



Barometer of mobile Internet connections in Slovakia.

01/01/2023 - 31/12/2023



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
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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!
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2. Executive Summary



The subscribers of Telekom enjoyed the best mobile Internet performances in Slovakia during 2023.

Cellular Internet connections in Slovakia

	4ka	O2	Orange	Telekom
▼ Download bitrates (Mb/s)	31.64	36.32	68.44	77.85
▲ Upload bitrates (Mb/s)	11.19	13.51	16.65	22.88
◀▶ Latency (ms)	44.14	41.89	30.02	28.96
🌐 Web browsing (%)	57.61	71.10	72.58	74.02
🎥 Youtube streaming (%)	80.99	84.50	83.45	87.69
 nPerf Score (nPoints)	64 158	75 558	89 630	97 116

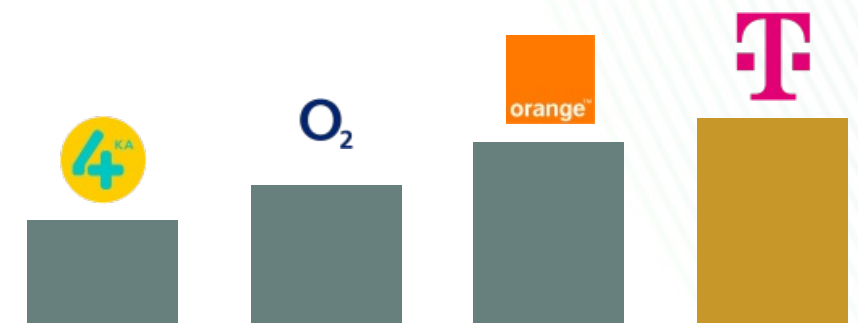
Source : nperf.com



Best mobile Internet performance
in 2023









Source : nperf.com



Source : nperf.com

The subscribers of Telekom enjoyed the best 5G mobile connections in Slovakia during 2023.

5G mobile connections in Slovakia

	02	Orange	Telekom
 Download bitrates (Mb/s)	70.54	134.00	161.61
 Upload bitrates (Mb/s)	22.99	28.33	41.63
 Latency (ms)	24.53	27.92	21.22
 Web browsing (%)	80.03	80.89	81.45
 Youtube streaming (%)	88.25	89.06	91.33
 nPerf Score (nPoints)	102 488	111 359	122 888

Source : nperf.com

In Slovakia's mobile broadband sector, the evaluation of Internet Service Providers (ISPs) through comprehensive metrics such as nPerf scores, download and upload bitrates, latency, and performance in web browsing and streaming is crucial. This analysis offers a detailed look at how the major ISPs stack up against each other, providing insights into their service quality and user experience.

Telekom: the front-runner in mobile broadband

Telekom stands out as the leading ISP in Slovakia's mobile market on 4G and 5G network, delivering exceptional download speeds of 77.85 Mb/s and upload speeds of 22.88 Mb/s. Its low latency of 28.96 ms enhances the overall user experience, further supported by high web browsing scores of 74.02% and streaming performance of 87.69%. These impressive metrics contribute to Telekom's top nPerf score of 97,116 nPoints, showcasing its superior service in the mobile broadband landscape.

Orange: a strong contender

With a strong download speed of 68.44 Mb/s and an upload speed of 16.65 Mb/s, Orange presents itself as a robust competitor. Its relatively low latency of 30.02 ms and solid web browsing and streaming scores of 72.58% and 83.45%, respectively, culminate in an nPerf score of 89,630 nPoints, indicating a high-quality service.

O2: Customer experience first

O2 is lagging behind its competitor in terms of speed with a download speed of 36.32 Mb/s and upload speed of 13.51 Mb/s. The ISP's latency stands at 41.89 ms. But O2 is clearly focusing on user experience and its clients experience very competitive scores with web browsing and streaming scores of 71.10% and 84.50%, respectively. These metrics contribute to an nPerf score of 75,558 nPoints, reflecting a reliable service offering.

4ka: room for improvement

Despite trailing with lower download speeds of 31.64 Mb/s and upload speeds of 11.19 Mb/s, 4ka offers a noteworthy service. Its latency of 44.14 ms might be on the higher side, but its streaming score of 80.99% is commendable. However, its web browsing success rate of 57.61% could be a concern, leading to an overall nPerf score of 64,158 nPoints.

Conclusion:

Telekom secures the top position in Slovakia's mobile broadband market, thanks to its unmatched download and upload speeds, low latency, and superior performance in web browsing and streaming. Orange follows closely, offering competitive speeds and reliable service, while O2 and 4ka provide viable alternatives with their own set of strengths.

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 :

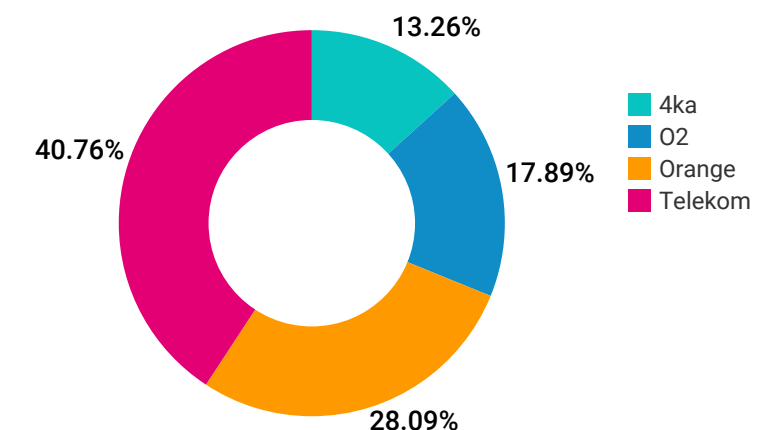
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the user's perceived quality of the Internet network.

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.

