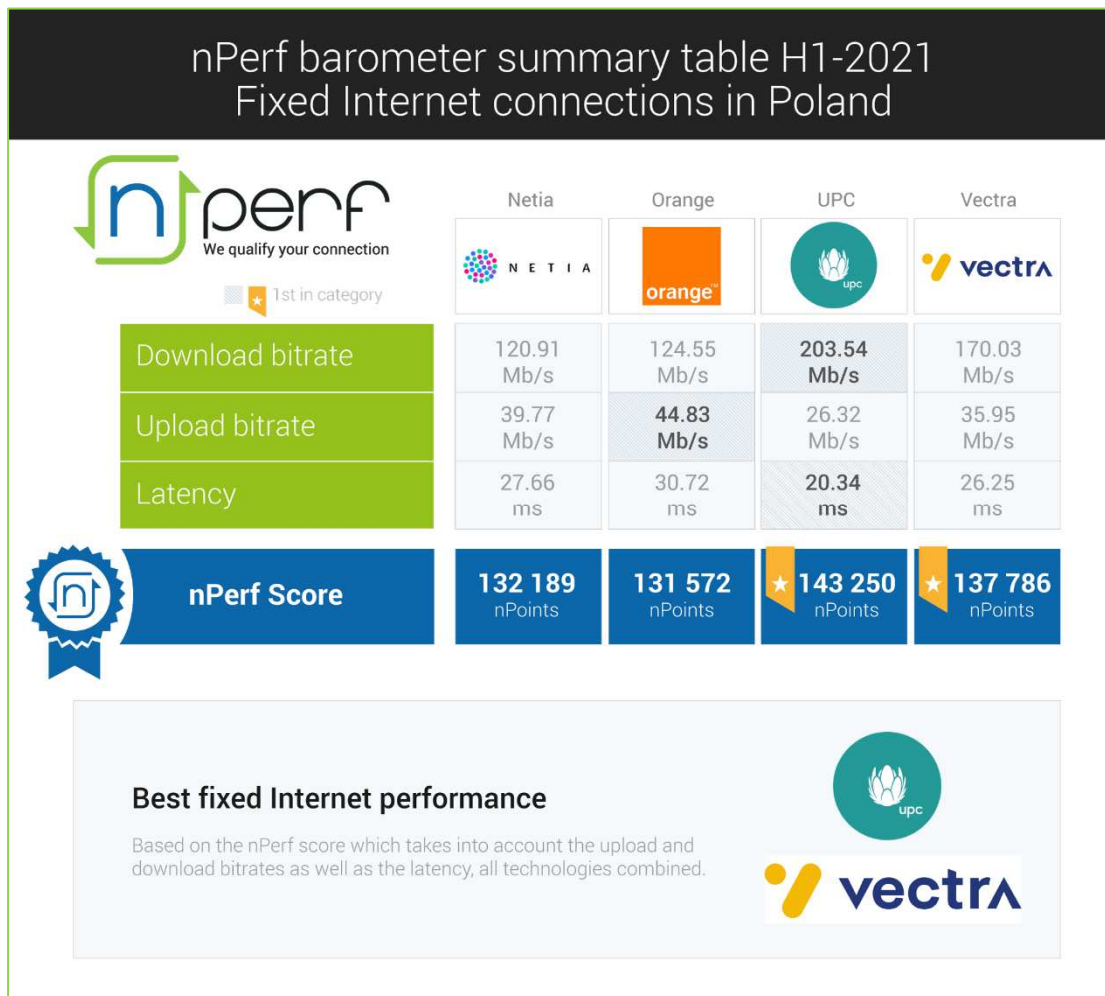# Barometer of fixed internet connections in Poland

First half 2021

Table of contents

1 Summary of global annual results

1.1 Summary table and nPerf score, all technologies combined

nPerf barometer summary table H1-2021
Fixed Internet connections in Poland

	Netia	Orange	UPC	Vectra
Download bitrate	120.91 Mb/s	124.55 Mb/s	**203.54 Mb/s**	170.03 Mb/s
Upload bitrate	39.77 Mb/s	**44.83 Mb/s**	26.32 Mb/s	35.95 Mb/s
Latency	27.66 ms	30.72 ms	**20.34 ms**	26.25 ms
nPerf Score	132 189 nPoints	131 572 nPoints	★ 143 250 nPoints	★ 137 786 nPoints

Best fixed Internet performance

Based on the nPerf score which takes into account the upload and download bitrates as well as the latency, all technologies combined.

