Barometer of mobile Internet connections in India

07/01/2024 - 06/30/2025

Agenda

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2 Executive summary

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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.
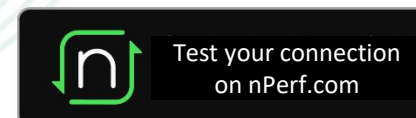
300k+ tests daily worldwide.

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!

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DISPONIBLE SUR Google Play

Test your connection on nPerf.com

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

Mobile Internet connections in India

	Airtel	BSNL	Jio	Vi
Download bitrates (Mb/s)	61.53	3.91	83.30	16.05
Upload bitrates (Mb/s)	10.39	1.48	8.31	5.01
Latency (ms)	63.24	105.48	67.40	133.42
Web browsing (%)	62.27	39.79	63.80	58.45
Youtube streaming (%)	76.58	49.34	77.08	75.10
nPerf Score (nPoints)	67 360	15 509	69 897	42 088

Source : nPerf.com

Best mobile Internet performance in 2025

No.1 MOBILE NETWORK PERFORMANCE
nPerf AWARDS

Source : nPerf.com

Source : nPerf.com

The subscribers of Airtel and Jio enjoyed the best 5G Internet performances in India in 2025.

5G mobile Internet connections in India

	Airtel	BSNL	Jio	Vi
▼ Download bitrates (Mb/s)	158.62	21.07	176.88	61.58
▲ Upload bitrates (Mb/s)	21.73	4.73	15.32	12.16
◀▶ Latency (ms)	54.97	80.47	56.59	131.74
🌐 Web browsing (%)	69.45	49.51	69.73	64.42
▶ Youtube streaming (%)	82.27	51.20	82.14	77.99
nPerf Score (nPoints)	90 778	35 866	89 766	64 869

Source : nPerf.com

Introduction

In the mobile Internet performance in India, Jio has claimed the top position for the most recent period, with a solid score of 69,897 nPoints. This represents a change from the previous year when Airtel was the market leader. Looking at specific technologies, Airtel maintains its leadership in 5G performance, while Jio excels in several key performance indicators. Jio holds the n°1 position for download speed (83.3 Mbps), allowing users to enjoy smooth streaming, and also leads in browsing performance (63.8%), ensuring fast webpage loading times. Meanwhile, Airtel distinguishes itself with the best upload speeds (10.4 Mbps), facilitating quality video conferencing, and the best latency (63.2 ms), providing responsive online gaming experiences.

Jio: Strong performance across multiple metrics

With a score of 69,897 nPoints, Jio has secured the first place in the overall ranking. The operator delivers the country's fastest download speeds at 83.3 Mbps, showing a significant improvement of 59.6% compared to the previous period. Jio is co-leader in 5G and also leads in browsing performance with 63.8% of successful sessions and video streaming quality at 77.1%, making it the preferred choice for consumers who regularly consume online content. The operator has demonstrated consistent growth, with its overall score improving by 25.7% and upload speeds increasing by 57.1%.

Airtel: Balanced performance with excellent responsiveness

Airtel achieves a strong score of 67,360 nPoints, positioning itself in 2nd place in the overall ranking. The operator continues to excel in 5G technology that it is co-leader and maintains its leadership in two important metrics: upload speed (10.4 Mbps) and latency (63.2 ms). These strengths make Airtel particularly well-suited for interactive applications like video conferencing and online gaming. The company has shown solid improvement

with a 24.7% increase in upload performance and a 13.2% enhancement in browsing capabilities, while its overall score has grown by 18.6%.

Vi: Good progression in key areas

Vi secures the third position with 42,088 nPoints. While not leading in any specific category, the operator has made good progress with a 25.6% improvement in its overall score. Vi's download speeds have increased by 32.2%, and its upload performance has improved by 33.9%. The operator also shows a 16.3% enhancement in browsing performance, reaching 58.4% of successful sessions, which provides users with a more reliable web browsing experience.

BSNL: Making strides in network improvement

BSNL ranks fourth with 15,509 nPoints but demonstrates the most substantial relative improvement in several areas. The operator's overall score has increased by 33.5%, while its download and upload speeds have both improved by over 50% (52.3% and 51.8% respectively). These enhancements, though starting from a lower baseline, indicate BSNL's commitment to strengthening its network capabilities and closing the gap with competitors.

Conclusion

The Indian mobile internet market shows healthy competition with Jio now leading the overall performance ranking, followed closely by Airtel. All operators have shown significant improvements in multiple performance metrics, benefiting Indian consumers with increasingly better mobile internet experiences. The competitive nature of the market continues to drive positive developments in network quality across the country.

