



Barometer of mobile Internet connections in the Czech Republic.

01/01/2023 - 31/12/2023



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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 and T-Mobile enjoyed the best mobile Internet performances in the Czech Republic during 2023.

Cellular Internet connections in the Czech Republic

	O2	T-Mobile	Vodafone
▼ Download bitrates (Mb/s)	80.42	78.45	58.77
▲ Upload bitrates (Mb/s)	23.79	28.31	25.12
◀▶ Latency (ms)	32.28	31.24	31.29
🌐 Web browsing (%)	73.94	73.11	73.02
📺 Youtube streaming (%)	88.86	87.29	87.25
📶 nPerf Score (nPoints)	96 739	96 595	92 098

Source : nperf.com

O₂

T-Mobile

Best mobile Internet performance
in 2023



Source : nperf.com

O₂

T-Mobile







vodafone



Source : nperf.com

The subscribers of O2 enjoyed the best 5G mobile connections in the Czech Republic during 2023.

5G mobile connections in the Czech Republic

	O2	T-Mobile	Vodafone
 Download bitrates (Mb/s)	189.85	136.62	88.77
 Upload bitrates (Mb/s)	46.92	53.60	40.90
 Latency (ms)	24.72	26.02	25.97
 Web browsing (%)	83.16	81.55	80.39
 Youtube streaming (%)	92.41	90.20	90.02
 nPerf Score (nPoints)	125 401	118 271	109 798

Source : nperf.com

The Czech Republic's telecom sector is a vibrant showcase of innovation and customer-centric services, with O2 and T-Mobile in a tight race, demonstrating the competitive spirit that drives the industry forward.

O2: a market co-leader

O2 Czech Republic, with its impressive download speeds of 80 Mb/s and upload speeds of 24 Mb/s, coupled with a low latency of 32 ms, stands as a beacon of digital innovation. The ISP excels with a navigation score of 74% and a streaming score of 89%, reflecting its commitment to providing a seamless online experience. Its nPerf score of 96,739 places it in a dead heat with T-Mobile, highlighting the intense competition.

O2 is taking the first place on 5G, its consumer enjoyed an average download speed of 190 Mb/s and an impressive streaming score of 92%.

T-Mobile: the connectivity champion

T-Mobile showcases its prowess with download speeds of 78 Mb/s and the highest upload speeds in the competition at 28 Mb/s. The ISP's dedication to a smooth user experience is evident from

its latency of 31 ms, navigation score of 73%, and a streaming score of 87%. With an nPerf score of 96,595, T-Mobile is virtually tied with O2, underscoring the close contest in the Czech telecom sector.

Vodafone: a robust competitor

Vodafone, with download speeds of 59 Mb/s and upload speeds of 25 Mb/s, ensures a competitive service offering, particularly highlighted by its latency of 31 ms. The ISP maintains a strong user experience with navigation and a streaming score of 73% and 87%, respectively, culminating in an nPerf score of 92,098.

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 :

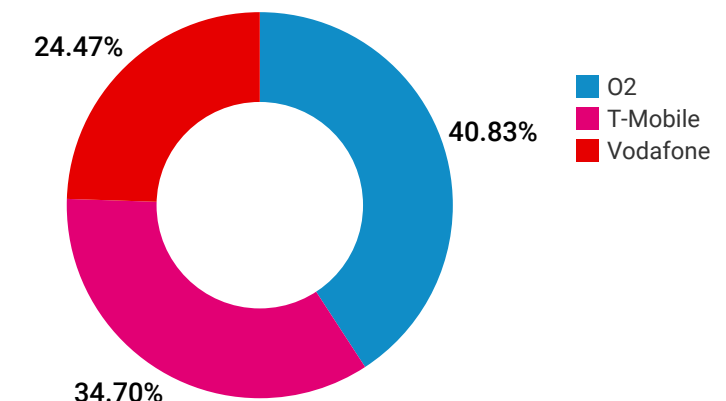
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the user's perceived quality of the Internet network.

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 % precision for absolute values and 1 point for percentage-based results, 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



