Barometer of fixed Internet connections in Moldova

2022 Report

Contents

1 Summary

1.1 KPIs and nPerf scores

nPerf barometer 2022
Fixed Internet connections in Moldova

		IDC	Moldtelecom	Orange	StarNet
▼ Download bitrate	(Mb/s)	40.17	85.47	186.01	133.13
▲ Upload bitrate	(Mb/s)	56.03	75.65	164.07	115.01
◀▶ Latency	(ms)	28.54	28.65	14.19	15.19
○ nPerf score	(nPoints)	117 027	131 193	★ 161 746	152 733

Focus on the fiber (FTTH)

		IDC	Moldtelecom	Orange	StarNet
▼ Download bitrate	(Mb/s)	120.69	297.83	361.16	327.96
▲ Upload bitrate	(Mb/s)	222.70	274.29	348.94	290.58
◀▶ Latency	(ms)	18.77	23.41	10.51	13.49
○ nPerf score	(nPoints)	153 029	164 869	★ 181 537	175 841

No.1 BROADBAND PERFORMANCE — nPerf AWARDS — **2022**

Orange
Best fixed Internet performances

Ranking based on all tests, all fixed technologies combined. Tests carried out on nPerf.com, and other partner sites, from 01/01/2022 to 31/12/2022, over the main broadband Internet consumer networks of the country.

Orange provided the best broadband Internet performances in Moldova in 2022.

1.2 Our analysis

This study is based on the tests carried out by users of the nPerf website. During the last year, users of the nPerf app in **Moldova** completed, after filtering, **26.741 tests.**

Orange is sacred champion of Moldovan broadband Internet.

In 2022 the download speed in the country reached in average 124 Mb/s and the upload speed 113 Mb/s.

Orange is far ahead of its competitors on speeds and also provided the best latency close to 14 ms on annual average, ahead of StarNet, 2nd in our general ranking.

Regarding the focus on the fiber, the ranking is the same. Orange, StarNet and Moldtelecom provided high download speeds around 300 Mb/s !

Orange is still in the lead by offering a latency close to 10 ms !

Moldovans can be delighted with these fine fiber Internet performances.

