G focus, where O2 has improved its performance from the previous year.

### O2: Market Leader with Exceptional Performance

For the period Q1 2024 to Q4 2024, O2 solidifies its position as the market leader with an impressive global score. The operator excels in several domains, leading in Download speed, Latency, and Video streaming. O2 also maintains its leadership in the 5G focus, demonstrating strong performance improvements. These accomplishments underscore O2's pivotal role in enhancing the mobile internet experience in the Czech Republic.

### T-Mobile: Excellence in Upload speed

T-Mobile, while not the sole market leader, showcases excellence in Upload speed, sharing this category with O2. The operator's global score reflects its competitive stance in the market, and its achievements in browsing and Upload speed highlight

its strengths. T-Mobile's contribution to the market is significant, particularly in maintaining high standards in mobile connectivity.

### Vodafone: Co-Leader in Browsing

Vodafone stands out as a co-leader in Browsing, sharing this category with T-Mobile and O2. Although not leading across multiple KPIs, Vodafone's performance in Browsing and its solid global score signify its competitive edge. The operator's focus on enhancing user experience in browsing positions it as a key player in the market.

### Conclusion

O2 leads the market with outstanding performance in several key areas, particularly in Download speed, Latency, and Video streaming. T-Mobile and Vodafone, as co-leaders in specific categories, contribute to the competitive landscape. The Czech mobile internet market continues to thrive, driven by advancements in 5G technology and the diverse strengths of its leading operators. The market outlook remains positive, with ongoing competitiveness and innovation at the forefront.

## 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

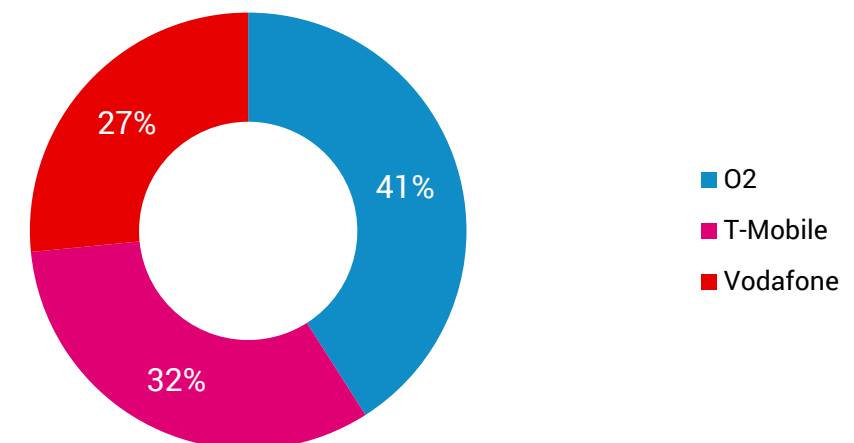
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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



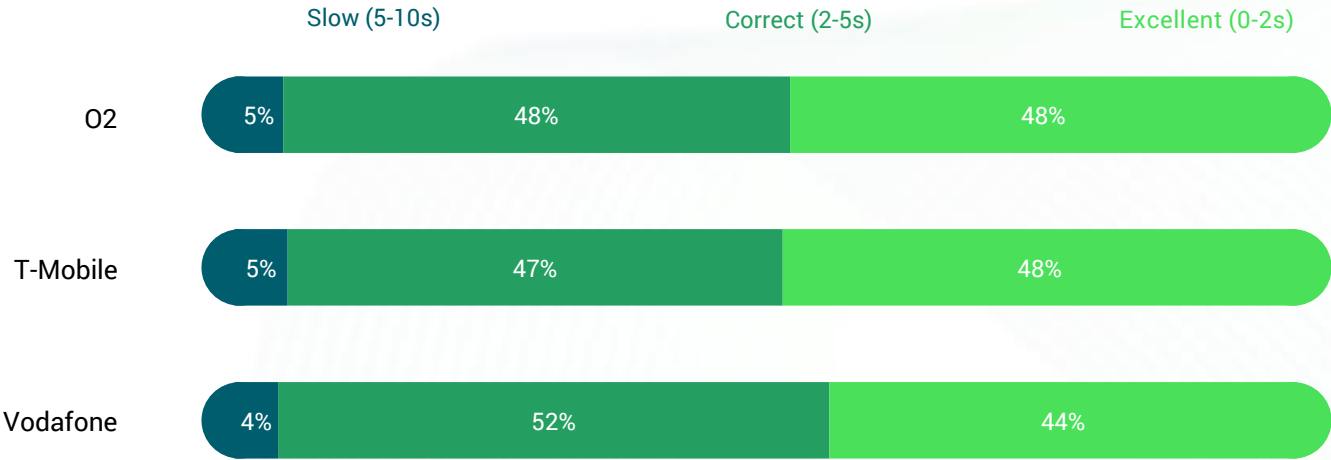
Browsing Performance rate (average)



