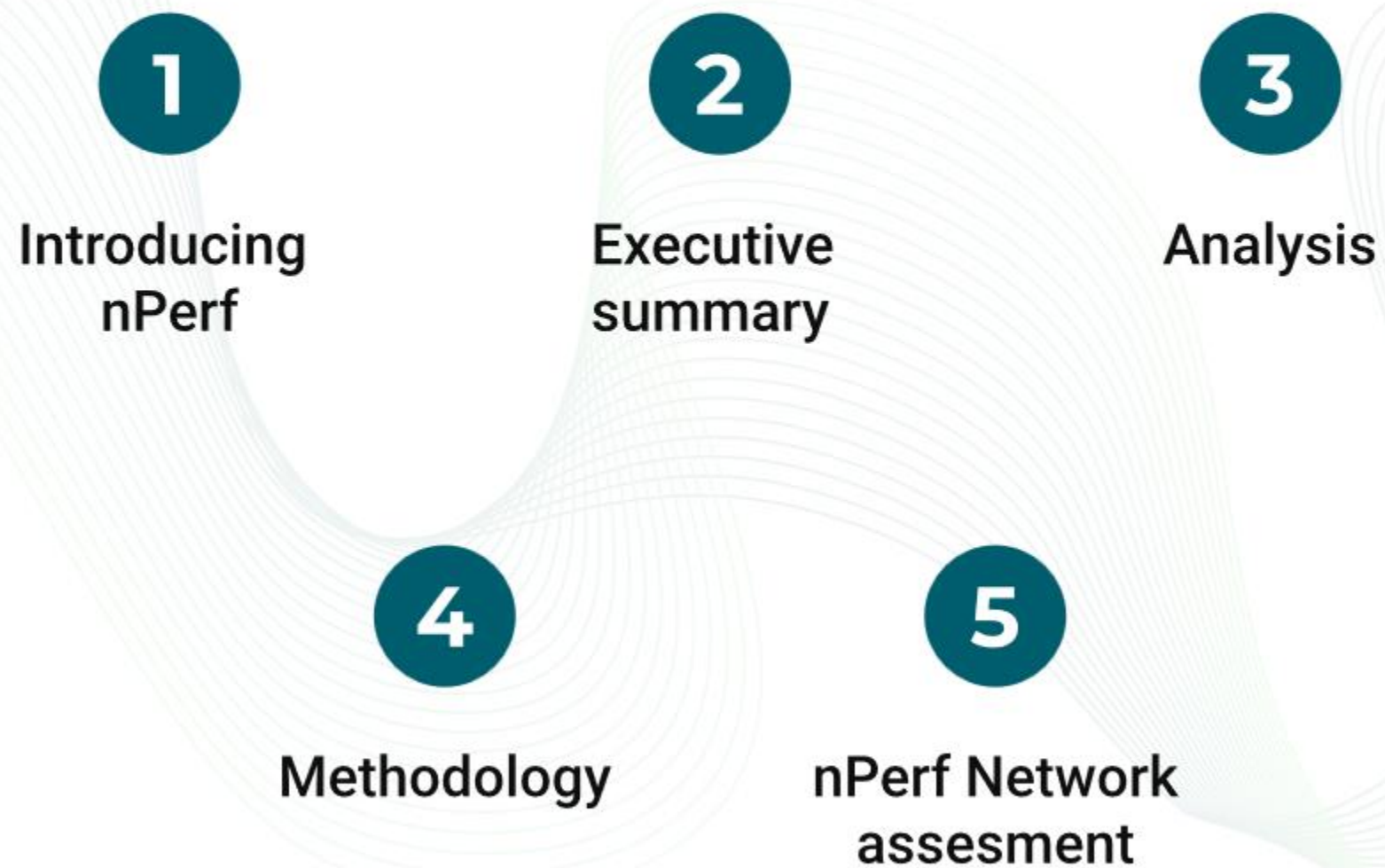


01/16/2025

# Barometer of mobile Internet connections in United Kingdom of Great Britain and Northern Ireland

01/01/2024 - 12/31/2024







## 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.

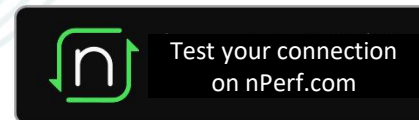
 **300k+** tests daily worldwide.

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

### Mobile Internet connections in United Kingdom of Great Britain and Northern Ireland

	EE	O2	Three	Vodafone
Download bitrates (Mb/s)	102,54	36,14	111,49	71,30
Upload bitrates (Mb/s)	16,03	8,54	15,85	11,77
Latency (ms)	36,14	38,27	38,27	41,34
Web browsing (%)	68,00	63,20	66,34	66,30
Youtube streaming (%)	82,23	77,93	78,68	79,24
nPerf Score (nPoints)	88 212	67 087	85 288	77 773

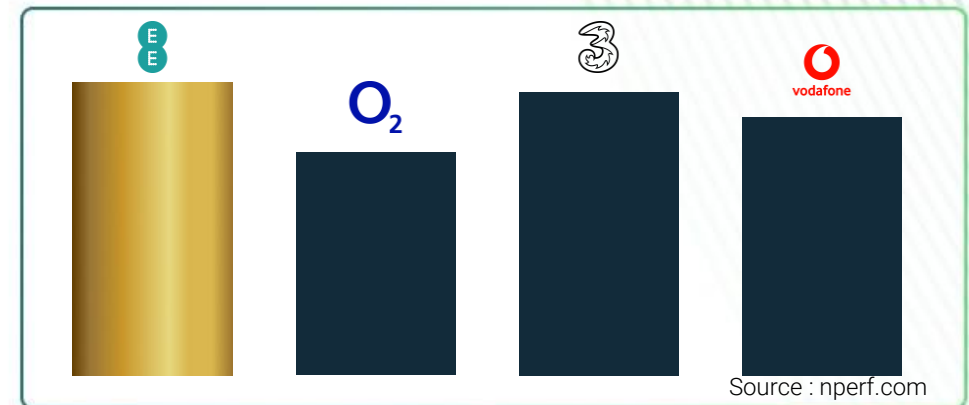
Source : nperf.com



Best mobile Internet performance in 2024




Source : nperf.com



Source : nperf.com

The subscribers of Three enjoyed the best 5G Internet performances in United Kingdom of Great Britain and Northern Ireland in 2024.

#### 5G mobile Internet connections in United Kingdom of Great Britain and Northern Ireland

	EE	O2	Three	Vodafone
▼ Download bitrates (Mb/s)	166,89	77,23	234,50	165,65
▲ Upload bitrates (Mb/s)	22,06	13,31	28,55	20,40
◀▶ Latency (ms)	31,83	34,29	30,22	37,33
🌐 Web browsing (%)	74,83	71,18	76,07	73,76
📺 Youtube streaming (%)	87,15	80,22	86,39	81,71
 nPerf Score (nPoints)	105 290	85 165	112 410	98 167

Source : nperf.com

### Introduction

In 2024, the mobile market in Great Britain has seen significant developments, particularly in the 5G sector. EE emerged as the new leader of the market, showcasing a shift from the previous year's standings. This period highlights the strong performance of EE and its capabilities in delivering superior mobile internet services. The Score nPerf for this period reflects the evolving landscape and the competitive dynamics among the operators. EE, the new market leader, demonstrates excellence across various Key Performance Indicators (KPIs) including Download, Upload, and Latency. The market also sees co-leaders in areas such as Video streaming, where competition remains fierce. The focus on 5G continues to drive advancements and sets the stage for future enhancements in connectivity.