3

1 Global results

1.1 Data volume and distribution

Between **January 1st, 2022** and **December 31st, 2022** we counted in Moldova 35.597 speed tests through the main broadband national networks. After filtering (see § 5.4), **26.741 tests** have been retained, and their overall distribution per provider is as follows :
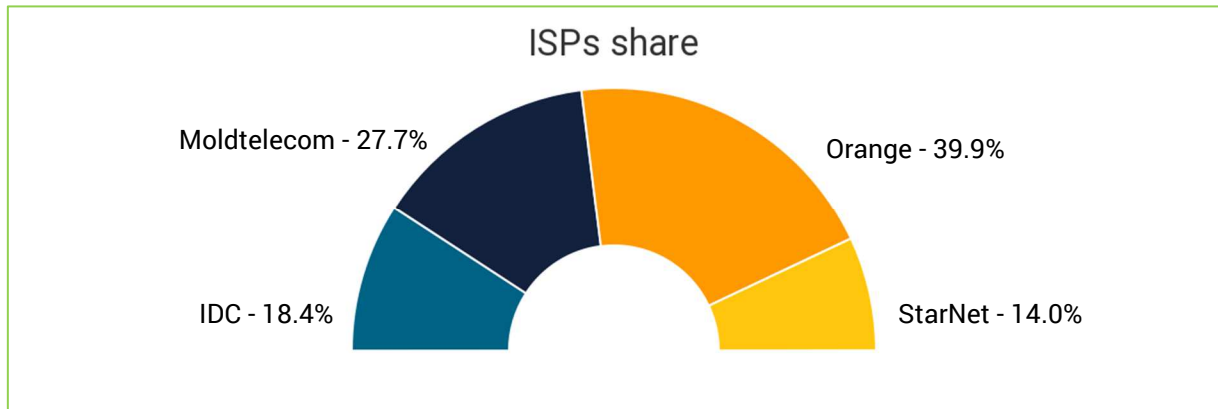
The distribution is not too unbalanced in the country. Orange, however, accounts for almost 40% of these, taking the lead in terms of representativeness.
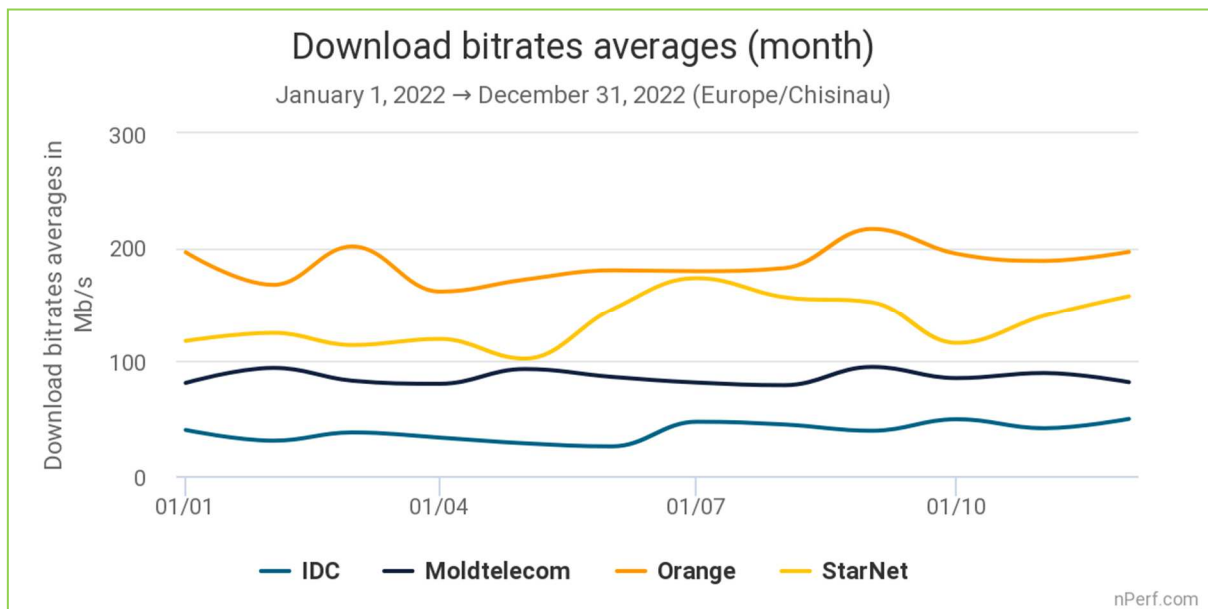
1.2 Download speed
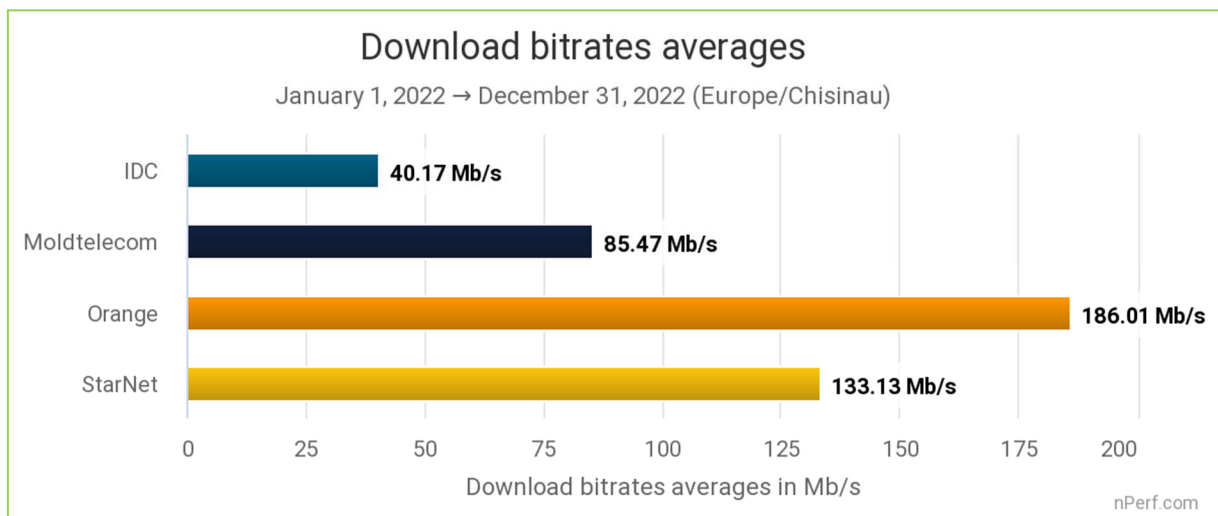
The highest speed is the best.