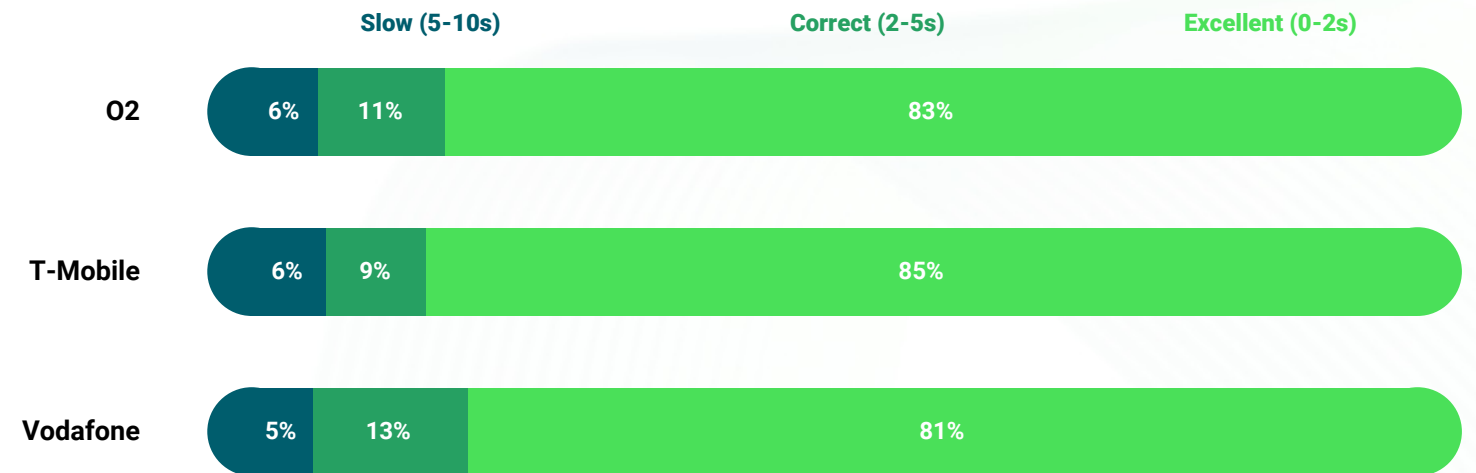
Browsing Performance rate (average)



Source : nperf.com

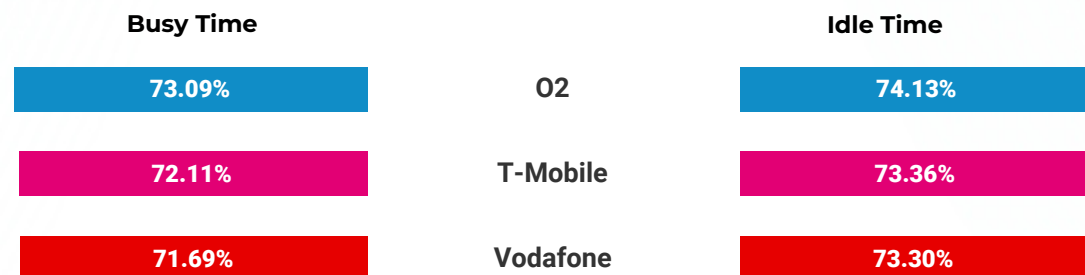
The subscribers of O2, T-Mobile and Vodafone enjoyed the best mobile Internet browsing performance in 2023.

Browsing Performance results ventilation (average)



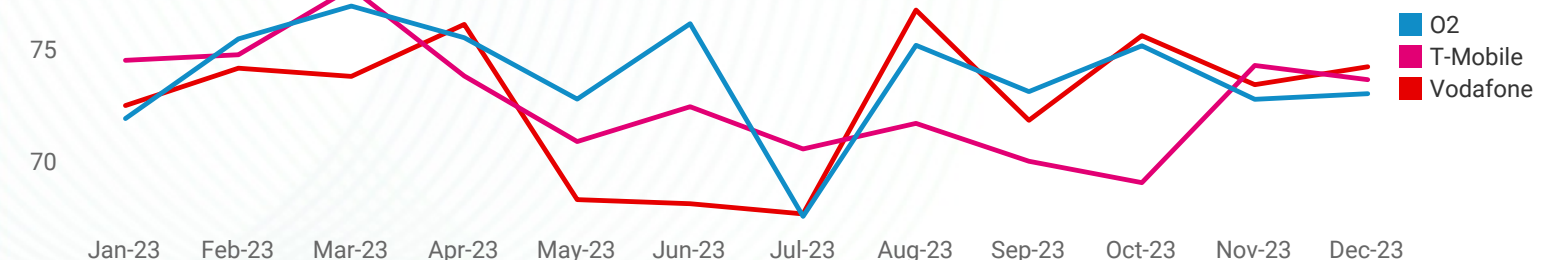
Source : nperf.com

Browsing Performance rate (average)