### EE: Market Leader with Outstanding Performances

EE distinguishes itself as the market leader for the period with a strong overall performance. The operator achieves a remarkable Score nPerf, leading in Latency and Video streaming, and showcasing significant strengths in the mobile internet sector. As the leader in these categories, EE's contributions to the mobile market are noteworthy, ensuring high-quality connectivity and user experience.

### Three: Excellence in Download and Upload speed

Three excels in specific categories, particularly in Download and Upload speed, making it a key player in the mobile market. Its focus on maintaining high download and upload speeds positions Three as a prominent provider of robust

mobile internet services. The operator's performance in these areas highlights its commitment to delivering reliable and efficient connectivity.

### Vodafone: Strengths in Video Streaming

Vodafone demonstrates notable strengths in Video streaming, contributing to its competitive position in the market. The operator's focus on providing a seamless streaming experience underscores its ability to cater to the growing demand for high-quality video content. Vodafone's efforts in this category enhance its market presence and appeal to users seeking superior streaming services.

### O2: Competitive in Latency

O2 remains competitive with its focus on Latency, ensuring that users experience minimal delays in connectivity. The operator's emphasis on reducing latency supports its role in providing responsive and efficient mobile internet services. O2's performance in this area reflects its dedication to improving user satisfaction through enhanced connectivity.

### Conclusion

The mobile market in Great Britain has witnessed a dynamic shift with EE emerging as the market leader. Each operator has demonstrated strengths in various KPIs, contributing to a vibrant and competitive landscape. As the focus on 5G continues to drive innovation, the market shows promise for further advancements, ensuring that users benefit from superior mobile internet experiences.

## 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

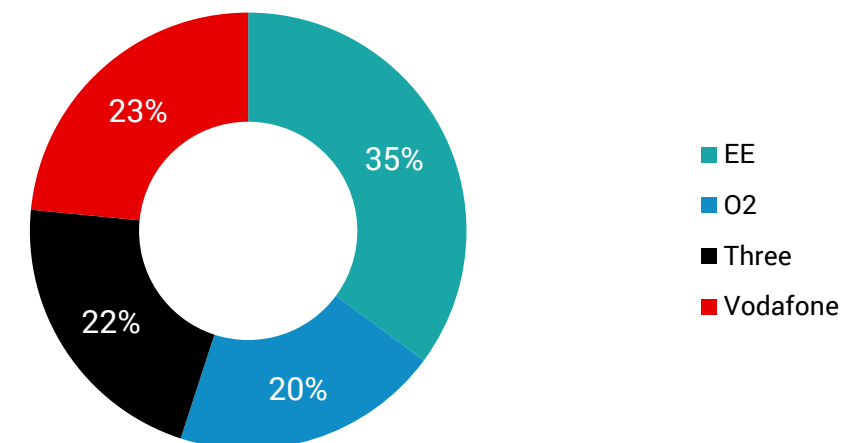
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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.

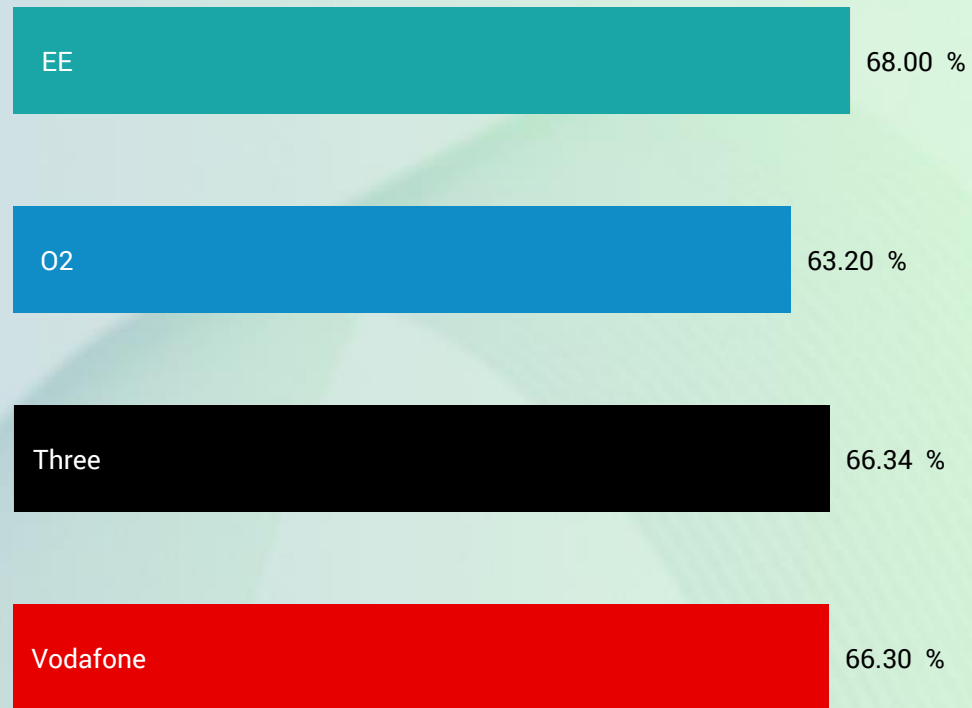
Overall distribution of the tests per provider (ISPs Share)



Source: nperf.com



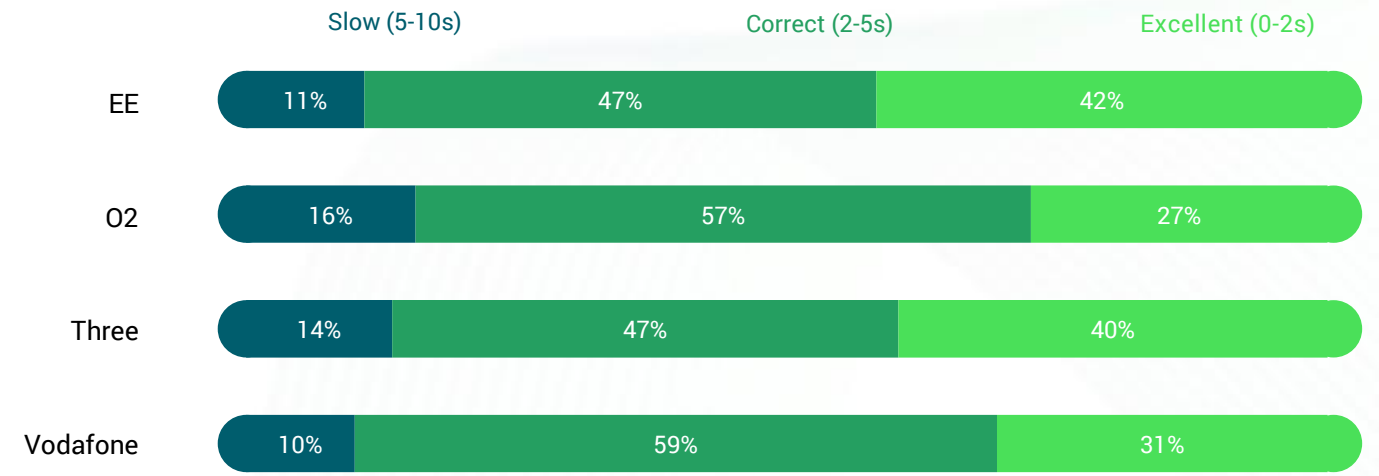
## Browsing Performance rate (average)



