

Barometer of fixed Internet Connections in Belgium - Brussels.

01/01/2023 - 31/12/2023









4 5
Methodology 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!





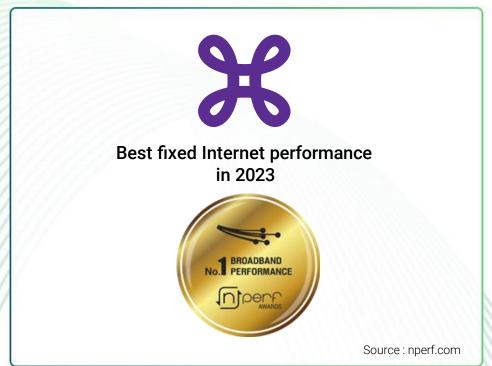


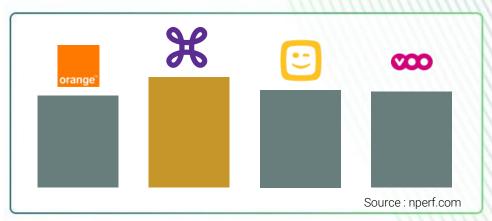
# 2. Executive Summary



The subscribers of Proximus/Scarlet enjoyed the best broadband performances in Belgium - Brussels during 2023.

	Orange	Proximus/Scarlet	Telenet	V00
Download bitrates (Mb/s)	177.40	238.17	226.55	233.57
▲ Upload bitrates (Mb/s)	20.72	123.00	29.61	22.89
<b>◀▶</b> Latency (ms)	16.54	16.38	17.61	17.39
nPerf Score (nPoints)	142 494	161 285	148 141	146 800





# 3. Analysis



Brussels enjoys a highly competitive Internet Service Provider market, where performance metrics significantly impact user experience. Key Performance Indicators such as download and upload bitrates, latency, and nPerf scores are pivotal in assessing the quality of ISP services.

## Proximus/Scarlet leads with outstanding performance

Proximus/Scarlet emerges as the frontrunner with a remarkable download bitrate of 238.17 Mb/s and an unparalleled upload bitrate of 123 Mb/s, ensuring a superior browsing and streaming experience for users. Coupled with a low latency of 16.38 ms and the highest nPerf score of 161285 nPoints, Proximus/Scarlet sets the benchmark for ISP performance in Brussels.

## Telenet a strong contender

Telenet showcases strong performance with a download bitrate of 226.55 Mb/s and an upload bitrate of 29.61 Mb/s, along with a latency of 17.61 ms. Its nPerf score of 148141 nPoints positions Telenet as a strong contender, providing a balanced and high-quality internet service, though not leading in any specific category.

## **VOO: the speed champion**

VOO is competitive with a download bitrate of 233.57 Mb/s and an upload bitrate of 22.89 Mb/s, with a latency of 17.39 ms. Its nPerf score of 146800 nPoints indicates a robust service, particularly in download speeds, though its upload speeds are not as competitive as Proximus/Scarlet's.

### **Orange: room for improvement**

Last in our panel, Orange provides a solid service with a download bitrate of 177.4 Mb/s and an upload bitrate of 20.72 Mb/s, complemented by a competitive latency of 16.54 ms. With an nPerf score of 142494 nPoints, Orange offers a reliable user experience, though it trails behind the leader in both download and upload speeds.

#### Conclusion

The ISP landscape in Brussels is characterized by Proximus/Scarlet's leadership in both download and upload speeds, crucial for high-demand internet users. Telenet and VOO offer commendable download speeds, suitable for streaming and large downloads, though they lag in upload speeds compared to Proximus/Scarlet. Orange, while offering reliable service, falls behind the competition in speed metrics.

# 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 fixed 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.

### **A** 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.

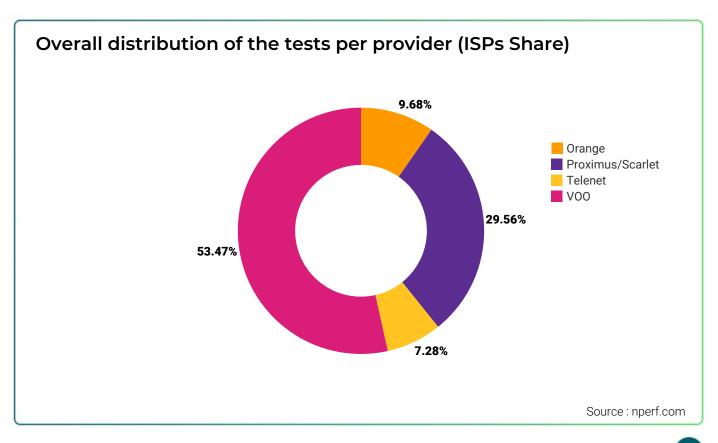
## **◆▶** Latency (ping):

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.

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.

