# **Barometer of mobile** Internet connections in Hungary

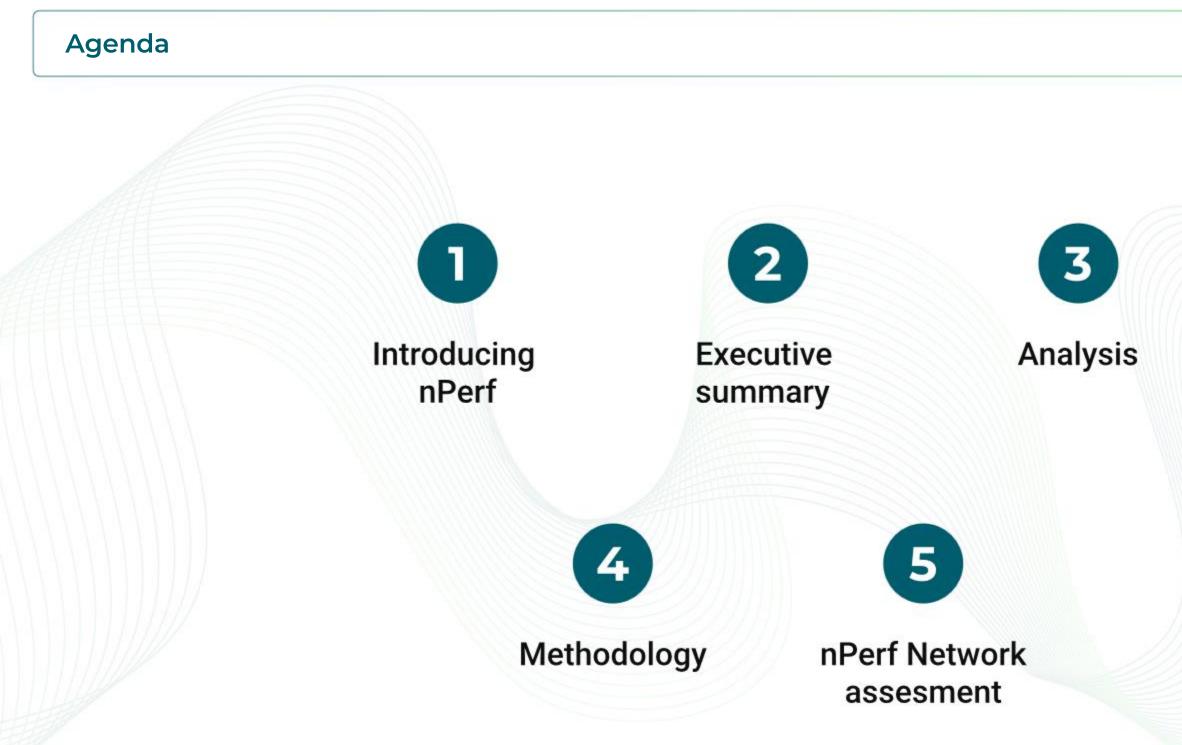
01/01/2024 - 12/31/2024



10.

5.