Source : nperf.com

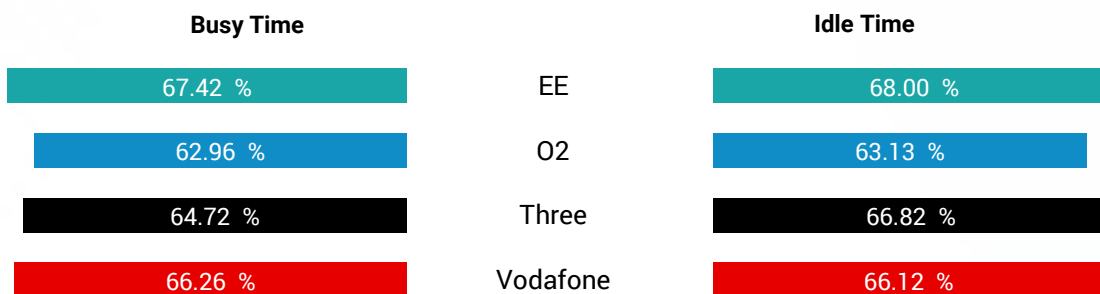
The subscribers of EE enjoyed the best mobile Internet Internet browsing performance in 2024.

## Browsing Performance results ventilation (average)



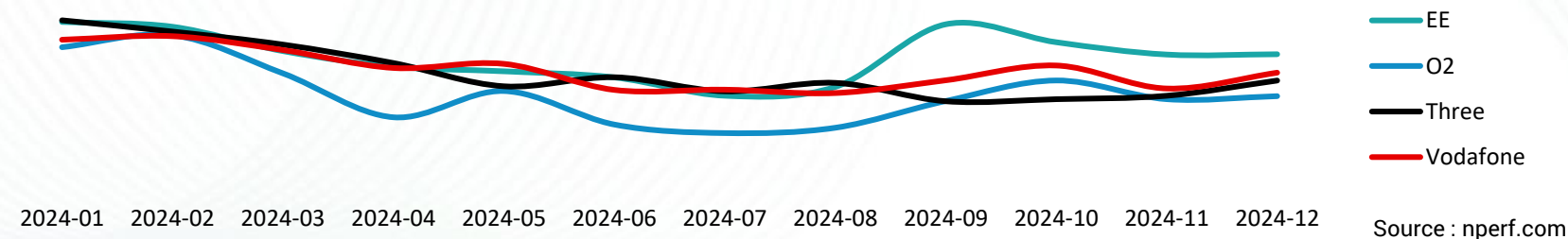
Source : nperf.com

## Browsing Performance rate (average)



Source : nperf.com

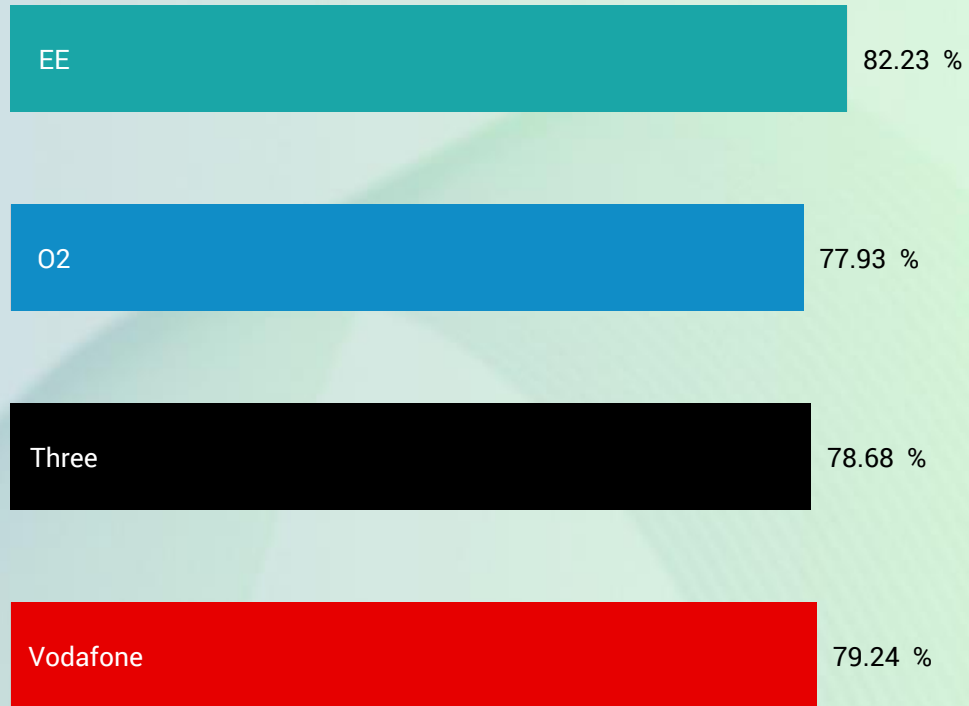
## Browsing performance rate (average) evolution over the year



Source : nperf.com



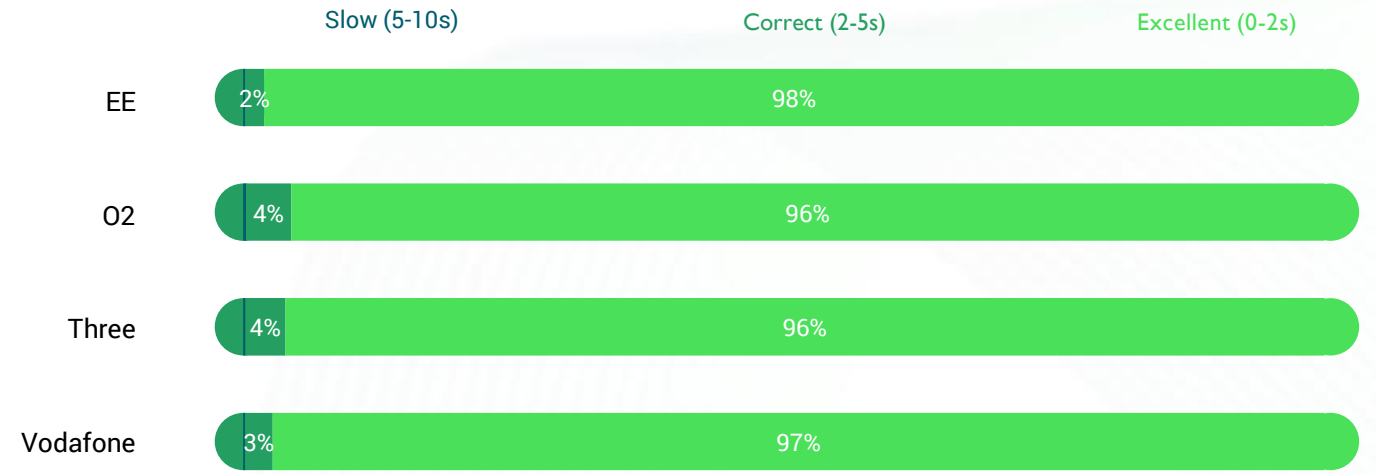
## Streaming Performance rate (average)



