# Barometer of mobile Internet connections in Ukraine

01/01/2024 - 12/31/2024











**Analysis** 



5

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.





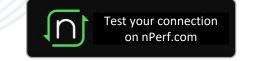


# **Test your Internet connection with nPerf!**

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!







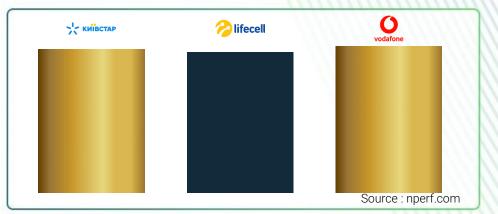
# 2. Executive Summary



The subscribers of Kyivstar and Vodafone enjoyed the best mobile Internet performances in 2024.

	Kyivstar	Lifecell	Vodafone
Download bitrates (Mb/s)	24,20	24,57	23,76
Upload bitrates (Mb/s)	11,70	7,77	11,99
Latency (ms)	43,64	46,99	44,82
Web browsing (%)	54,70	57,09	56,68
Youtube streaming (%)	78,78	79,96	80,43
nPerf Score (nPoints)	59 339	58 054	60 573





### 3. Analysis



#### Introduction

In Q4 2024, the mobile telecom sector in Ukraine has shown significant developments with Kyivstar and Vodafone emerging as co-leaders. These operators have notably improved their scores, becoming new leaders in 2024. The sector reflects a competitive landscape with Kyivstar, Lifecell, and Vodafone demonstrating remarkable achievements across various KPIs, such as Download speed, Upload speed, and Latency. The overall trend indicates a positive trajectory with strong gains in network capabilities and user experience.

### **Kyivstar: Co-leader of the sector and excellence in Download speed and Latency.**

For the period analyzed, Kyivstar stands out as a co-leader with a stellar performance, achieving a global score of 59,339. It excels in Download speed with a rate of 24.2 Mbps and maintains the best Latency at 43.6 ms. Kyivstar has shown notable improvements, especially with a 29.5% increase in Download speed and a 13% improvement in Upload speed. These advancements underline its significant contribution to enhancing mobile internet performance in Ukraine.

### Lifecell: Excellence in Browsing and Video streaming.

Lifecell demonstrates its strength with a global score of 58,054, leading in Browsing with a score of 57.1% and maintaining its dominance in Video streaming with an impressive score of 80.0%. Lifecell has also achieved a remarkable 20.4% increase in Download speed, showcasing its commitment to improving user experience. Despite not being a sector leader, its focused enhancements in these key areas contribute significantly to the overall sector dynamics.

### Vodafone: Co-leader of the sector with outstanding performance in Upload speed.

Vodafone shares the top position as a co-leader with a global score of 60,573, primarily driven by its leadership in Upload speed at 12.0 Mbps and streaming with a score of 80.4%. Vodafone's consistent improvements across various categories highlight its strategic advancements and pivotal role in shaping the sector landscape.

#### Conclusion

Kyivstar and Vodafone have emerged as co-leaders in the Ukrainian mobile sector, showcasing exceptional performances in key KPIs such as Download speed, Upload speed, and Latency. Lifecell, while not a sector leader, has excelled in Browsing and Video streaming, contributing to the competitive sector environment. The overall positive trends and enhancements in network performance suggest a bright future for mobile internet, driven by the continuous efforts of these operators.

### 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.

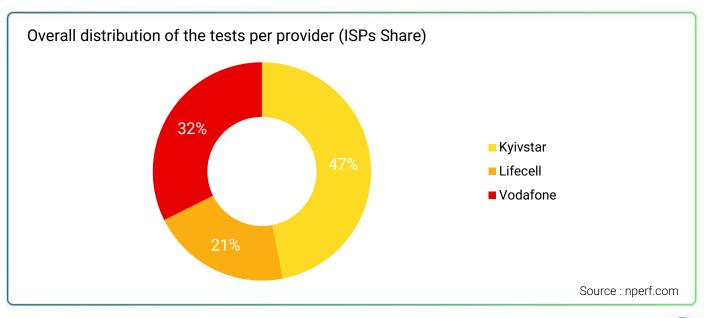
### **Streaming performance**

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.

