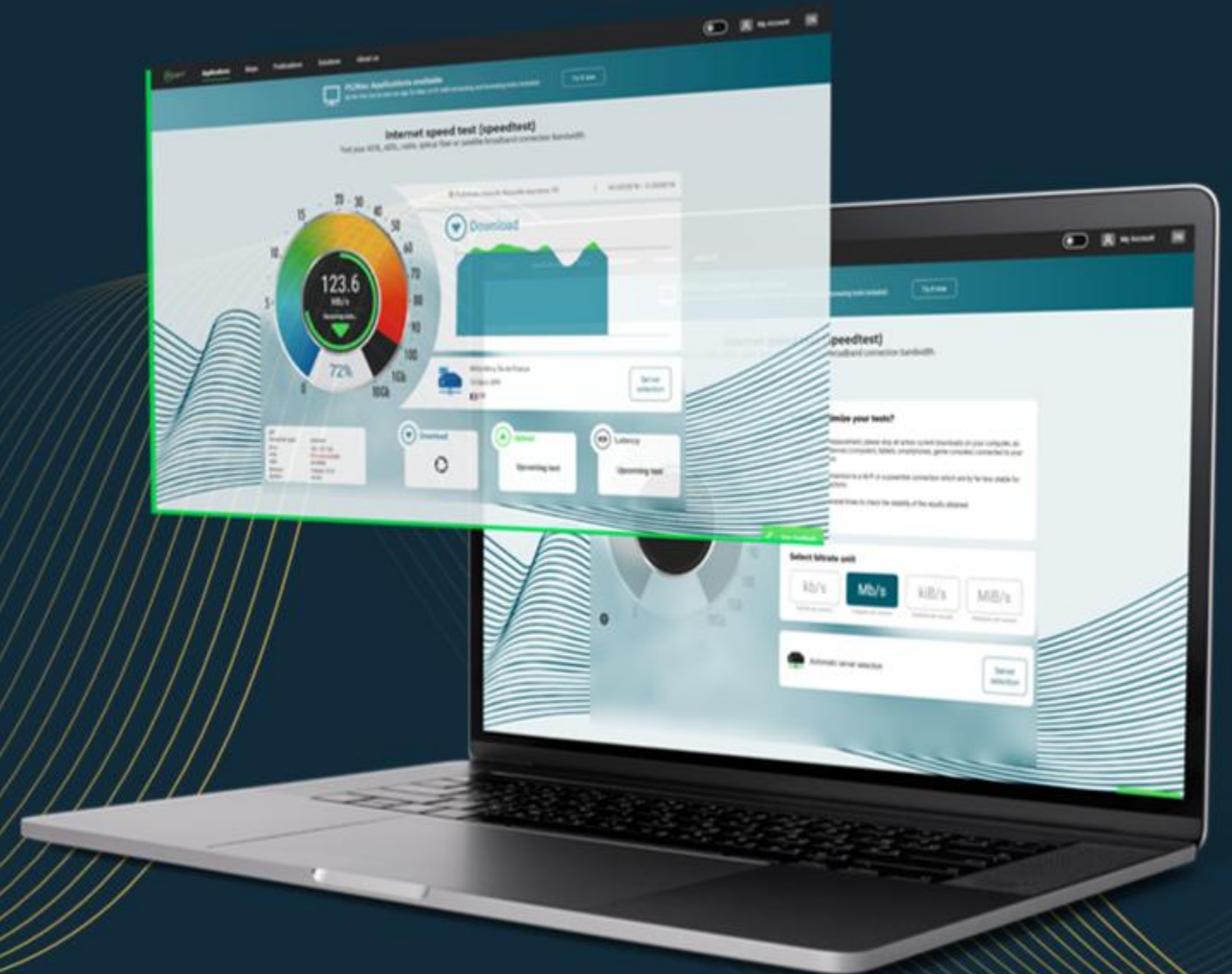


07/09/2025

Barometer of fixed Internet connections in India

07/01/2024 - 06/30/2025



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nPerf**

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**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.

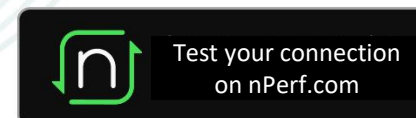
 **300k+** tests daily
worldwide.

 **26Md+** coverage
scans in total.

 **3k+** servers all
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 Jio enjoyed the best fixed Internet performances in 2025.

Fixed Internet connections in India

	Airtel	BSNL	Jio
▼ Download bitrates (Mb/s)	56.21	64.43	62.31
▲ Upload bitrates (Mb/s)	37.38	63.39	51.03
◀▶ Latency (ms)	52.85	45.25	50.32
🌐 Web browsing (%)	65.51	62.38	69.57
📺 Youtube streaming (%)	78.47	71.47	80.69
📊 nPerf Score (nPoints)	77 885	78 273	84 906

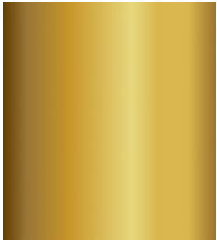
Source : nPerf.com



Best fixed Internet performance
in 2025



Source : nPerf.com



Source : nPerf.com

The subscribers of Airtel and Jio enjoyed the best WIFI Internet performances in India in 2025.

WIFI fixed Internet connections in India

	Airtel	BSNL	Jio
 Download bitrates (Mb/s)	50.83	45.38	40.16
 Upload bitrates (Mb/s)	43.90	45.37	39.74
 Latency (ms)	45.42	46.86	44.81
 Web browsing (%)	71.33	68.24	74.03
 Youtube streaming (%)	83.80	78.86	85.16
 nPerf Score (nPoints)	85 537	79 611	84 378

Source : nPerf.com

Introduction

In India's fixed-line internet sector, Jio has risen to the top position this year, demonstrating the competitive nature of this sector. For WiFi connections, both Airtel and Jio share the first place, showing strong performance in this technology. BSNL maintains its leadership in download and upload speeds as well as latency metrics, while Jio excels in both browsing and video streaming experiences, offering users smooth online content viewing.