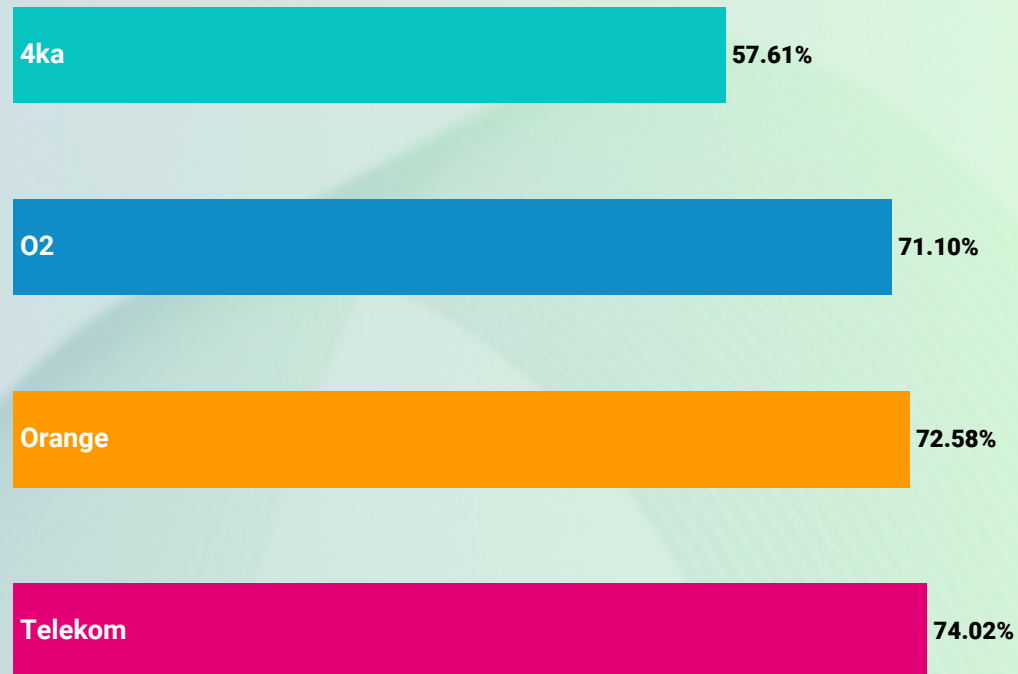
Overall distribution of the tests per provider (ISPs Share)



Source : nperf.com



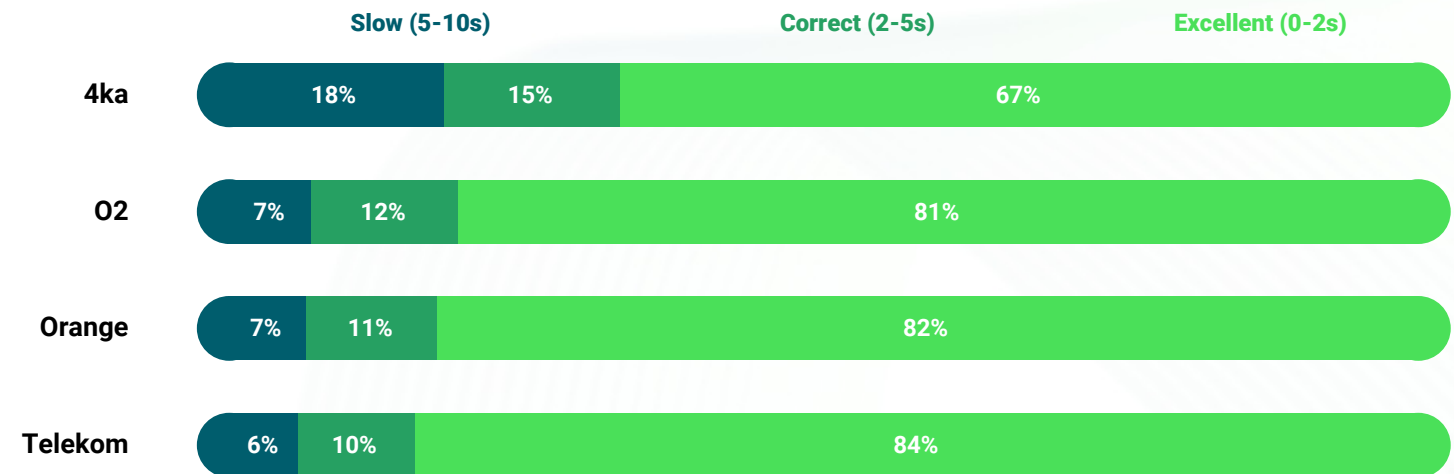
Browsing Performance rate (average)



Source : nperf.com

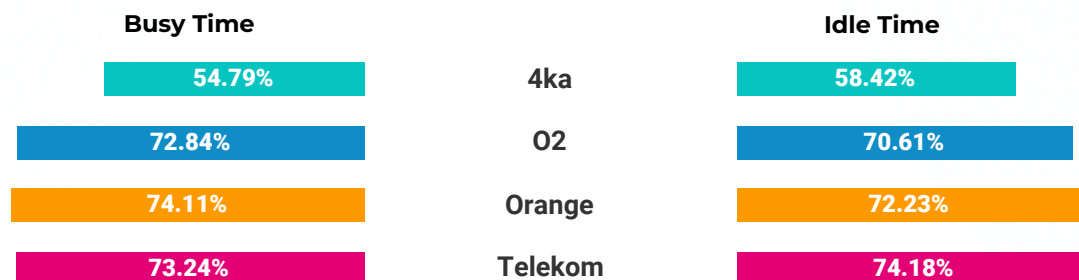
The subscribers of Telekom enjoyed the best mobile Internet browsing performance in 2023.