Source : nperf.com

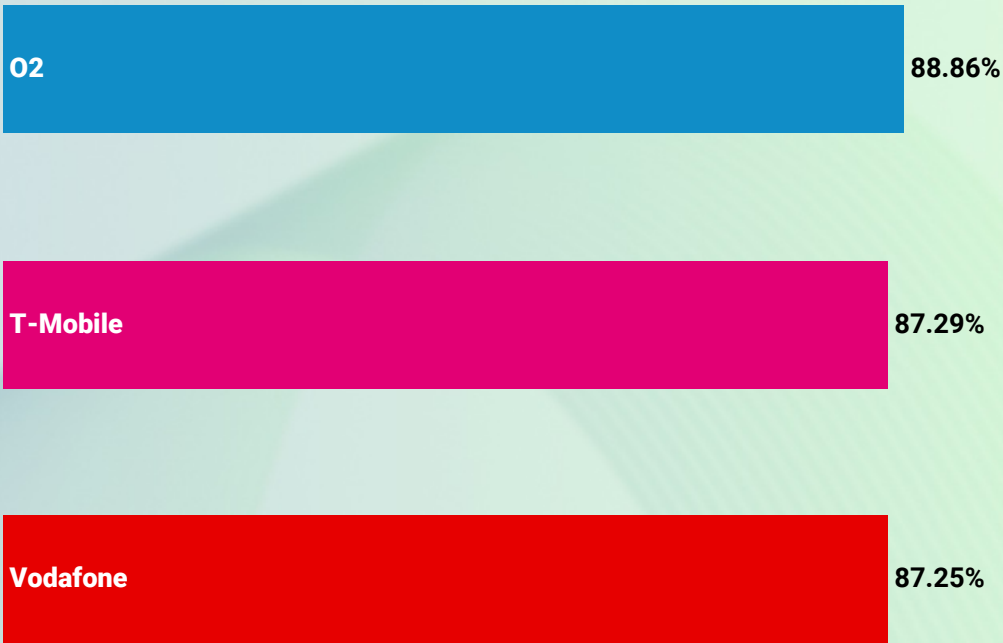
Browsing performance rate (average) evolution over the year



Source : nperf.com



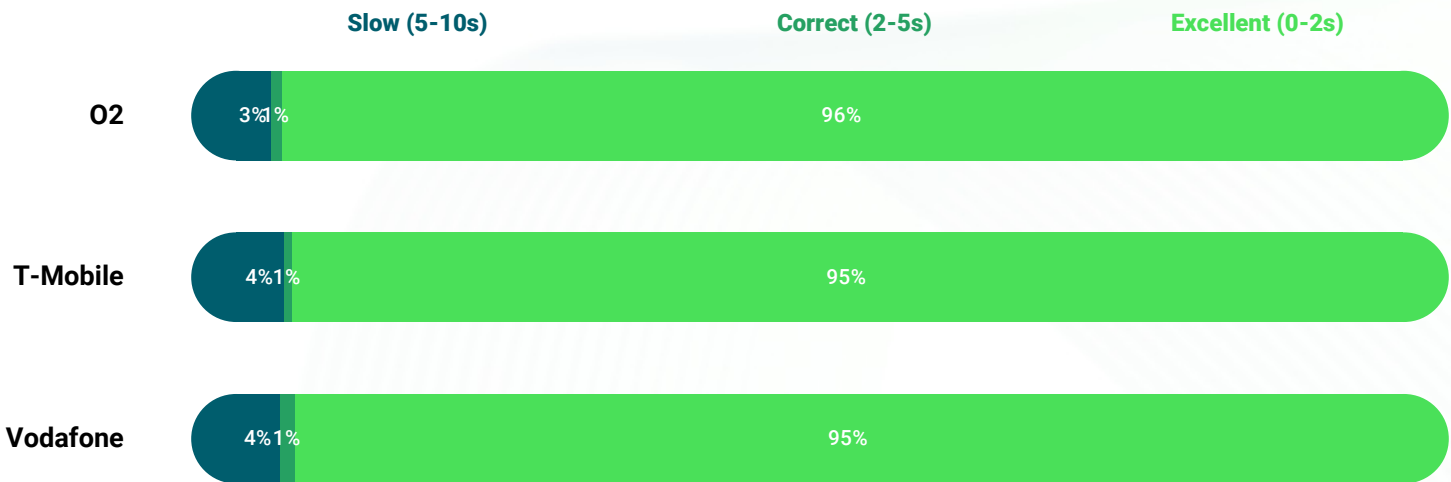
Streaming Performance rate (average)



Source : nperf.com

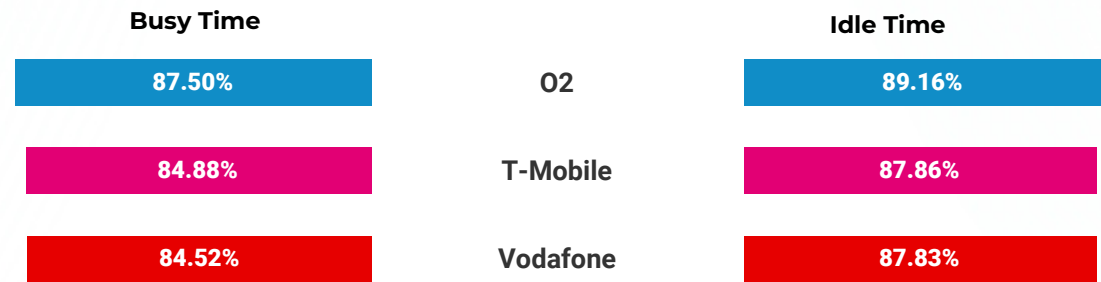
The subscribers of O2 enjoyed the best mobile Internet streaming performance in 2023.