Jio: Strong overall performance with excellent browsing and streaming capabilities

With a score of 84,906 nPoints, Jio has secured the first position in the overall ranking. The operator shares the top spot for WiFi performance with Airtel and is the undisputed leader in both browsing and video streaming experiences. Jio's browsing score of 69.6% ensures fast webpage loading times for users, while its leading streaming performance (80.7%) provides a fluid viewing experience for online video content. The operator has shown notable improvement in its overall score (+12.8%) and browsing performance (+19.2%), indicating consistent network enhancements.

Airtel: Solid WiFi performance with improved browsing experience

Airtel achieves a score of 77,885 nPoints, securing the second position in the ranking. The operator shares the top spot for WiFi performance with Jio, demonstrating its commitment to delivering quality fixed-line services. Airtel has made significant progress in its browsing capabilities with a 16.3% improvement, offering customers faster webpage loading. The operator's overall score has also increased by 12.3%, showing positive momentum in service quality enhancement.

BSNL: Technical excellence in key performance indicators

BSNL reaches a score of 78,273 nPoints, placing it in a competitive position in the sector. The operator distinguishes itself by leading in several technical metrics, securing the first position in download speeds (64.4 Mbps), upload speeds (63.4 Mbps), and latency (45.3 ms). These strengths make BSNL particularly well-suited for activities requiring fast file transfers and responsive connections, such as video conferencing and online gaming where low latency is crucial.

Conclusion

India's fixed-line internet sector shows healthy competition with Jio taking the lead in the overall ranking. Each operator demonstrates specific strengths, with BSNL excelling in technical performance metrics, while Jio and Airtel offer superior browsing and streaming experiences. This competitive landscape benefits consumers through continual service improvements and specialized offerings.

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 mean 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

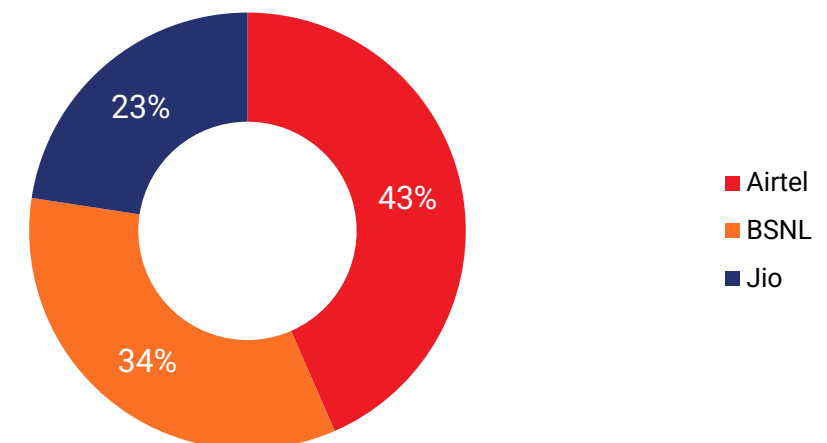
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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 1.5% 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.

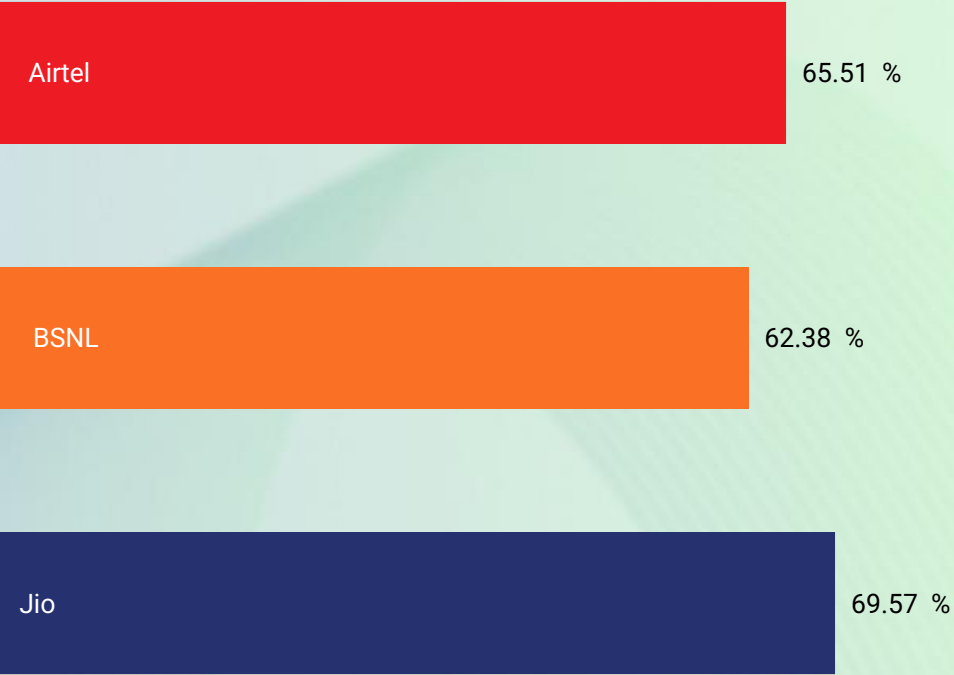
Overall distribution of the tests per provider (ISPs Share)