CLE



n perf









# 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!**

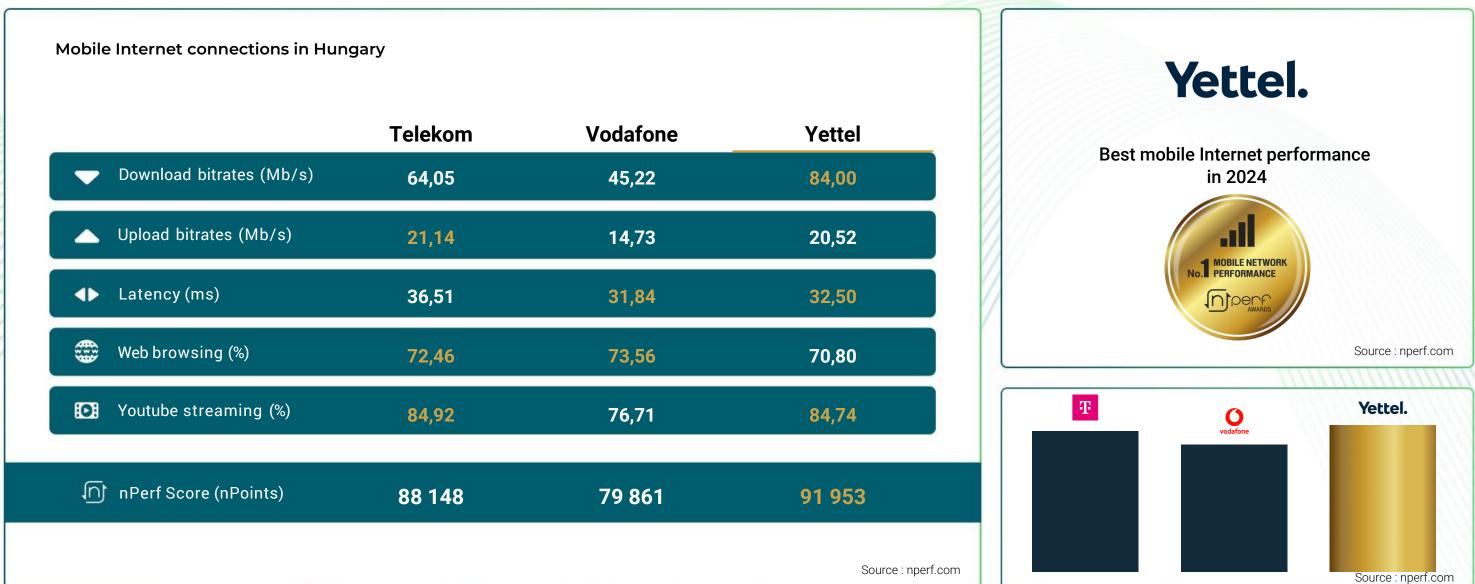
nPerf allows you to test the quality of your fixed, mobile, or Wi-Fi Internet connections up to 10 Gb/s! Dowload our app or visit our website!





# 2. Executive Summary

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



mobile Internet - 01/01/2024 - 12/31/2024 - Hungary

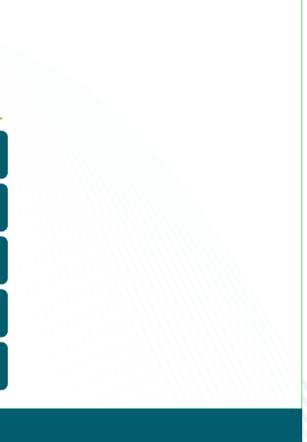


4

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

5G mobile Internet connections in Hungary Telekom Vodafone Yettel Download bitrates (Mb/s) 98,05 106,29 203,71  $\overline{\phantom{a}}$ Upload bitrates (Mb/s) 28,21 28,51 35,84 Latency (ms) 30,72 32,29 26,89 Web browsing (%) 75,43 79,62 76,97 Youtube streaming (%) 0 87,94 78,99 86,97 nPerf Score (nPoints) 101 488 98 848 114 939





Source : nperf.com

(5

# 3. Analysis

### Introduction

In 2024, the mobile market in Hungary shows significant advancements, with Yettel emerging as the new leader. The market's overall performance, measured by the nPerf Score, indicates a positive trajectory. Yettel, distinguished as a new leader, shares the spotlight with others as co-leaders in various categories. The market winners for the latest period are prominently led by Yettel, demonstrating substantial improvements in 5G, download speed, and upload speed. Noteworthy trends include Yettel's leadership in Download and 5G Focus, alongside Vodafone's strides in latency and browsing.

### Yettel: Market Leader with Exceptional Performance

For the period Q1 2024-Q4 2024, Yettel stands out as the market leader, achieving a remarkable global score of 91,953. The operator excels in the download speed category with a superior performance. Yettel is the undeniable leader in the 5G focus, reflecting its commitment to cutting-edge mobile technology. The operator has also shown significant improvements in download (17.1%) and upload (22.7%) speed, fortifying its market position with robust contributions to Hungary's mobile internet landscape.