Browsing Performance results ventilation (average)



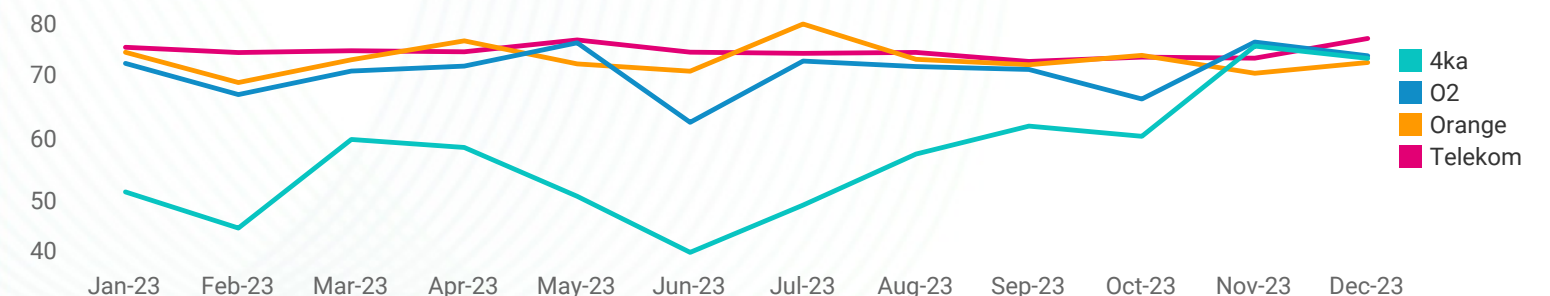
Source : nperf.com

Browsing Performance rate (average)



Source : nperf.com

Browsing performance rate (average) evolution over the year



Source : nperf.com



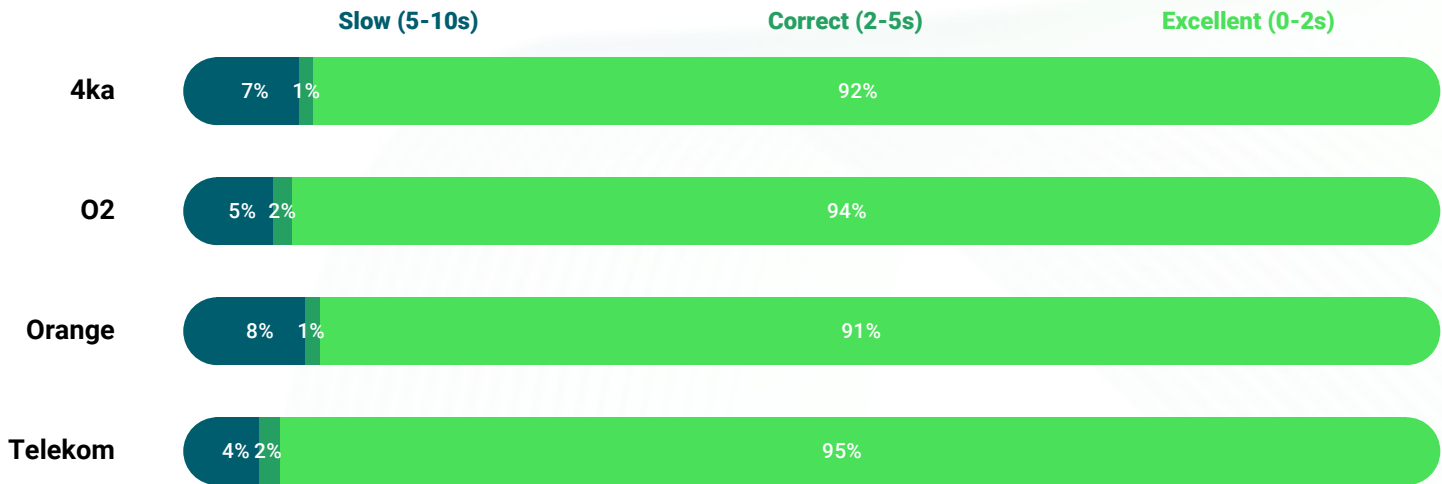
Streaming Performance rate (average)



Source : nperf.com

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

Streaming Performance results ventilation (average)



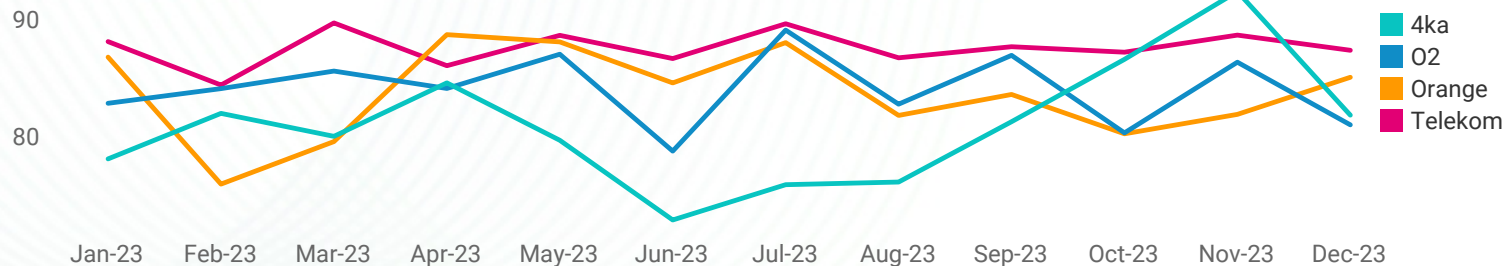
Source : nperf.com

Streaming Performance rate (average)