*** UPC and Vectra, the best fixed Internet performances during the last semester ***

1.2 Our analysis

During the last six months, nPerf users conducted **30,766** connection tests on Poland's four largest Internet Service Providers.

And this time the winners are two ! Indeed, UPC and Vectra share the first position for the H1 2021, and this is the first win for any of them, since 2018. Their constant progressions throughout the last years, and maybe the absence of Inea for this study, seem to help.

After finishing second in the previous barometers, UPC has dominated the average download speed and the latency in Poland. Nonetheless, it appears to be the worst network when it comes to uploading. Its main rival, Vectra, doesn't even need to lead on any indicator for the last semester. By recording the second best figures on the download speed and the latency, and thanks to a spectacular improvement on the upload speed since 2019, its leadership has come true.

Furthermore, Netia and Orange have provided good fixed connexions across Poland too, during the last six months, even if they fill the last positions of the nPerf ranking. The best performance progression belong to them. For example, they have offered the highest upload speeds in the country and, also, the strongest download speed evolution from 2019 is theirs !

Hence, the situation in Poland has turned very exciting in the last couple of years. Everything could happen in the next few months, once the scores have come this close… This tightening can be a great news for the polish Internet market.

The significant efforts from every operator are encouraging signs for the polish Internet users. Let's keep a careful eye on the situation for the months to come !
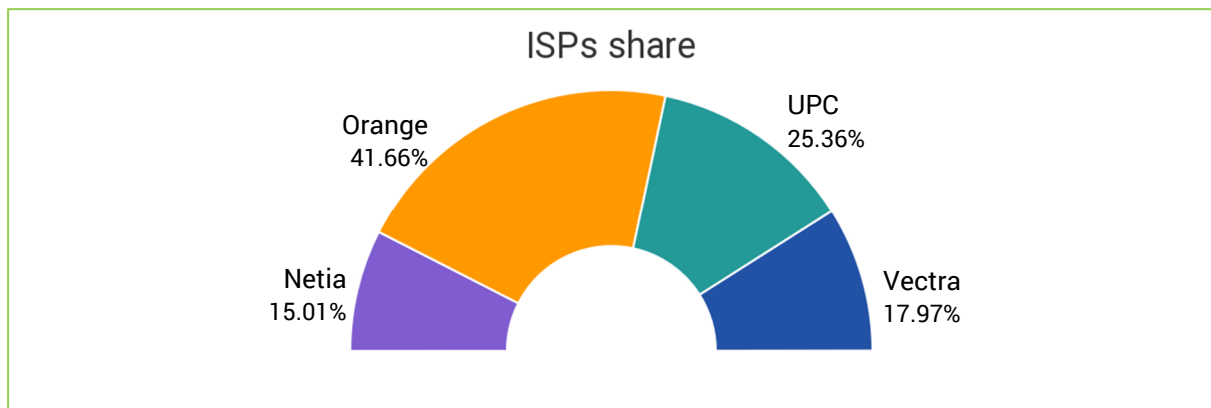
2 Overall results, all technologies combined

2.1 Data amount and distribution

From January 1st, 2021 to June 30th, 2021 we counted **30,766** tests amongst the four largest Poland's fixed ISP, distributed after filtering as follows:

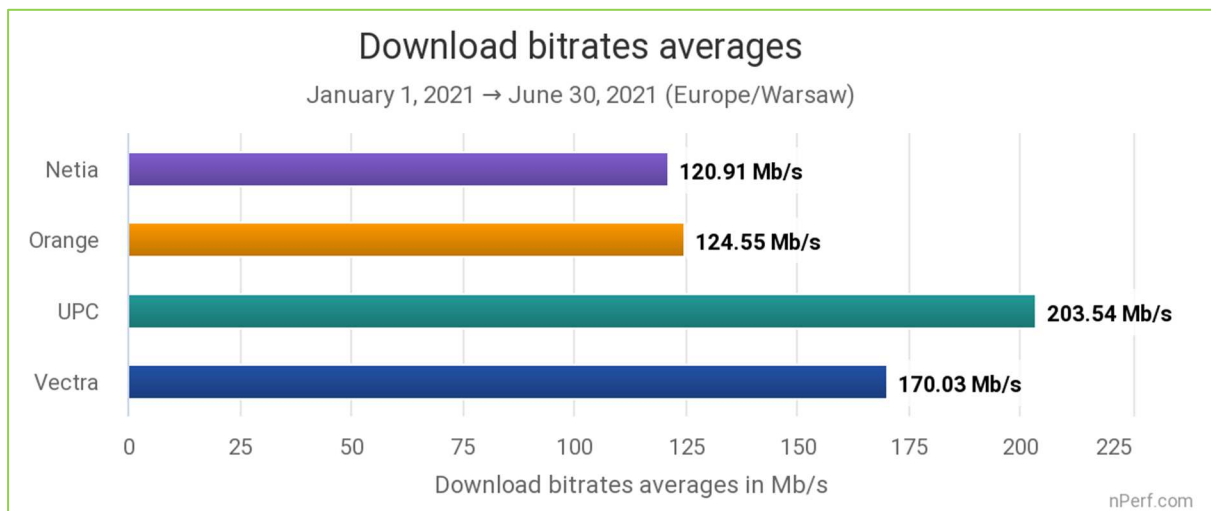| Country	Tests
Poland	**24,605**

Breakdown of tests by provider

Inea, amongst others ISPs, hasn't been considered for this period, because of the low number of tests carried out on this network.
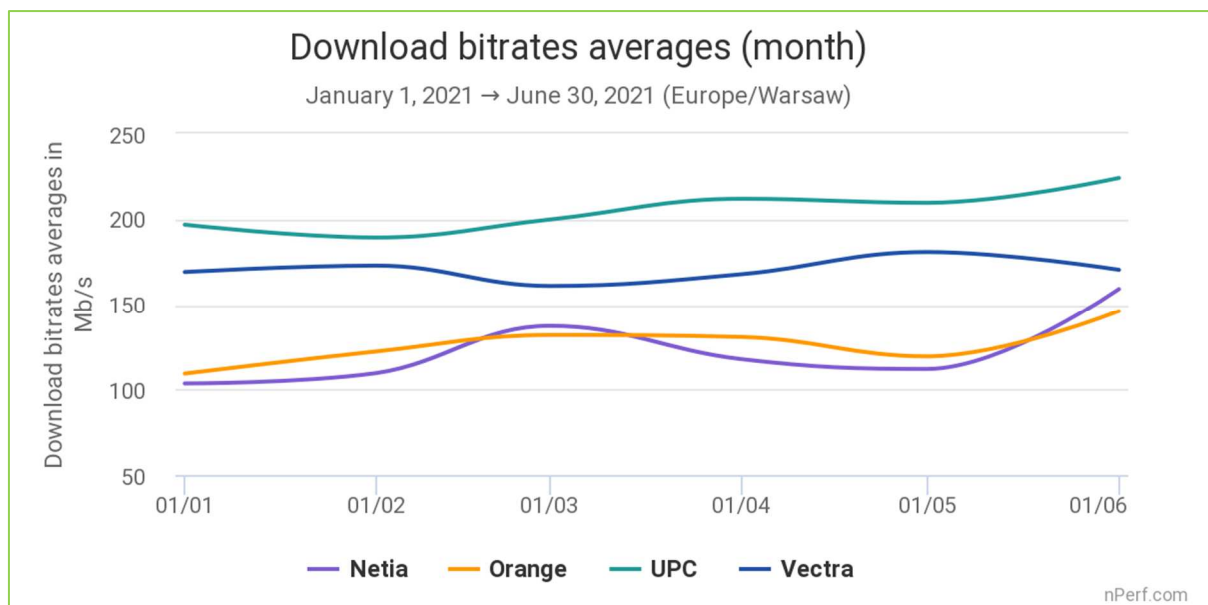
2.2 Download speed

The average download speed in Poland was 152 Mb/s during the last semester.

Download bitrates averages
January 1, 2021 → June 30, 2021 (Europe/Warsaw)

Provider	Download bitrates averages in Mb/s
Netia	120.91 Mb/s
Orange	124.55 Mb/s
UPC	203.54 Mb/s
Vectra	170.03 Mb/s

The highest value is the best.