Source : nperf.com

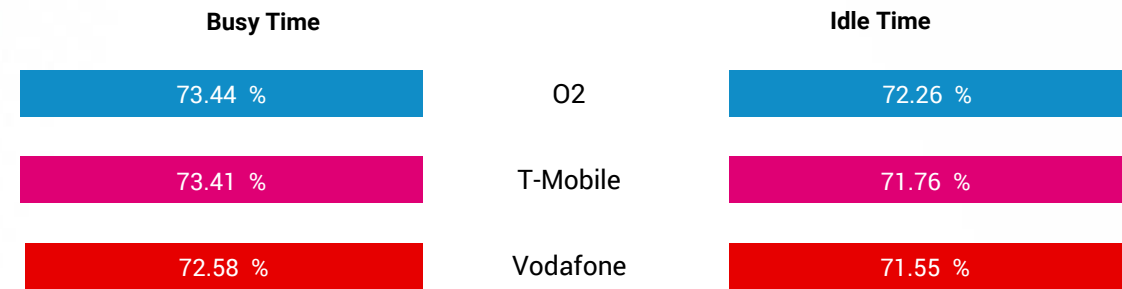
The subscribers of O2, T-Mobile and Vodafone enjoyed the best mobile Internet Internet browsing performance in 2024.

Browsing Performance results ventilation (average)



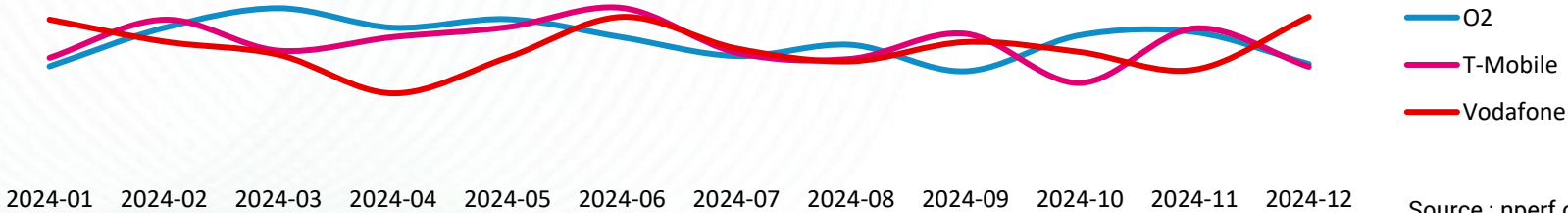
Source : nperf.com

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

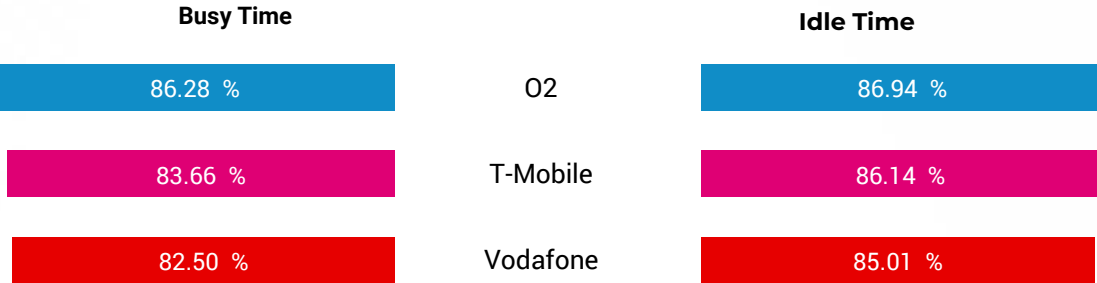
The subscribers of O2 enjoyed the best mobile Internet streaming performance in 2024.

Streaming Performance results ventilation (average)



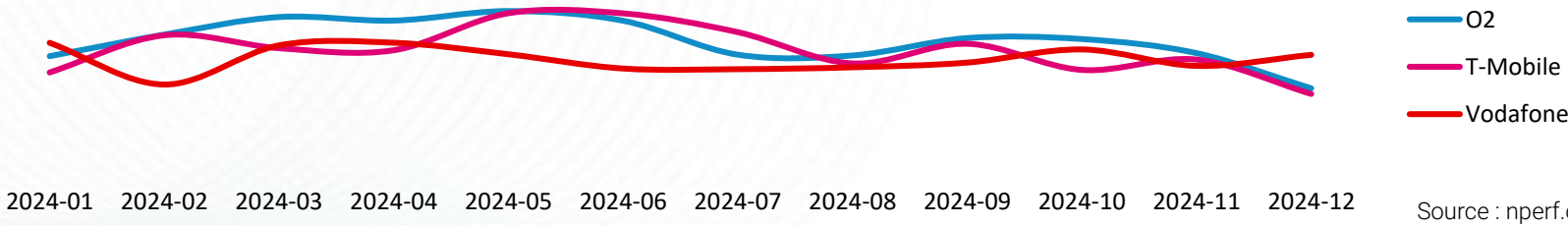
Source : nperf.com

Streaming Performance rate (average)