### **Telekom: Excellence in Upload and Streaming**

Telekom, while not the overall market leader, demonstrates excellence in specific categories. For the current period, Telekom maintains a strong global score of 88,148, showcasing its dominance in upload speed and video streaming. Telekom's leadership in these areas underscores its proficiency in providing reliable mobile

services. The operator's consistent performance in browsing and streaming further enhances its reputation as a key player in the Hungarian market.

### Vodafone: Co-Leader in Latency and Browsing

Vodafone emerges as a co-leader in latency and browsing, with a commendable global score of 79,861 for the assessed period. The operator's advancements in download (23.4%) and upload (24.5%) speed reflect its dynamic growth. Vodafone's leadership in latency, coupled with co-leadership in browsing, highlights its strategic focus on improving user experience. These achievements position Vodafone as a competitive force in Hungary's mobile internet sector.

### Conclusion

The Hungarian mobile market in 2024 is characterized by Yettel's leadership and impressive advancements across various KPIs. Yettel's dominance in download speed and 5G focus, supported by significant improvements, sets a high benchmark. Vodafone and Telekom also contribute notably, with leadership in latency, browsing, upload speed, and streaming. The market's competitive nature and operator strengths promise continued innovation and enhanced connectivity for users.



# 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.

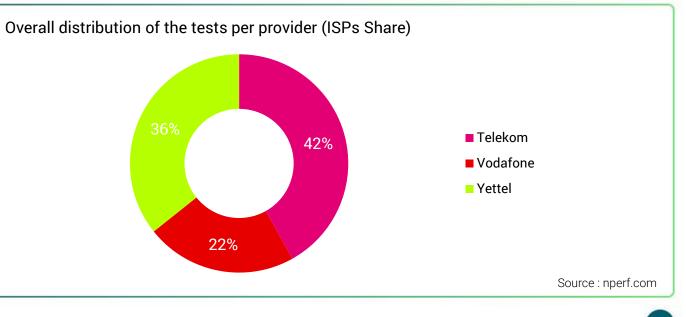
### **Image Streaming performance**

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.

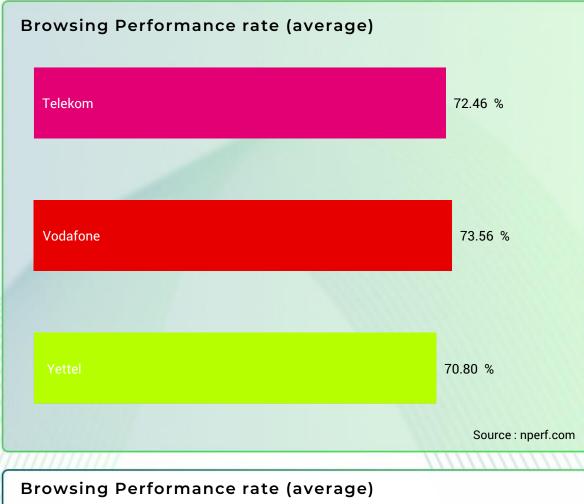
For a more comprehensive understanding of the user experience, our report features test results during both Busy hours (6 PM to 11 PM) and Idle hours (the rest of the day). Busy hours, marked by network strain, can impact user experience through congestion. This approach helps in understanding how network performance fluctuates throughout the day.