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.
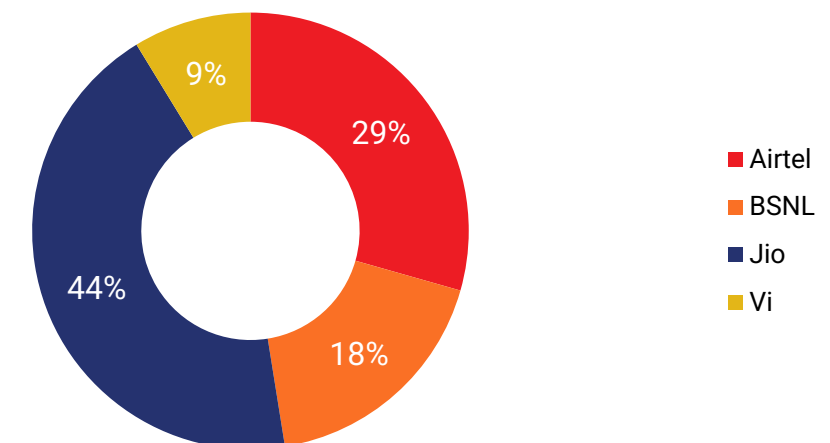
▶ Streaming performance

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 2.1% 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.
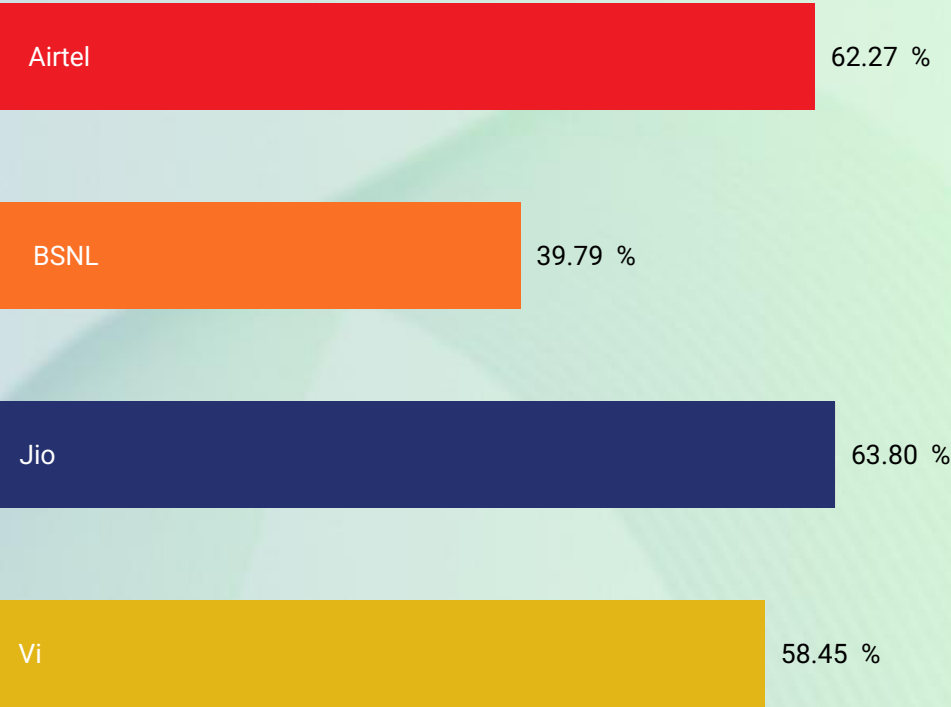
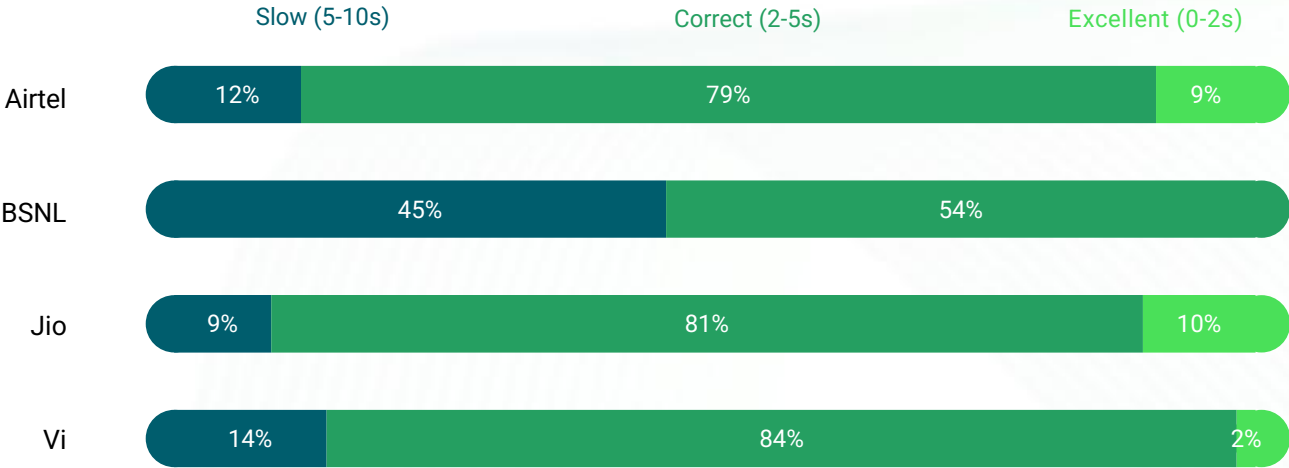Overall distribution of the tests per provider (ISPs Share)

