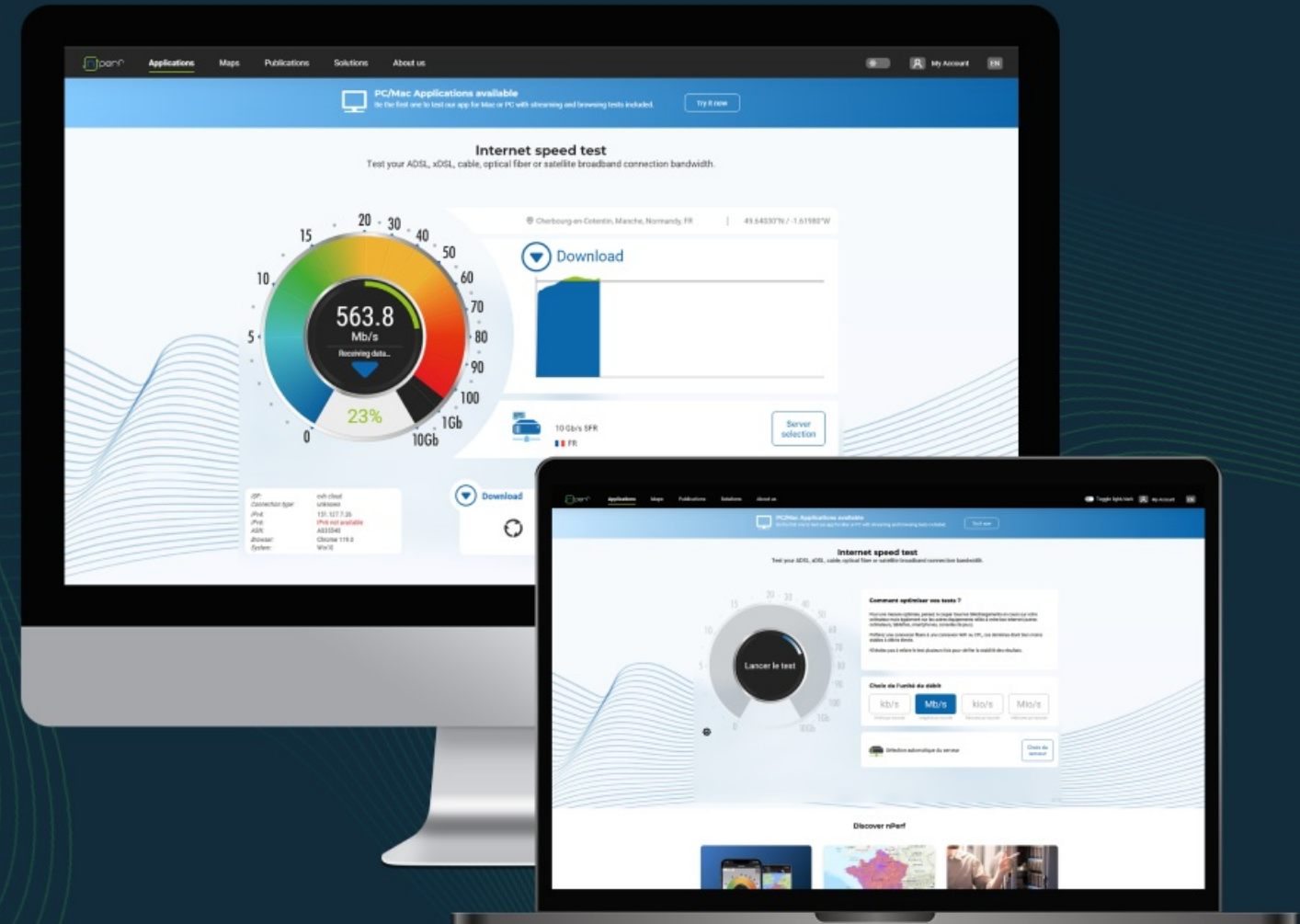




Barometer of fixed Internet Connections in Bulgaria.