UPC subscribers enjoyed the best average fixed download speed through the last 6 months.

Download bitrates averages (month)
January 1, 2021 → June 30, 2021 (Europe/Warsaw)
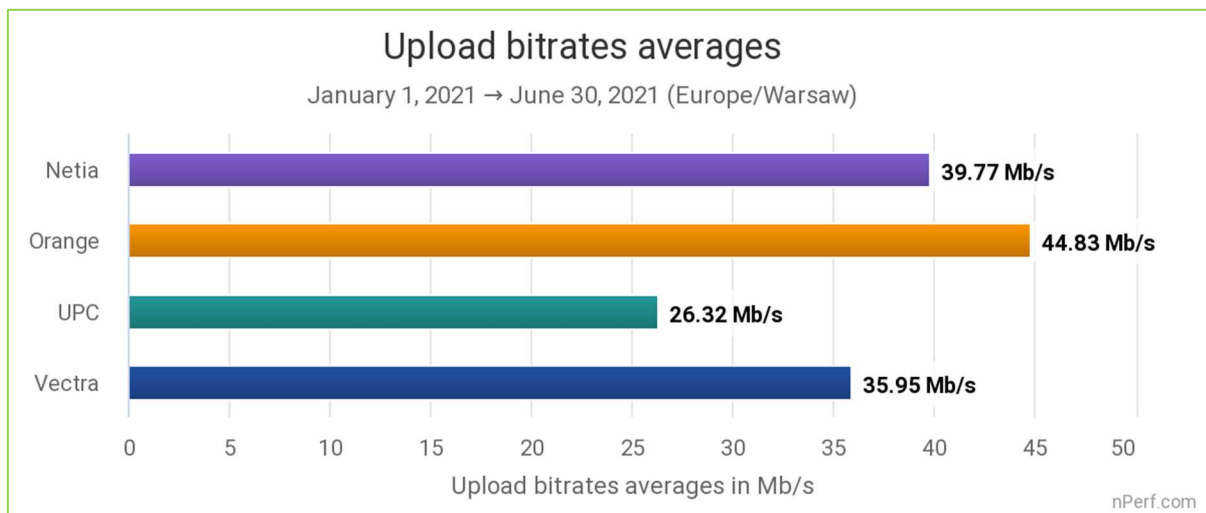
— Netia — Orange — UPC — Vectra

nPerf.com

The above graph illustrates the ability of providers to maintain a constant download speed over the period regardless of the network load (number of connected end-users).

In short, UPC has provided the highest speed through the whole semester, above Vectra. Orange's and Netia's results and trends are very similar. In June, this average download speed has been pretty close for all ISPs, except for UPC, still higher.
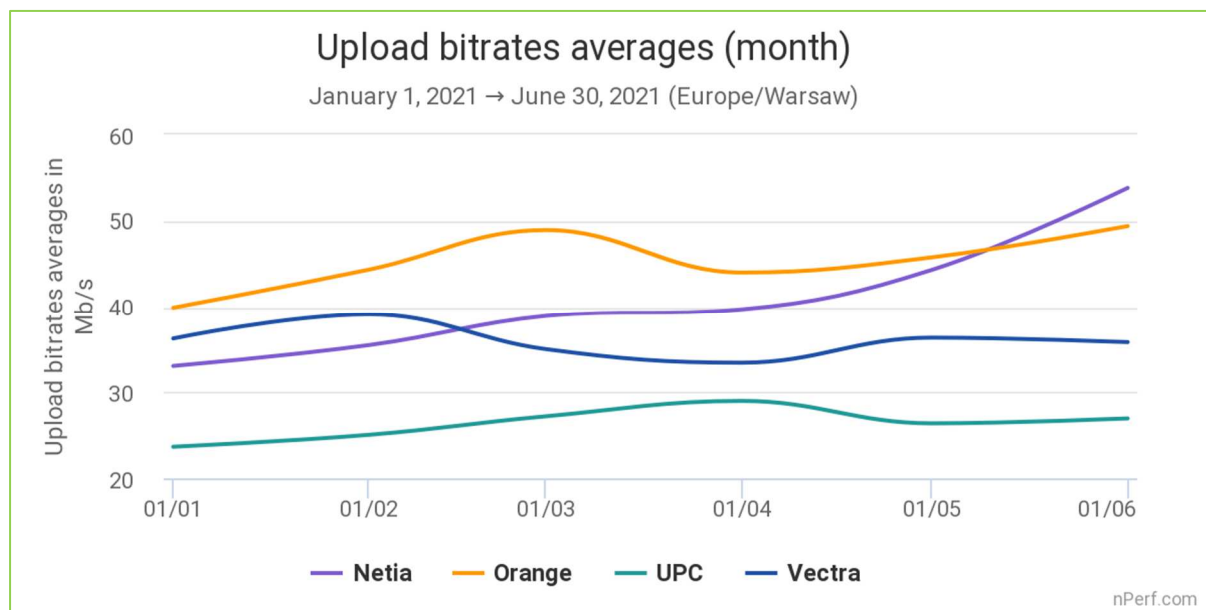
2.3 Upload speed