Orange subscribers enjoyed the best average broadband download speed in 2022.
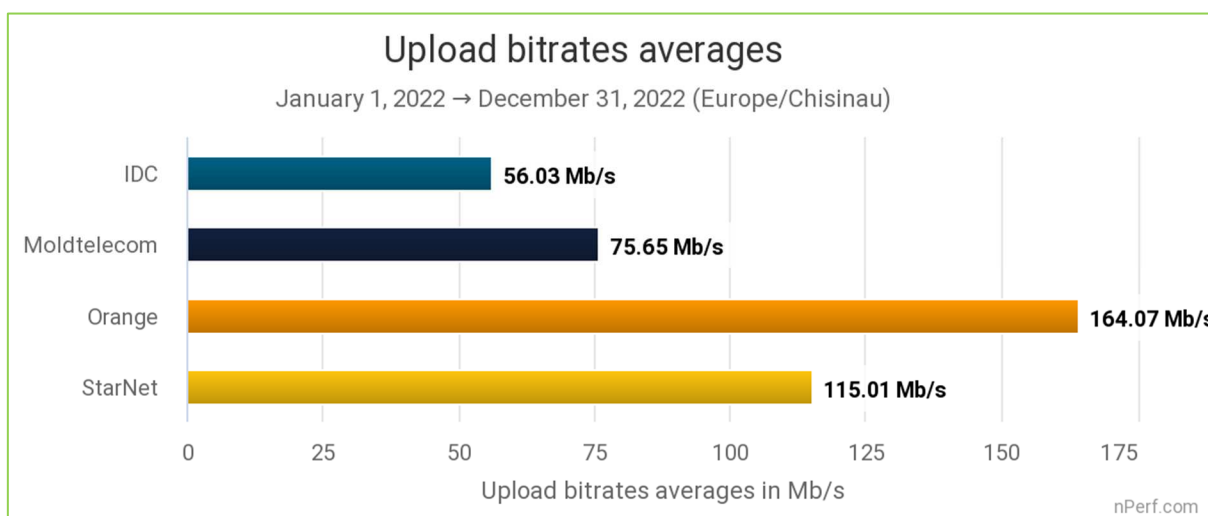
At the 200 Mb/s mark, no rival can overshadow the French firm's subsidiary on this measure. The second ranked company is StarNet, which in turn is far ahead of Moldtelecom and IDC, respectively third and last, and both below the 100 Mb/s average.

Download bitrates averages (month)

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

Download bitrates averages in Mb/s

— IDC — Moldtelecom — Orange — StarNet

The graph above shows the evolution of the *monthly* average bitrates throughout the period.
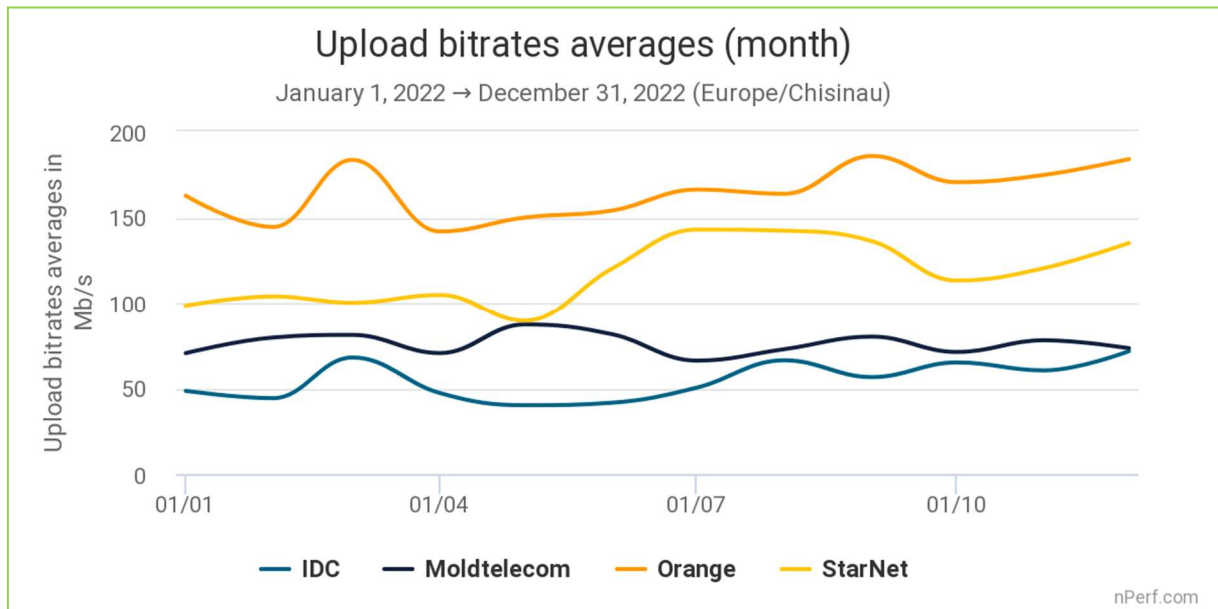
Over the past year, there has been no change in the monthly ranking of these four suppliers. This means that each of them has held the same rank as in the final ranking from the beginning to the end of 2022. StarNet experienced a significant improvement in the second half of the year.