01/01/2023 - 31/12/2023



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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 Vivacom and A1 enjoyed the best fixed Internet performances in Bulgaria during 2023.

Fixed Internet connections in Bulgaria

	A1	Bulsatcom	Vivacom
▼ Download bitrates (Mb/s)	75.97	42.58	96.35
▲ Upload bitrates (Mb/s)	44.70	44.40	72.22
◀▶ Latency (ms)	35.24	35.78	44.49
nPerf Score (nPoints)	121 244	111 801	124 602

Source : nperf.com



Best fixed Internet performance in 2023



Source : nperf.com



Source : nperf.com

Bulgaria's digital infrastructure is under the spotlight, showcasing a tightly contested arena among leading ISPs. With A1 and Vivacom neck and neck in performance, let's delve into what each operator brings to the table, complemented by the latest buzz in Bulgaria's telecom sector.

Vivacom: Co-leader of the market and speed champion

Vivacom matches A1 stride for stride, boasting the highest download speed of 96 Mb/s and an upload speed of 72 Mb/s among its peers, setting the gold standard for high-speed internet in Bulgaria. Despite a slightly higher latency of 44 ms, its performance remains unparalleled, mirrored in its tied nPerf score of 121,244 with A1.

A1 Bulgaria: Co-leader of the market and latency champion

A1 Bulgaria is setting benchmarks with its impressive download speed of 76 Mb/s and upload speed of 45 Mb/s, ensuring seamless digital

experiences for streaming, gaming, and online work. The ISP's performance of low latency, at 35 ms, promises responsive and uninterrupted connectivity. Matching Vivacom with an nPerf score of 121,244, A1 is at the forefront of the digital race.

Bulsatcom: competitive performances

Bulsatcom, with its balanced approach, offers a download speed of 43 Mb/s alongside an upload speed that closely competes at 44 Mb/s, catering to a symmetrical internet need for both consuming and creating content online. A latency of 36 ms ensures a smooth online experience, backed by an nPerf score of 111,801.

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.

▲ 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) :

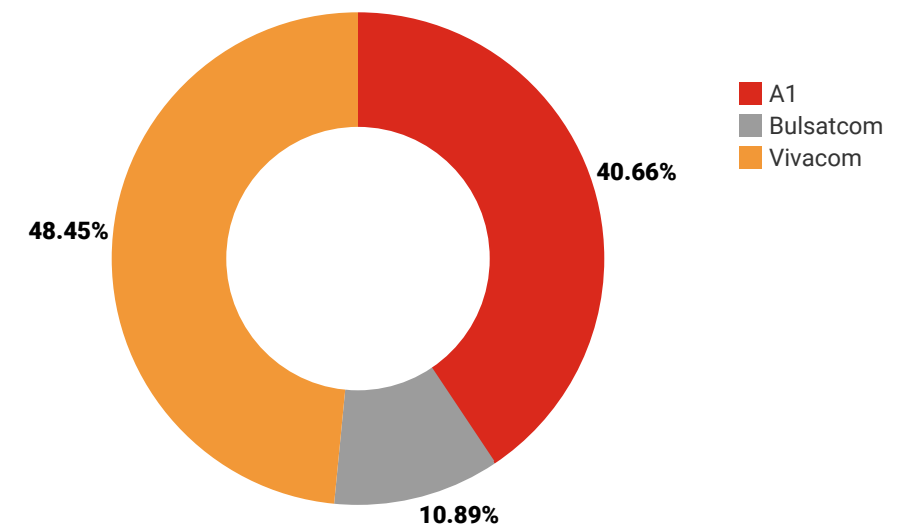
It indicated the delay a small packet of data requires to make a round-trip from your computer to the nPerf server. The shorter the delay, the most reactive your connection is. The main is the minimum value.

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.