Source : nperf.com

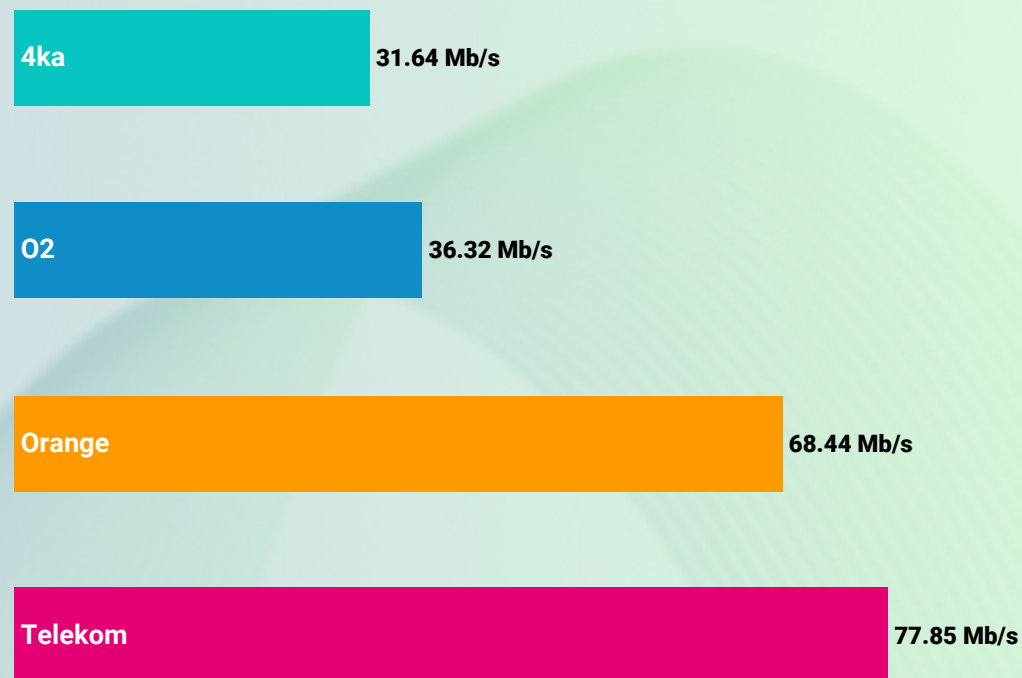
Streaming performance rate (average) evolution over the year



Source : nperf.com



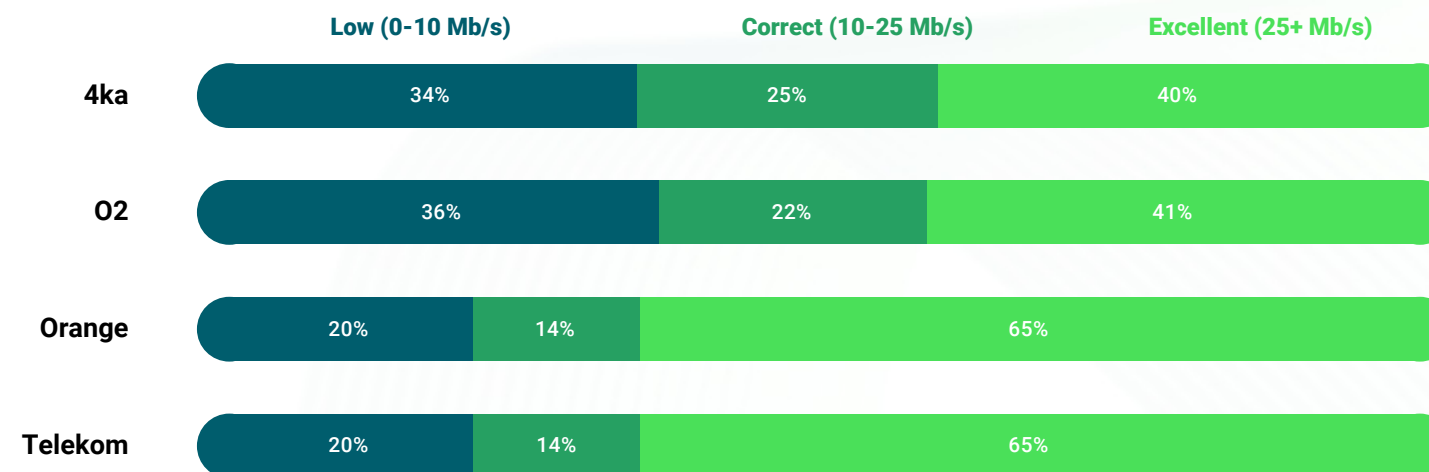
Download Speed (average)



Source : nperf.com

The subscribers of Telekom enjoyed the best average mobile Internet download speed in 2023.

Download Speed results ventilation (average)



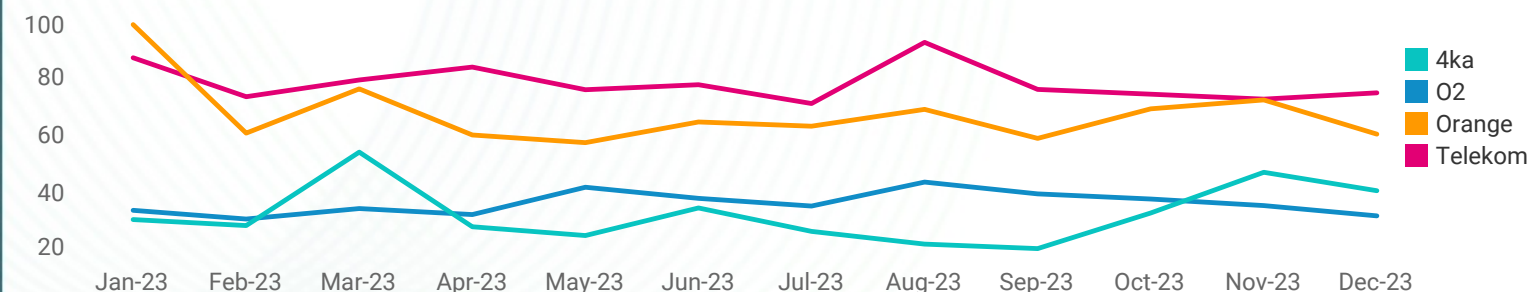
Source : nperf.com

Download Speed (average)