Streaming Performance results ventilation (average)



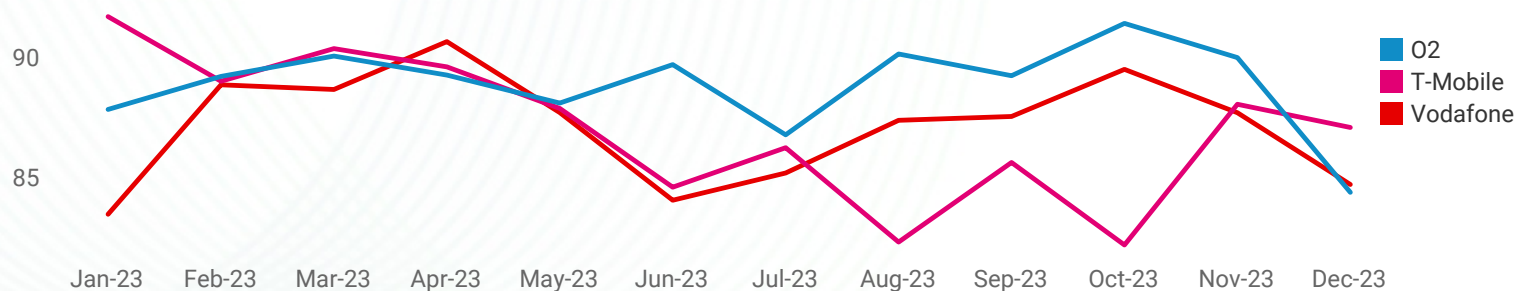
Source : nperf.com

Streaming Performance rate (average)



Source : nperf.com

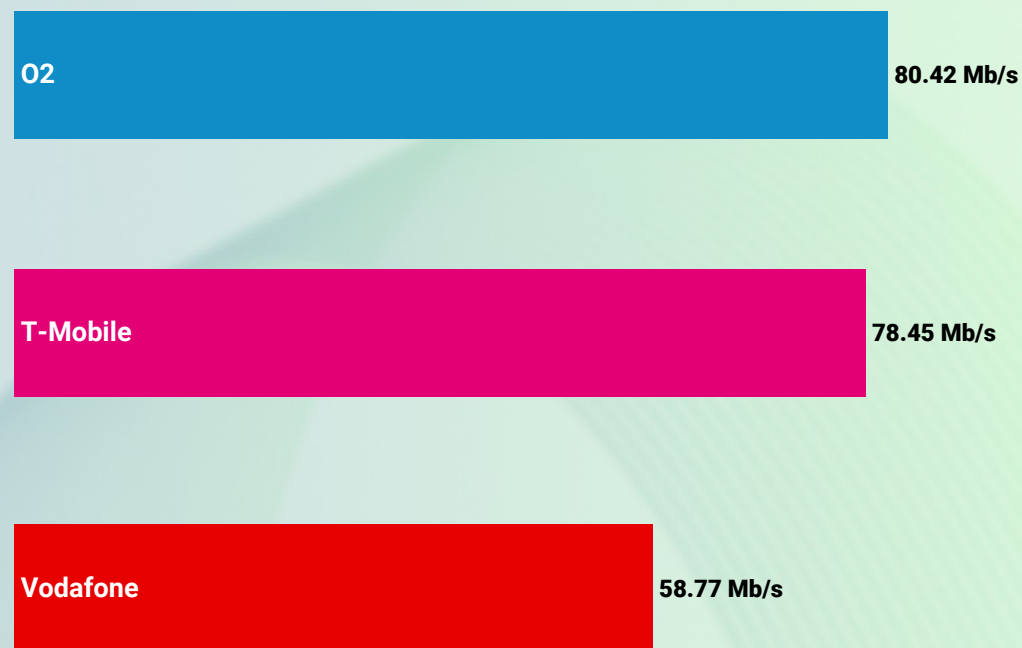
Streaming performance rate (average) evolution over the year