Source : nPerf.com



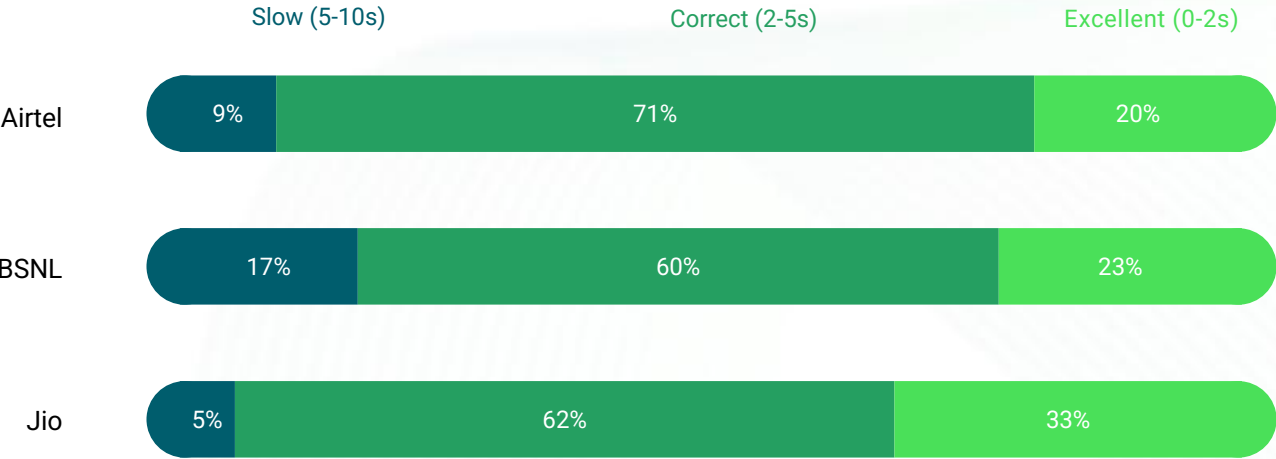
Browsing Performance rate (average)



Source : nPerf.com

The subscribers of Jio enjoyed the best fixed Internet browsing performance in 2025.

Browsing Performance results ventilation (average)



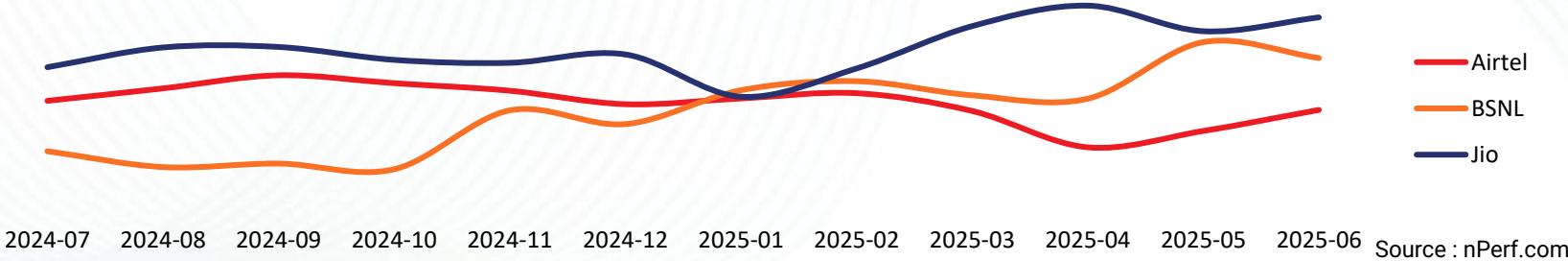
Source : nPerf.com

Browsing Performance rate (average)



Source : nPerf.com

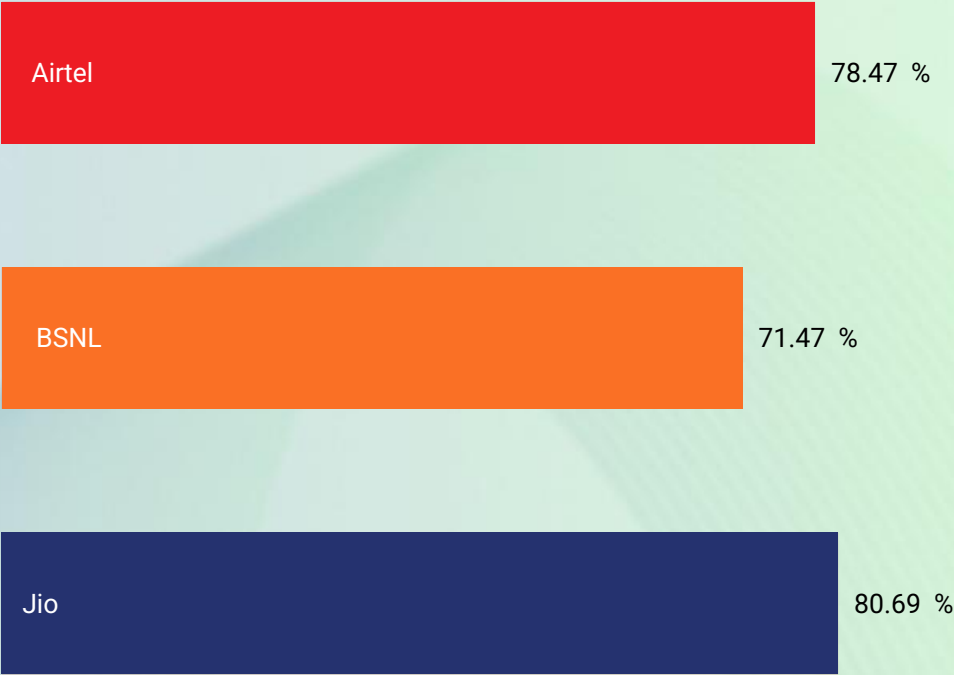
Browsing performance rate (average) evolution over the year



Source : nPerf.com



Streaming Performance rate (average)



Source : nPerf.com

The subscribers of Jio enjoyed the best fixed Internet streaming performance in 2025.