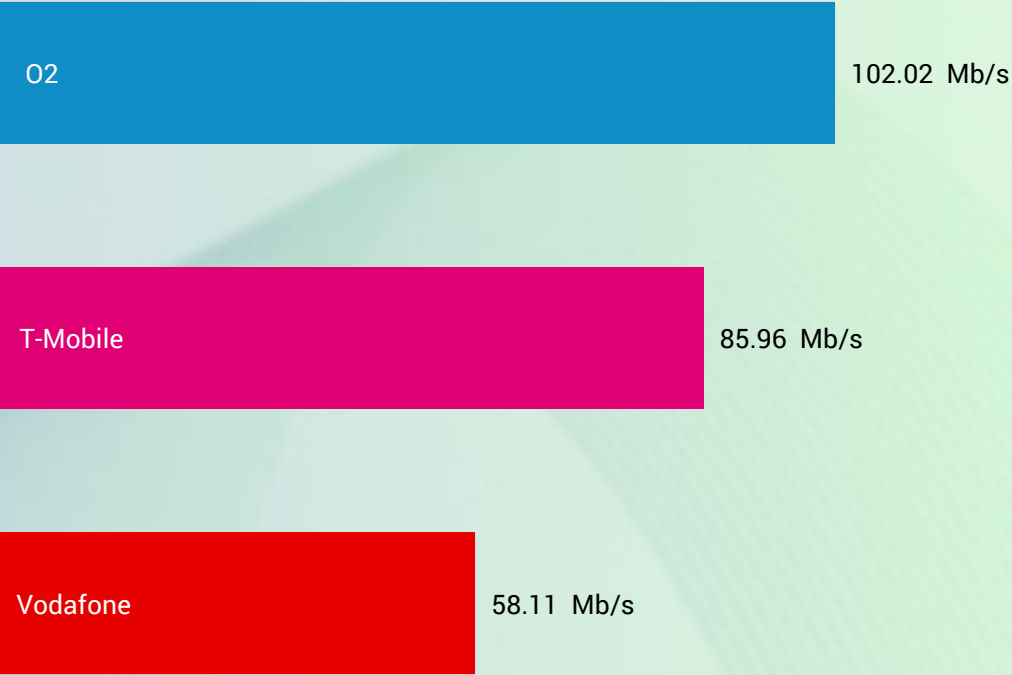
Source : nperf.com

Streaming performance rate (average) evolution over the year





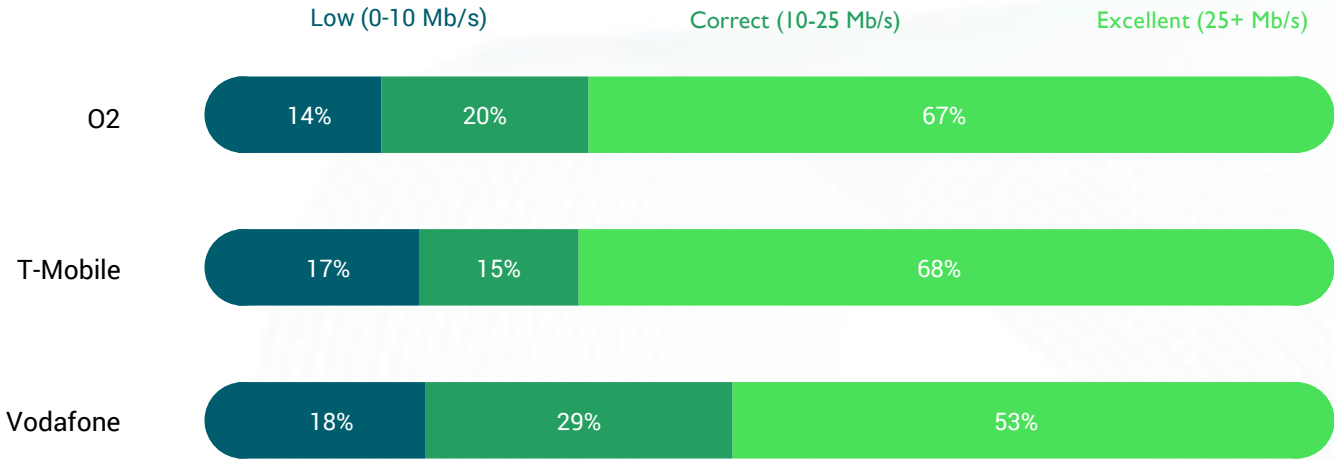
Download Speed (average)