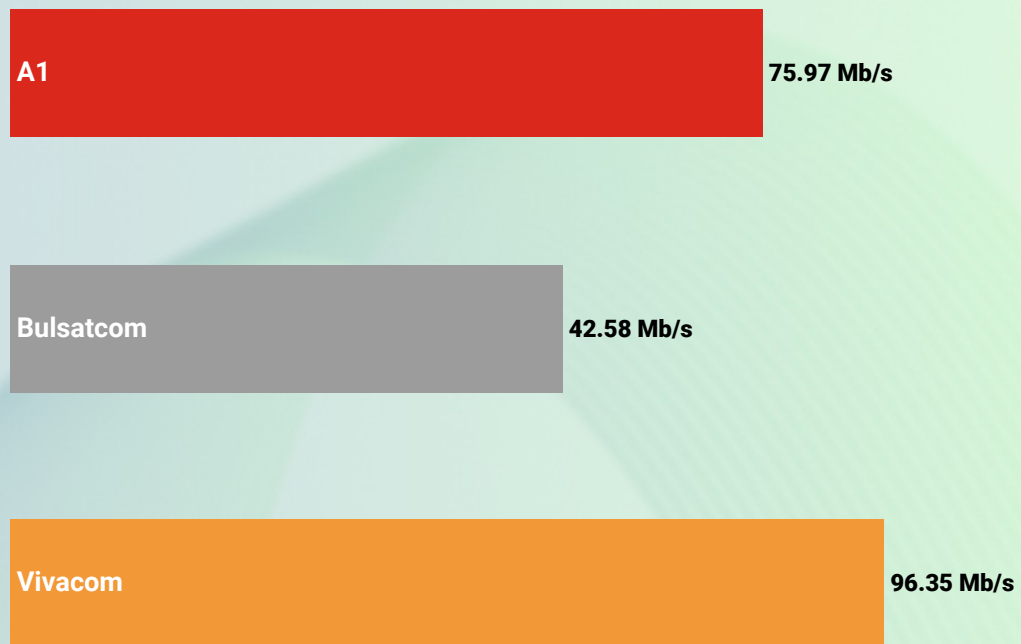
Overall distribution of the tests per provider (ISPs Share)



Source : nperf.com



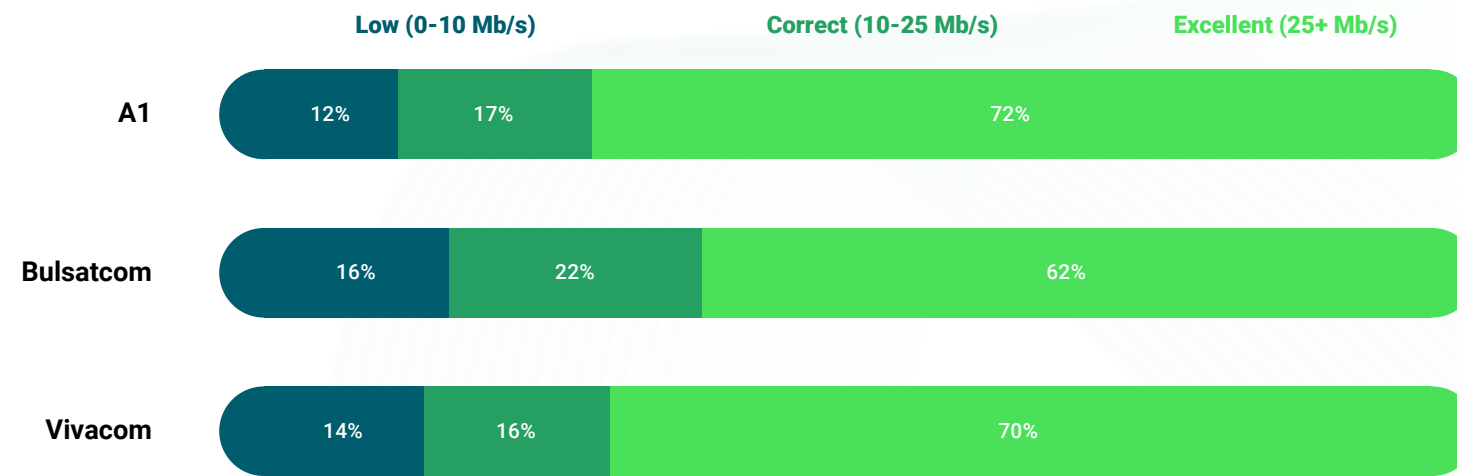
Download Speed (average)



Source : nperf.com

The subscribers of Vivacom enjoyed the best average broadband download speed in 2023.

