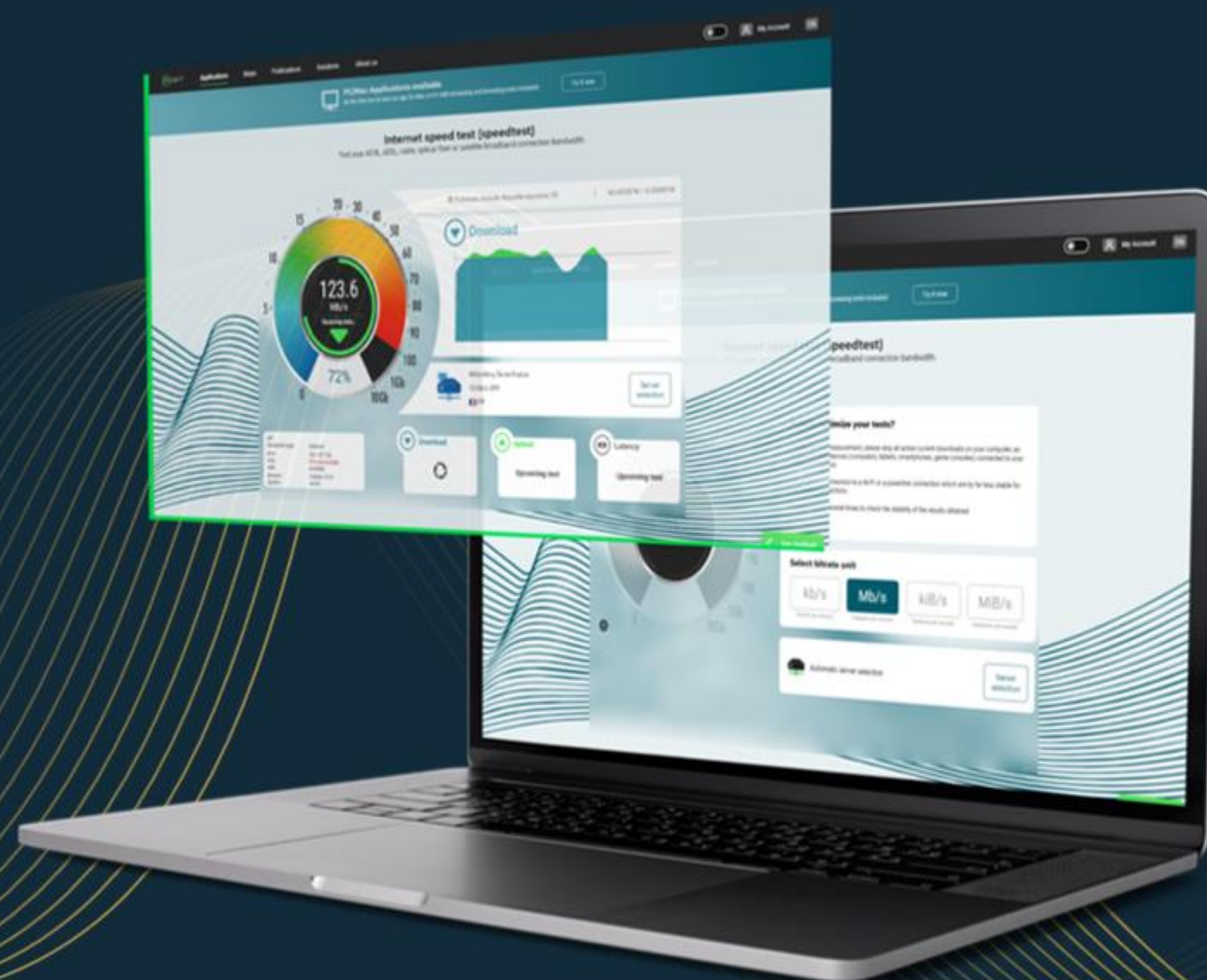


01/10/2025

Barometer of fixed Internet connections in Croatia

01/01/2024 - 12/31/2024



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**Introducing
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.



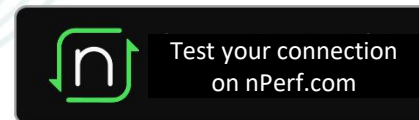
26Md+ coverage
scans in total.



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 A1 enjoyed the best fixed Internet performances in 2024.

Fixed Internet connections in Croatia

	A1	Hrvatski Telekom	Iskon	Telemach
▼ Download bitrates (Mb/s)	141,90	94,22	49,40	97,94
▲ Upload bitrates (Mb/s)	66,89	57,85	25,73	59,33
◀▶ Latency (ms)	20,37	26,52	28,31	45,40
🌐 Web browsing (%)	71,39	67,82	64,60	62,77
🎬 Youtube streaming (%)	87,71	85,42	81,68	84,39
📊 nPerf Score (nPoints)	115 083	101 225	83 616	90 485

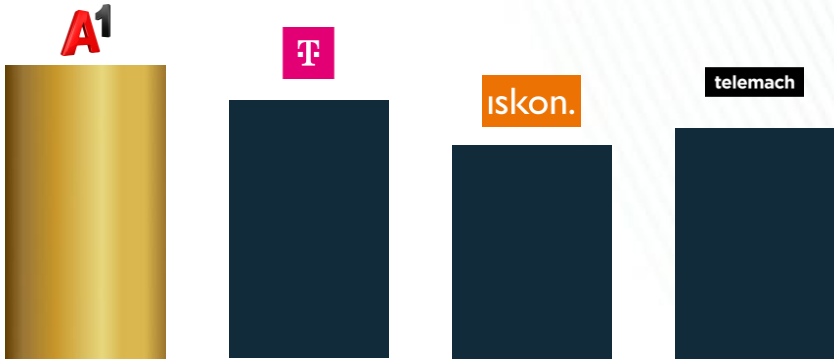
Source : nperf.com



Best fixed Internet performance
in 2024



Source : nperf.com



Source : nperf.com

The subscribers of A1, Hrvatski Telekom and Telemach enjoyed the best FTTH Internet performances in Croatia in 2024.

FTTH Fixed Internet connections in Croatia

	A1	Hrvatski Telekom	Iskon	Telemach
 Download bitrates (Mb/s)	326,26	342,26	224,88	447,80
 Upload bitrates (Mb/s)	242,94	228,88	144,78	363,96
 Latency (ms)	14,39	14,74	18,84	25,27
 Web browsing (%)	78,94	76,27	84,83	80,69
 Youtube streaming (%)	90,68	92,18	93,19	93,49
 nPerf Score (nPoints)	147 135	146 085	141 848	149 834

Source : nperf.com

The subscribers of A1 enjoyed the best WIFI Internet performances in Croatia in 2024.

Fixed Internet connections in Croatia

	A1	Hrvatski Telekom	Iskon	Telemach
 Download bitrates (Mb/s)	127,05	82,03	42,13	77,00
 Upload bitrates (Mb/s)	64,71	51,88	20,87	57,72
 Latency (ms)	21,81	27,85	31,36	47,48
 Web browsing (%)	71,90	68,09	64,90	63,44
 Youtube streaming (%)	87,90	85,80	82,14	83,14
 nPerf Score (nPoints)	112 995	98 588	79 547	86 657

Source : nperf.com

Introduction

The market analysis for the period Q1 2024-Q4 2024 highlights significant shifts and emerging leaders in the fixed internet sector in Croatia. With a focus on WiFi and FTTH technologies, the market has seen new players take the lead in these categories. The Score nPerf indicates an evolving landscape, showcasing the dynamic nature of the market. A1 remains the market leader for 2024, continuing its dominance from the previous year, while also excelling in multiple KPI categories such as download, upload, latency, browsing, and video streaming. The positive trends and strengths of the market are underscored by the ongoing advancements in technology and service delivery.