Source : nperf.com

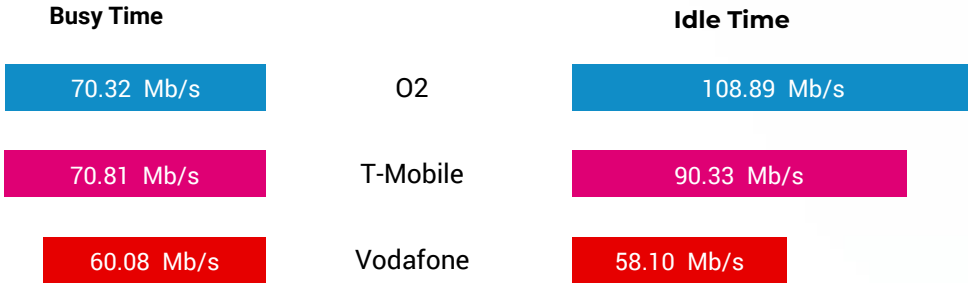
The subscribers of O2 enjoyed the best average mobile Internet download speed in 2024.

Download Speed results ventilation (average)



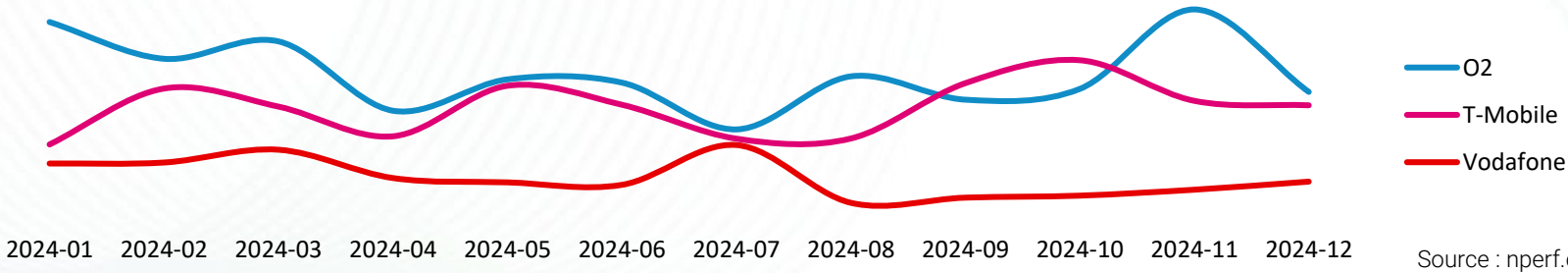
Source : nperf.com

Download Speed (average)



Source : nperf.com

Download Speed evolution over the year (average)