Streaming Performance results ventilation (average)



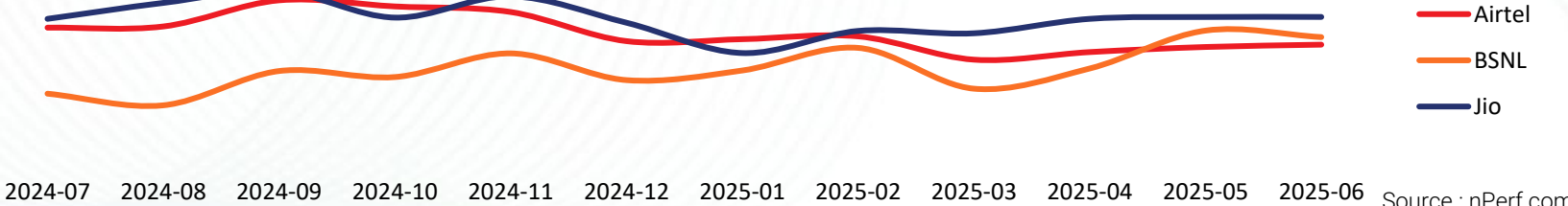
Source : nPerf.com

Streaming Performance rate (average)



Source : nPerf.com

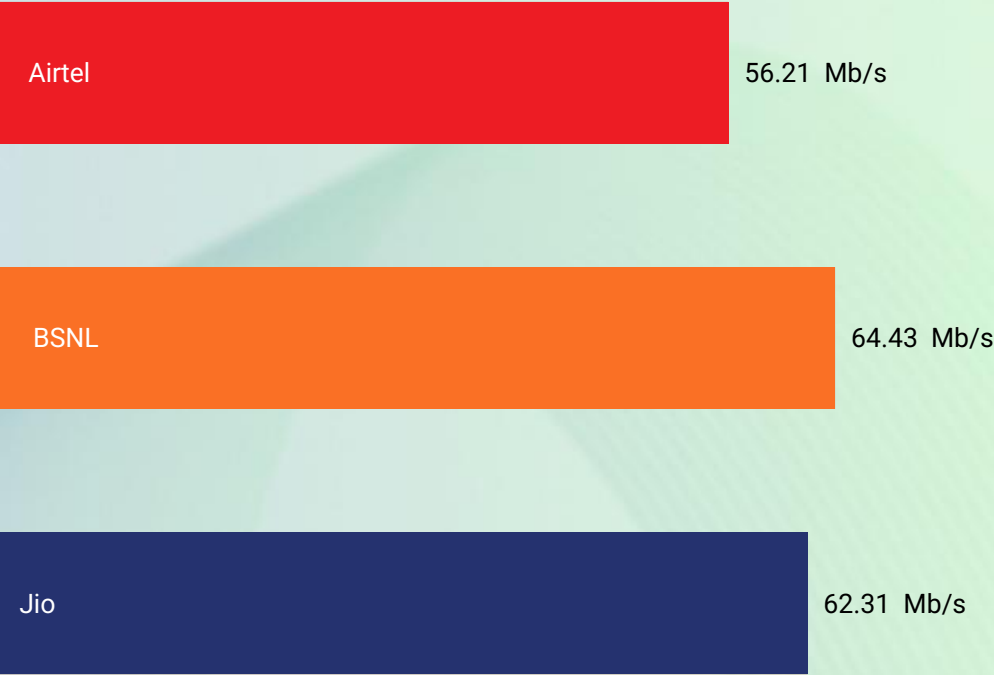
Streaming performance rate (average) evolution over the year



Source : nPerf.com



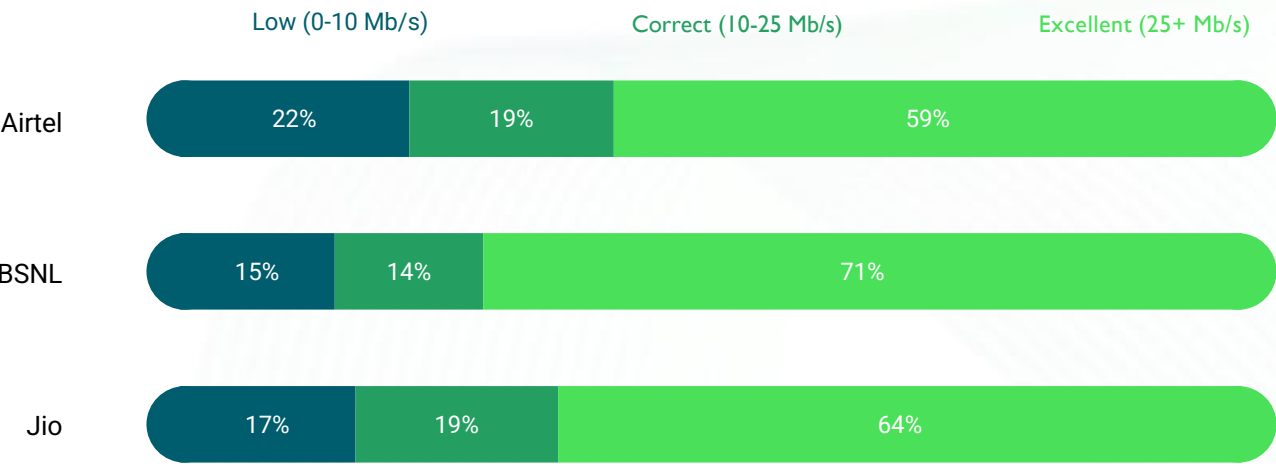
Download Speed (average)



Source : nPerf.com

The subscribers of BSNL enjoyed the best average fixed Internet download speed in 2025.