- 🟥 Airtel — 29%
- 🟧 BSNL — 18%
- 🟦 Jio — 44%
- 🟨 Vi — 9%

Source : nPerf.com

Quality of Experience : Browsing

Browsing Performance rate (average)

Operator	Rate
Airtel	62.27 %
BSNL	39.79 %
Jio	63.80 %
Vi	58.45 %

Source : nPerf.com

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

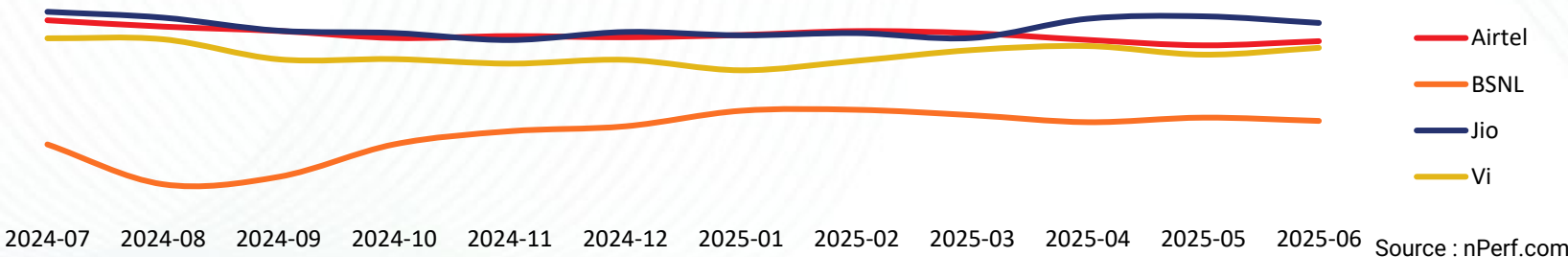## Browsing Performance results ventilation (average)

Slow (5-10s)   Correct (2-5s)   Excellent (0-2s)

Operator	Slow (5-10s)	Correct (2-5s)	Excellent (0-2s)
Airtel	12%	79%	9%
BSNL	45%	54%	
Jio	9%	81%	10%
Vi	14%	84%	2%

Source : nPerf.com

Browsing Performance rate (average)

	Busy Time		Idle Time
Airtel	60.12 %		62.92 %
BSNL	34.64 %		41.56 %
Jio	62.87 %		64.26 %
Vi	57.18 %		58.93 %

Source : nPerf.com

Browsing performance rate (average) evolution over the year

Legend: Airtel, BSNL, Jio, Vi

X-axis: 2024-07, 2024-08, 2024-09, 2024-10, 2024-11, 2024-12, 2025-01, 2025-02, 2025-03, 2025-04, 2025-05, 2025-06

Source : nPerf.com

Streaming Performance rate (average)

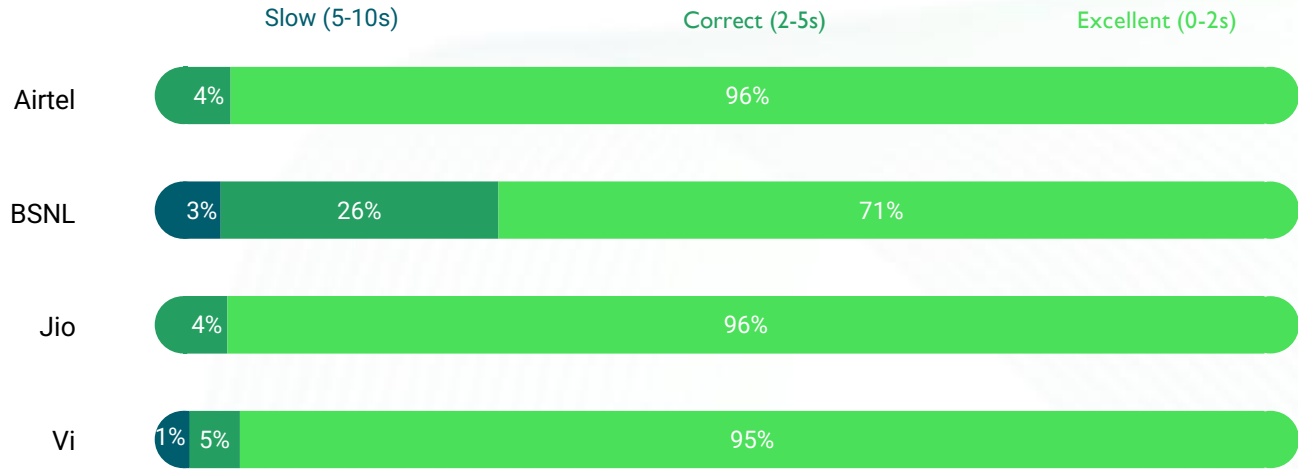|	
Airtel	76.58 %
BSNL	49.34 %
Jio	77.08 %
Vi	75.10 %
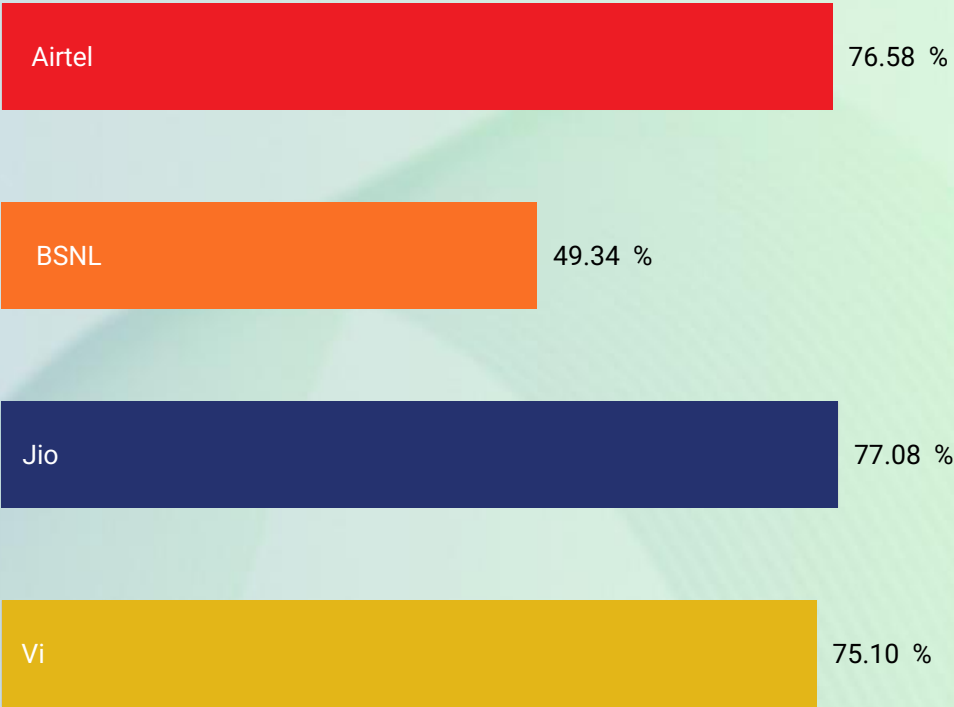
Source : nPerf.com