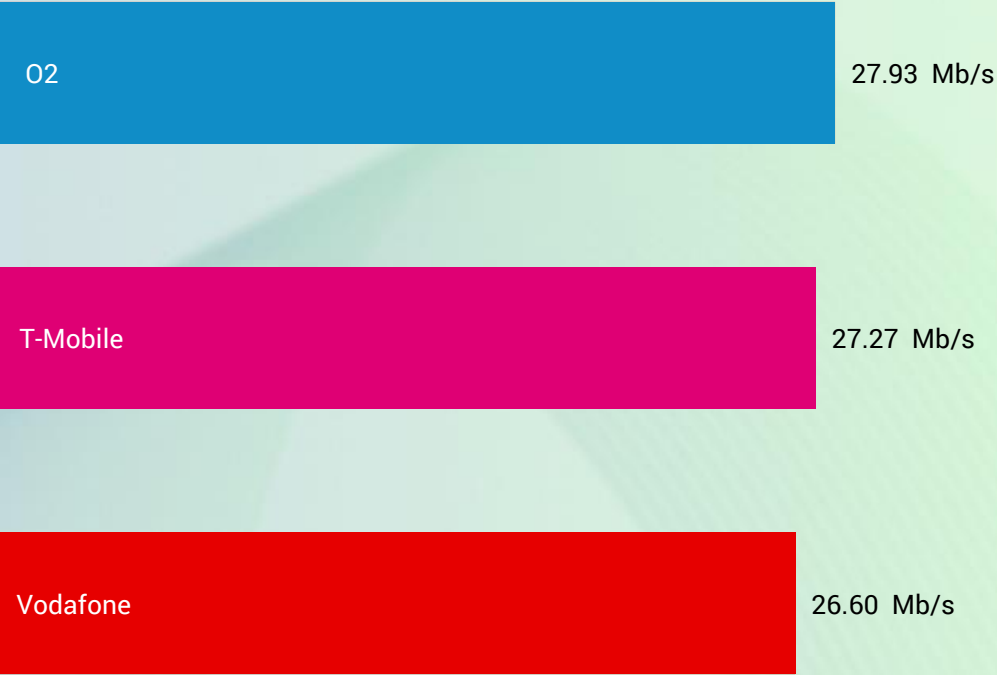


Source : nperf.com





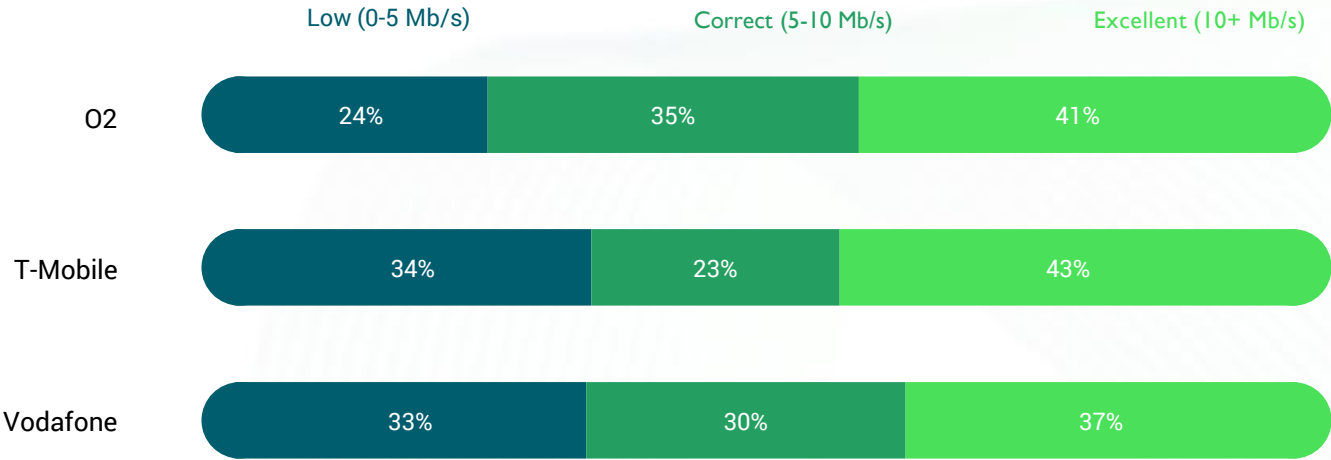
Upload Speed (average )



Source : nperf.com

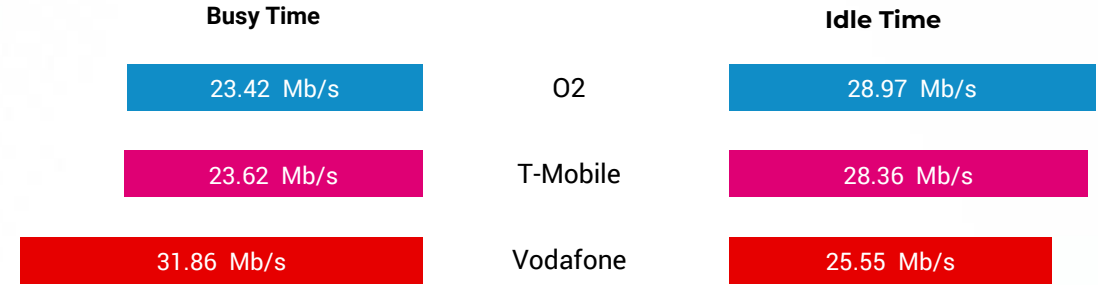
The subscribers of O2 and T-Mobile enjoyed the best average mobile Internet upload speed in2024.

Upload Speed results ventilation (average)



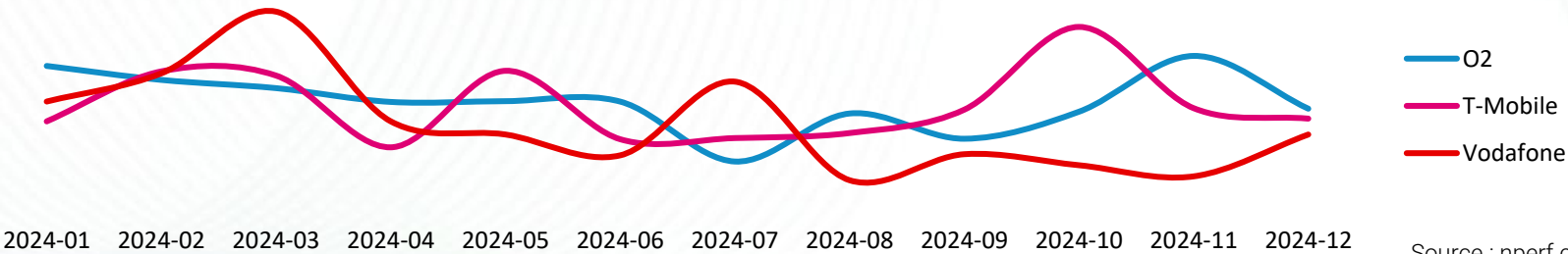
Source : nperf.com

Upload Speed (average )



Source : nperf.com

Upload Speed evolution over the year (average)