Source : nperf.com

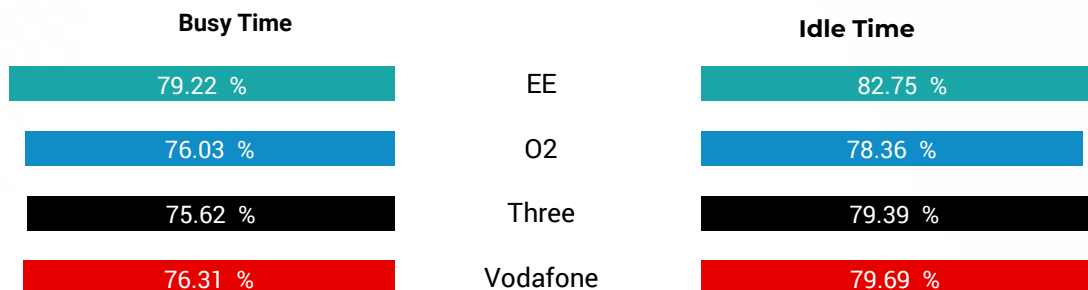
The subscribers of EE enjoyed the best mobile Internet streaming performance in 2024.

## Streaming Performance results ventilation (average)



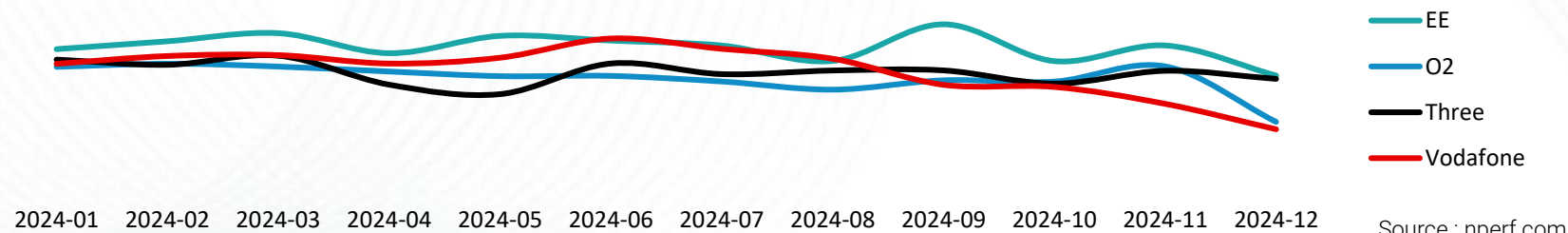
Source : nperf.com

## Streaming Performance rate (average)



Source : nperf.com

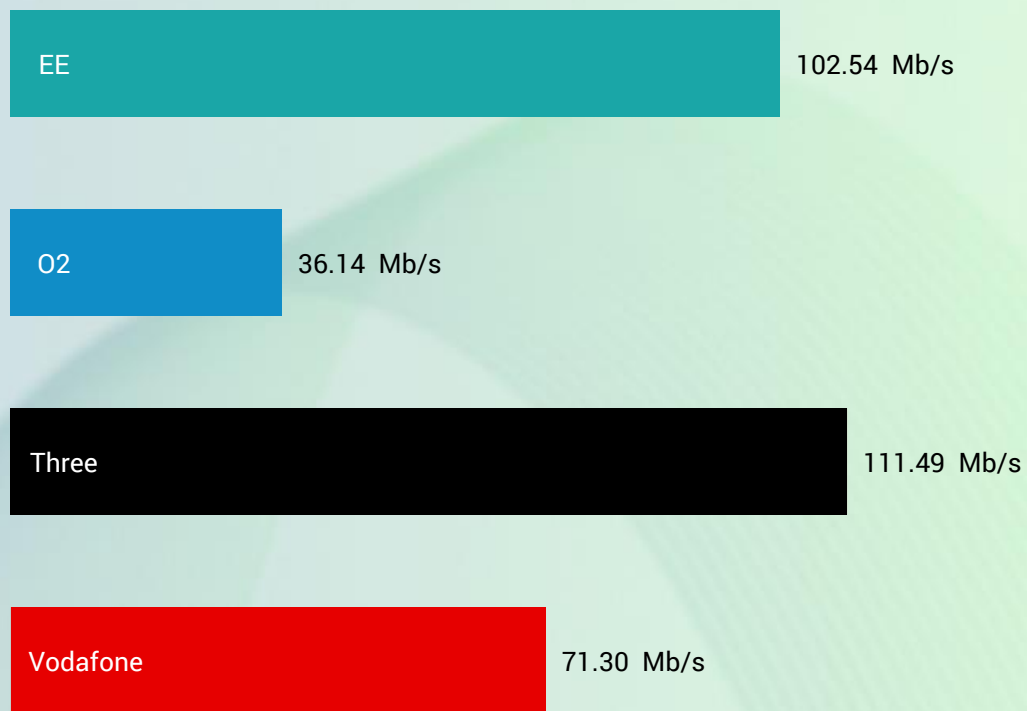
## Streaming performance rate (average) evolution over the year



Source : nperf.com



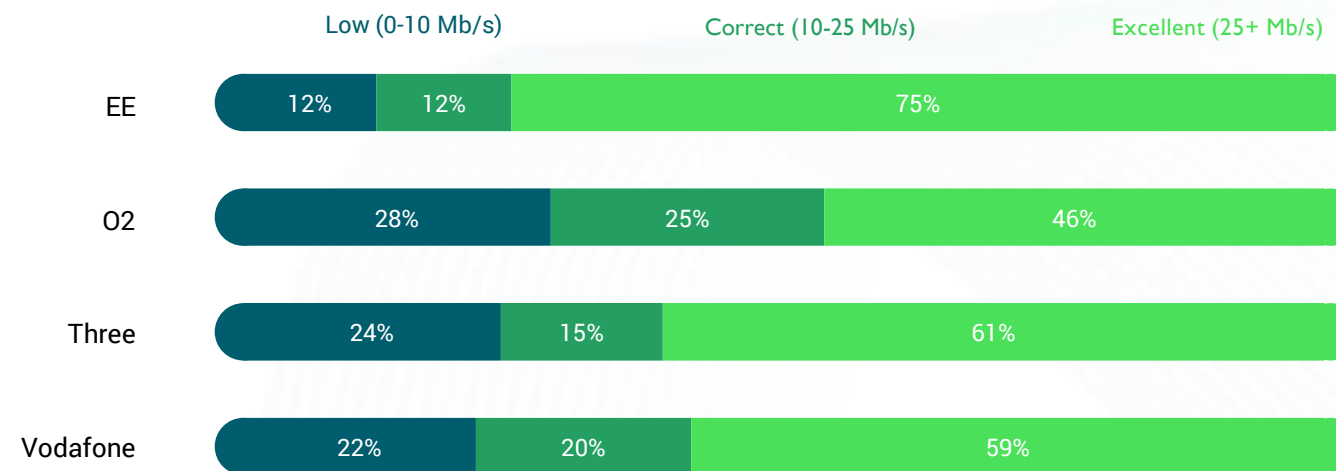
## Download Speed (average)