A1: Market Leader with Exceptional Performance

A1 continues to lead the market with exceptional performance in the period Q1 2024-Q4 2024. Boasting a formidable nPerf Score, A1 excels across all key performance indicators, including download, upload, latency, browsing, and video streaming. The operator also maintains its leadership in WiFi and FTTH, underscoring its comprehensive dominance in the fixed internet segment.

Hrvatski Telekom: Excellence in FTTH

During the same period, Hrvatski Telekom has demonstrated excellence in the FTTH category. With a significant improvement of 17.2% in its overall score, the operator has strengthened its position in the market. Although not the overall market leader, Hrvatski Telekom's advancements contribute significantly to the competitive landscape.

Telemach: Strong Performance in Video Streaming

Telemach stands out for its strong performance in video streaming, sharing the leading position with A1. The operator's efforts in delivering high-quality streaming services have been recognized, making it a key player in this category.

Iskon: Solid Browsing Performance

Iskon showcases solid browsing performance, positioning itself as a reliable provider in this area. While not leading the market, Iskon's focus on browsing excellence adds value to its service offerings.

Conclusion

In conclusion, A1 remains the undisputed market leader, excelling in all KPIs and maintaining its dominance in WiFi and FTTH. Hrvatski Telekom and Telemach also make significant contributions to the market, particularly in FTTH and video streaming, respectively. The Croatian market continues to thrive, driven by competitiveness and the robust capabilities of its operators.

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

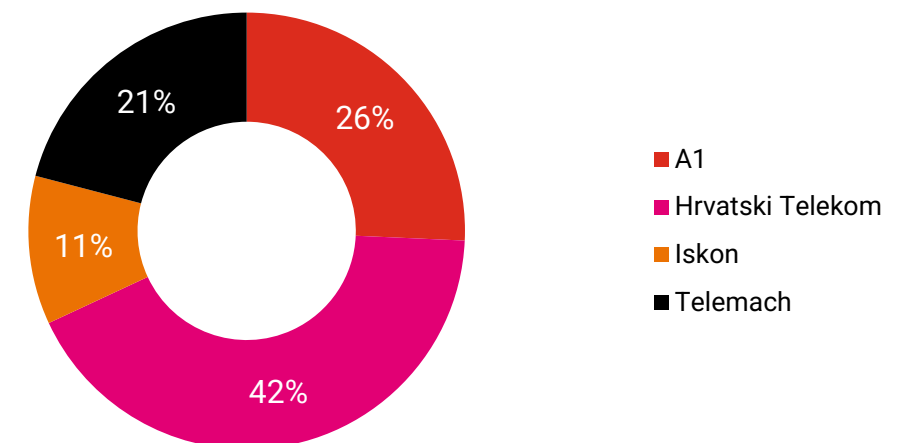
The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

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.

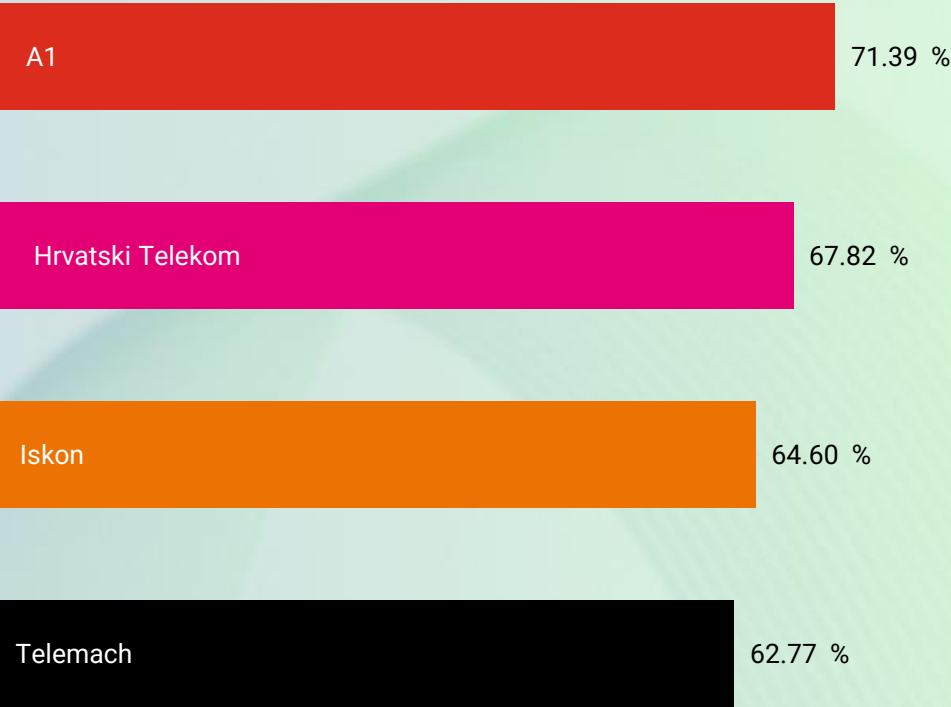
Overall distribution of the tests per provider (ISPs Share)



Source : nperf.com



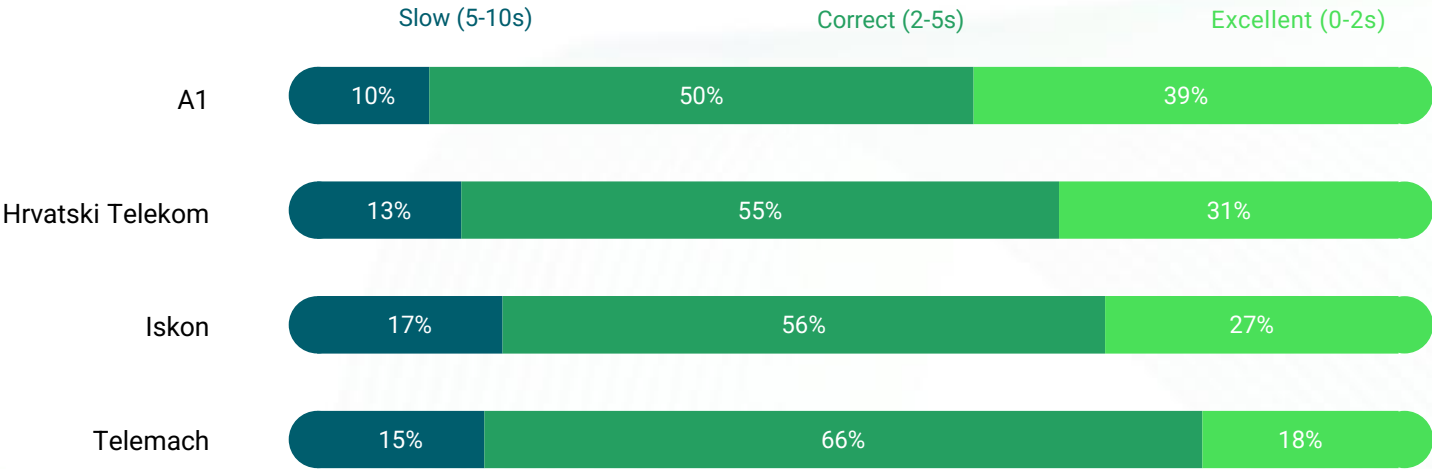
Browsing Performance rate (average)



Source : nperf.com

The subscribers of A1 enjoyed the best fixed Internet browsing performance in 2024.