Source : nperf.com



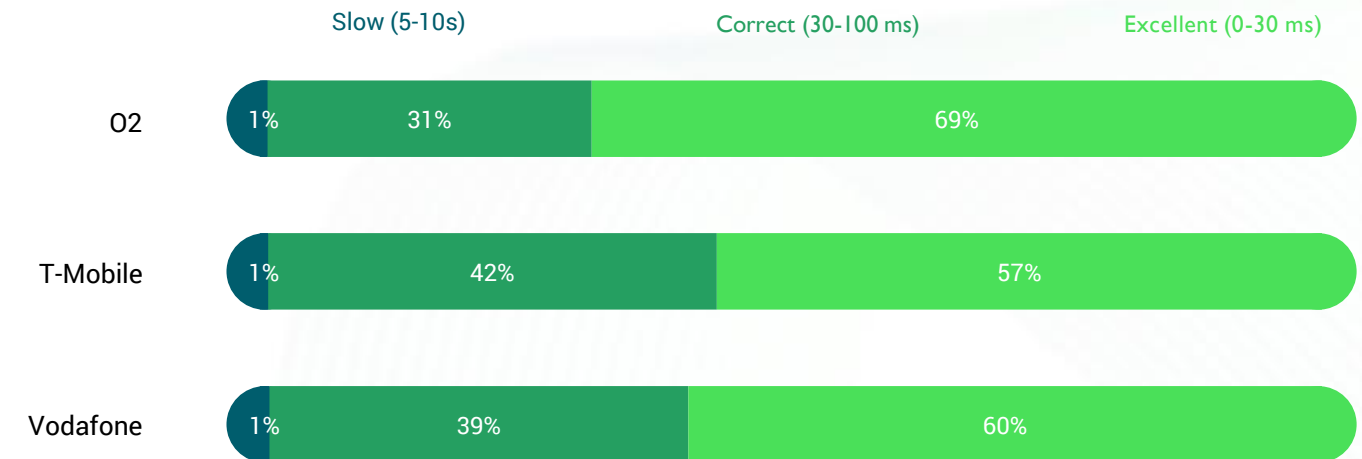
## Latency Speed (average)



Source : nperf.com

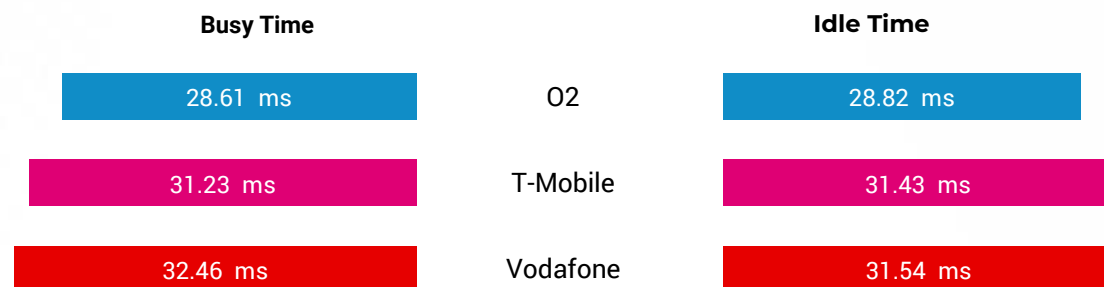
The subscribers of O2 enjoyed the best average mobile Internet latency speed in 2024.