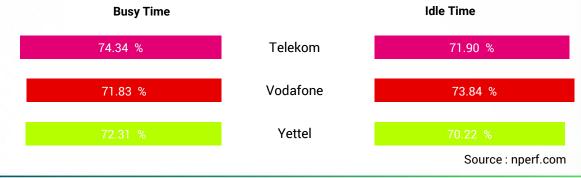
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



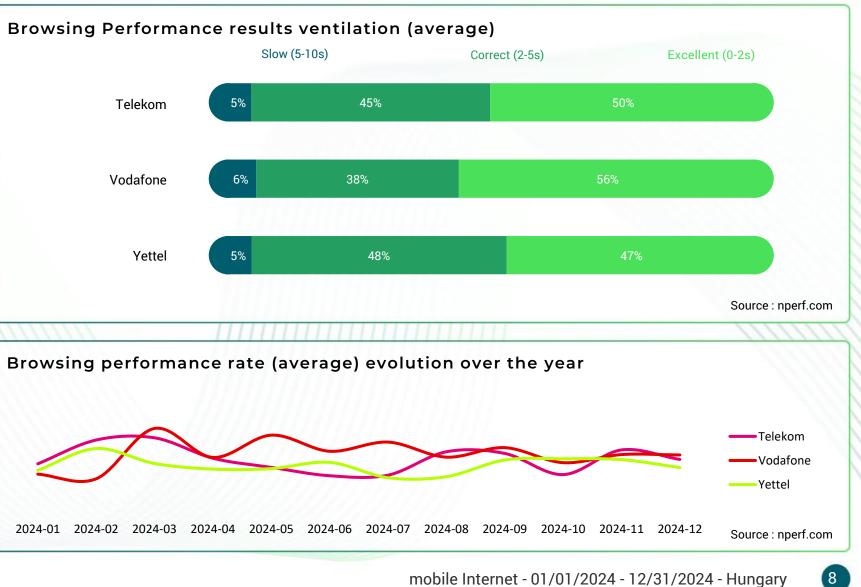






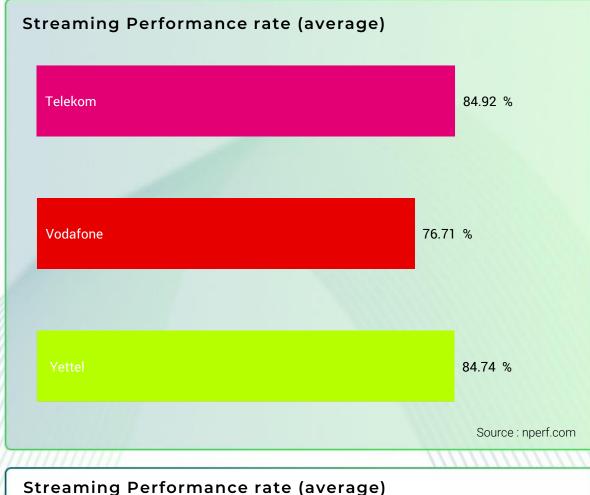


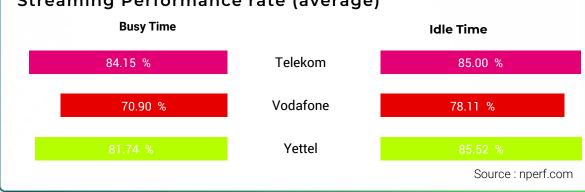
The subscribers of Telekom and Vodafone enjoyed the best mobile Internet Internet browsing performance in 2024.