Browsing Performance results ventilation (average)



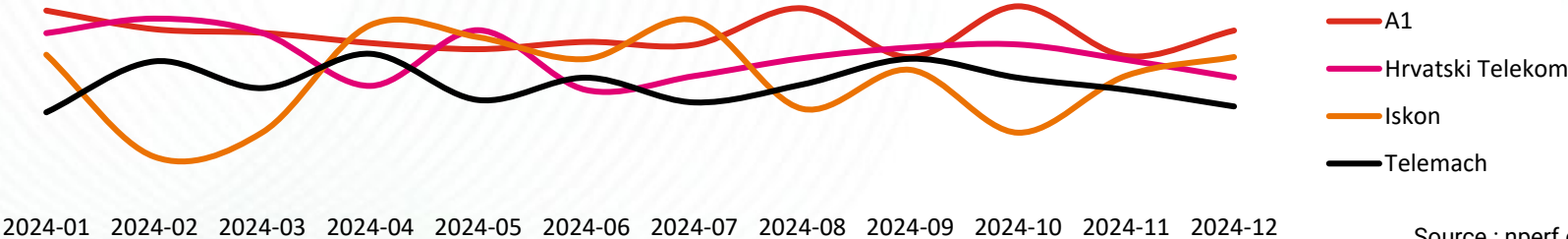
Source : nperf.com

Browsing Performance rate (average)



Source : nperf.com

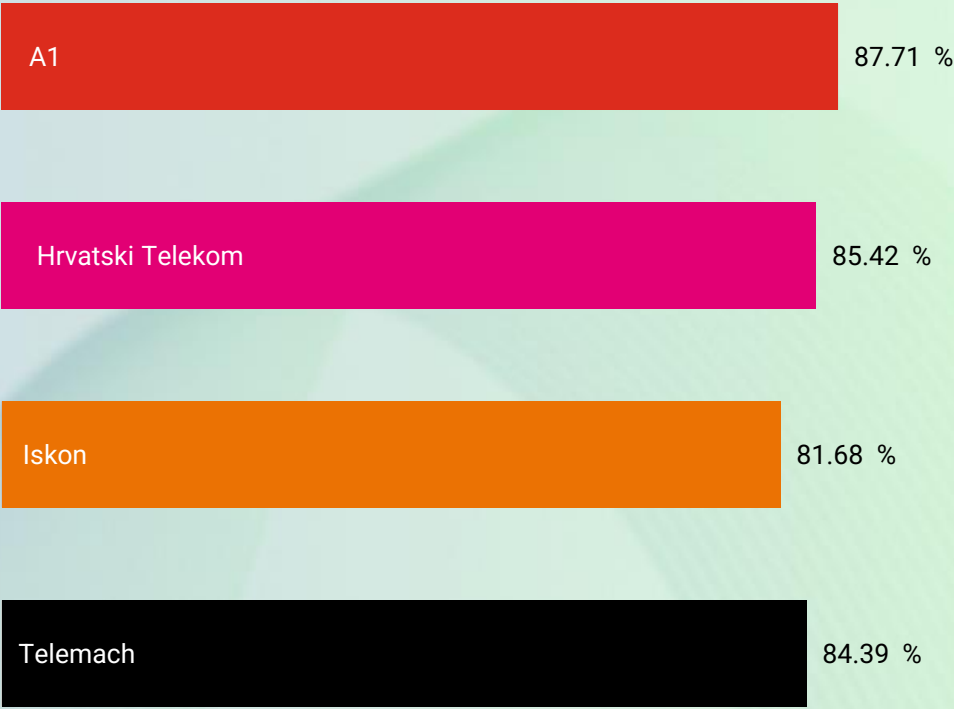
Browsing performance rate (average) evolution over the year



Source : nperf.com



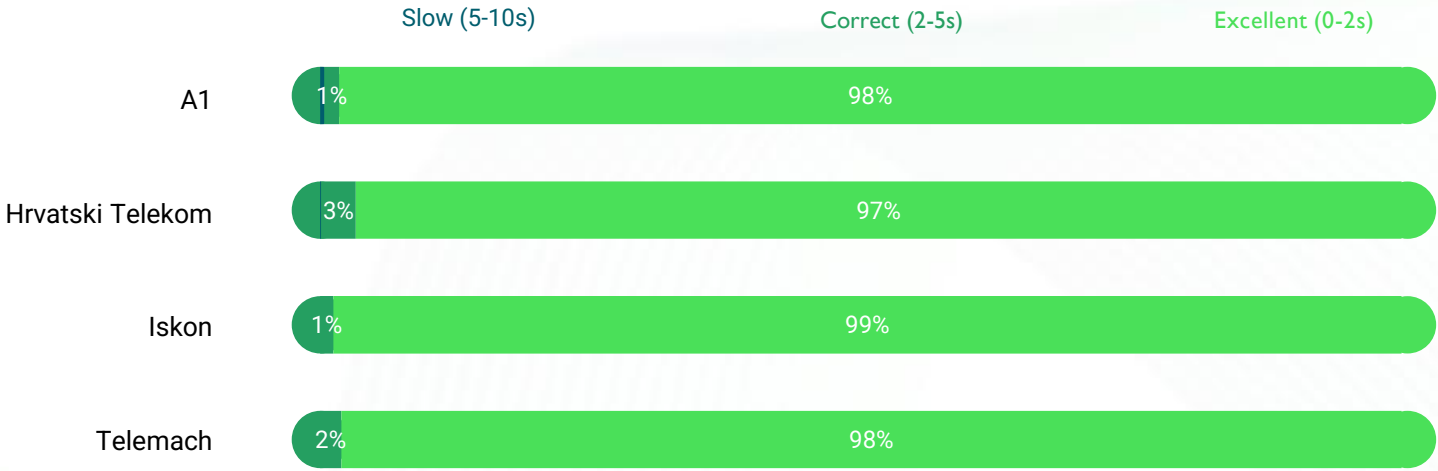
Streaming Performance rate (average)



Source : nperf.com

The subscribers of A1 enjoyed the best fixed Internet streaming performance in 2024.

Streaming Performance results ventilation (average)



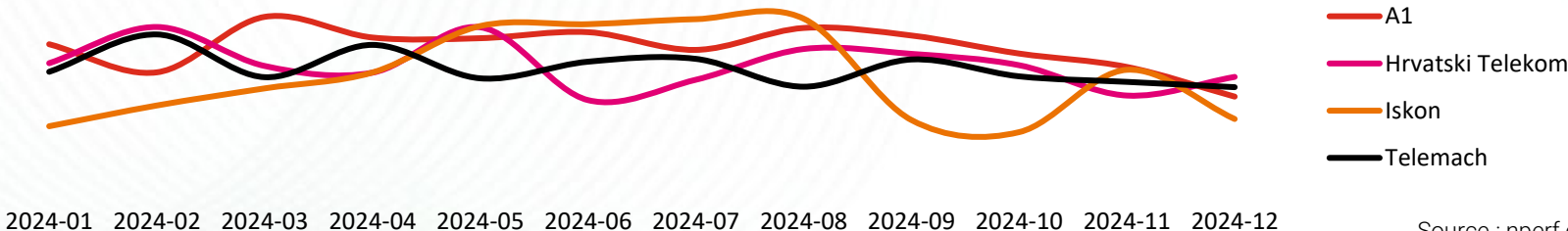
Source : nperf.com

Streaming Performance rate (average)