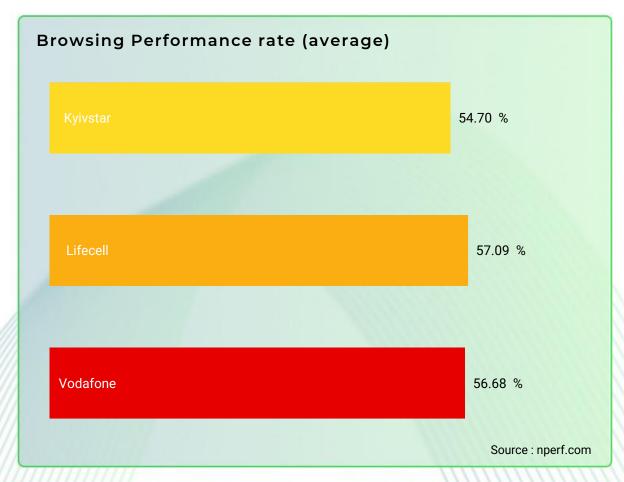
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



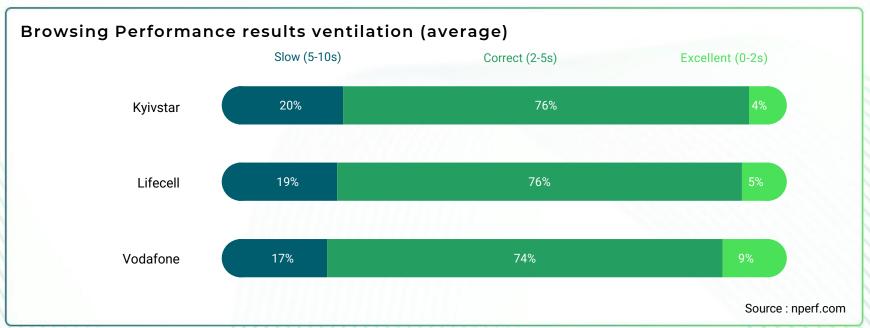


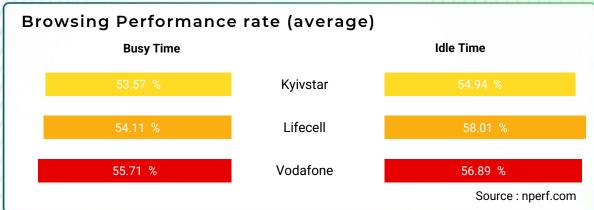
# **Quality of Experience: Browsing**

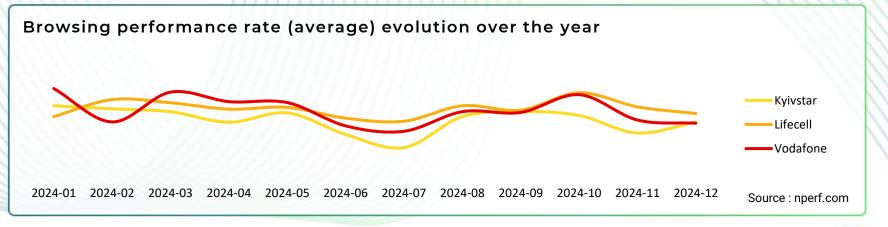




The subscribers of Lifecell and Vodafone enjoyed the best mobile Internet Internet browsing performance in 2024.