Download Speed results ventilation (average)



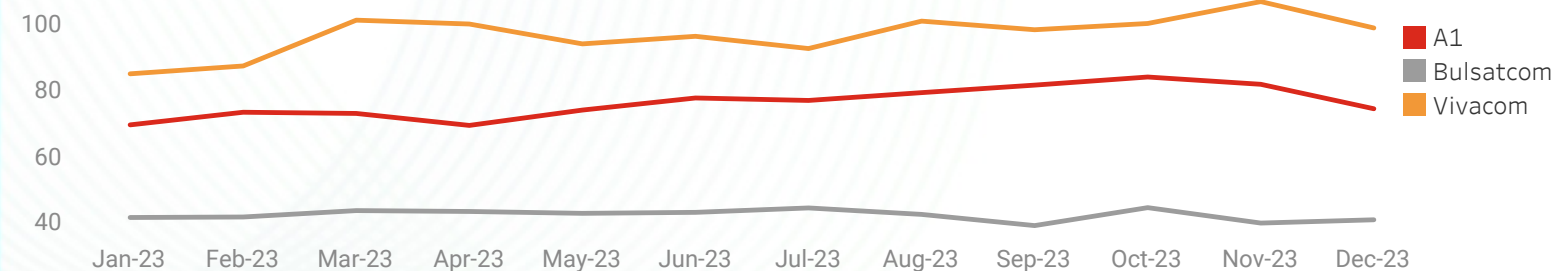
Source : nperf.com

Download Speed (average)



Source : nperf.com

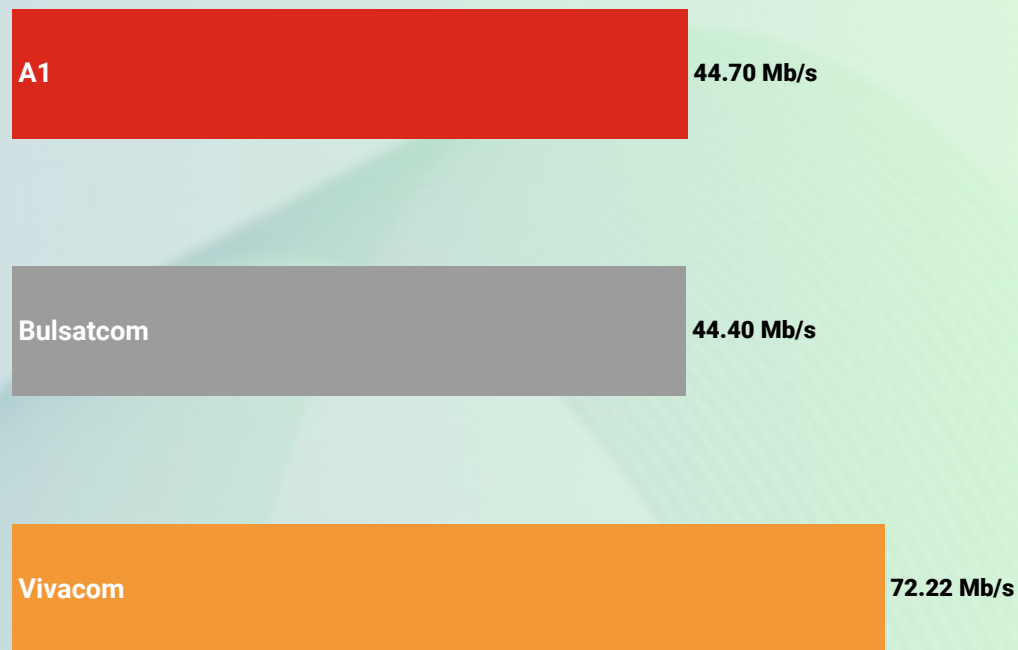
Download Speed evolution over the year (average)