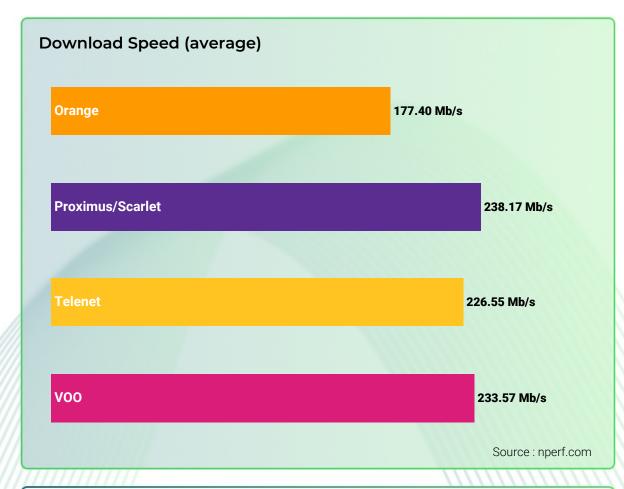
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



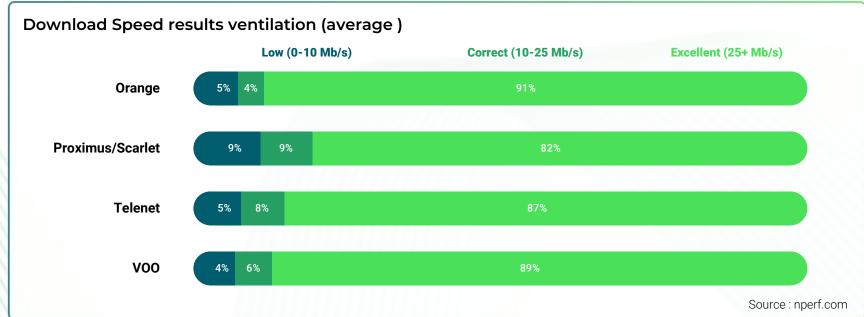


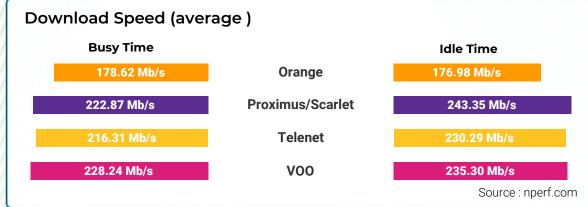
# Speed: Download

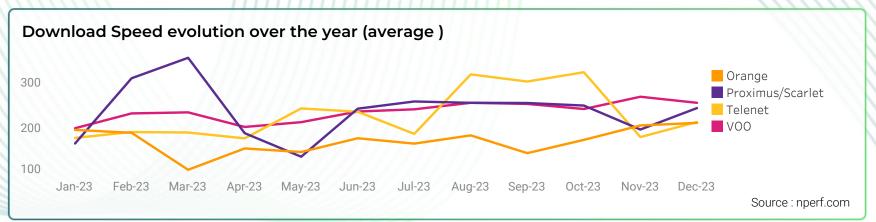




The subscribers of Proximus/Scarlet and VOO enjoyed the best average broadband download speed in 2023.