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

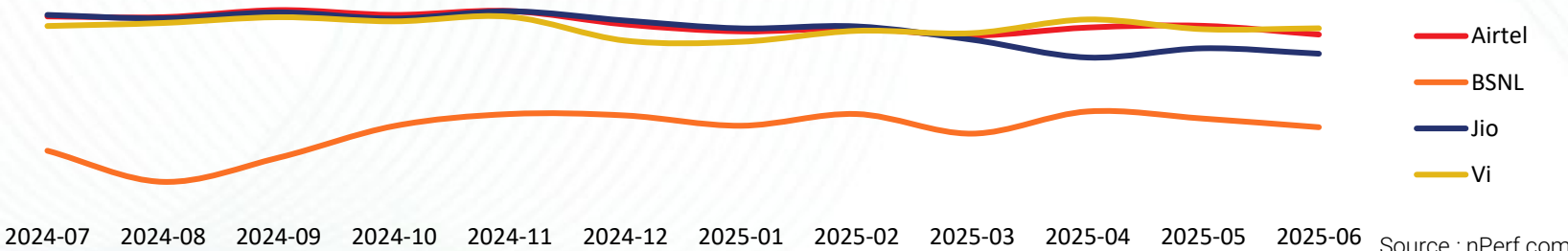## Streaming Performance results ventilation (average)

Slow (5-10s)　　　　Correct (2-5s)　　　　Excellent (0-2s)

	Slow (5-10s)	Correct (2-5s)	Excellent (0-2s)
Airtel		4%	96%
BSNL	3%	26%	71%
Jio		4%	96%
Vi	1%	5%	95%

Source : nPerf.com

Streaming Performance rate (average)

Busy Time		Idle Time
73.27 %	Airtel	77.73 %
41.26 %	BSNL	52.17 %
73.88 %	Jio	78.21 %
71.47 %	Vi	76.43 %

Source : nPerf.com

Streaming performance rate (average) evolution over the year

Legend: Airtel, BSNL, Jio, Vi

2024-07　2024-08　2024-09　2024-10　2024-11　2024-12　2025-01　2025-02　2025-03　2025-04　2025-05　2025-06

Source : nPerf.com

Speed : Download

Download Speed (average)