1.3 Upload speed

5

Upload bitrates averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

IDC — 56.03 Mb/s
Moldtelecom — 75.65 Mb/s
Orange — 164.07 Mb/s
StarNet — 115.01 Mb/s

Upload bitrates averages in Mb/s

The highest speed is the best.

Orange subscribers enjoyed the best average broadband upload speed in 2022.

Upload bitrates averages (month)

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

— IDC — Moldtelecom — Orange — StarNet

nPerf.com

The graph above shows the evolution of the *monthly* average bitrates throughout the period.

The situation is similar to that of download speeds. Orange comfortably dominates throughout the period, with an almost symmetrical speed of around 164 Mb/s. StarNet is also its main competitor here, and has been improving its performance since last June. At a lower level, Moldtelecom closes the podium, and IDC offers the lowest speed, but higher than the download speed! There was no change in position in the monthly rankings either.

1.4 Latency

Latencies averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

IDC	28.54 ms
Moldtelecom	28.65 ms
Orange	14.19 ms
StarNet	15.19 ms

Latencies averages in ms

nPerf.com
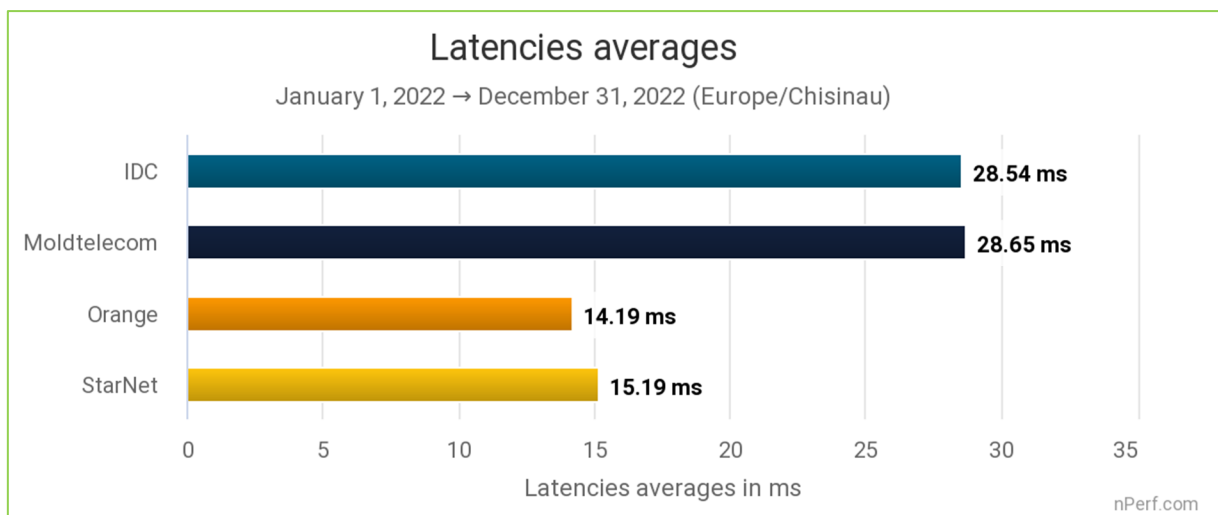
The shortest time is the best.

Orange subscribers enjoyed the best average broadband latency in 2022.