Source : nperf.com



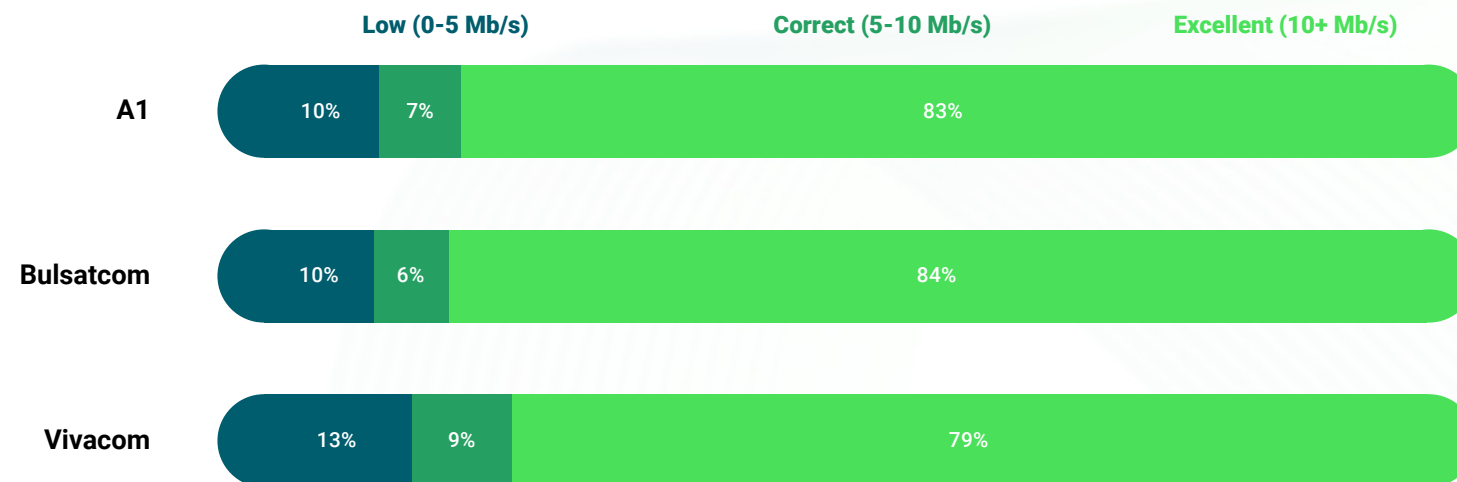
Upload Speed (average)



Source : nperf.com

The subscribers of Vivacom enjoyed the best average broadband upload speed in 2023.

Upload Speed results ventilation (average)



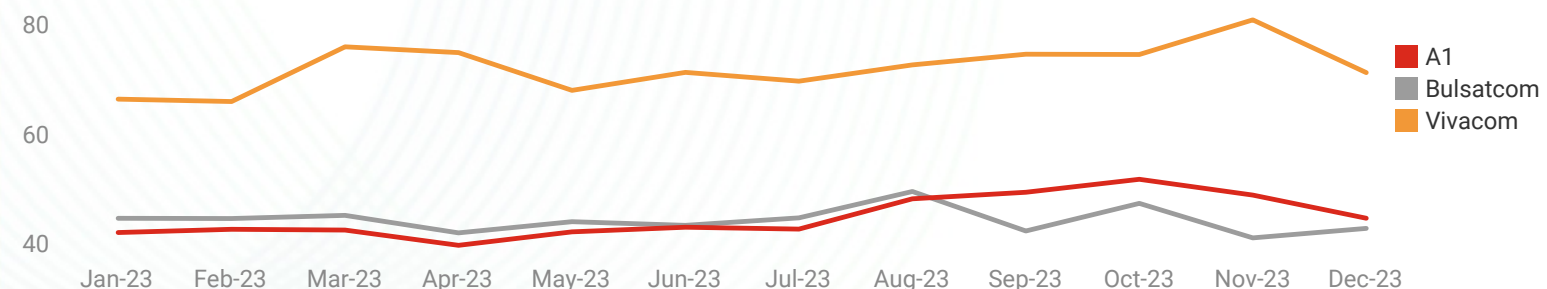
Source : nperf.com

Upload Speed (average)