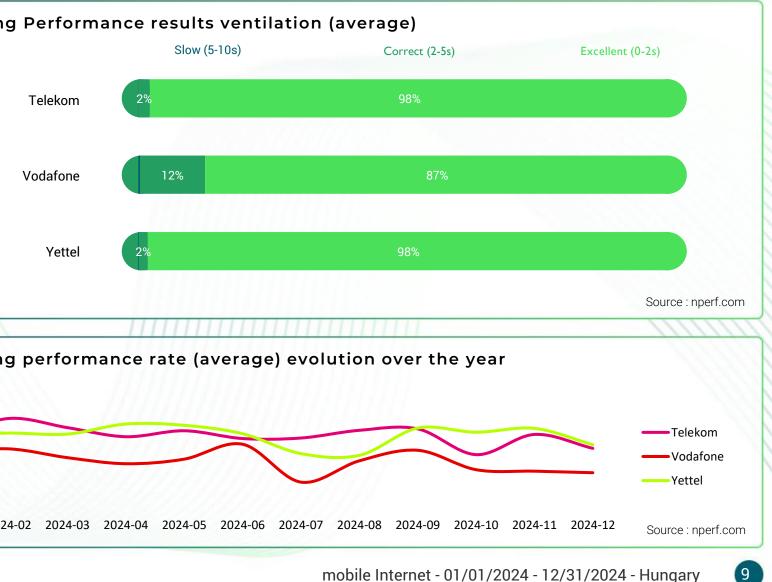


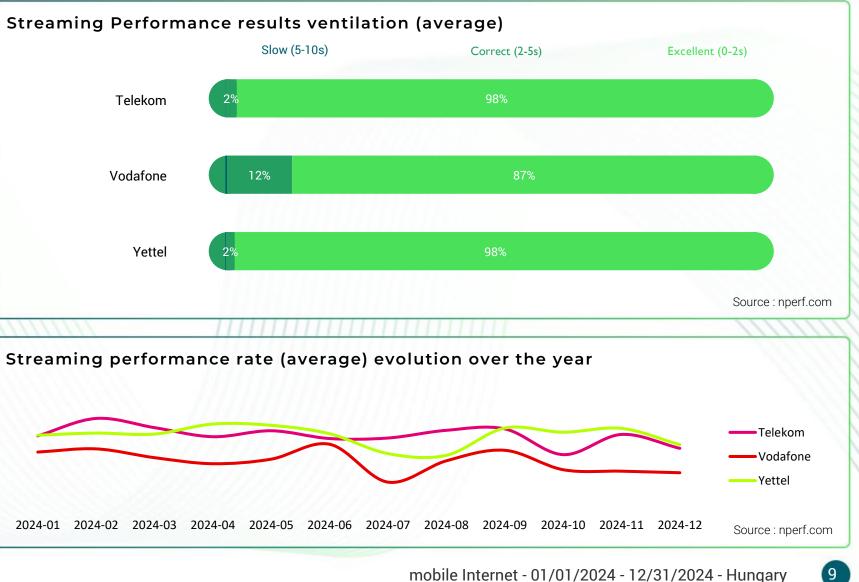




The subscribers of Telekom and Yettel enjoyed the best mobile Internet streaming performance in 2024.