Source : nperf.com



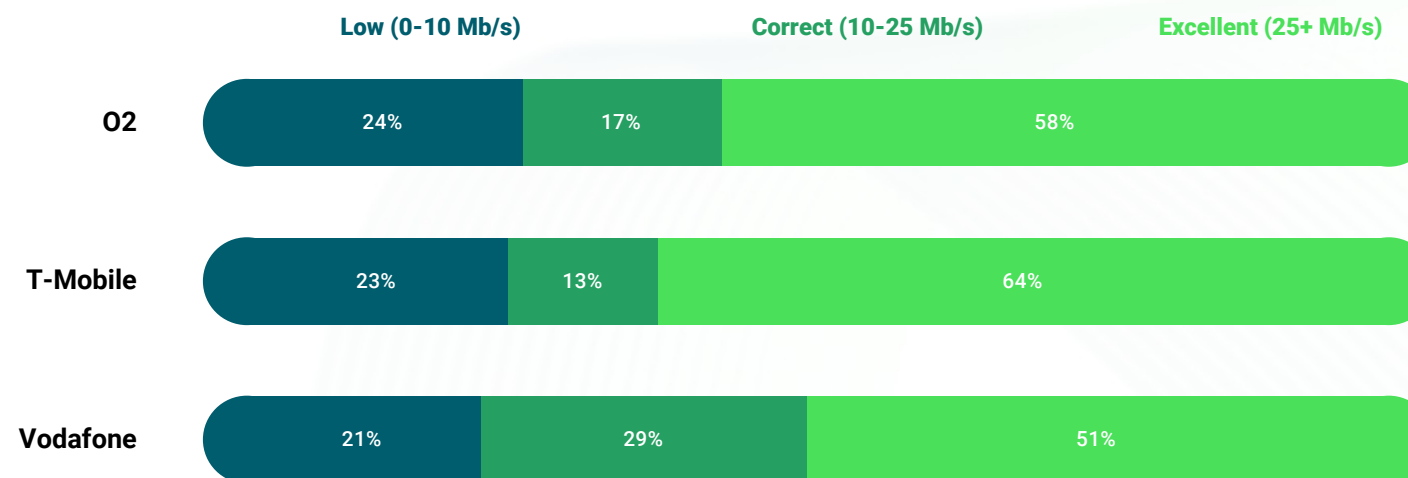
Download Speed (average)



Source : nperf.com

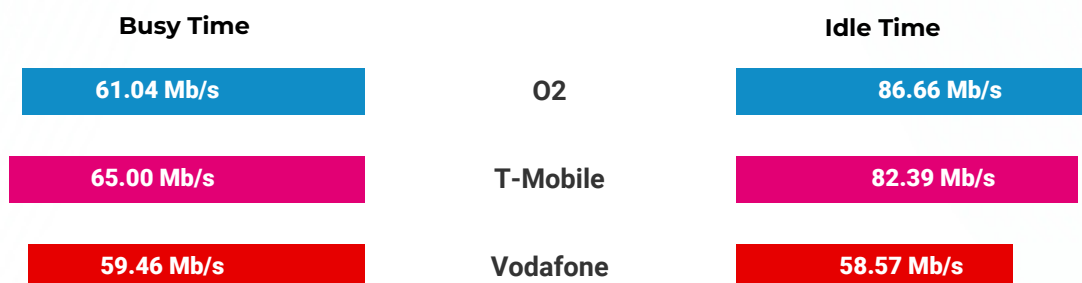
The subscribers of O2 and T-Mobile enjoyed the best average mobile Internet download speed in 2023.

Download Speed results ventilation (average)



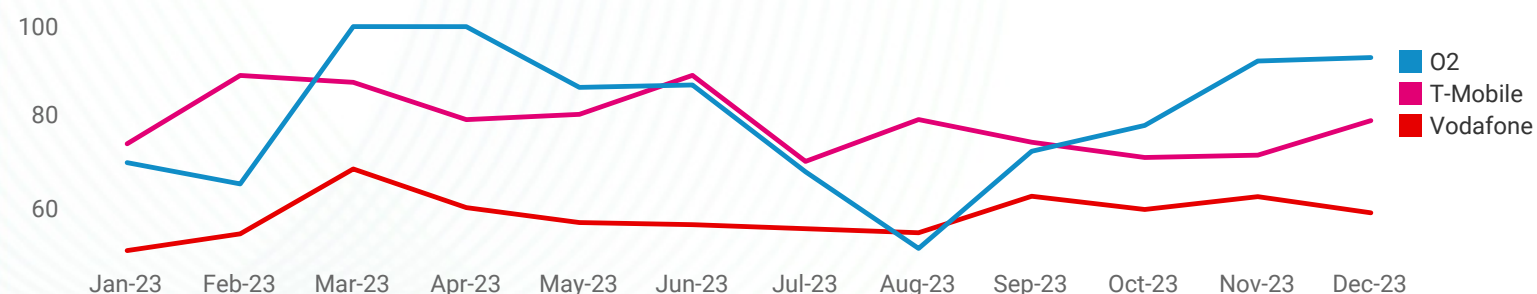
Source : nperf.com

Download Speed (average)



Source : nperf.com

Download Speed evolution over the year (average)