Download Speed results ventilation (average)



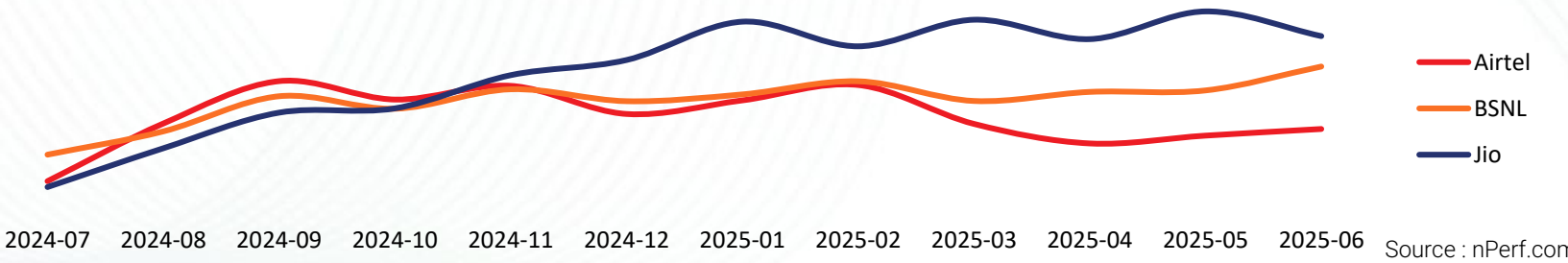
Source : nPerf.com

Download Speed (average)



Source : nPerf.com

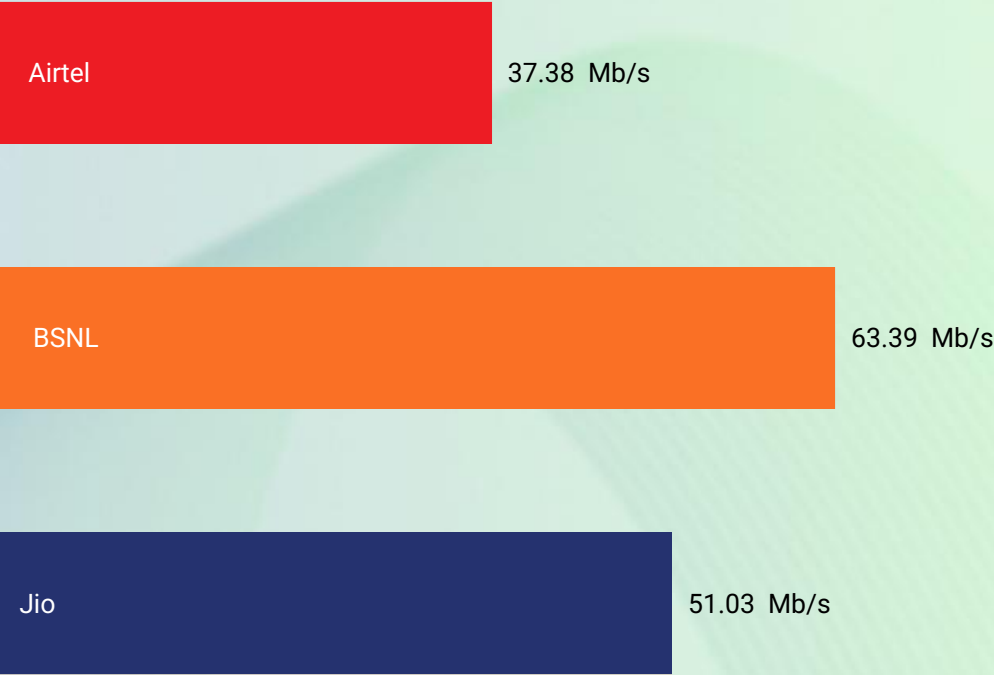
Download Speed evolution over the year (average)



Source : nPerf.com



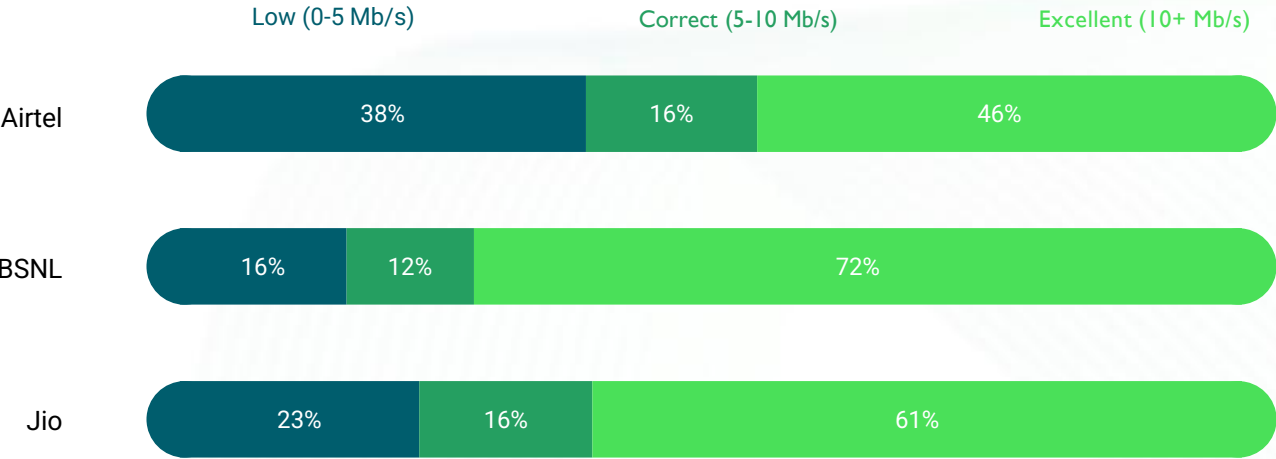
Upload Speed (average)



Source : nPerf.com

The subscribers of BSNL enjoyed the best average fixed Internet upload speed in 2025.