Source : nperf.com

Upload Speed evolution over the year (average)



Source : nperf.com



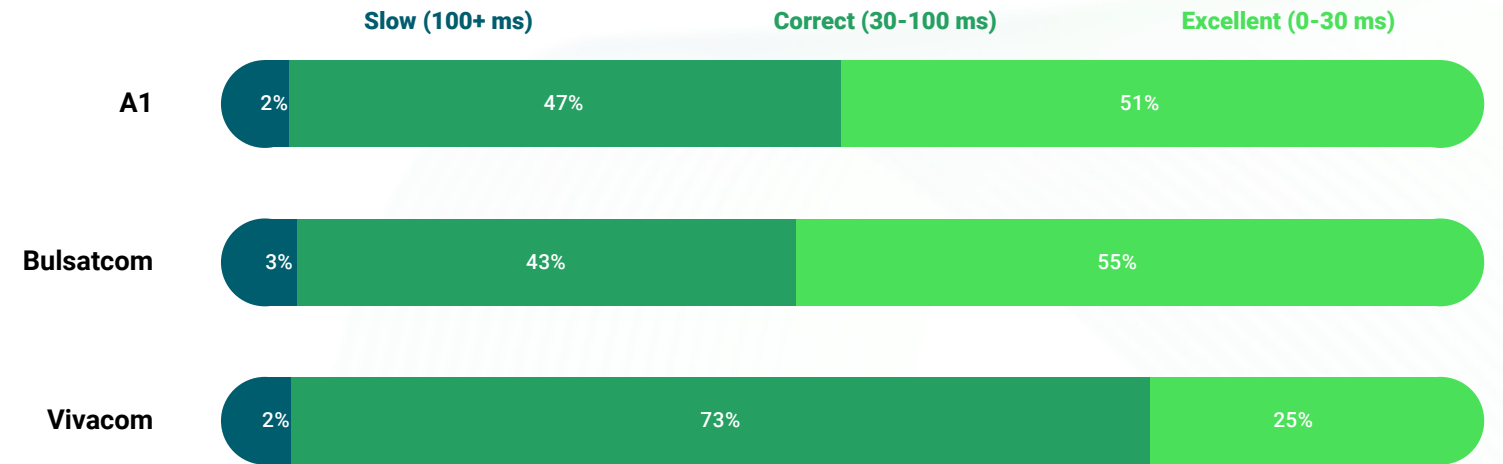
Latency Speed (average)



Source : nperf.com

The subscribers of A1 and Bulsatcom enjoyed the best average broadband latency in 2023.

Latency Speed results ventilation (average)