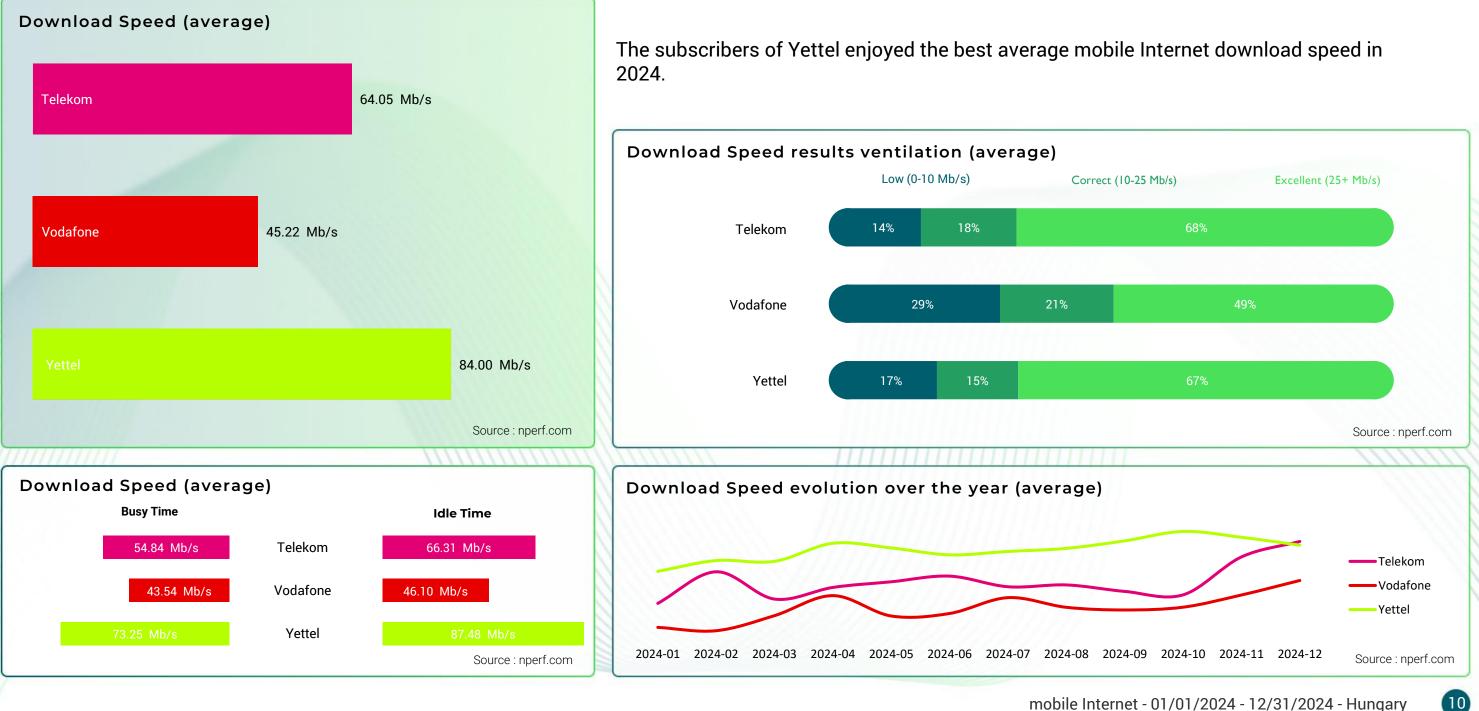






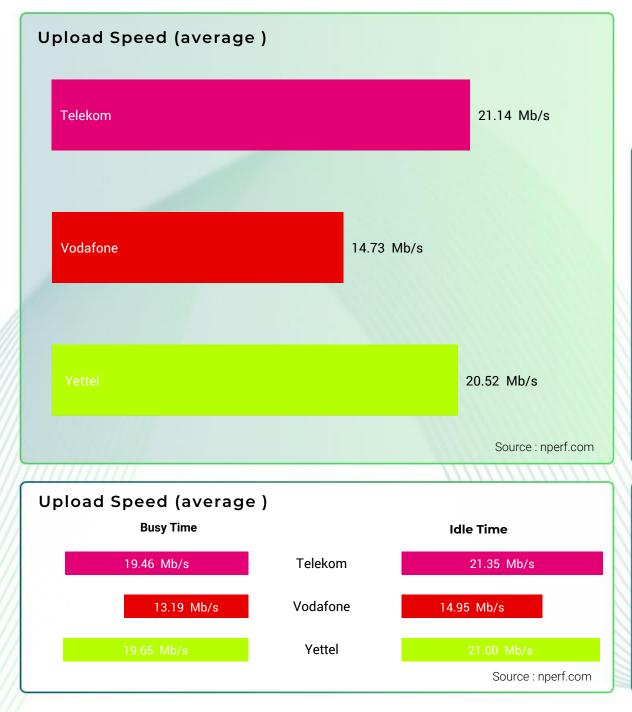










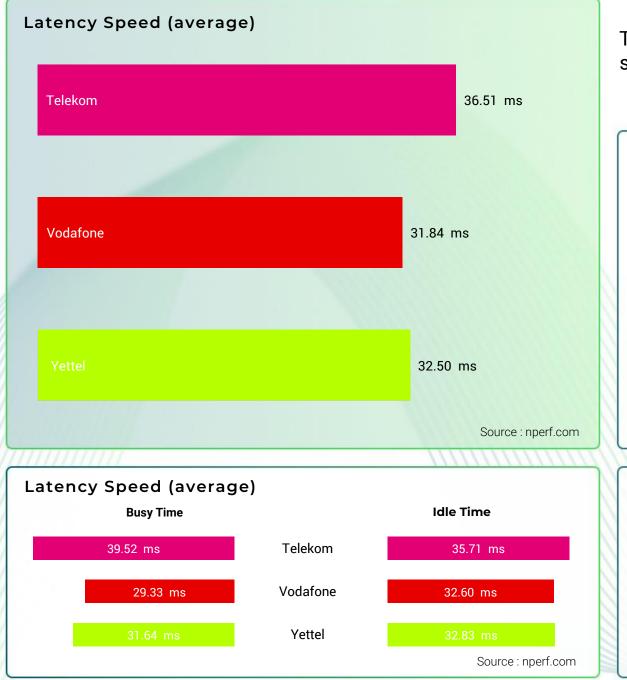


The subscribers of Telekom enjoyed the best average mobile Internet upload speed in2024.