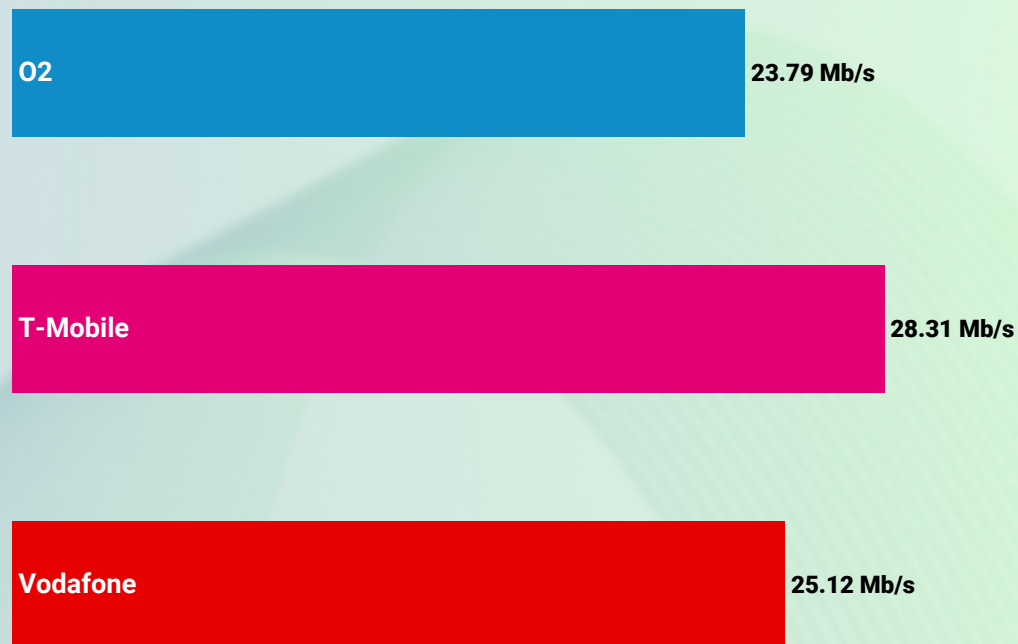
Source : nperf.com



Speed : Upload



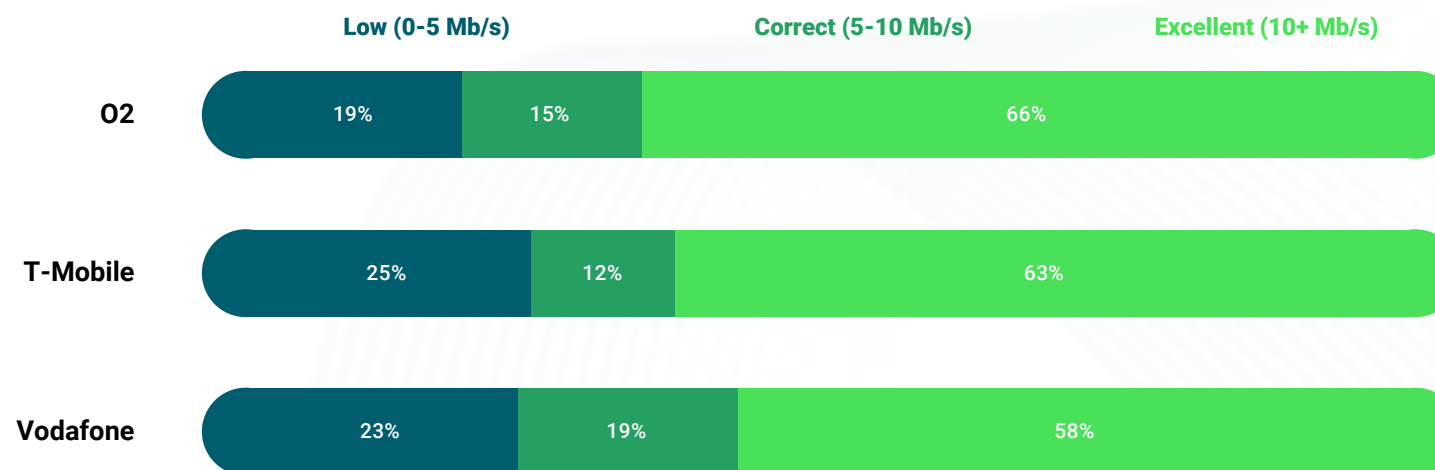
Upload Speed (average)



Source : nperf.com

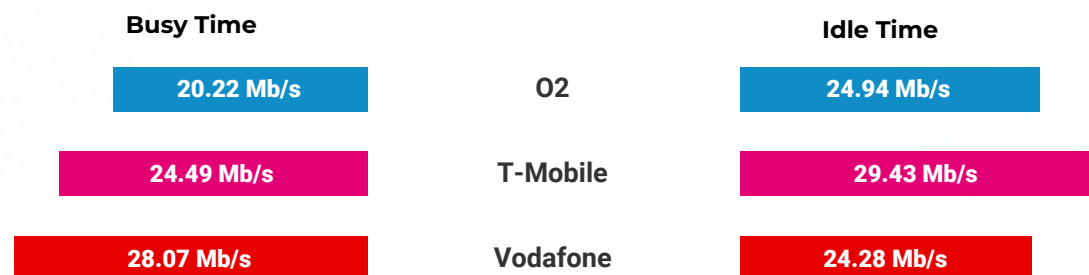
The subscribers of T-Mobile enjoyed the best average mobile Internet upload speed in 2023.