Source : nperf.com

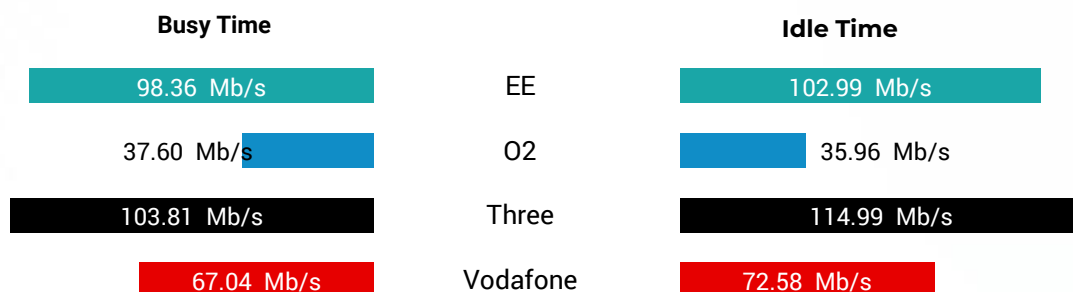
The subscribers of Three enjoyed the best average mobile Internet download speed in 2024.

## Download Speed results ventilation (average)



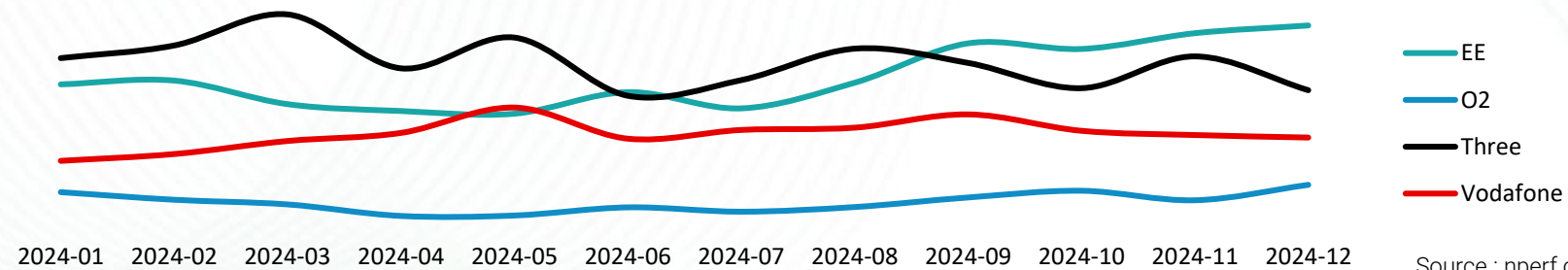
Source : nperf.com

## Download Speed (average)



Source : nperf.com

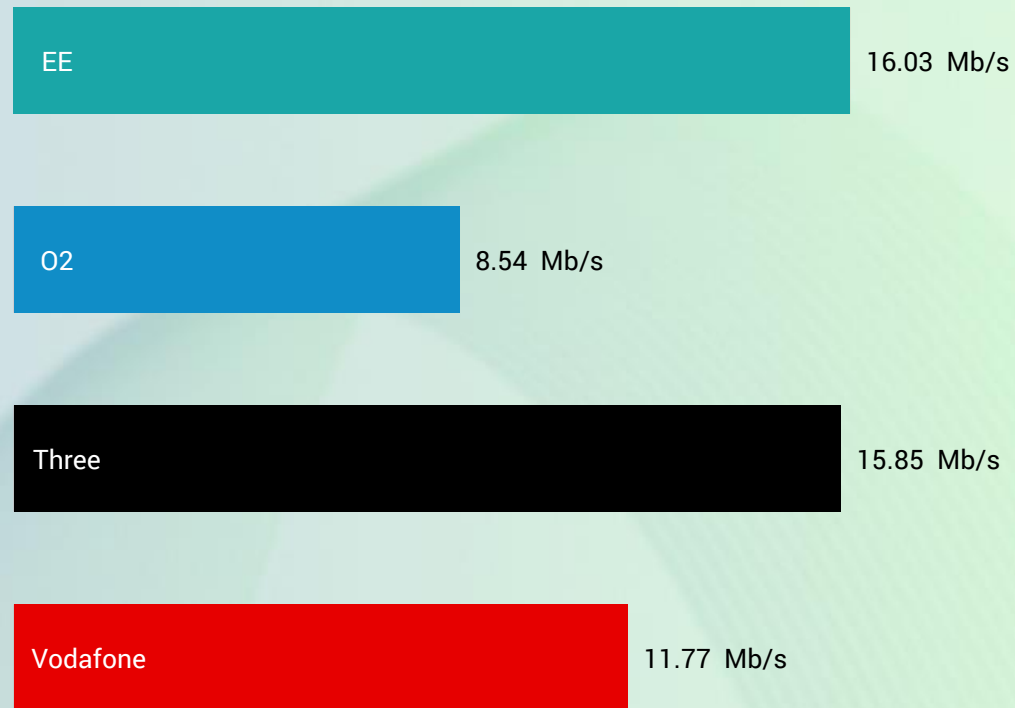
## Download Speed evolution over the year (average)



Source : nperf.com



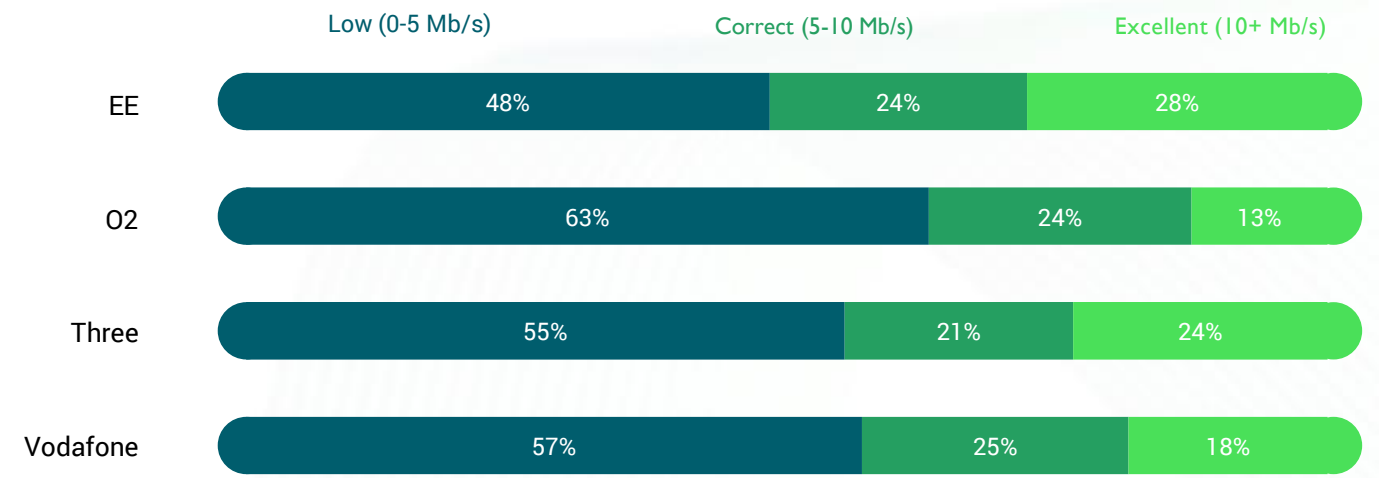
## Upload Speed (average )