Source : nperf.com

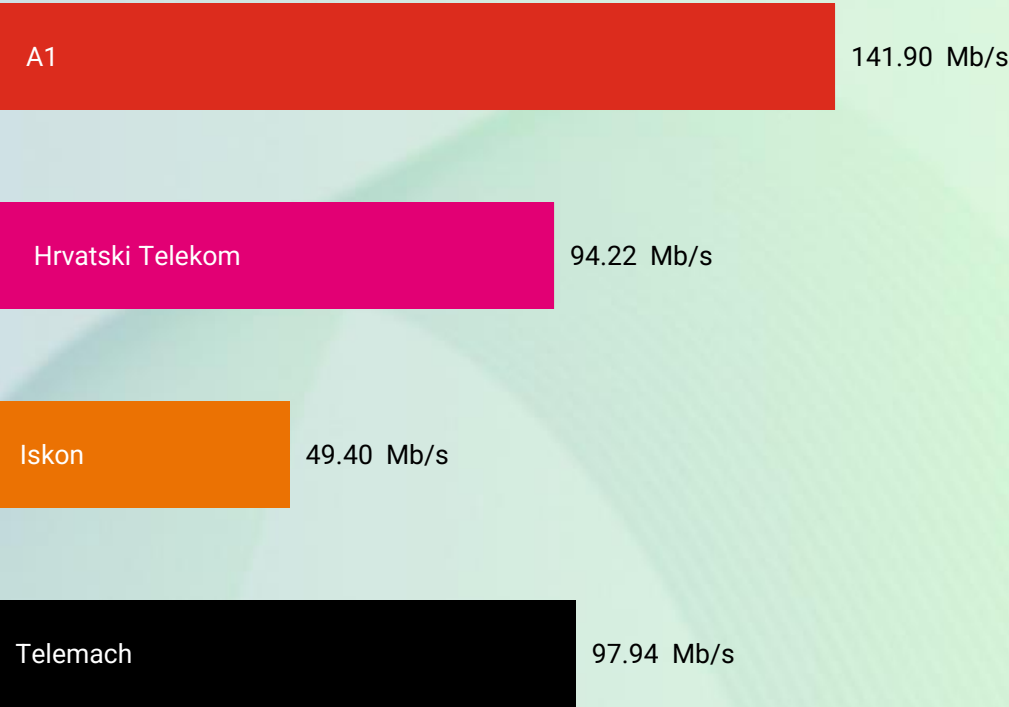
Streaming performance rate (average) evolution over the year



Source : nperf.com



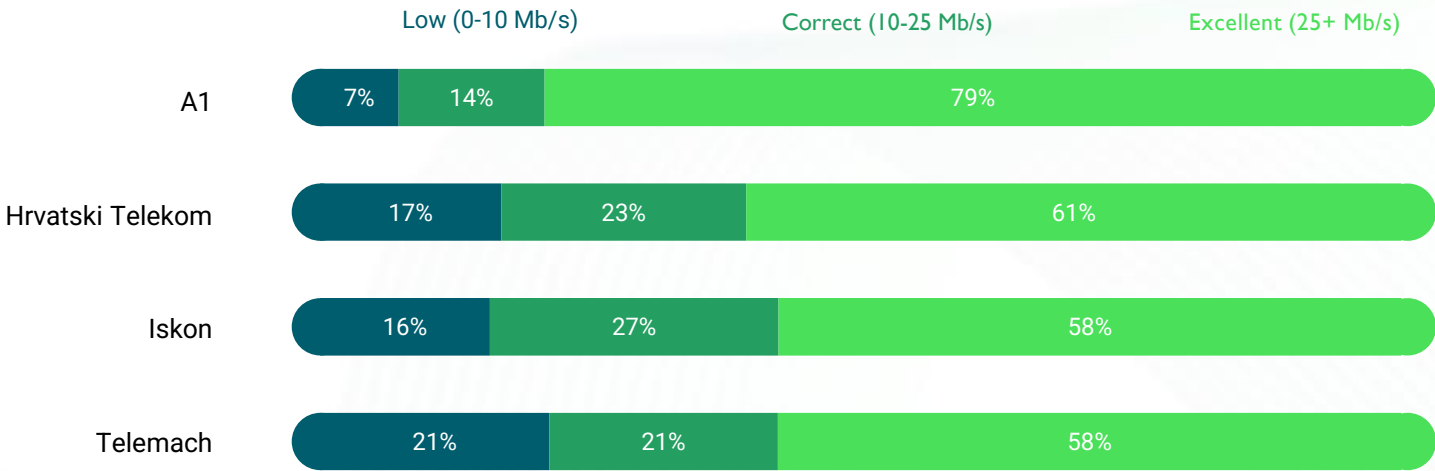
Download Speed (average)



Source : nperf.com

The subscribers of A1 enjoyed the best average fixed Internet download speed in 2024.

Download Speed results ventilation (average)



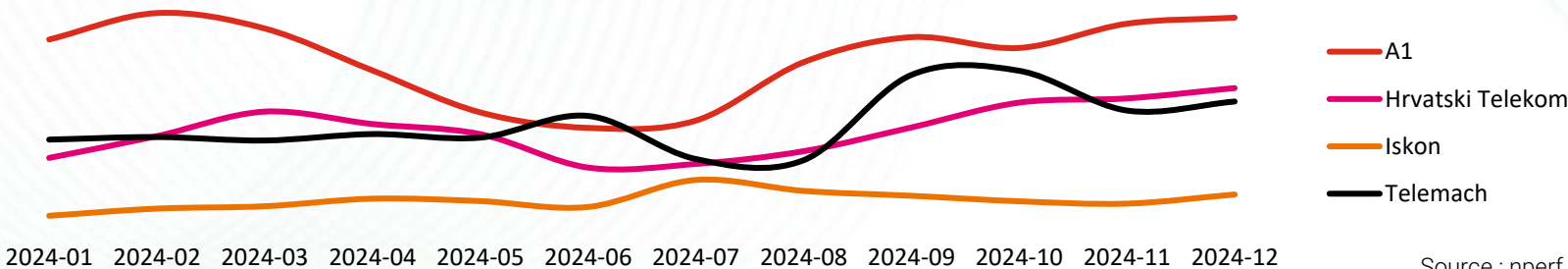
Source : nperf.com

Download Speed (average)



Source : nperf.com

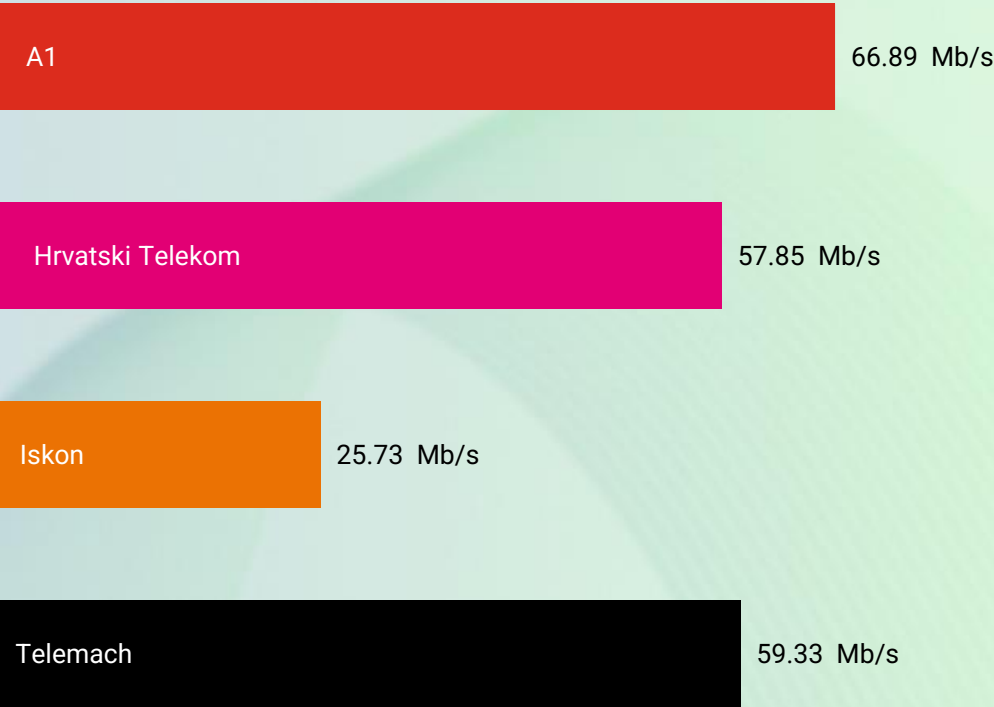
Download Speed evolution over the year (average)