Upload Speed results ventilation (average)



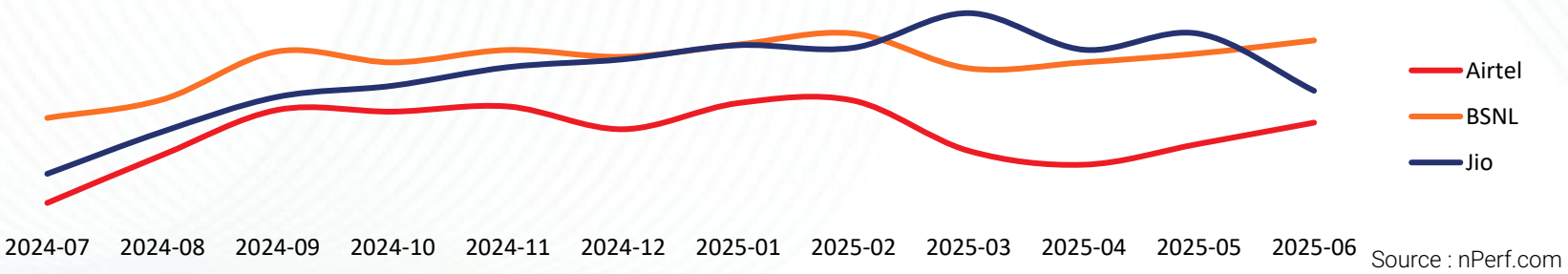
Source : nPerf.com

Upload Speed (average)



Source : nPerf.com

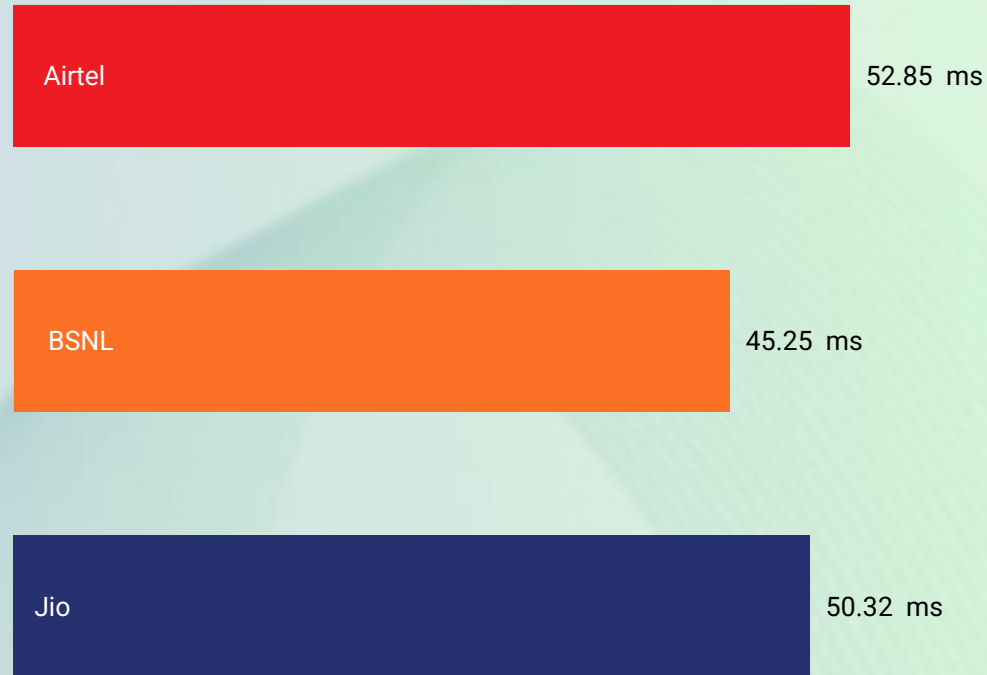
Upload Speed evolution over the year (average)



Source : nPerf.com



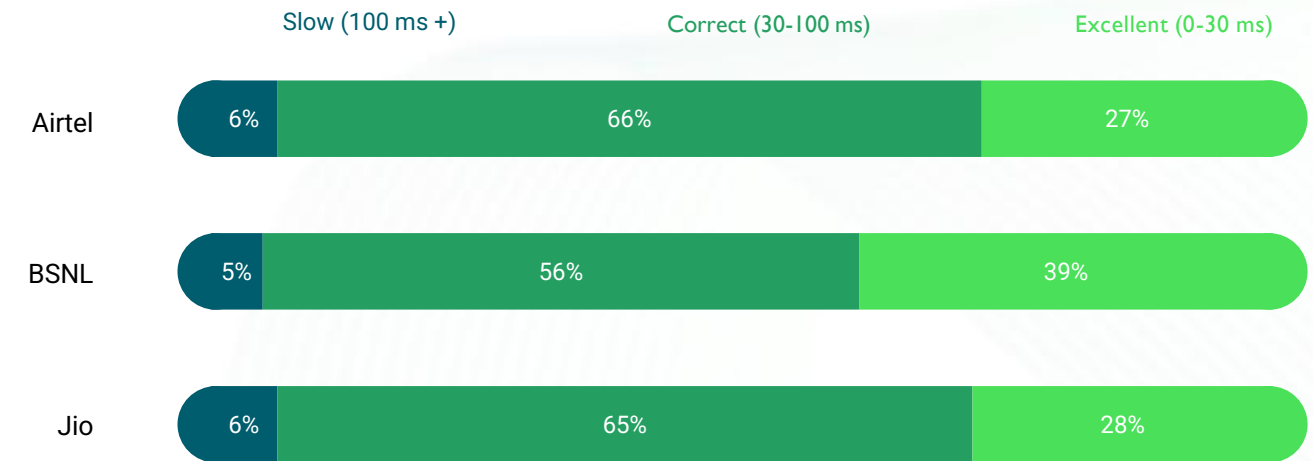
Latency Speed (average)



Source : nPerf.com

The subscribers of BSNL enjoyed the best average fixed Internet latency speed in 2025.