Source : nperf.com

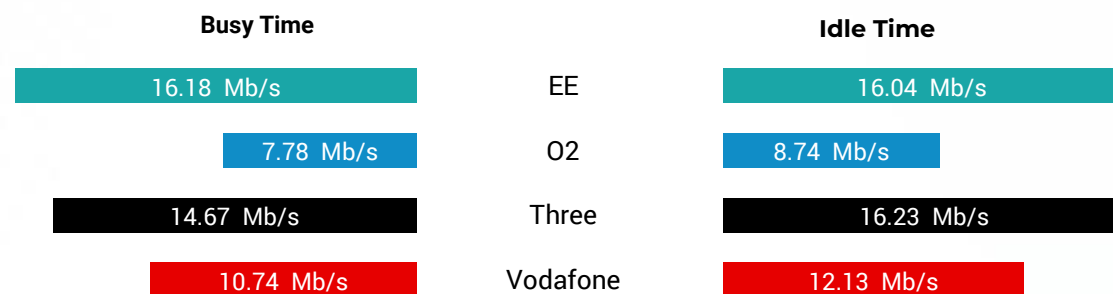
The subscribers of EE and Three enjoyed the best average mobile Internet upload speed in 2024.

## Upload Speed results ventilation (average)



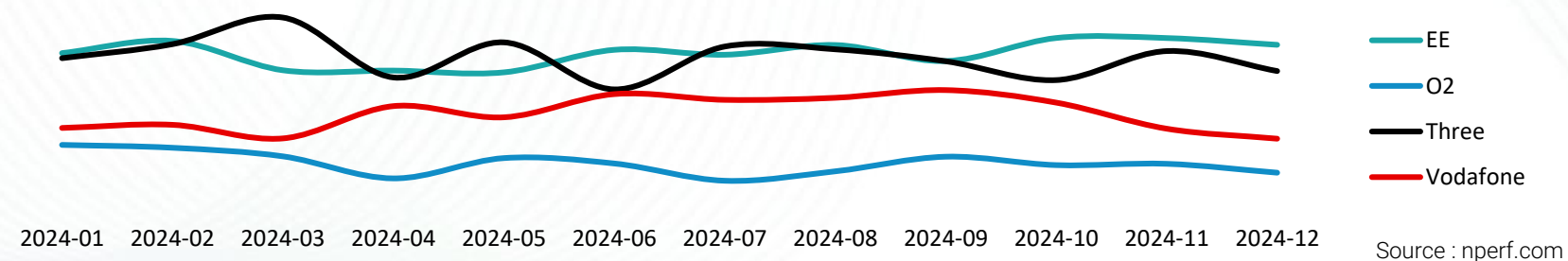
Source : nperf.com

## Upload Speed (average )



Source : nperf.com

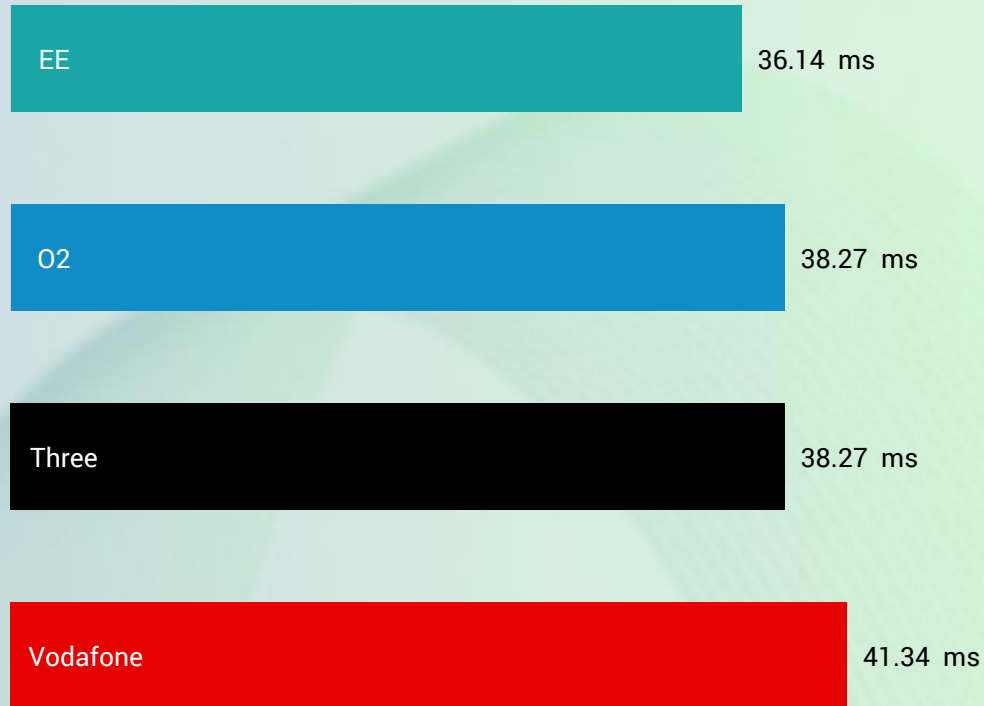
## Upload Speed evolution over the year (average)



Source : nperf.com



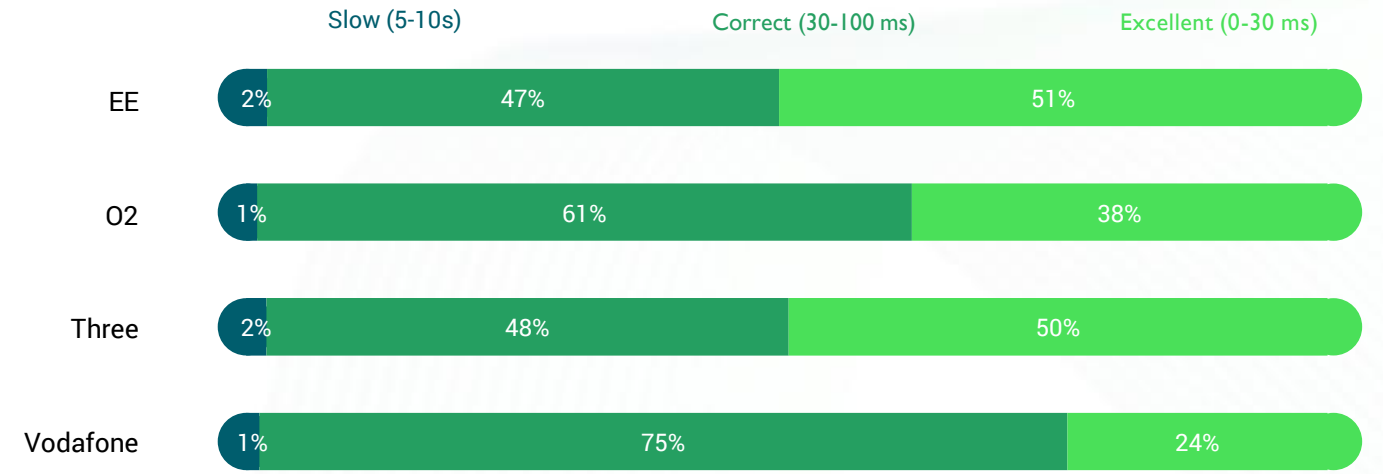
## Latency Speed (average)