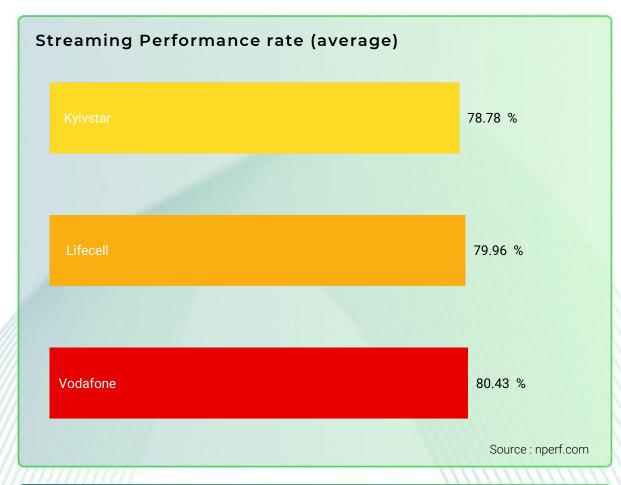




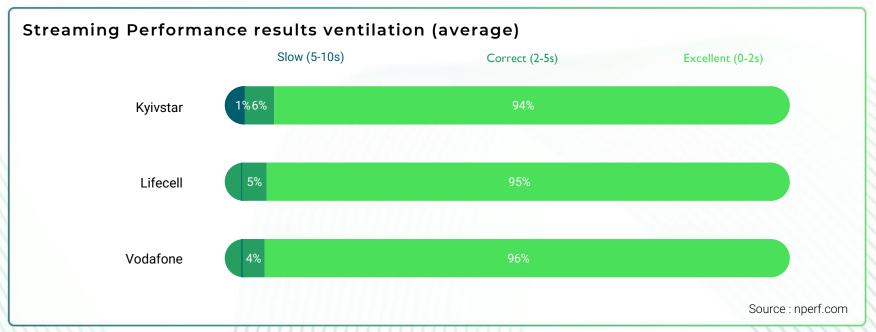


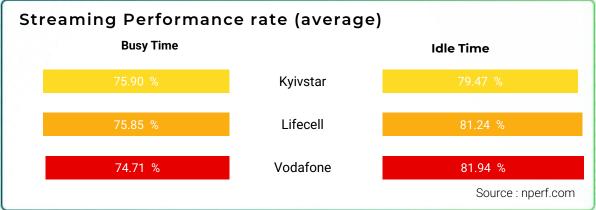
# **Quality of Experience: Streaming**

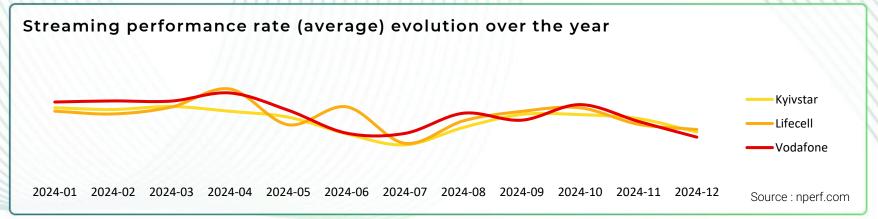




The subscribers of Lifecell and Vodafone enjoyed the best mobile Internet streaming performance in 2024.