Latencies averages (month)

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

nPerf.com
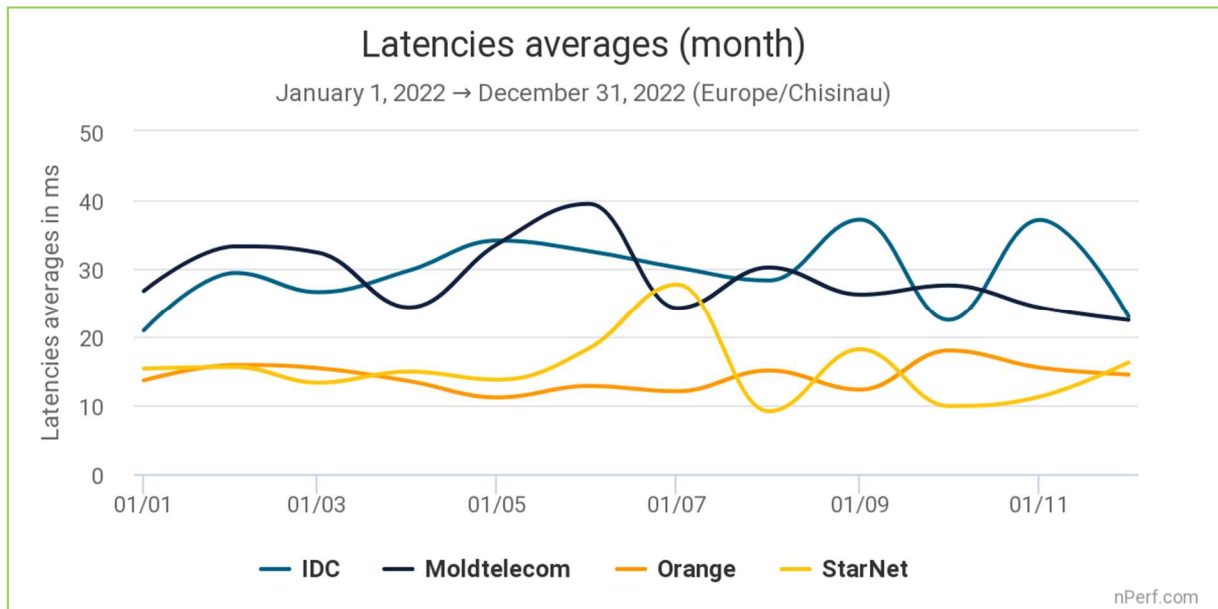
The graph above shows the evolution of the *monthly* average latency throughout the period.

When reading these statistics, two very distinct levels of average response time appear. On the one hand, Orange, the sole winner, is around 14 ms, and StarNet is chasing it, only 1 ms slower, although this is not enough to bring it within the confidence interval for victory. This is a pretty good level of latency. Much further down the list is IDC, who just barely finished in third place this time, followed by Moldtelecom in last place, just 0.1ms slower on average. Their latency is thus half as good as that of the leading duo. Their partial monthly rankings have varied, two by two, over the months, in each of these ISP pairs.