Airtel	61.53 Mb/s
BSNL	3.91 Mb/s
Jio	83.30 Mb/s
Vi	16.05 Mb/s
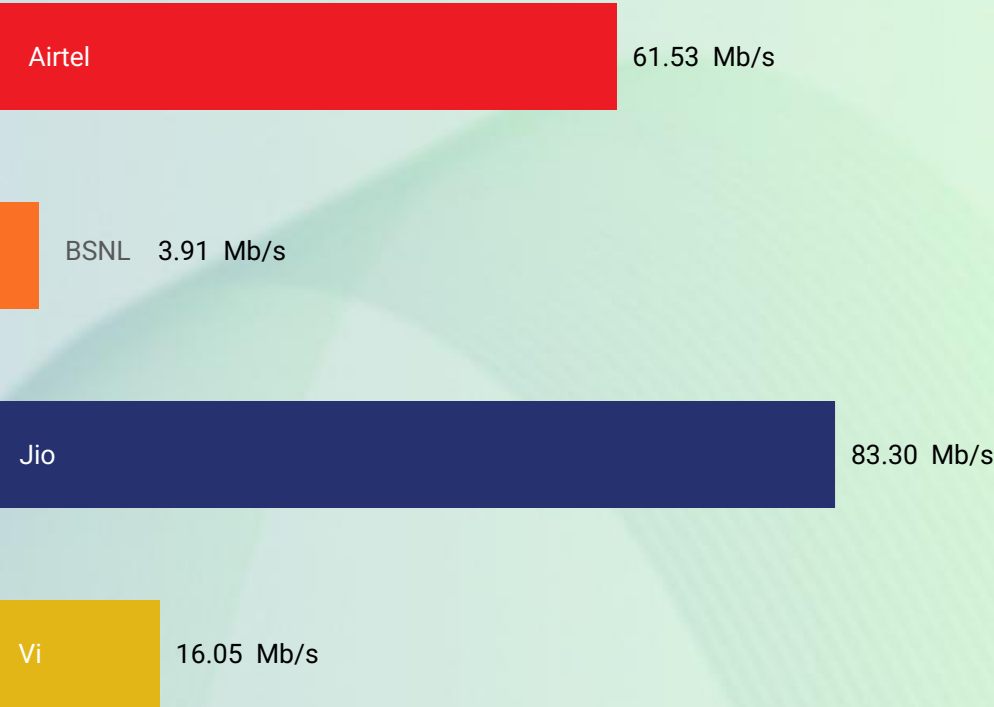
Source : nPerf.com

The subscribers of Jio enjoyed the best average mobile Internet download speed in 2025.
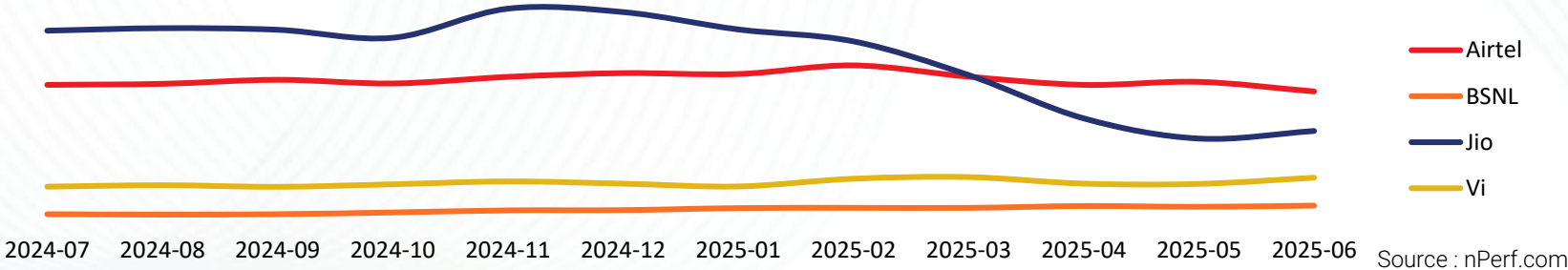
Download Speed results ventilation (average)

	Low (0-10 Mb/s)	Correct (10-25 Mb/s)	Excellent (25+ Mb/s)
Airtel	30%	22%	48%
BSNL	78%	18%	4%
Jio	32%	19%	49%
Vi	39%	32%	29%

Source : nPerf.com

Download Speed (average)

Busy Time		Idle Time
54.69 Mb/s	Airtel	63.42 Mb/s
3.28 Mb/s	BSNL	4.13 Mb/s
69.97 Mb/s	Jio	88.19 Mb/s
12.41 Mb/s	Vi	17.36 Mb/s

Source : nPerf.com

Download Speed evolution over the year (average)

— Airtel
— BSNL
— Jio
— Vi

2024-07 2024-08 2024-09 2024-10 2024-11 2024-12 2025-01 2025-02 2025-03 2025-04 2025-05 2025-06

Source : nPerf.com

mobile Internet - 07/01/2024 - 06/30/2025 - India

Speed : Upload

Upload Speed (average)

Airtel	10.39 Mb/s
BSNL	1.48 Mb/s
Jio	8.31 Mb/s
Vi	5.01 Mb/s

Source : nPerf.com

The subscribers of Airtel enjoyed the best average mobile Internet upload speed in 2025.