The average upload speed in Poland was 38 Mb/s during the last semester.

Upload bitrates averages
January 1, 2021 → June 30, 2021 (Europe/Warsaw)

Operator	Upload bitrates averages
Netia	39.77 Mb/s
Orange	44.83 Mb/s
UPC	26.32 Mb/s
Vectra	35.95 Mb/s

Upload bitrates averages in Mb/s

nPerf.com

The highest value is the best.

Orange subscribers enjoyed the best average fixed upload speed through the last 6 months.

Upload bitrates averages (month)
January 1, 2021 → June 30, 2021 (Europe/Warsaw)

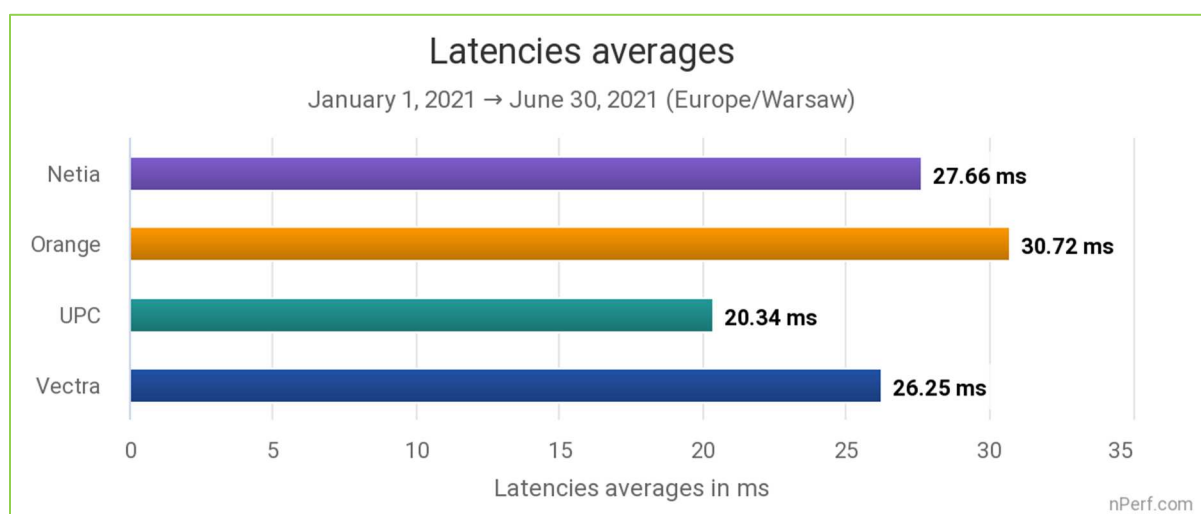— Netia — Orange — UPC — Vectra

nPerf.com

The above graph illustrates the ability of providers to maintain a constant upload speed over the period regardless of the network load (number of connected end-users).

We can notice that Orange and Netia recorded an impressive improvement in the first half of 2021, and manage to clearly exceed Vectra and UPC. Since 2019, three operators have more than doubled these speeds : + 101% for Netia, +120% for Vectra, and +137% for Orange. Only UPC grows much less, with only +46% only !

2.4 Latency

The average latency in Poland was 27 ms during the last semester.

Latencies averages
January 1, 2021 → June 30, 2021 (Europe/Warsaw)

Operator	Latency
Netia	27.66 ms
Orange	30.72 ms
UPC	20.34 ms
Vectra	26.25 ms

Latencies averages in ms

nPerf.com

The lowest value is the best.