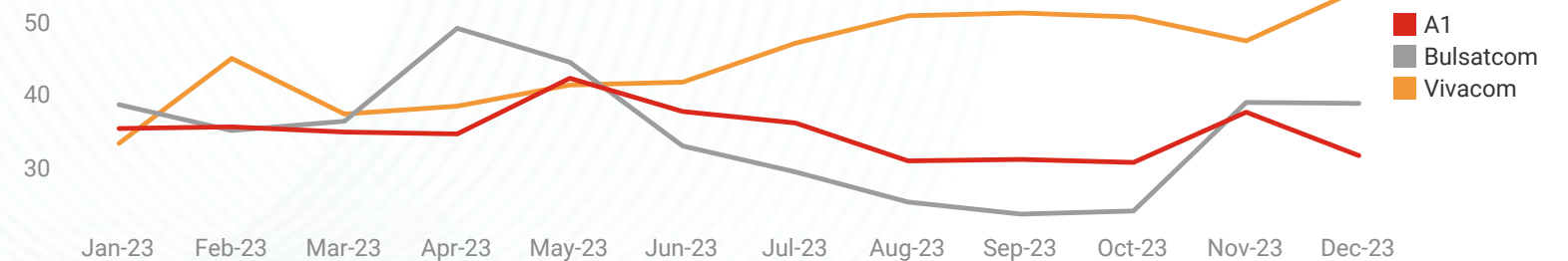
Source : nperf.com

Latency Speed (average)



Source : nperf.com

Average latency Speed evolution over the year



Source : nperf.com

nPerf Score (nPoints)



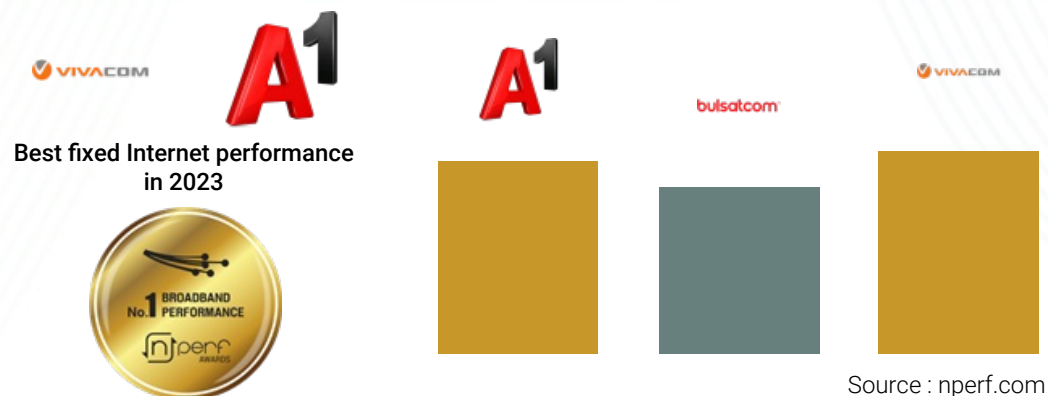
Source : nperf.com

The subscribers of Vivacom and A1 enjoyed the best fixed Internet performances in Bulgaria during 2023.

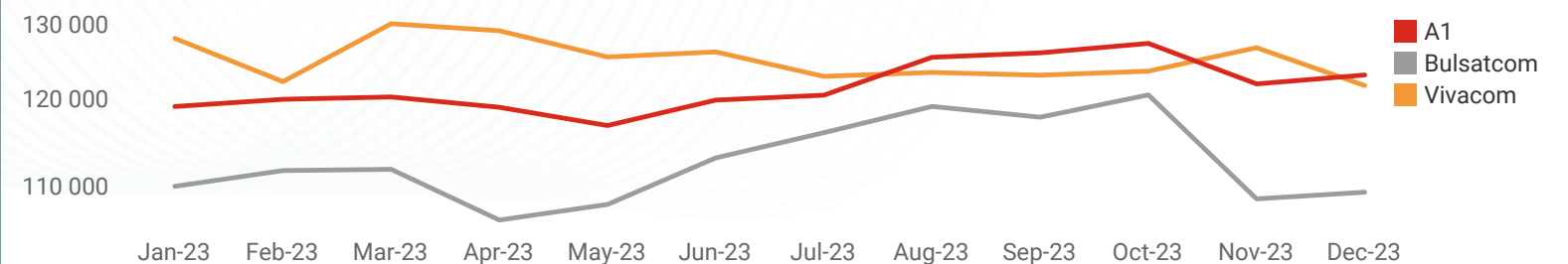
The nperf score takes into account the measured bitrates and the latency. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

Thus, this score reflects the overall quality of the connection experienced by the user.

Source : nperf.com



nPerf score evolution over the year (average)



Source : nperf.com



We qualify your connection