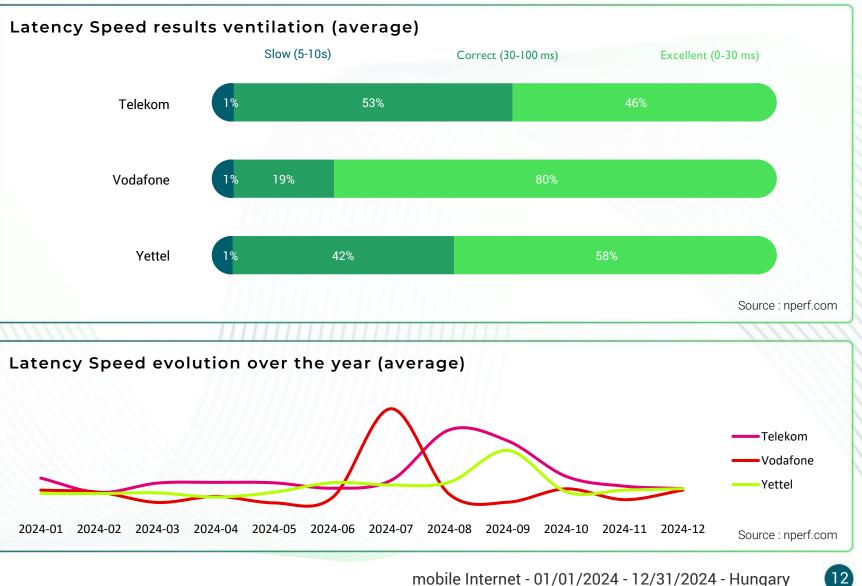






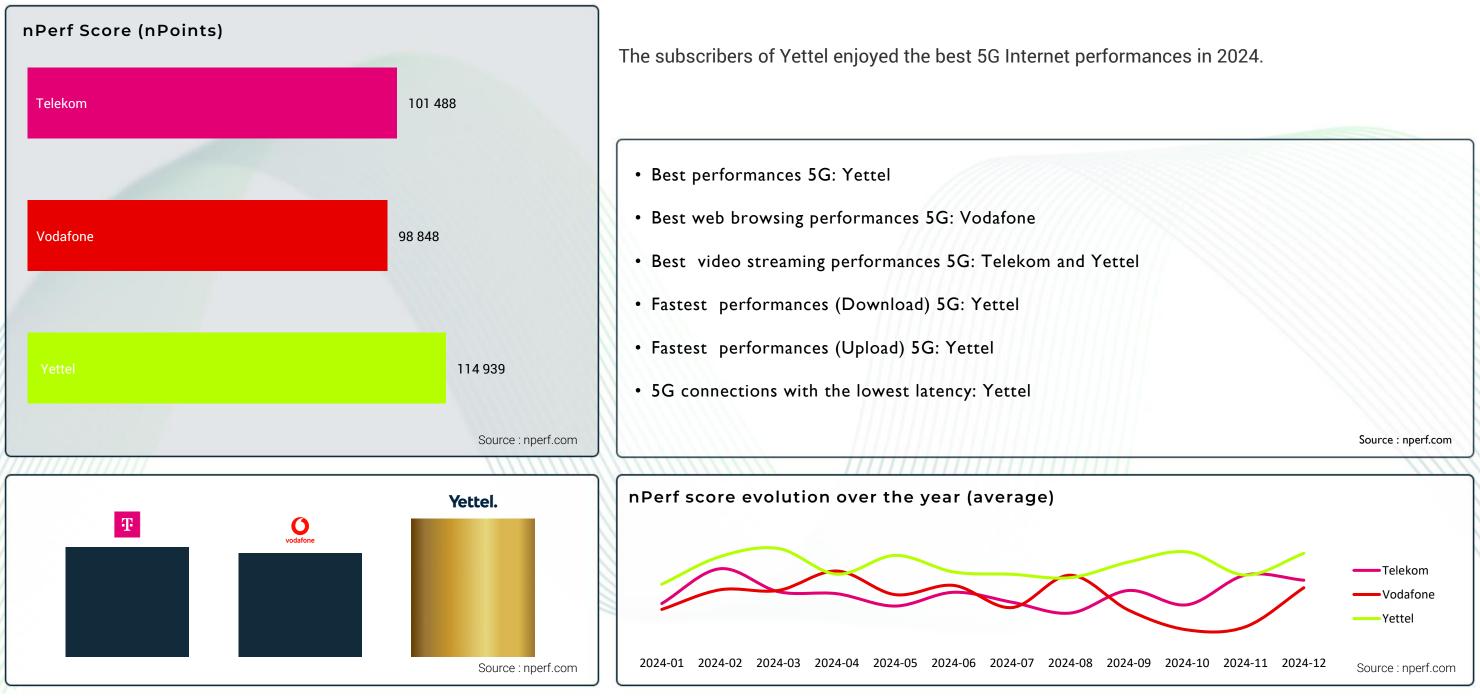


The subscribers of Vodafone and Yettel enjoyed the best average mobile Internet latency speed in 2024.





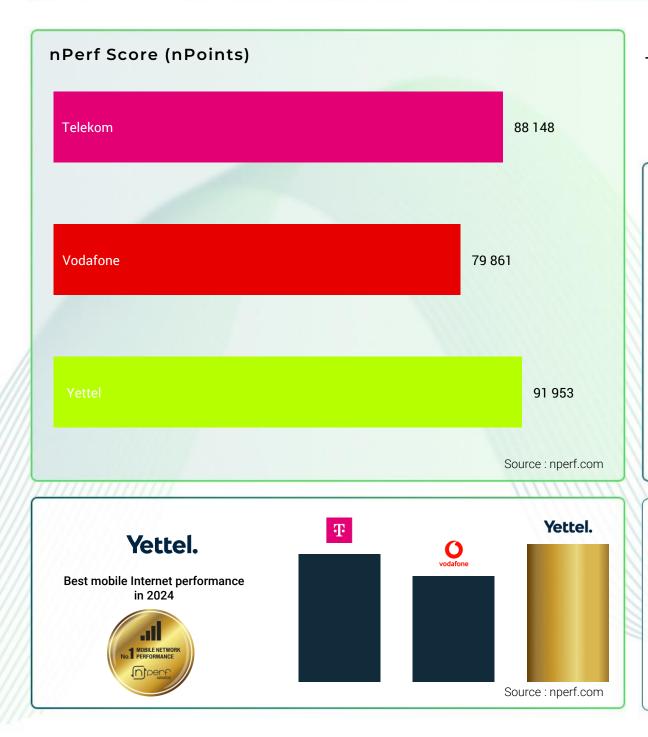
# Mobile Internet performance in Hungary



**5**G



# Mobile Internet performance in Hungary



The subscribers of Yettel 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.

# nPerf score evolution over the year (average) 2024-06 2024-01 2024-02 2024-03 2024-04 2024-05 2024-07 2024-08

mobile Internet - 01/01/2024 - 12/31/2024 - Hungary



Source : nperf.com