Source : nperf.com



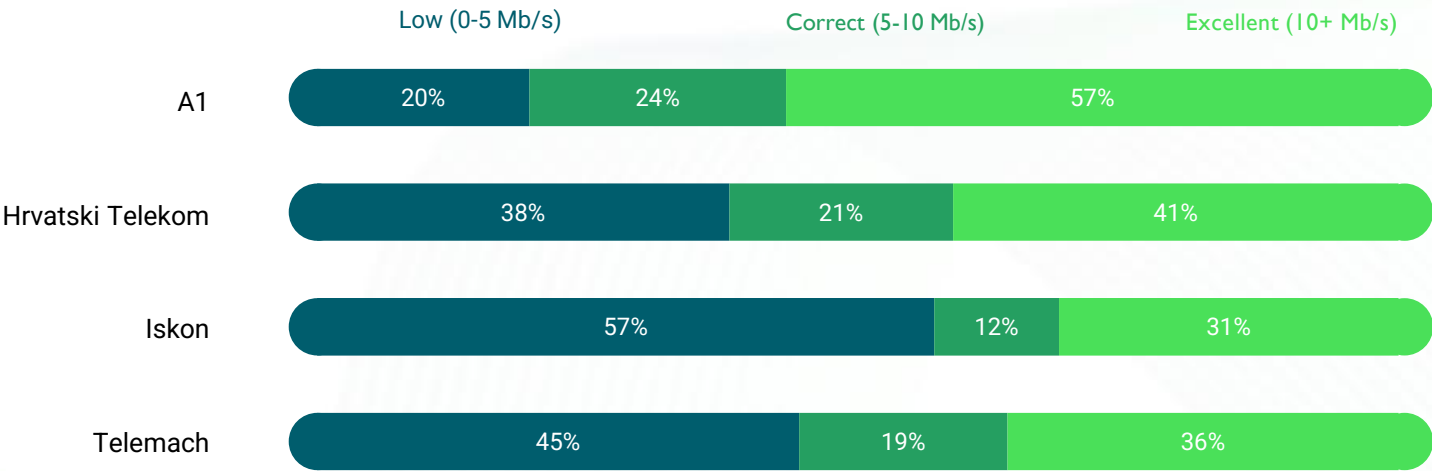
Upload Speed (average)



Source : nperf.com

The subscribers of A1 enjoyed the best average fixed Internet upload speed in 2024.

Upload Speed results ventilation (average)



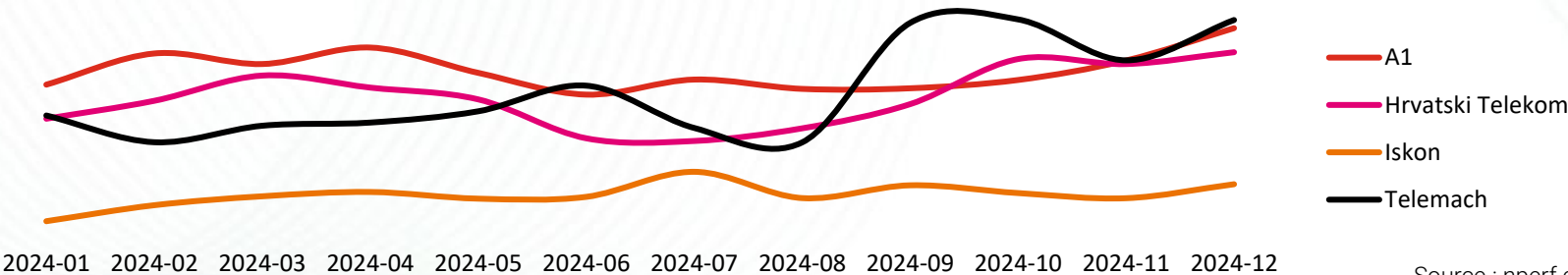
Source : nperf.com

Upload Speed (average)



Source : nperf.com

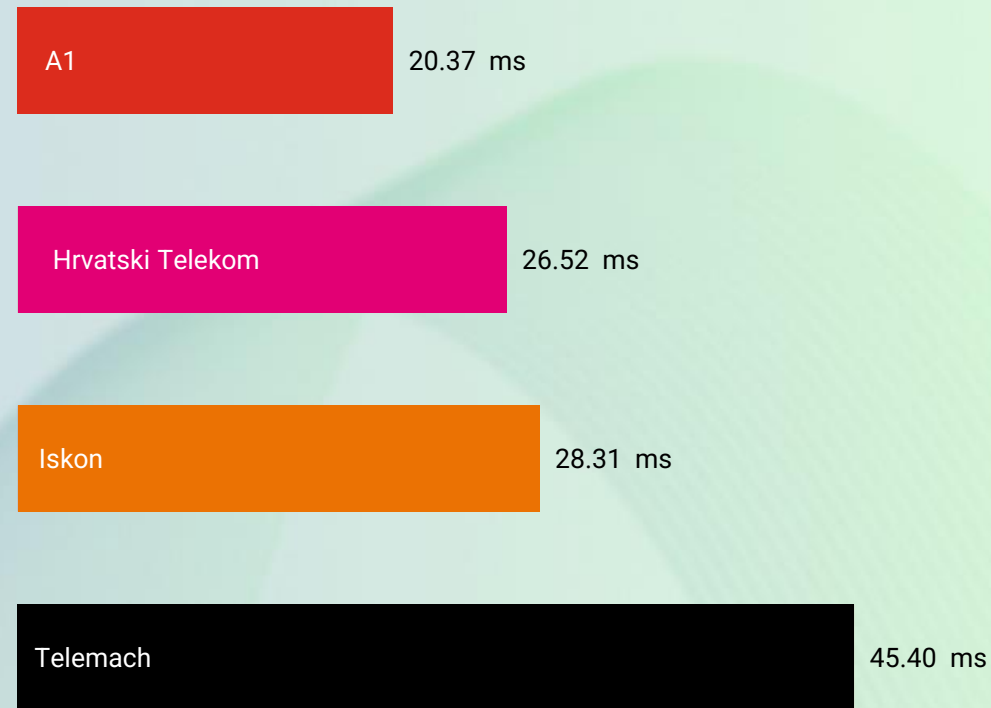
Upload Speed evolution over the year (average)



Source : nperf.com



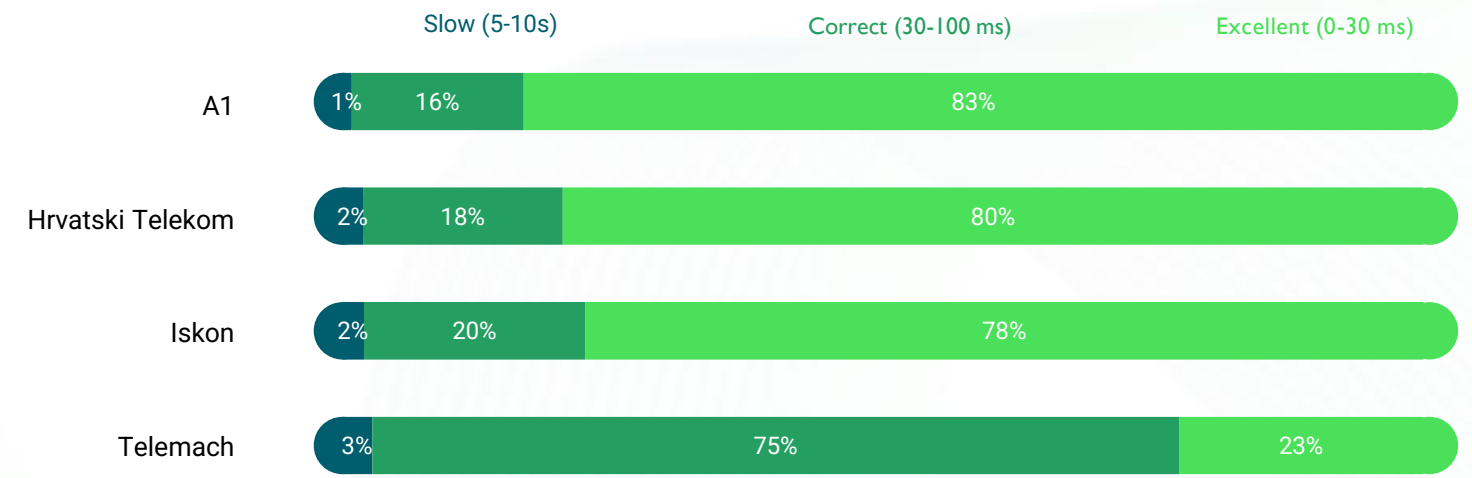
Latency Speed (average)



Source : nperf.com

The subscribers of A1 enjoyed the best average fixed Internet latency speed in 2024.