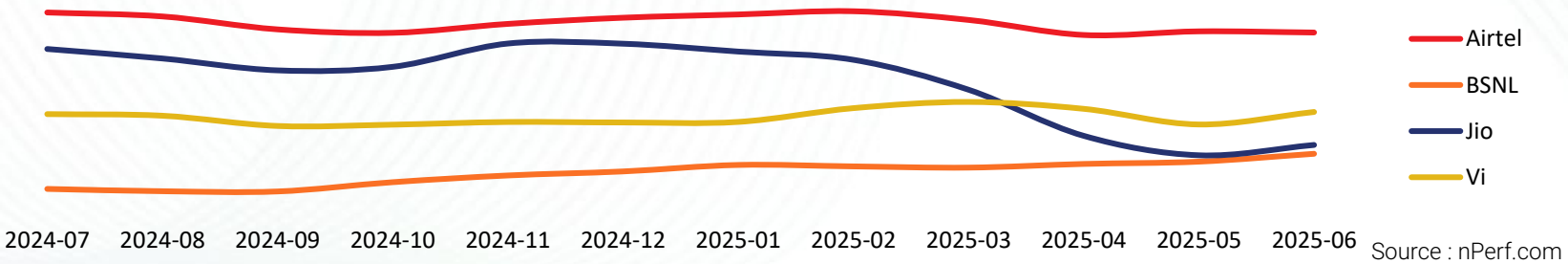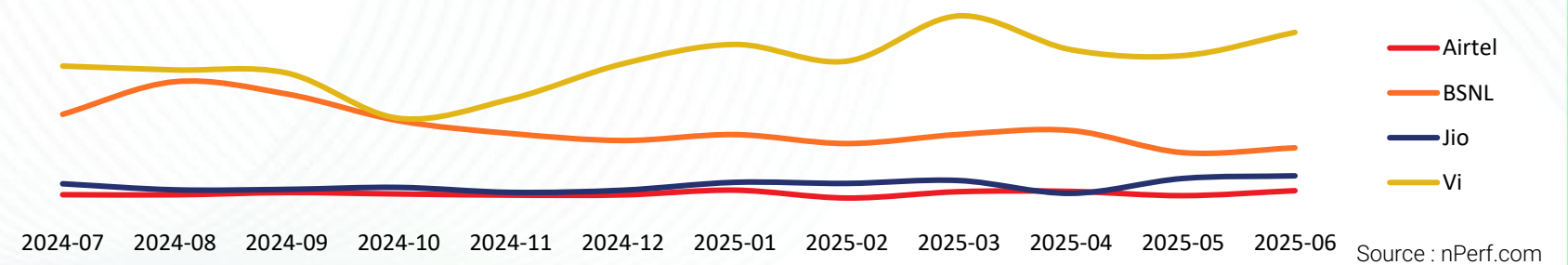## Upload Speed results ventilation (average)

Low (0-5 Mb/s)   Correct (5-10 Mb/s)   Excellent (10+ Mb/s)

	Low	Correct	Excellent
Airtel	66%	19%	16%
BSNL	94%		5%
Jio	74%	14%	13%
Vi	79%	17%	4%

Source : nPerf.com

Upload Speed (average)

Busy Time		Idle Time
9.30 Mb/s	Airtel	10.72 Mb/s
1.27 Mb/s	BSNL	1.55 Mb/s
7.25 Mb/s	Jio	8.68 Mb/s
4.48 Mb/s	Vi	5.21 Mb/s

Source : nPerf.com

Upload Speed evolution over the year (average)

Legend: Airtel, BSNL, Jio, Vi

2024-07 2024-08 2024-09 2024-10 2024-11 2024-12 2025-01 2025-02 2025-03 2025-04 2025-05 2025-06

Source : nPerf.com

nPerf Score (nPoints)