## Latency Speed results ventilation (average)



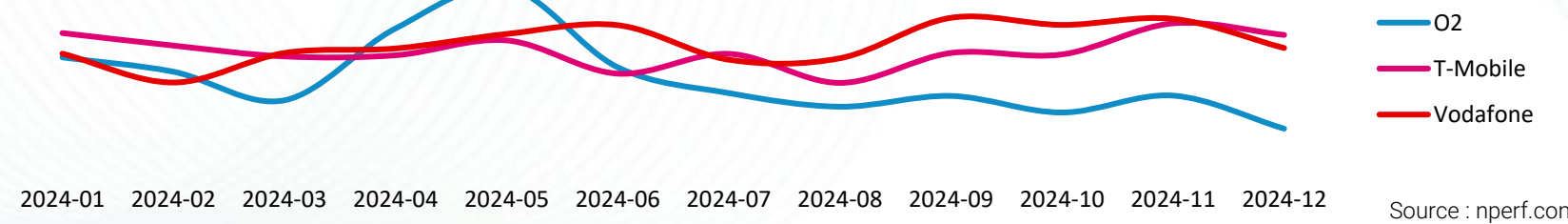
Source : nperf.com

## Latency Speed (average)



Source : nperf.com

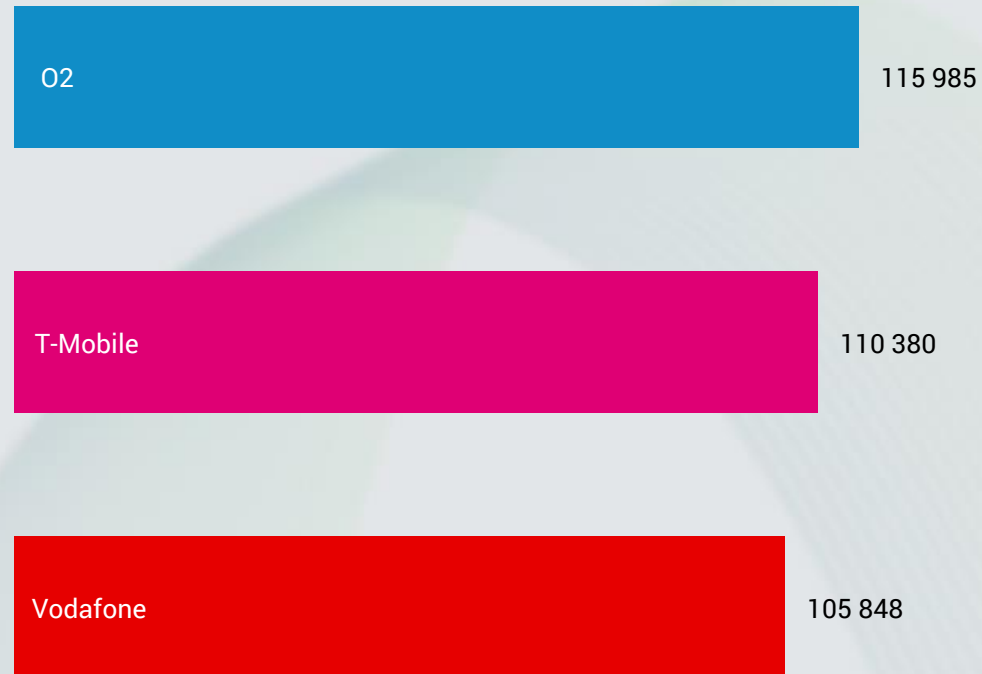
## Latency Speed evolution over the year (average)



Source : nperf.com



## nPerf Score (nPoints)



Source : nperf.com

The subscribers of O2 enjoyed the best 5G Internet performances in 2024.

- Best performances 5G: O2
- Best web browsing performances 5G: O2
- Best video streaming performances 5G: O2, T-Mobile and Vodafone
- Fastest performances (Download) 5G: O2
- Fastest performances (Upload) 5G: T-Mobile
- 5G connections with the lowest latency: O2