Upload Speed results ventilation (average)



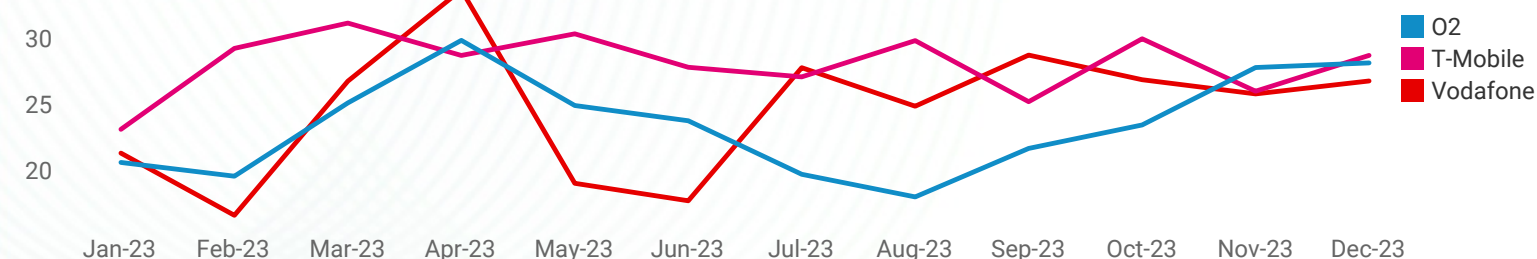
Source : nperf.com

Upload Speed (average)



Source : nperf.com

Upload Speed evolution over the year (average)



Source : nperf.com



Latency Speed (average)



Source : nperf.com

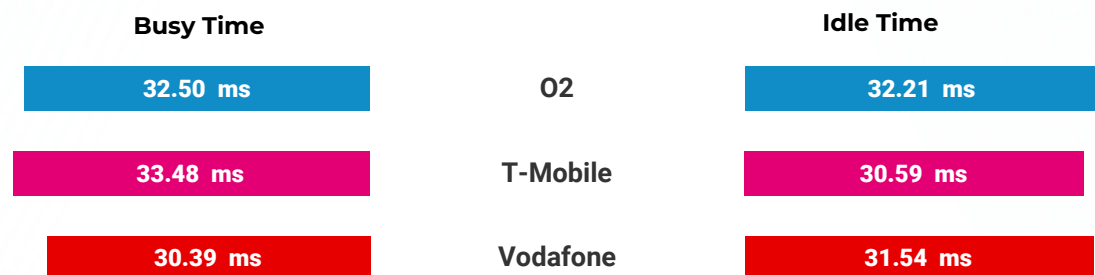
The subscribers of T-Mobile and Vodafone enjoyed the best average mobile Internet latency speed in 2023.

Latency Speed results ventilation (average)



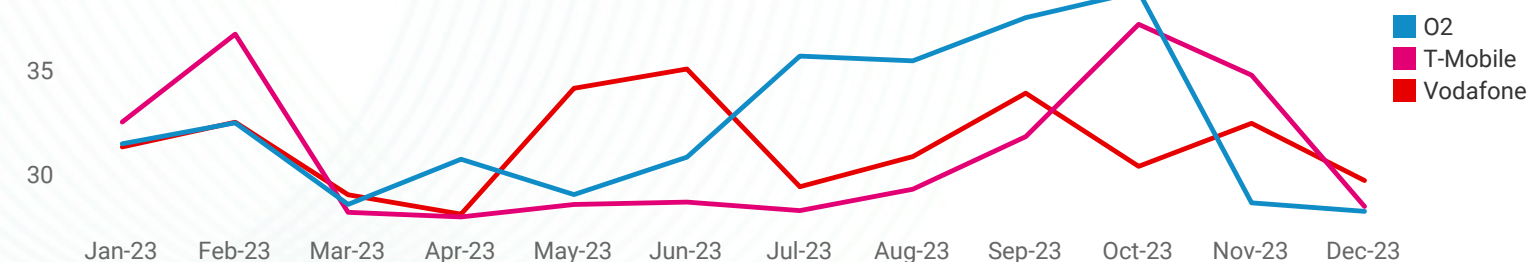
Source : nperf.com

Latency Speed (average)



Source : nperf.com

Latency Speed evolution over the year (average)



Source : nperf.com

5G nPerf score (average)



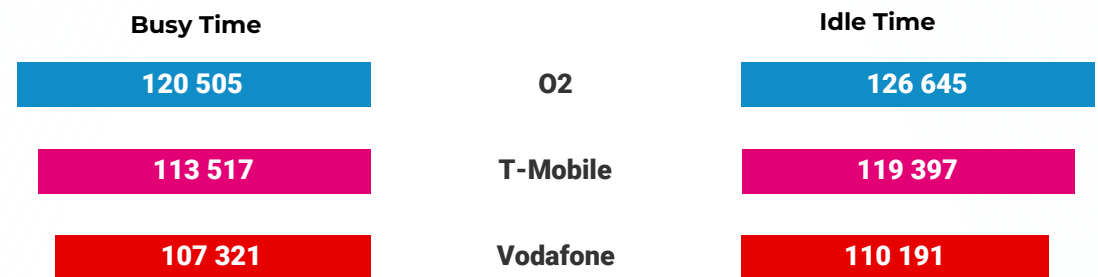
Source : nperf.com

The subscribers of O2 enjoyed the best 5G mobile connections in the Czech Republic during 2023.