Source : nperf.com

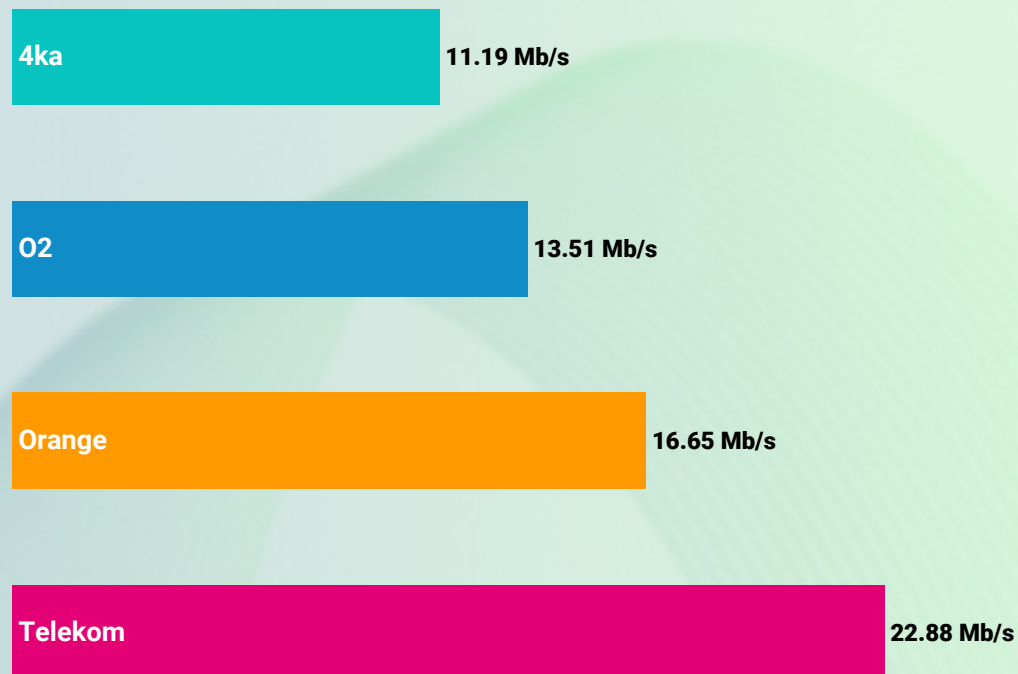
Download Speed evolution over the year (average)



Source : nperf.com



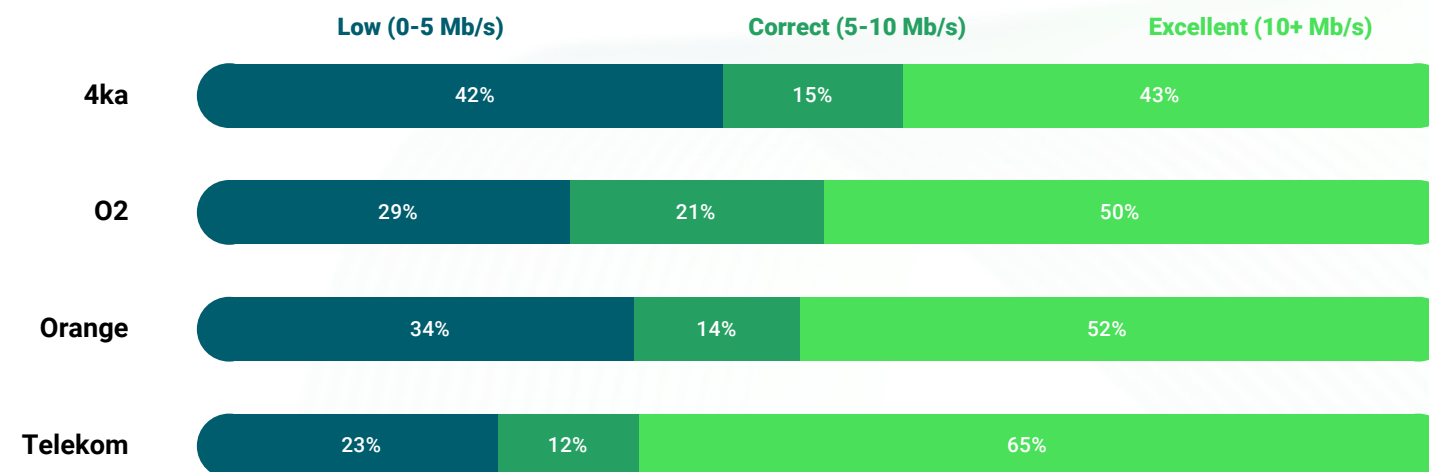
Upload Speed (average)



Source : nperf.com

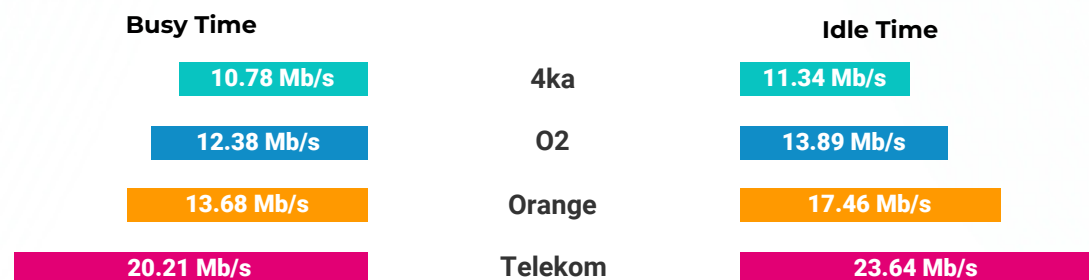
The subscribers of Telekom enjoyed the best average mobile Internet upload speed in 2023.