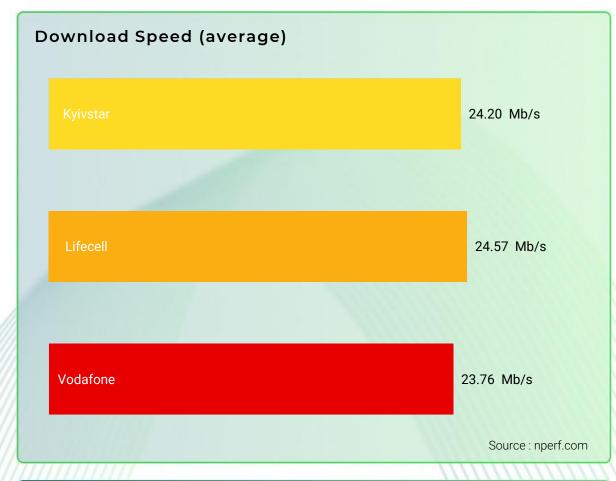




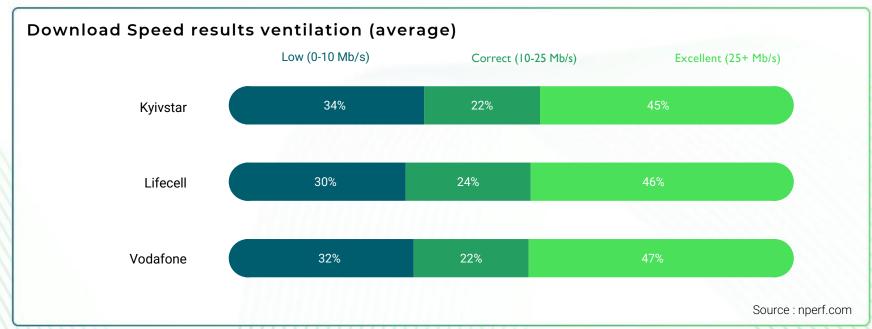


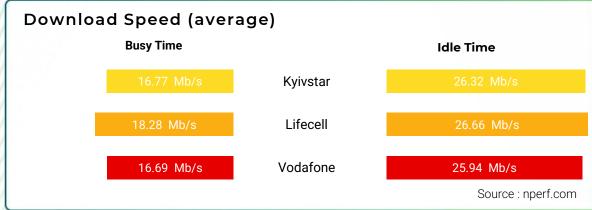
# Speed: Download

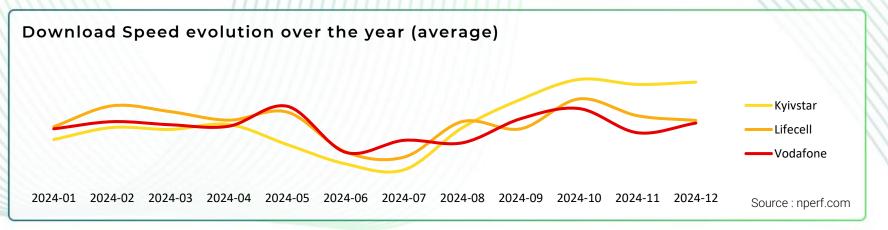




The subscribers of Kyivstar and Lifecell enjoyed the best average mobile Internet download speed in 2024.



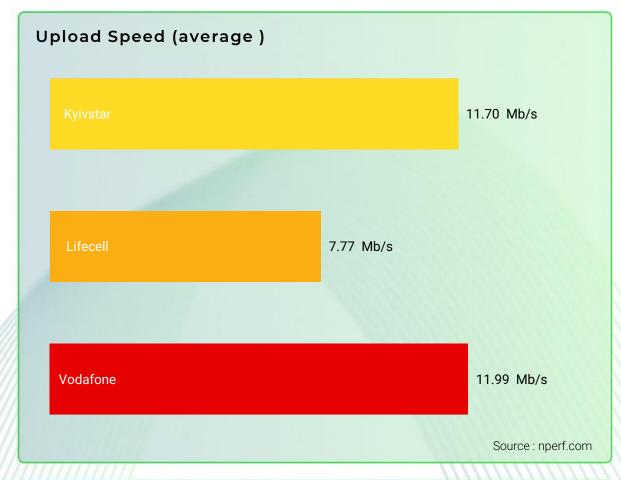




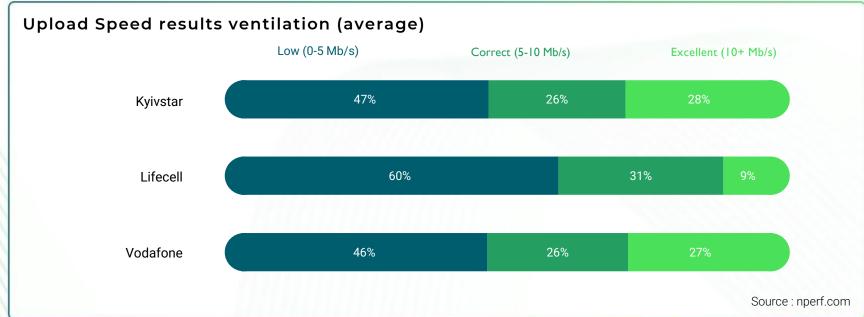


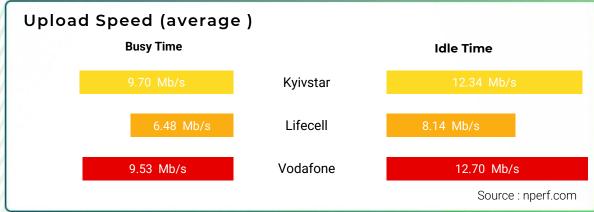
# Speed: Upload

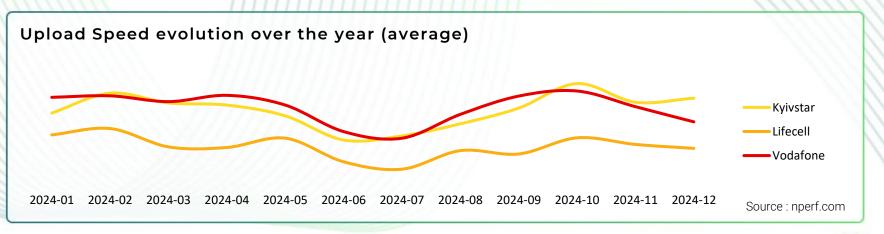




The subscribers of Kyivstar and Vodafone enjoyed the best average mobile Internet upload speed in 2024.