Latency Speed results ventilation (average)



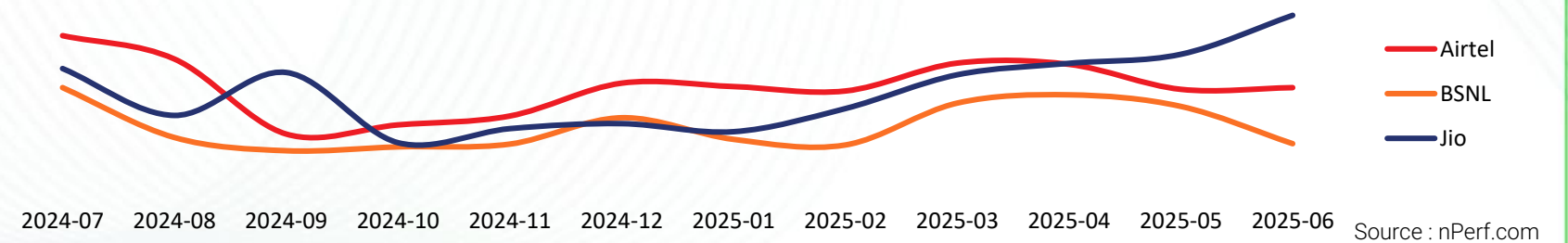
Source : nPerf.com

Latency Speed (average)

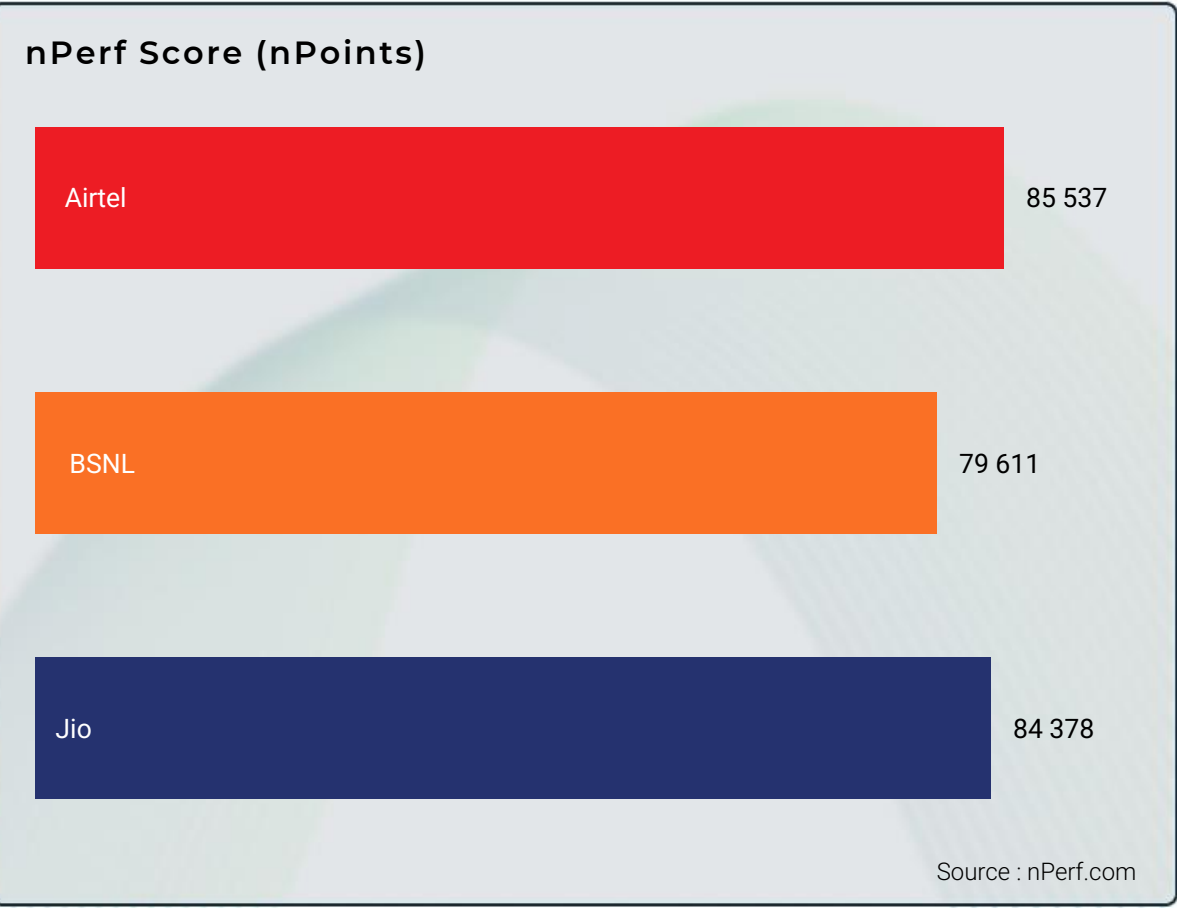


Source : nPerf.com

Latency Speed evolution over the year (average)