Source : nperf.com

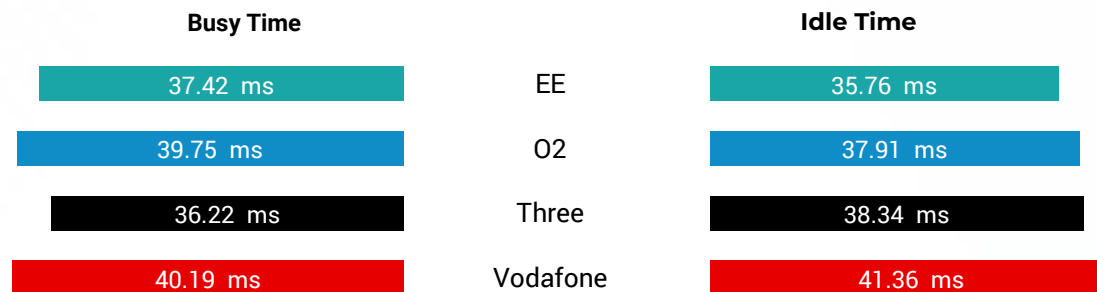
The subscribers of EE enjoyed the best average mobile Internet latency speed in 2024.

## Latency Speed results ventilation (average)



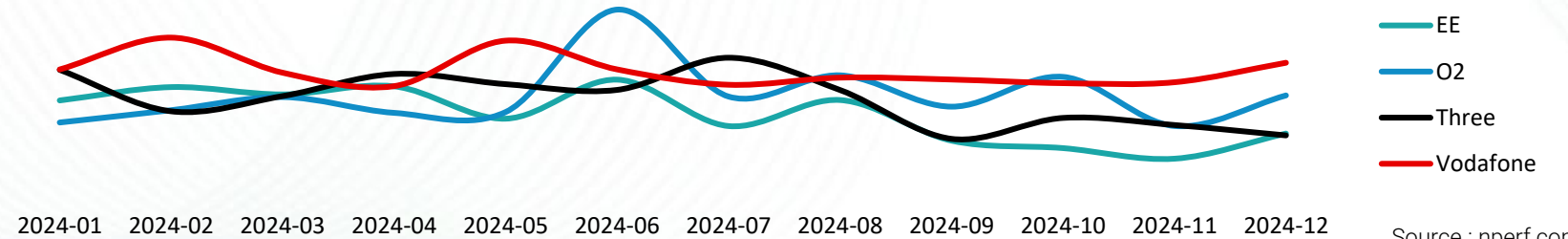
Source : nperf.com

## Latency Speed (average)



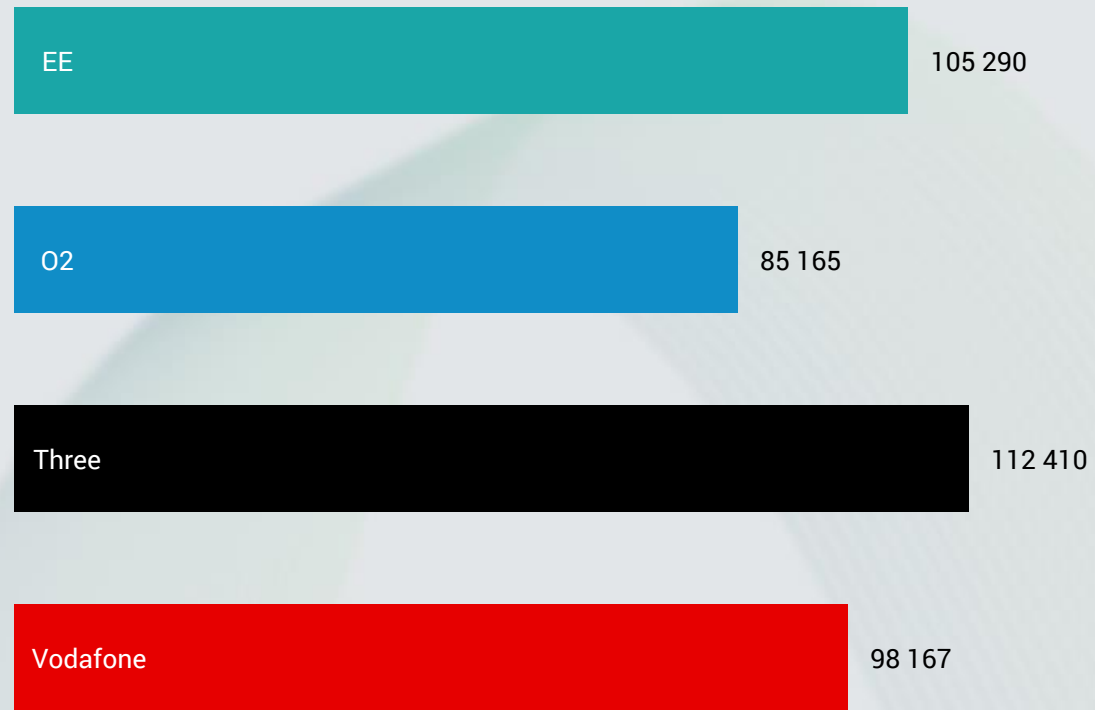
Source : nperf.com

## Latency Speed evolution over the year (average)



Source : nperf.com

## nPerf Score (nPoints)

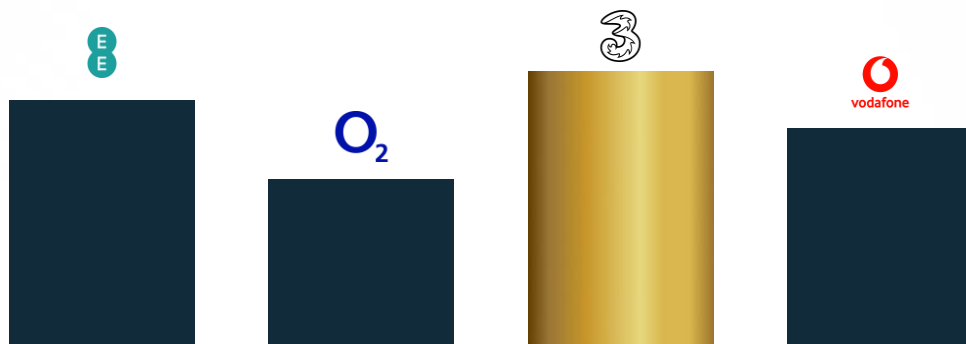


Source : nperf.com

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

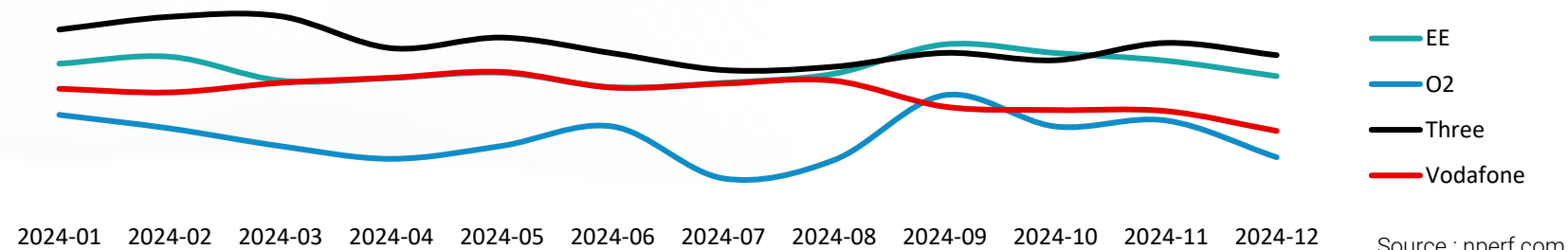
- Best performances 5G: Three
- Best web browsing performances 5G: Three
- Best video streaming performances 5G: EE and Three