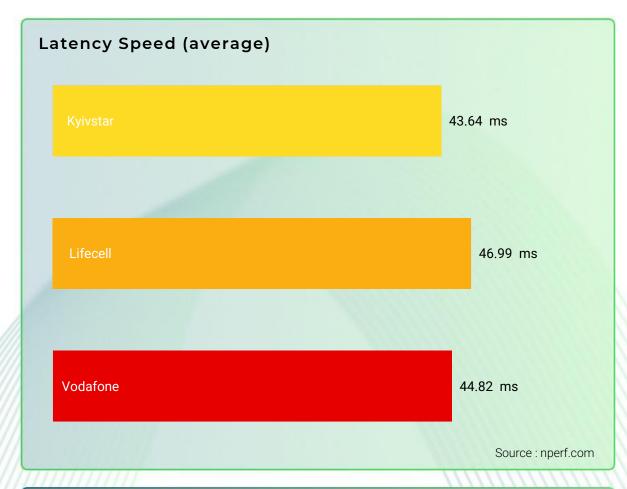




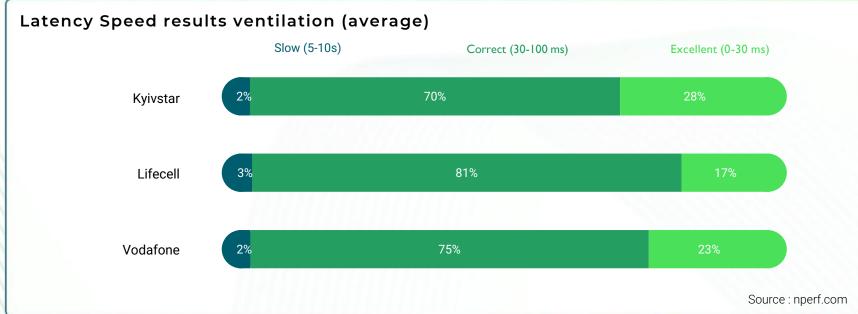


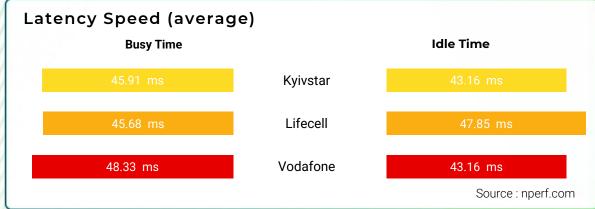
# Speed: Latency

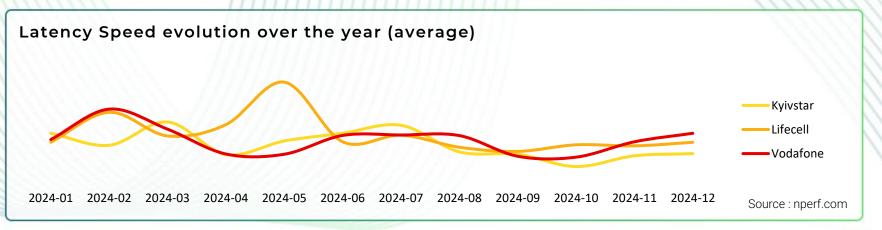




The subscribers of Kyivstar and Vodafone enjoyed the best average mobile Internet latency speed in 2024.

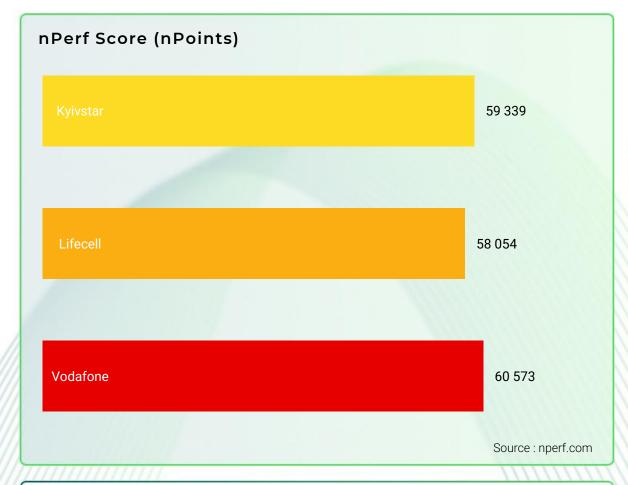






# Mobile Internet performance in Ukraine





The subscribers of Kyivstar and Vodafone 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