Upload Speed results ventilation (average)



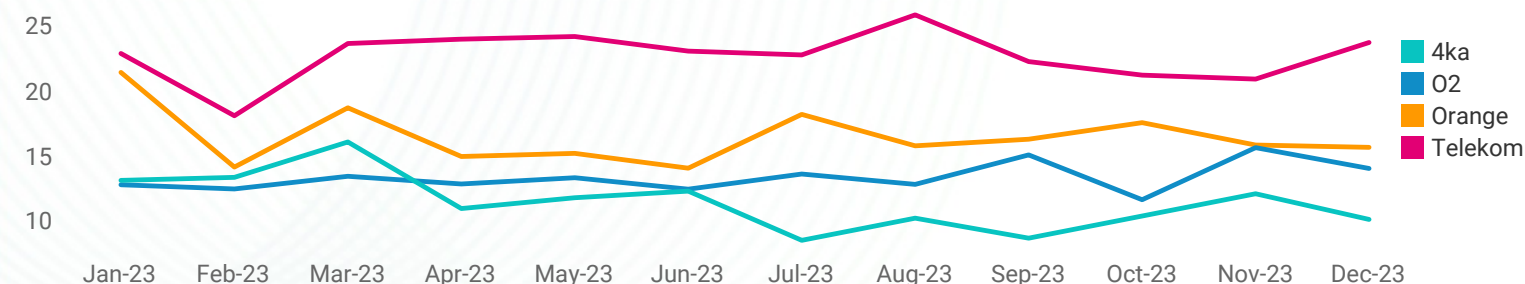
Source : nperf.com

Upload Speed (average)



Source : nperf.com

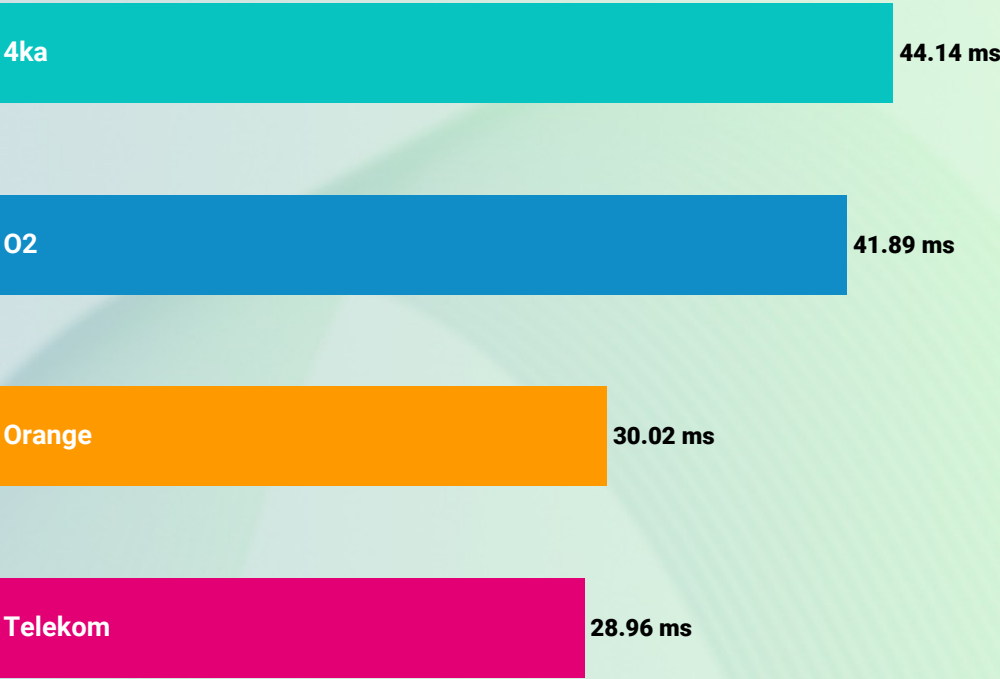
Upload Speed evolution over the year (average)



Source : nperf.com



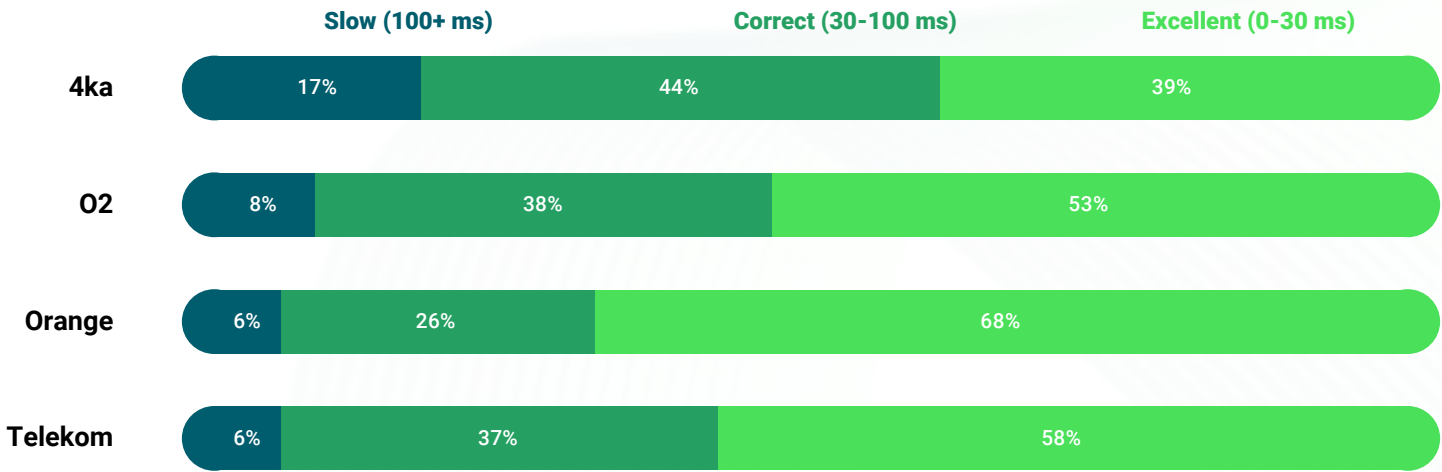
Latency Speed (average)