Latency Speed results ventilation (average)



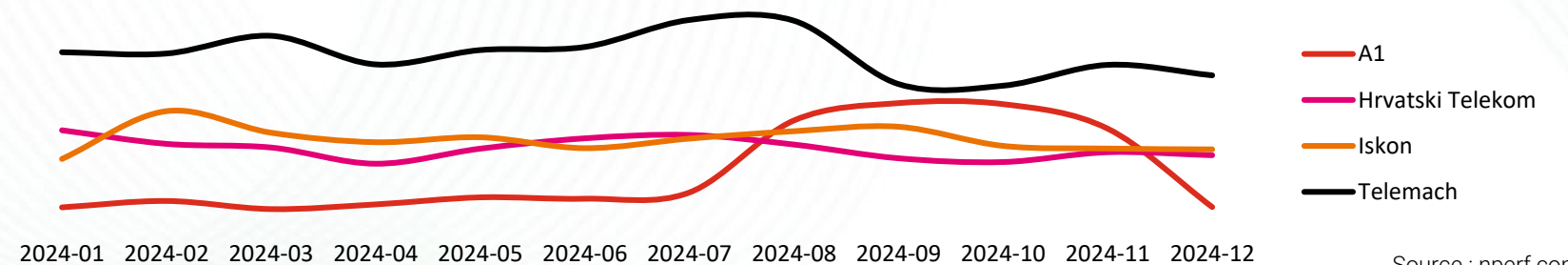
Source : nperf.com

Latency Speed (average)

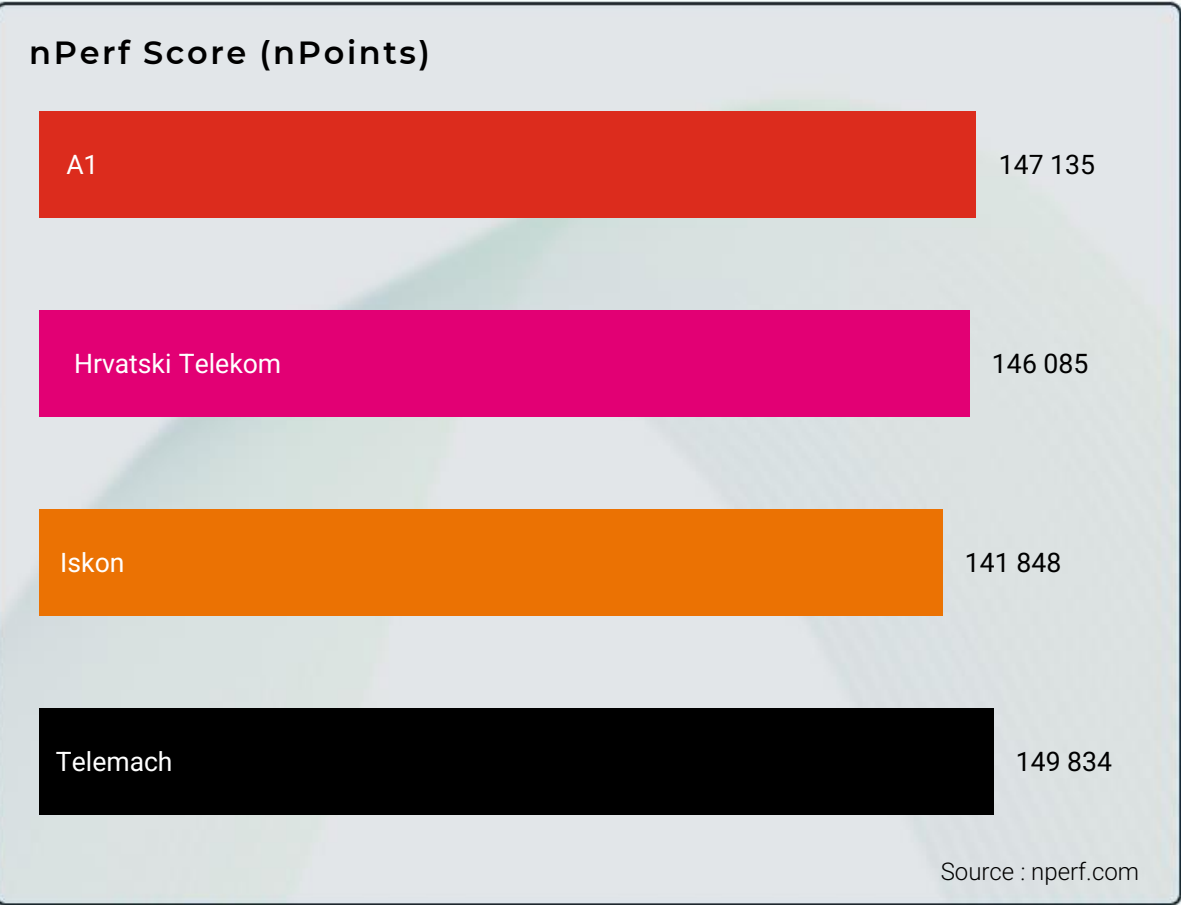


Source : nperf.com

Latency Speed evolution over the year (average)