Airtel — 90 778
BSNL — 35 866
Jio — 89 766
Vi — 64 869
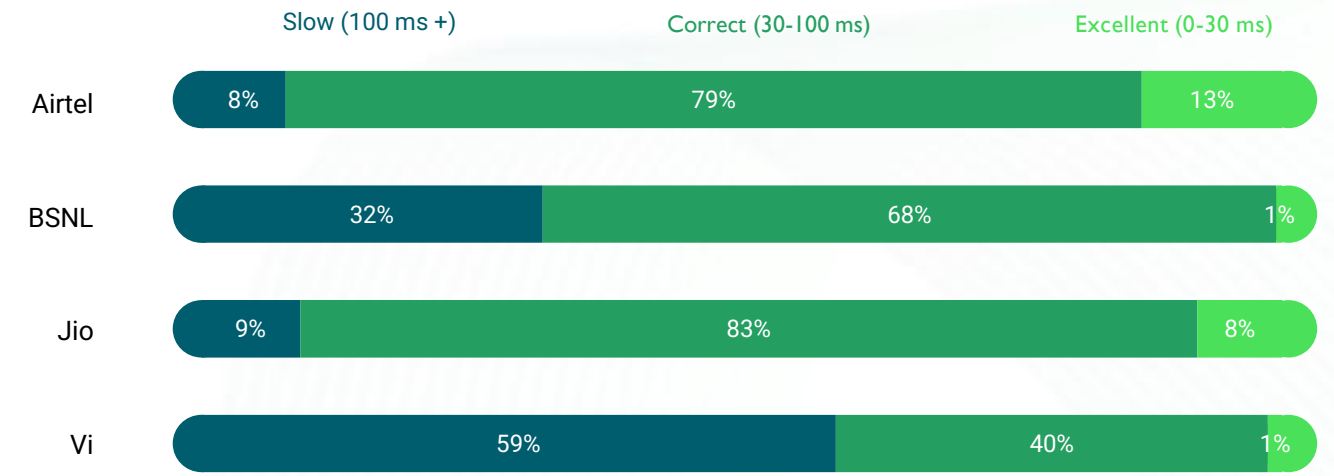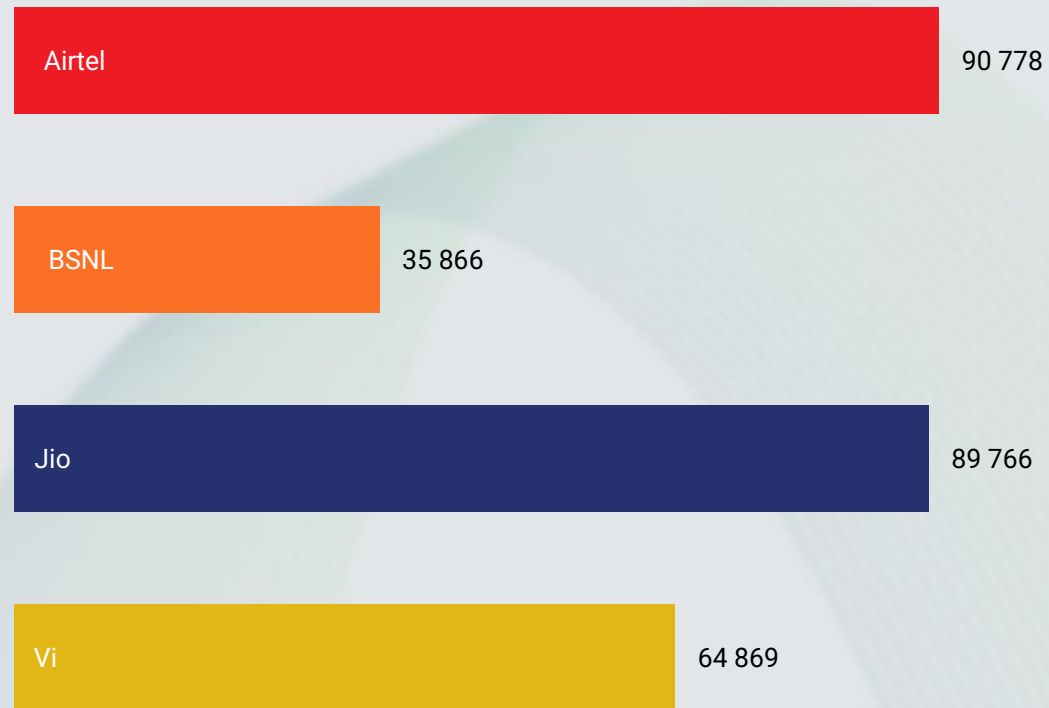
Source : nPerf.com

The subscribers of Airtel and Jio enjoyed the best 5G Internet performances in 2025.
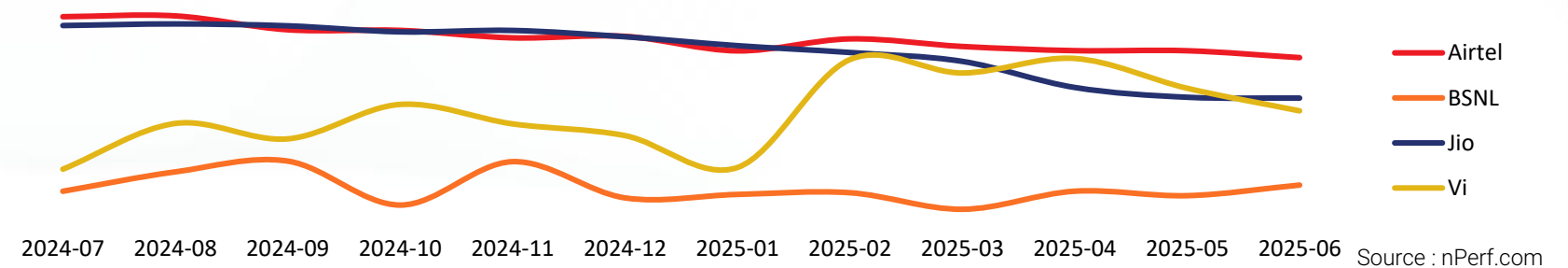
- Best performances 5G: Airtel and Jio