Source : nperf.com

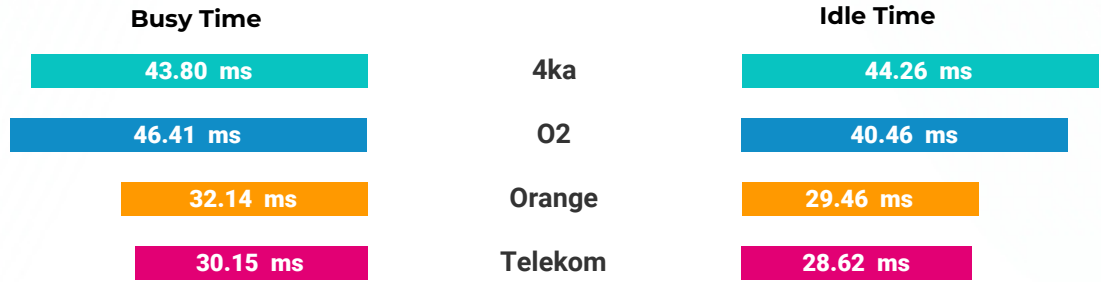
The subscribers of Telekom enjoyed the best average mobile Internet latency speed in 2023.

Latency Speed results ventilation (average)



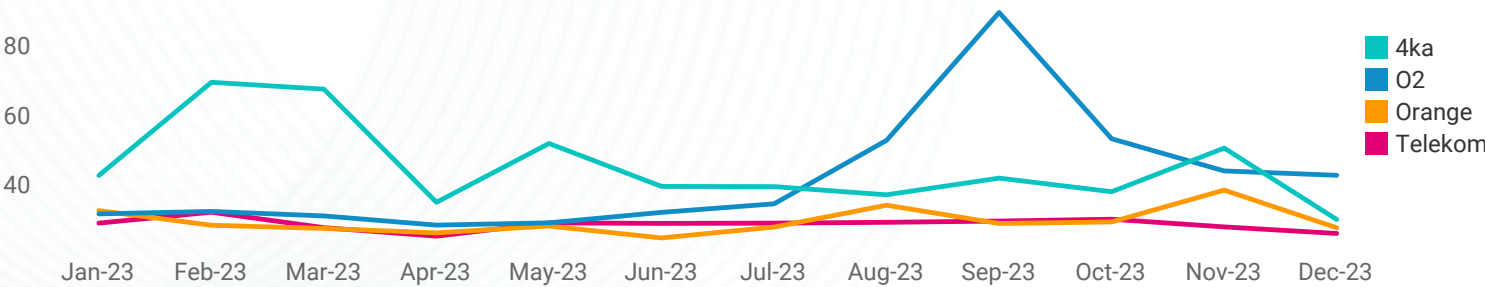
Source : nperf.com

Latency Speed (average)



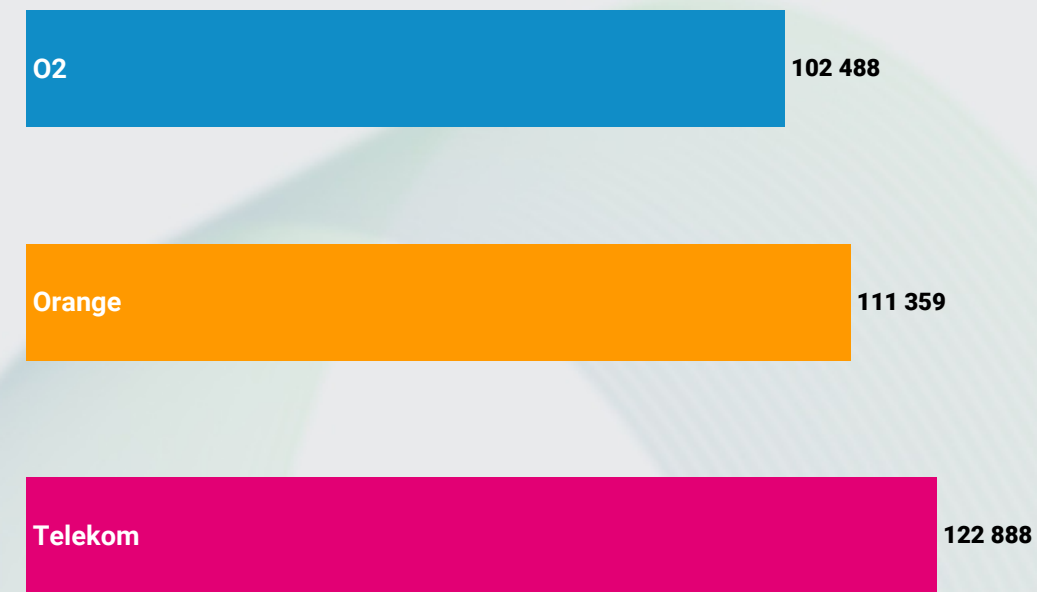
Source : nperf.com

Latency Speed evolution over the year (average)



Source : nperf.com

5G nPerf score (average)



Source : nperf.com

The subscribers of Telekom enjoyed the best 5G mobile connections in Slovakia during 2023.