- Best 5G Mobile Performance : O2 (125 401 nPoints)
- Best 5G Mobile Download speed : O2 (189.85 Mb/s)
- Best 5G Mobile Upload speed : T-Mobile (53.60 Mb/s)
- Best 5G Mobile Latency speed : O2 (24.72 ms)
- Best 5G Mobile Browsing experience : O2 (83.16 %)
- Best 5G Mobile Video experience : O2 (92.41 %)

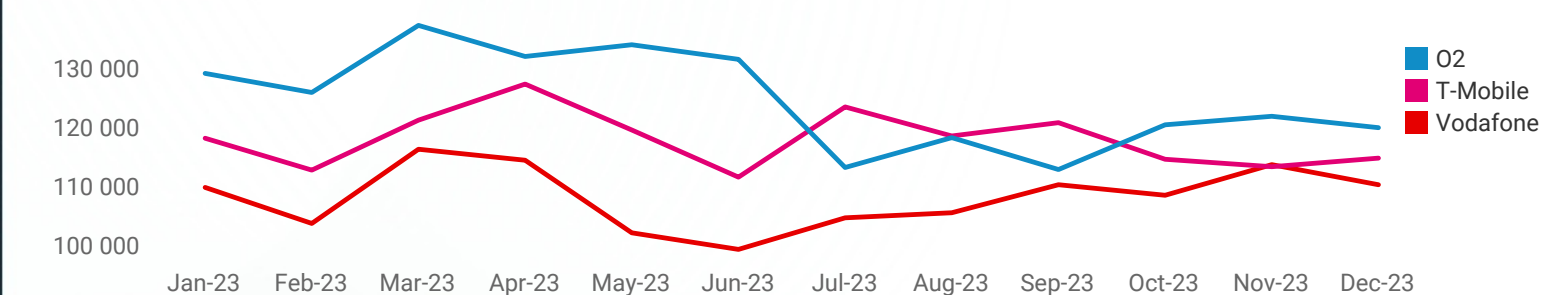
Source : nperf.com

5G nPerf score (average)



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

Mobile Internet performance in the Czech Republic



nPerf Score (nPoints)



Source : nperf.com

The subscribers of O2 and T-Mobile enjoyed the best mobile Internet performances in the Czech Republic during 2023.

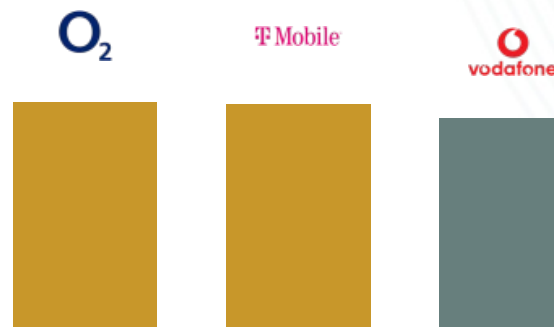
The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

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

Source : nperf.com

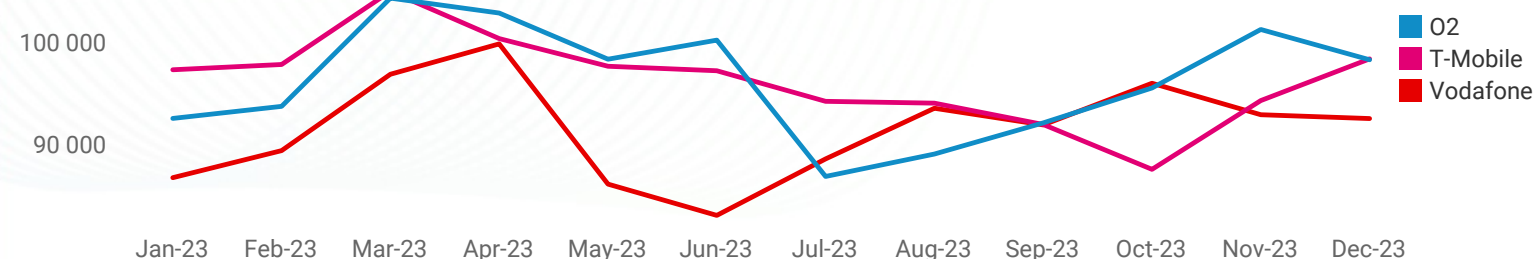
O₂ T Mobile

Best mobile Internet performance in 2023



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