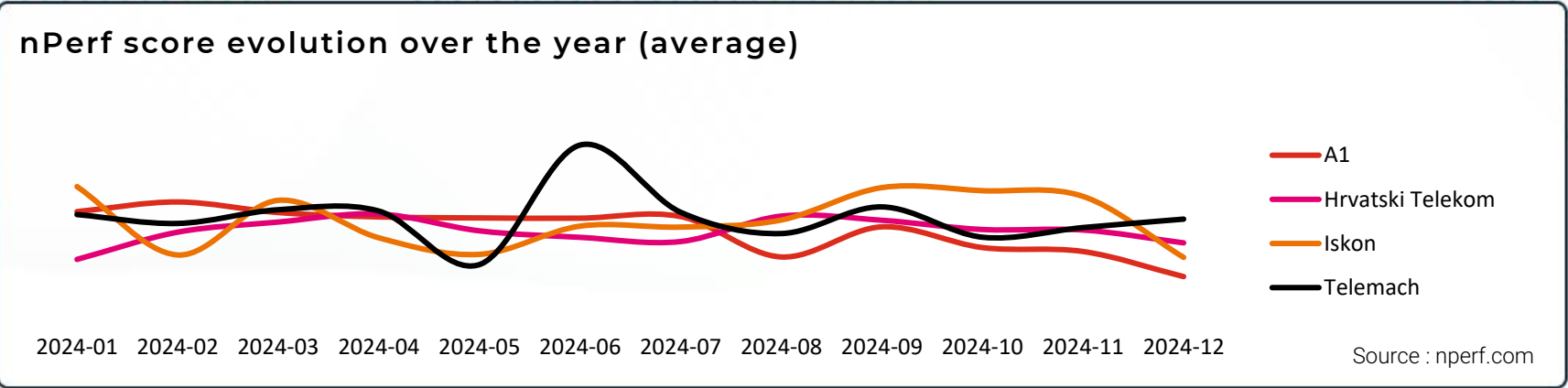
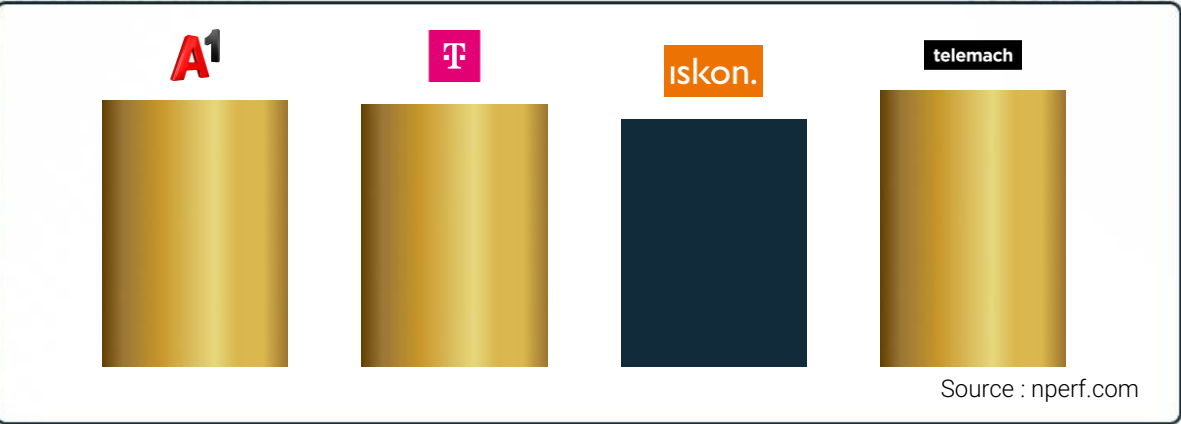


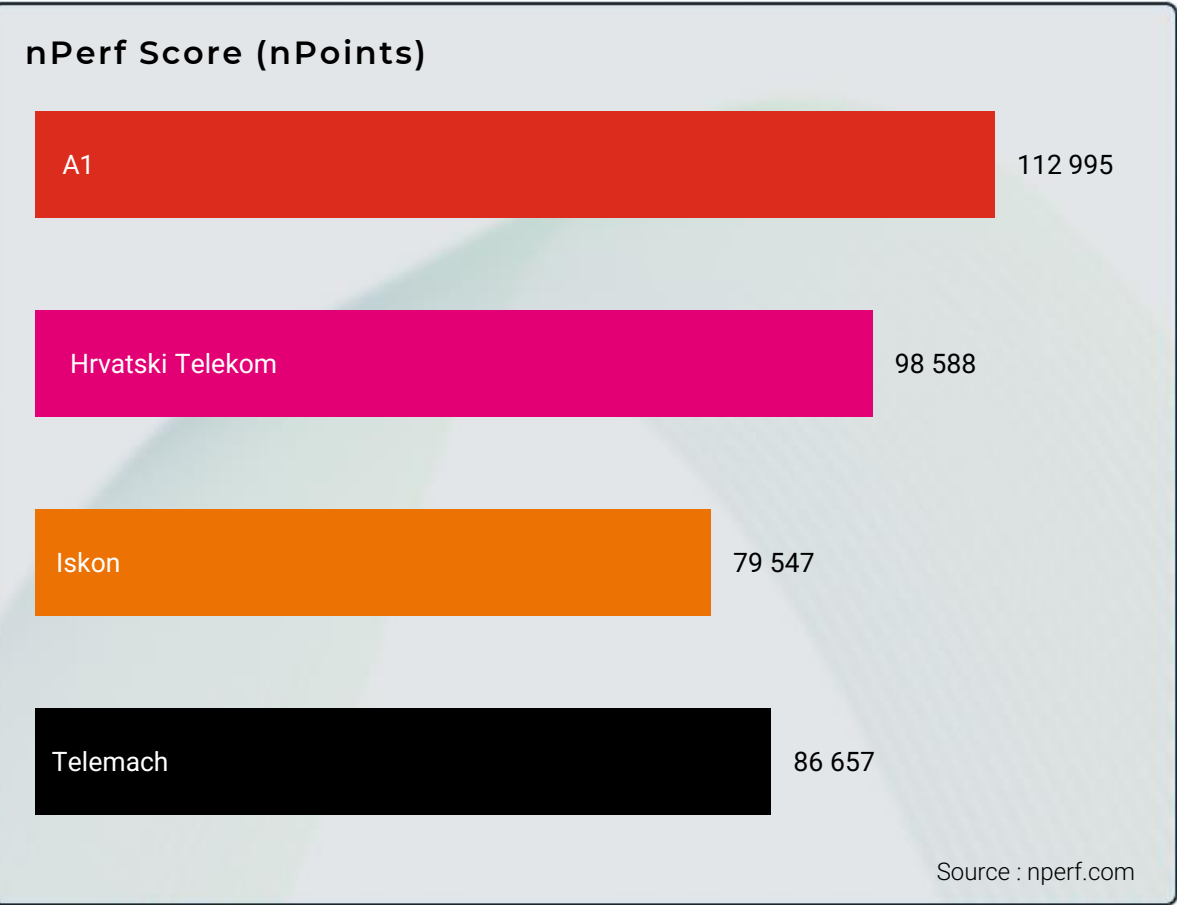
Source : nperf.com



The subscribers of A1, Hrvatski Telekom and Telemach enjoyed the best FTTH Internet performances in 2024.

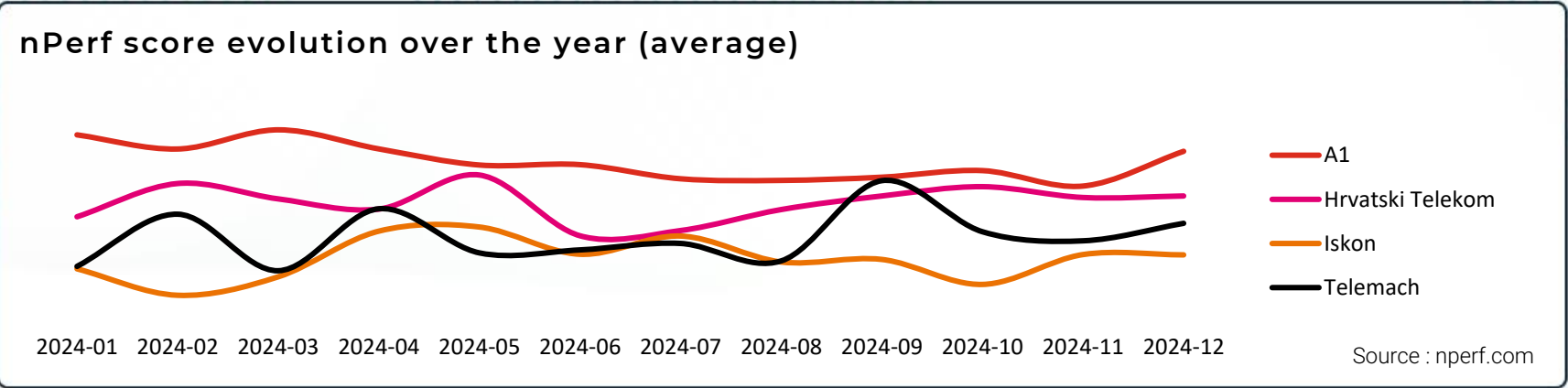
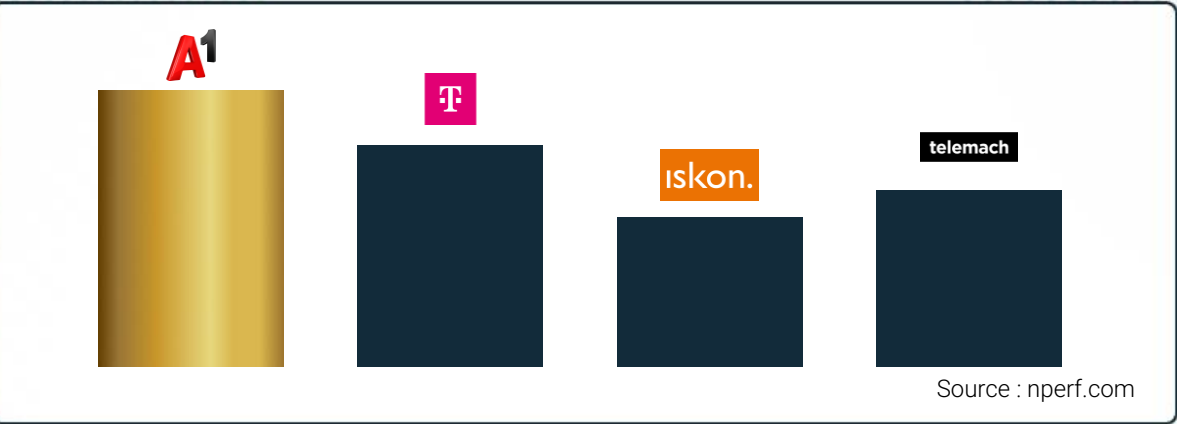
- Best performances FTTH: A1, Hrvatski Telekom and Telemach
 - Best web browsing performances FTTH: Iskon
 - Best video streaming performances FTTH: Iskon and Telemach
 - Fastest performances (Download) FTTH: Telemach
 - Fastest performances (Upload) FTTH: Telemach
 - FTTH connections with the lowest latency: A1 and Hrvatski Telekom
- Source : nperf.com