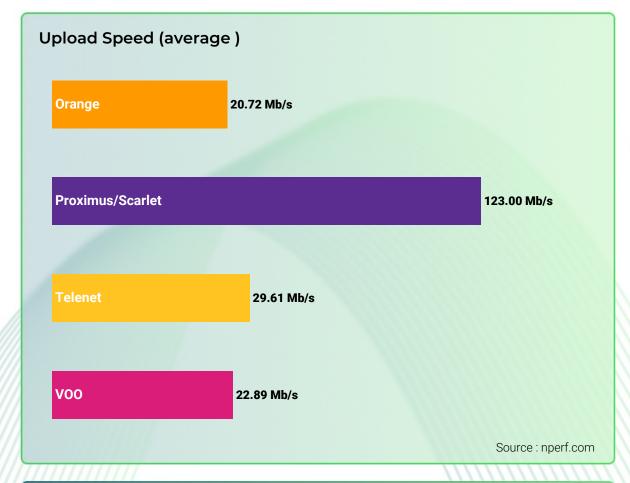




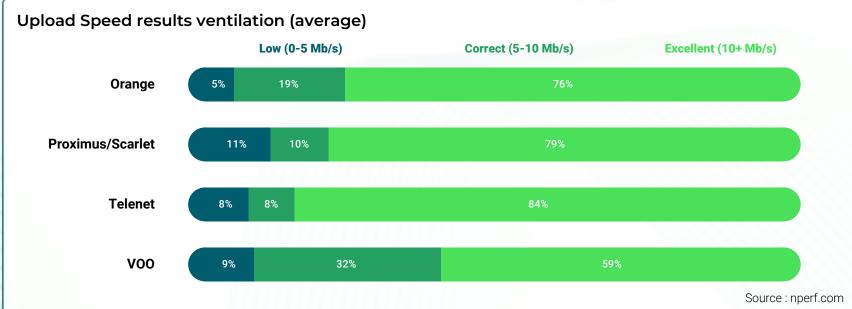


# Speed: Upload

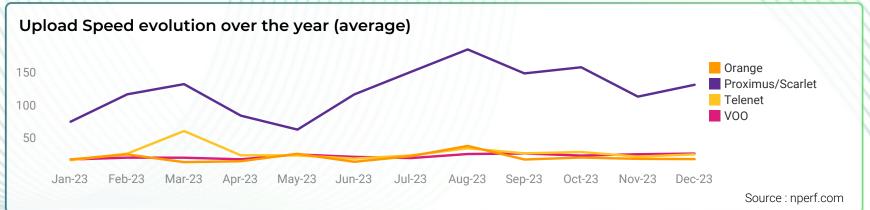




The subscribers of Proximus/Scarlet enjoyed the best average broadband upload speed in 2023.



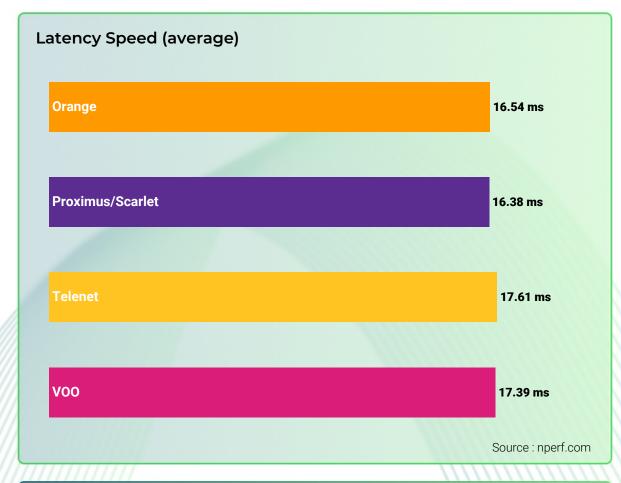




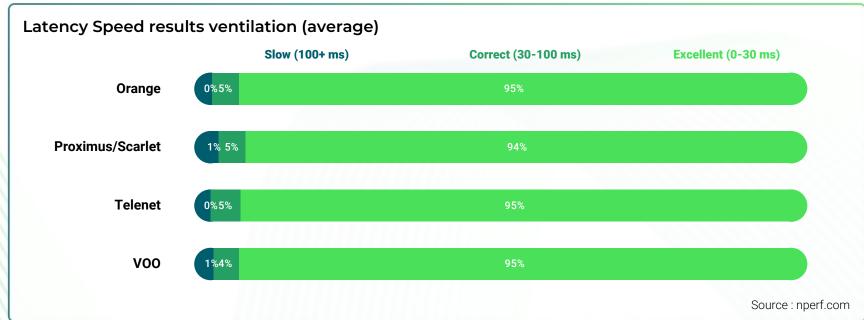


# **Speed: Latency**

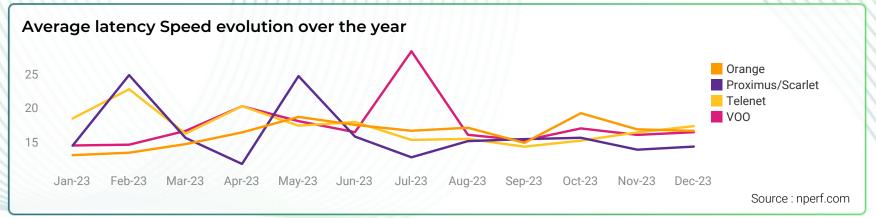




The subscribers of Proximus/Scarlet and Orange enjoyed the best average broadband latency in 2023.

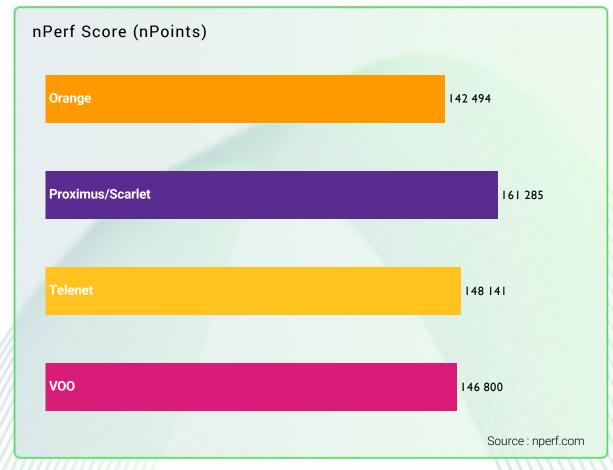






# Fixed Internet performance in Belgium - Brussels





The subscribers of Proximus/Scarlet enjoyed the best broadband performances in Belgium - Brussels during 2023.

The nperf score takes into account the measured bitrates and the latency. 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