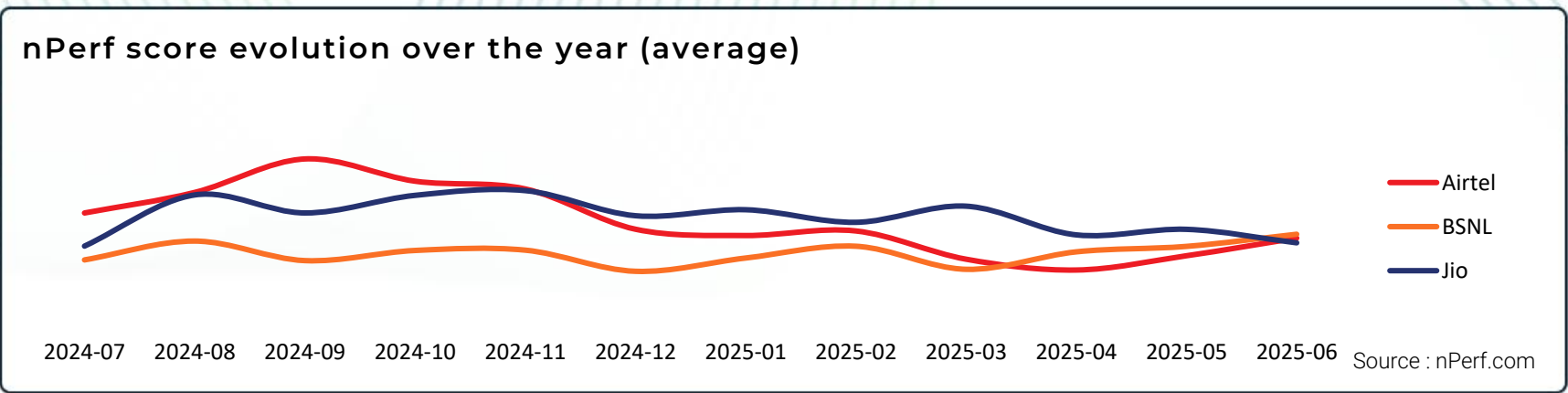


Source : nPerf.com



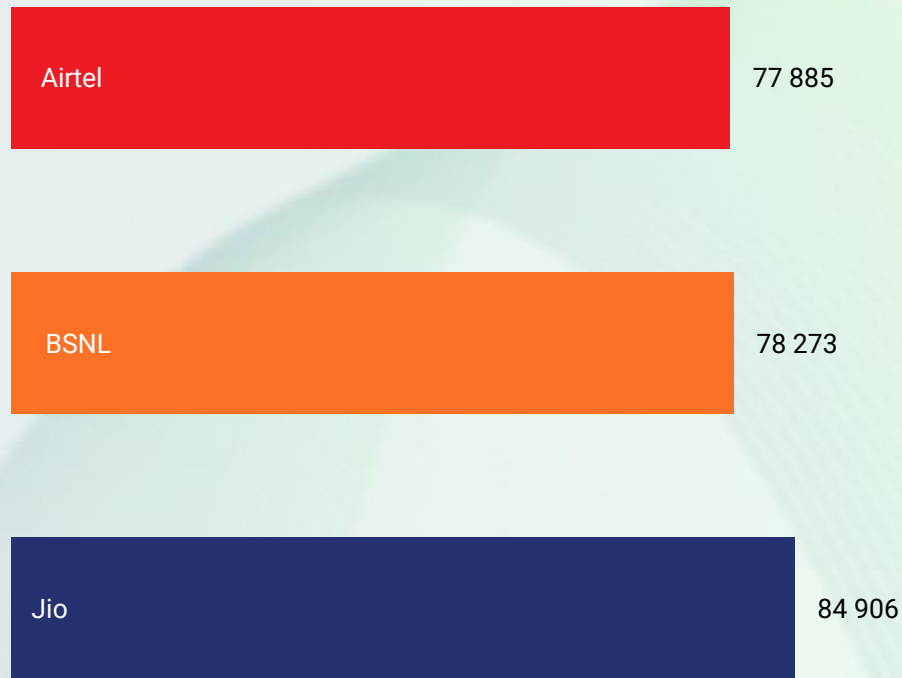
The subscribers of Airtel and Jio enjoyed the best WIFI Internet performances in 2025.

- Best performances WIFI: Airtel and Jio
 - Best web browsing performances WIFI: Jio
 - Best video streaming performances WIFI: Jio
 - Fastest performances (Download) WIFI: Airtel
 - Fastest performances (Upload) WIFI: BSNL
 - WIFI connections with the lowest latency: Jio
- Source : nPerf.com





nPerf Score (nPoints)

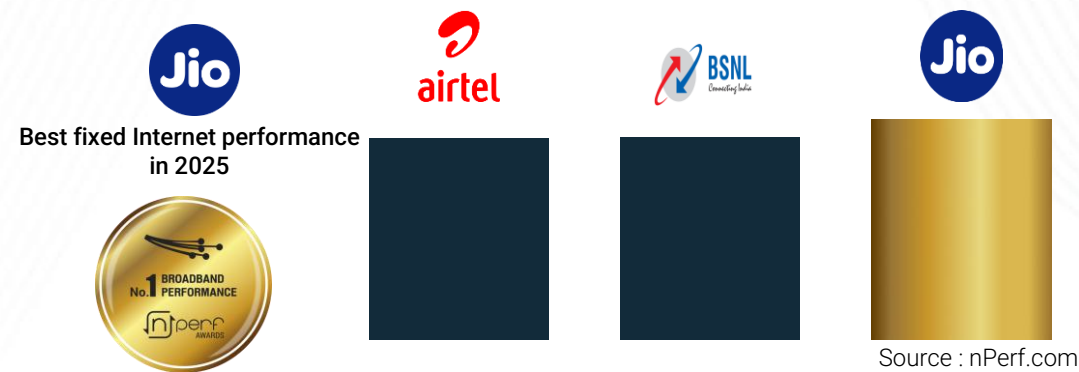


Source : nPerf.com

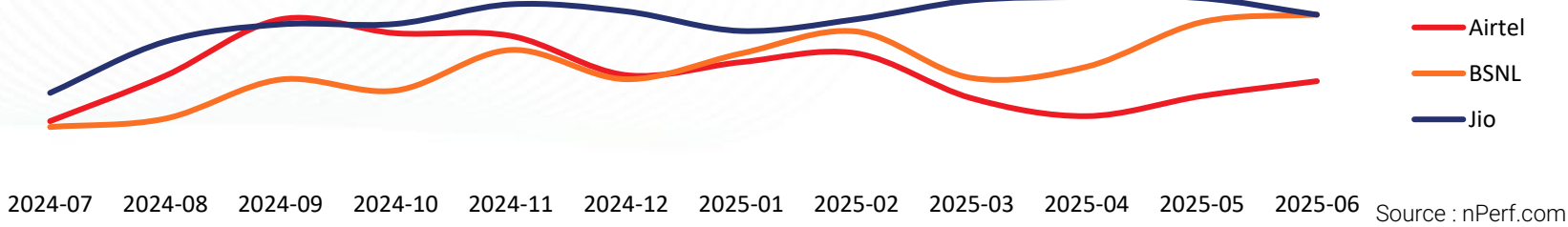
The subscribers of Jio enjoyed the best fixed Internet performances in 2025.

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 across the dark blue field.

nperf