UPC subscribers enjoyed the best average fixed latency through the last 6 months.

And this operator clearly makes the difference on this indicator : its competitors have correct results, but remain in a lower level group, in terms of latency. Netia is the one which has improved the most : 9 ms faster than in 2019, meaning 25% better.

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2.5 nPerf score, all technologies combined

The nPerf score, expressed in nPoints, gives an overall picture of the quality of a connection. It takes into account measured bitrates (2/3 Download + 1/3 Upload) and latency. These values are calculated on a logarithmic scale to better represent **the perception of the user**.
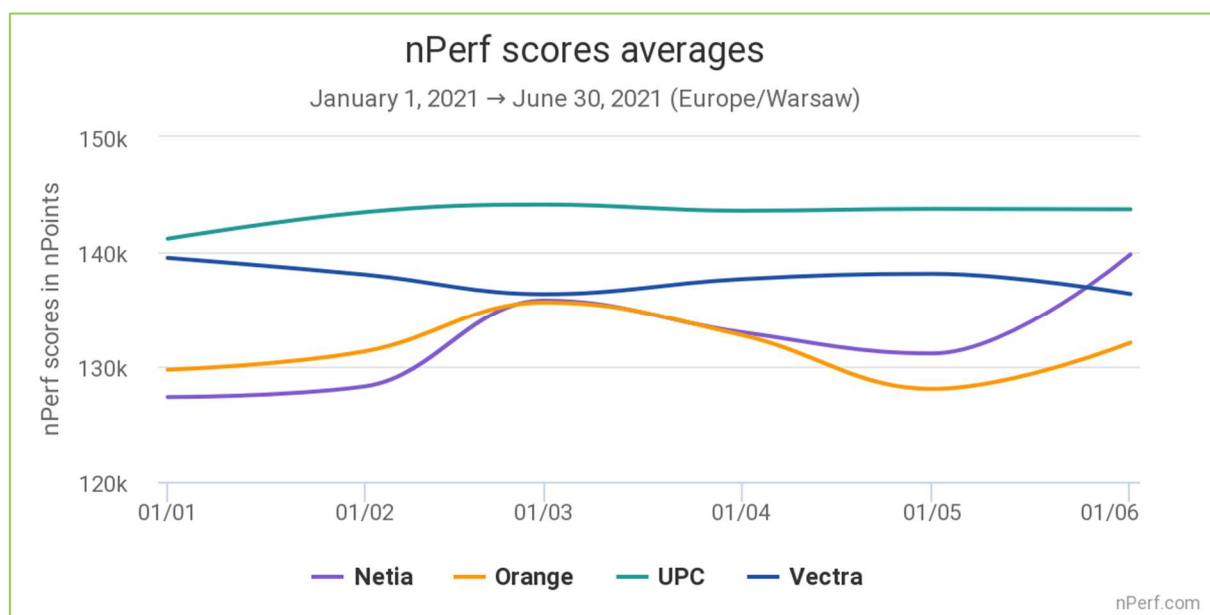
Thus, this score reflects **the overall quality of the connection** for mainstream consumer use.
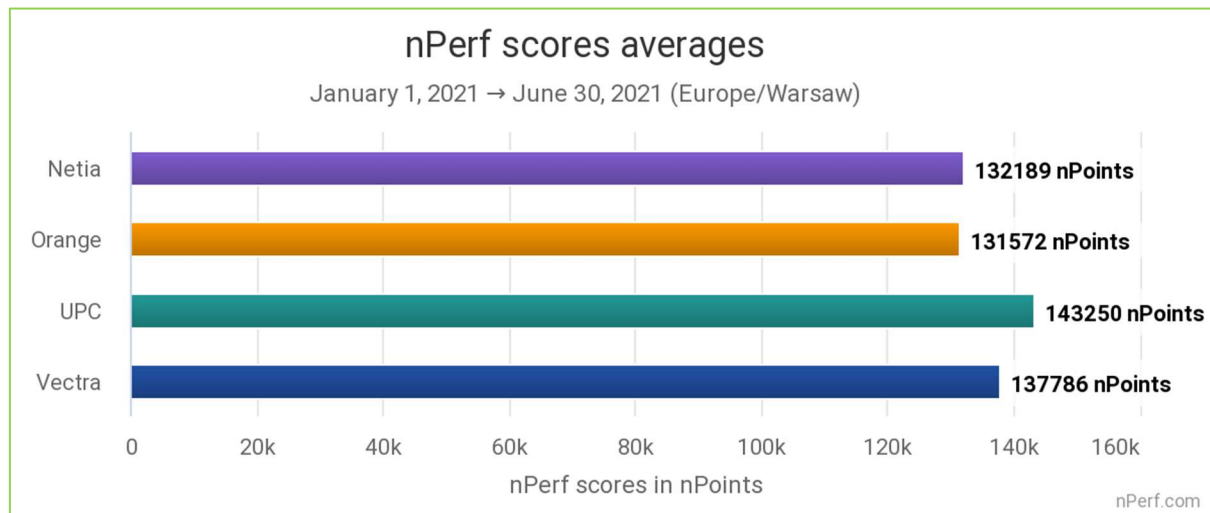
The highest value is the best.