- Fastest performances (Download) 5G: Three
- Fastest performances (Upload) 5G: Three
- 5G connections with the lowest latency: Three

Source : nperf.com



Source : nperf.com

## nPerf score evolution over the year (average)

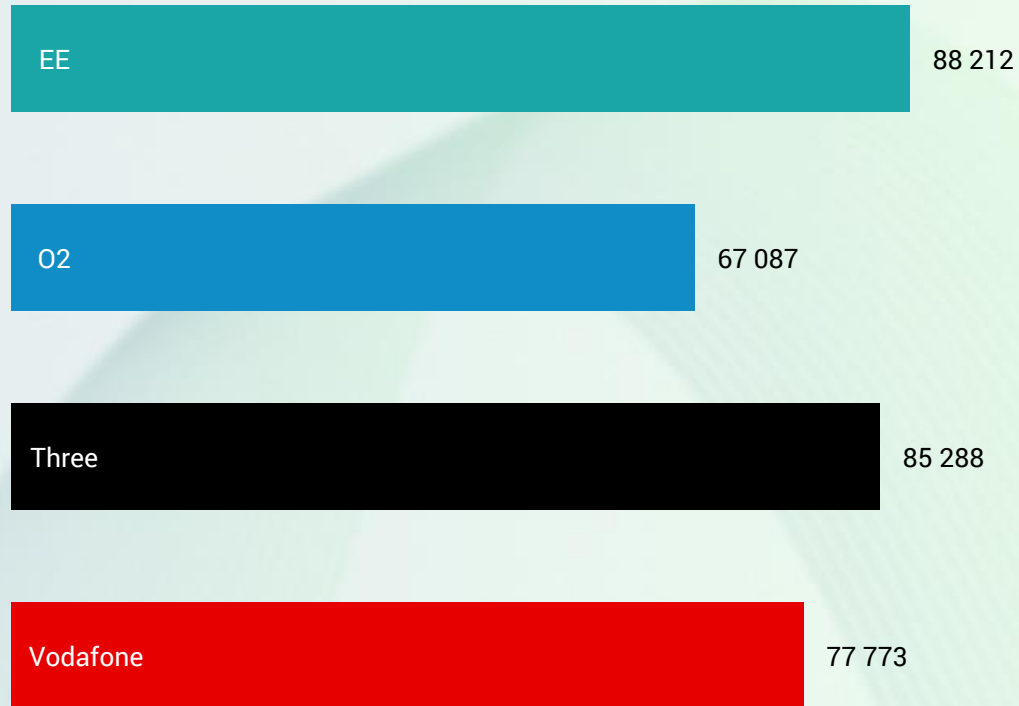


Source : nperf.com

# Mobile Internet performance in United Kingdom of Great Britain and Northern Ireland



## nPerf Score (nPoints)



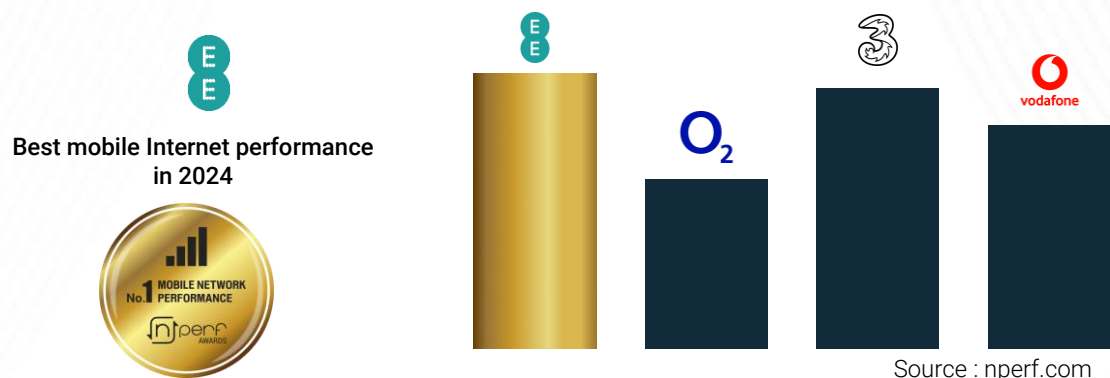
Source : nperf.com

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

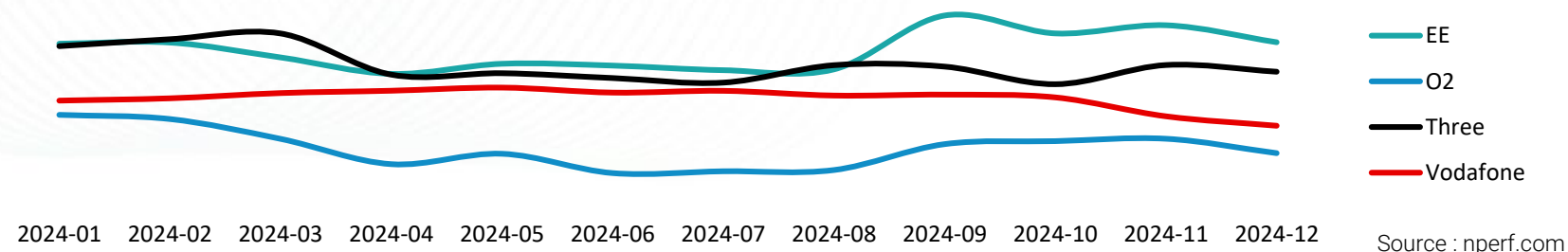
The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

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, set against a dark blue background.

**n**perf