- Best web browsing performances 5G: Airtel and Jio

- Best video streaming performances 5G: Airtel and Jio

- Fastest performances (Download) 5G: Jio

- Fastest performances (Upload) 5G: Airtel

- 5G connections with the lowest latency: Airtel
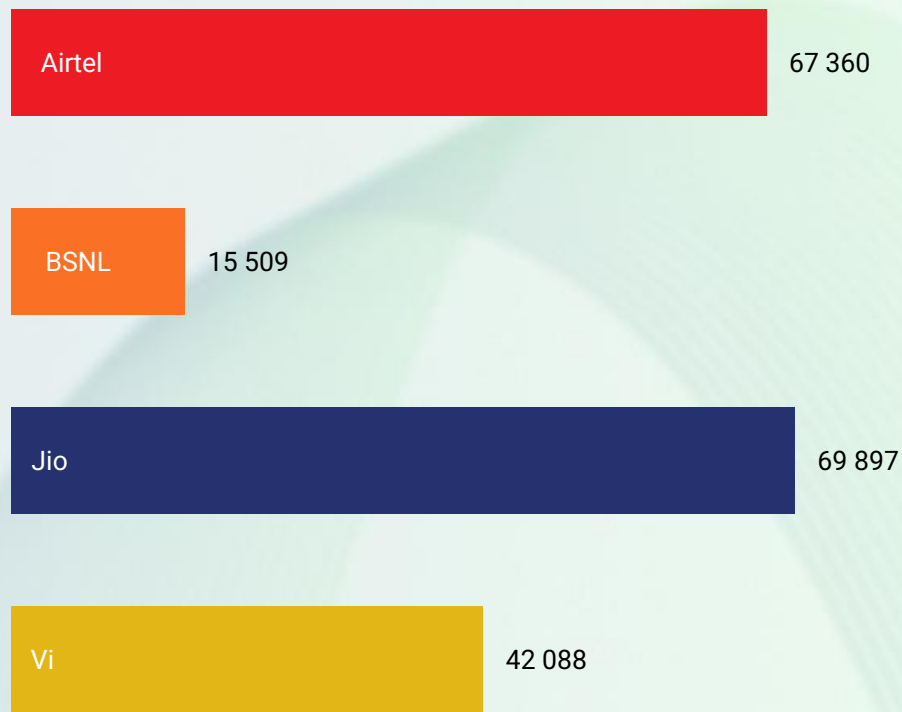
Source : nPerf.com

Source : nPerf.com

nPerf score evolution over the year (average)

Airtel
BSNL
Jio
Vi

2024-07 2024-08 2024-09 2024-10 2024-11 2024-12 2025-01 2025-02 2025-03 2025-04 2025-05 2025-06

Source : nPerf.com

mobile Internet - 07/01/2024 - 06/30/2025 - India

nPerf Score (nPoints)

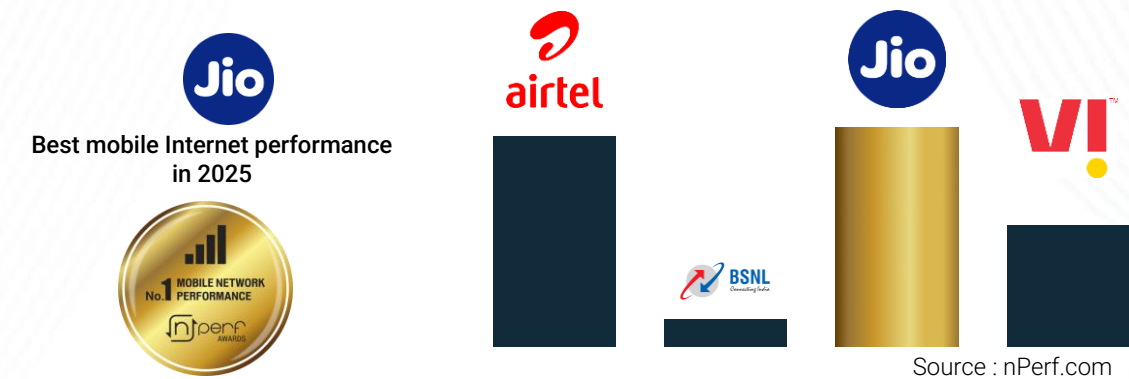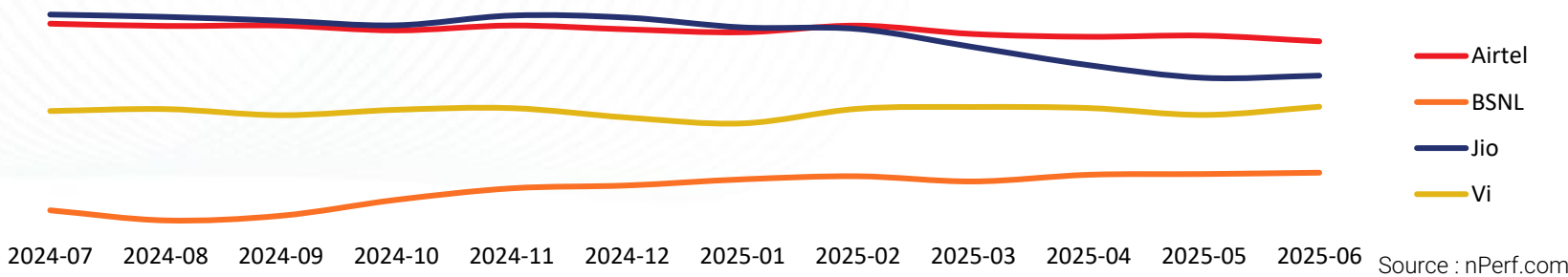| Operator	Score
Airtel	67 360
BSNL	15 509
Jio	69 897
Vi	42 088

Source : nPerf.com

The subscribers of Jio enjoyed the best mobile 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

Best mobile Internet performance in 2025

No.1 MOBILE NETWORK PERFORMANCE
nPerf AWARDS

Source : nPerf.com

nPerf score evolution over the year (average)

Legend: Airtel, BSNL, Jio, Vi

2024-07 2024-08 2024-09 2024-10 2024-11 2024-12 2025-01 2025-02 2025-03 2025-04 2025-05 2025-06

Source : nPerf.com