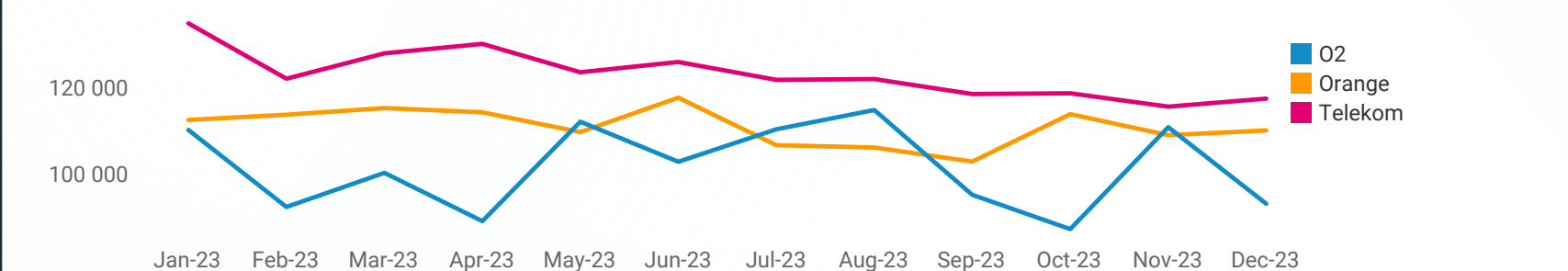
Source : nperf.com

5G nPerf score (average)



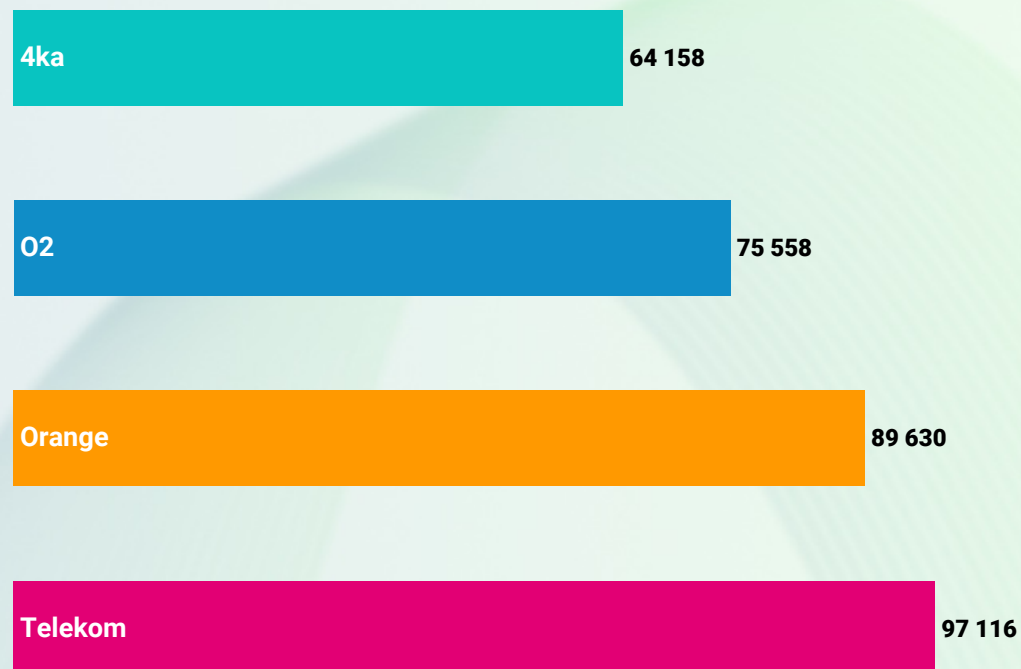
Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

nPerf Score (nPoints)



Source : nperf.com

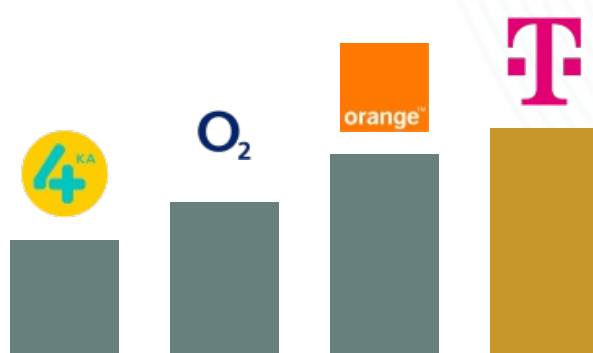
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The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

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

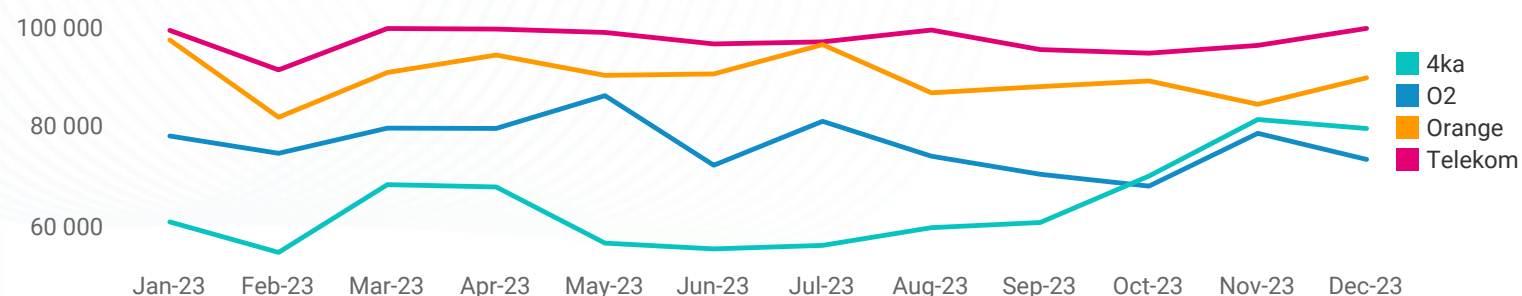
Source : nperf.com

Best mobile Internet performance in 2023



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