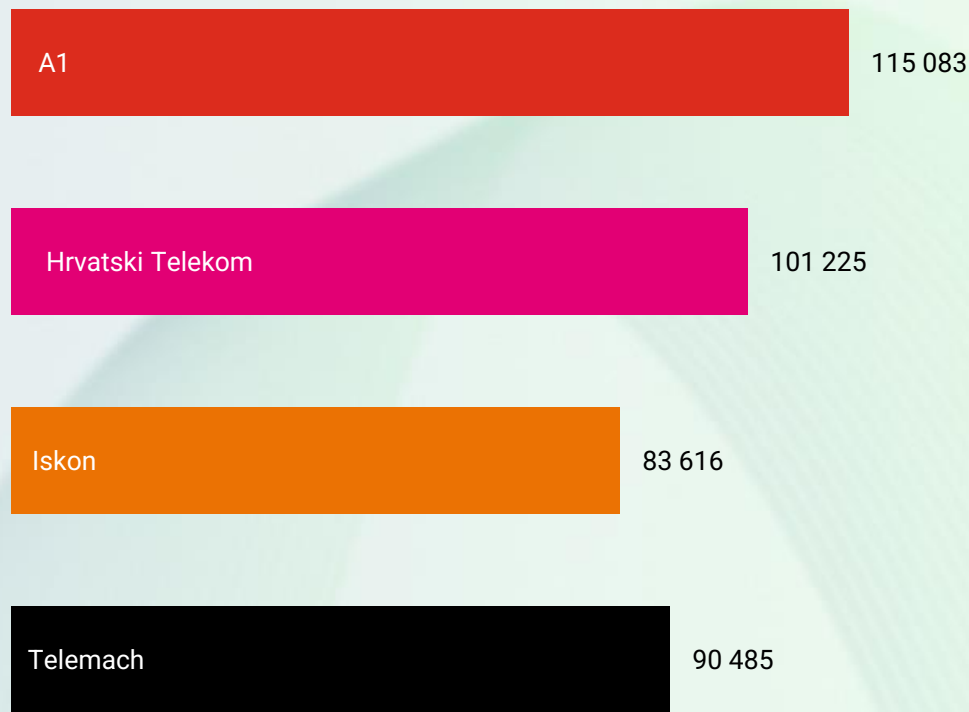
The subscribers of A1 enjoyed the best WIFI Internet performances in Croatia in 2024.

- Best performances WIFI: A1
 - Best web browsing performances WIFI: A1
 - Best video streaming performances WIFI: A1
 - Fastest performances (Download) WIFI: A1
 - Fastest performances (Upload) WIFI: A1
 - WIFI connections with the lowest latency: A1
- Source : nperf.com





nPerf Score (nPoints)

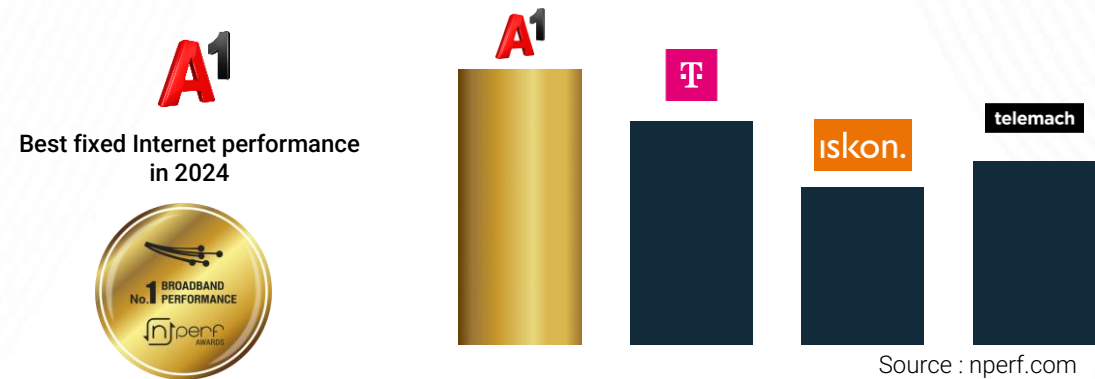


Source : nperf.com

The subscribers of A1 enjoyed the best fixed Internet performances in 2024.

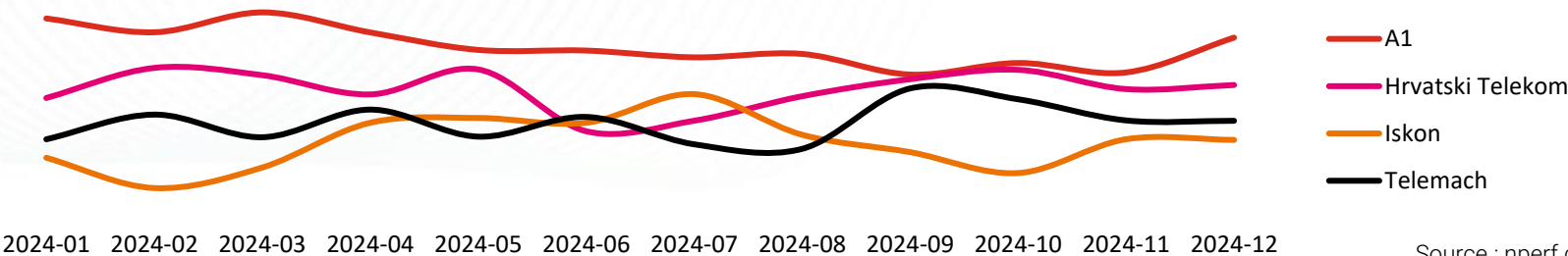
The nperf score takes into account the measured bitrates, the latency and the Qoe tests.
The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.
Thus, this score reflects the overall quality of the connection experienced by the user.

Source : nperf.com



Source : nperf.com

nPerf score evolution over the year (average)



Source : nperf.com

The background of the image features a series of thin, light-colored wavy lines that flow horizontally across the frame, creating a sense of movement and depth. These lines are set against a solid dark blue background.

inperf