UPC and Vectra subscribers enjoyed the best fixed Internet performance during the last semester.

We can graphicly check how UPC and Vectra have lead the race, with highly stable throughputs.

Nevertheless, this stability could be harmful : Netia and Orange are pushing hard and coming closer thanks to serious improvements and a very positive dynamic. In June, Netia has already overtaken Vectra.

3   Methodology

3.1   The panel

nPerf offers an Internet speed test application, which can be used for free at www.nPerf.com.

Everyone is free to use nPerf to measure the speed of their Internet connection. All the users of the nPerf application form the panel of this study.

In addition, the results from the nPerf speed tests integrated on our partner websites are also included in the panel.

Thus, the nPerf study is based on thousands of tests, making it the study with one of the largest panel in Poland.

3.2   Speed and latency tests

3.2.1   Objectives and operation of the speed and latency test

The purpose of the nPerf Speed Test is to measure the maximum capacity of the data connection in terms of data rates and latency.

To achieve this, nPerf establishes multiple connections simultaneously to saturate the bandwidth to accurately measure it. The speed used for the barometer is the average speed measured by the application.

Speed measurements thus reflect the maximum capacity of the data connection. This rate may not be representative of the user experience experienced during normal use of the Internet, as it is measured only on nPerf servers.

The measured bit rate can be impacted by the quality of the user's local network, especially since the expected flow is high. Thus, for an optical fiber internet connection, a local Wi-Fi or Power-Line connection can greatly reduce performance. However, since these constraints are identical to all market operators, they do not bias the comparison. In addition, the user is made aware of these constraints and invited to use a wired local connection for testing very high speed.

3.2.2   nPerf servers

To ensure maximum user bandwidth at all times, nPerf relies on a network of servers dedicated to this task.

These servers are located with hosts in Poland and abroad. nPerf has also installed dedicated servers directly at local ISPs to maximize measurement reliability.

Every local provider are welcome to install nPerf servers, that's free !

The total bandwidth available for Poland is greater than **80 Gb/s**, and exceeds **8 Tb/s** worldwide, with more than **2,000** active nPerf servers.

3.3 Filtering of test results

The results obtained are subject to automatic and manual checks to avoid duplication and to rule out possible abusive or fraudulent use (massive tests, robots ...).

Tests performed on cellular connections (2G, 3G, 4G,5G) are also excluded from this barometer.

3.4 Statistical accuracy

With regard to the total volume of unit tests, the statistical precision used in this publication is:

- ✓ **4% for absolute values**

If, for a given indicator, one or more operators have results close enough to the best, in the confidence interval defined above, these will be sharing the first place.

4 You too, participate in the nPerf panel!

To participate in the panel, simply test your connection on the website www.nperf.com. For mobile Internet, you can also use the nPerf app, available for free on the Apple AppStore for iPhone and iPad, and on Google Play for Android devices.

5 Custom analysis & contact

Do you need further study or want to get the raw data, punctually or automatically, to compile it yourself?

You can contact nPerf via www.nPerf.com "Contact Us" section, or directly from the mobile app.

Phone contact: +33 482 53 34 11

Address: nPerf SAS, 87 rue de Sèze, 69006 LYON, France

Stay in touch with us, follow us!