Source : nperf.com

O<sub>2</sub>

T

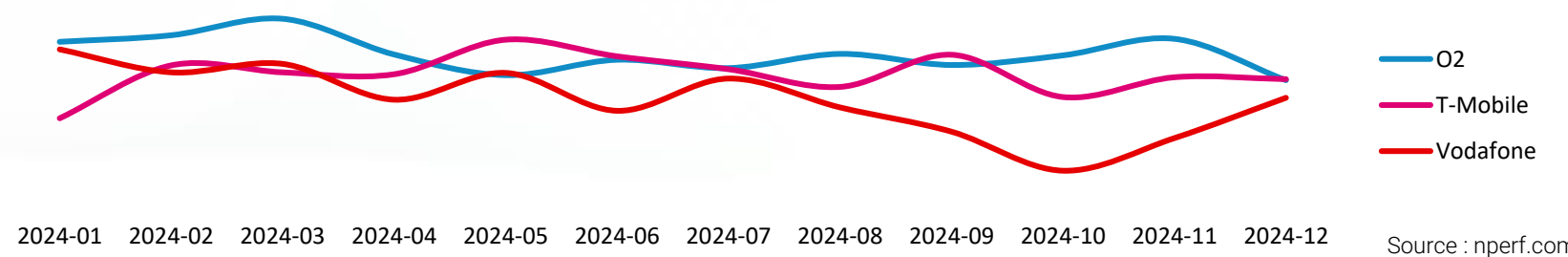


vodafone



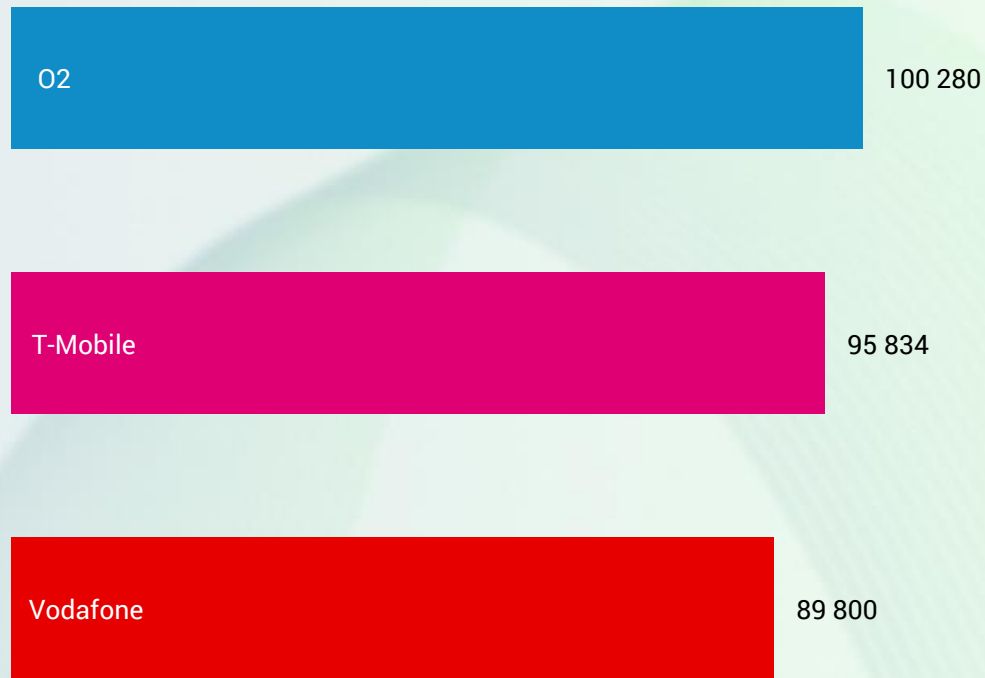
Source : nperf.com

## nPerf score evolution over the year (average)



Source : nperf.com

nPerf Score (nPoints)

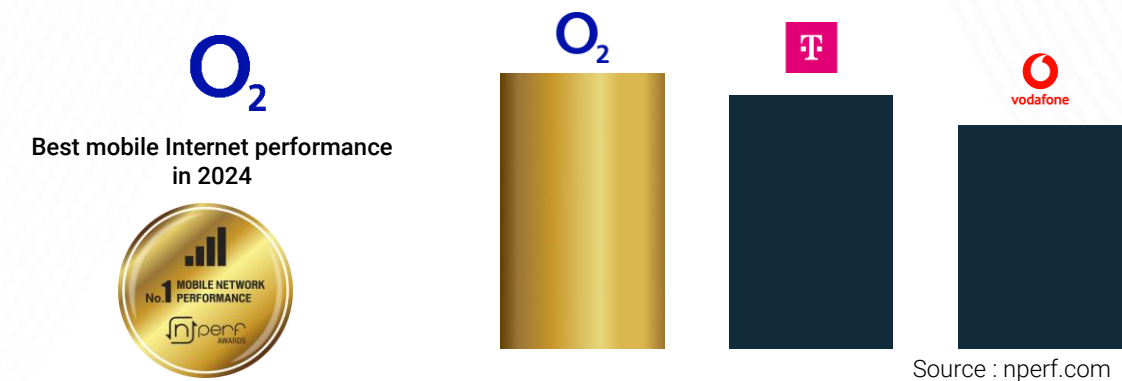


Source : nperf.com

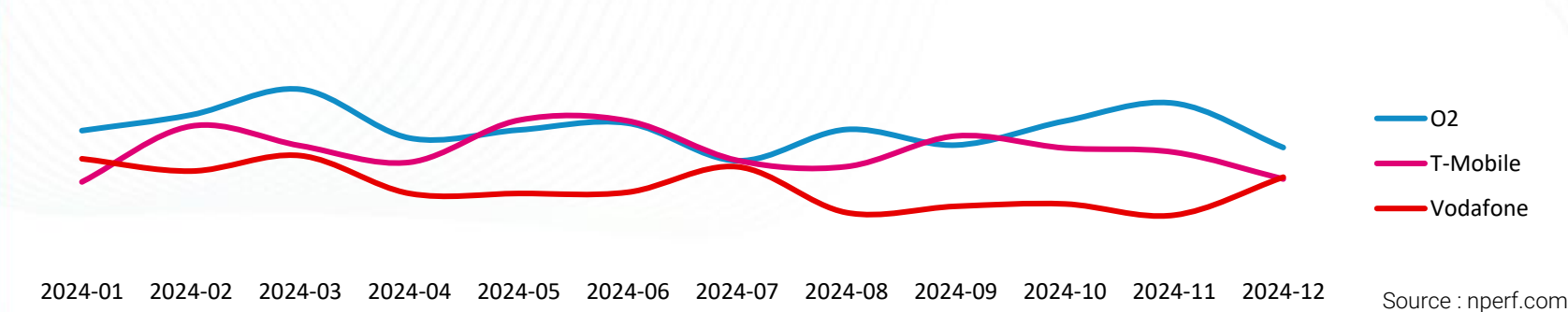
The subscribers of O2 enjoyed the best mobile Internet performances in 2024.

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



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 across the dark blue field.

The logo consists of a stylized 'n' enclosed in a square frame with arrows indicating a clockwise cycle, followed by the word 'perf' in a clean, sans-serif typeface.