1.5 nPerf scores

The nPerf score, expressed in nPoints, gives an overall picture of the quality of a connection. It takes into account the measured bitrates (2/3 Download + 1/3 Upload) and the 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 **felt by the user**.
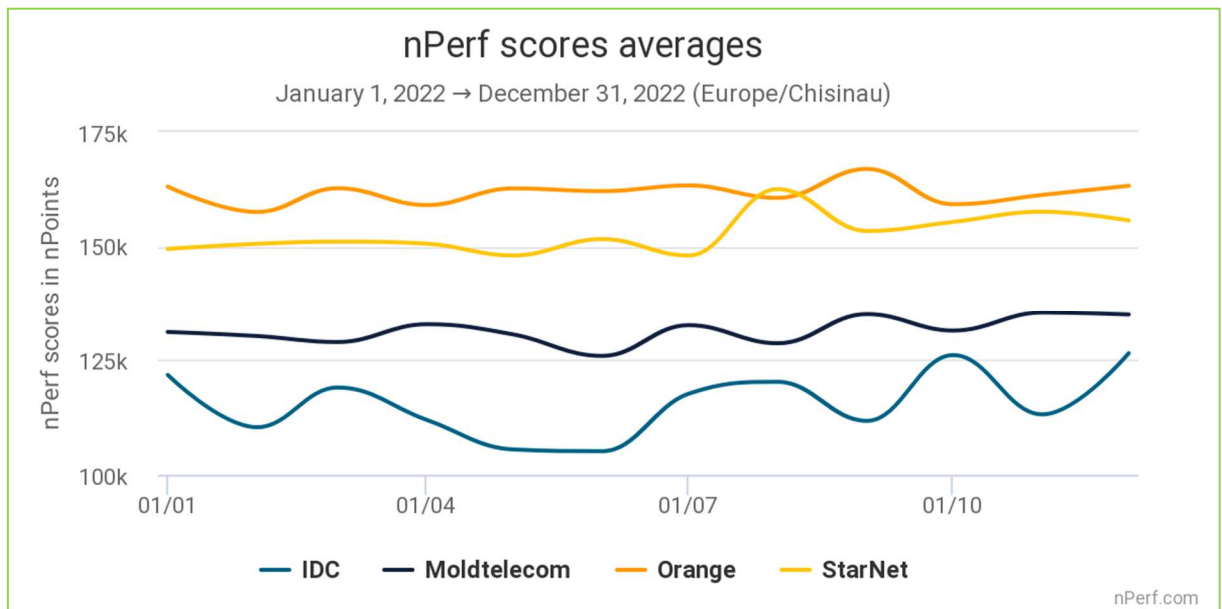
The results below consider all the previous indicators and therefore all the tests carried out. As technologies are grouped together, the proportion of tests in different technologies strongly impacts this global trend.
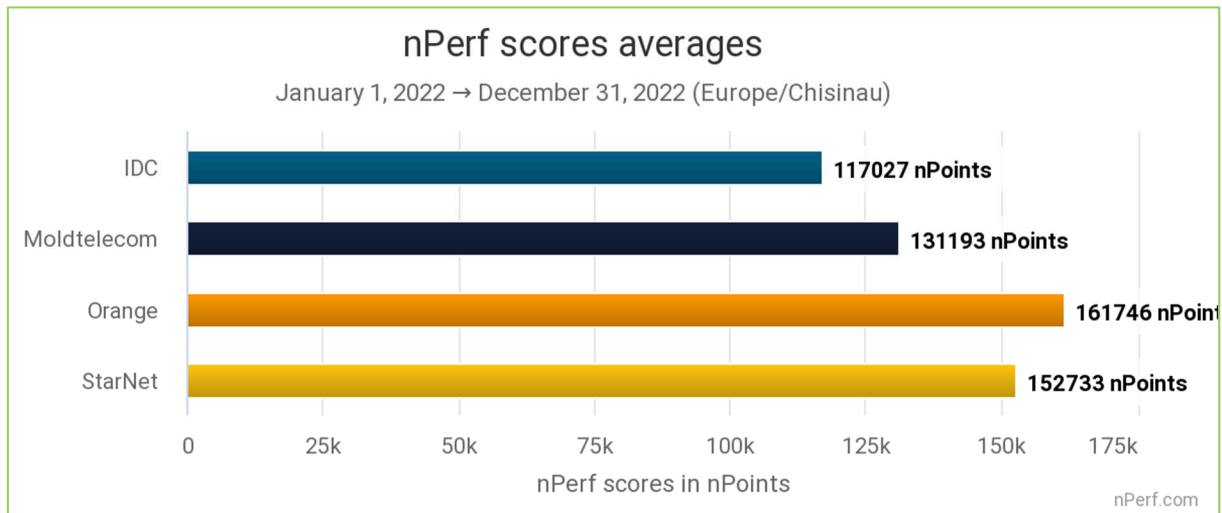
The highest value is the best.

Orange subscribers enjoyed the best broadband Internet performances in 2022.

The graph above illustrates the evolution of the *monthly* average scores throughout the period.

Thanks to a year full of solo victories, Orange has no difficulty in taking the crown of the first nPerf barometer of fixed connections in Moldova. Indeed, it clearly stands out for its almost symmetrical

speeds, ahead of second-placed StarNet in particular. On latency too, these two ISPs show a clear superiority over the two other competitors, Moldtelecom, the historical operator, and IDC, which finished third and last respectively in the general ranking.

The result is a two-tier fixed Internet landscape in Moldova, which Orange is set to dominate in the short term. At the moment, 9,000 nPerf points separate it from StarNet.

The average performance of broadband connections in the country is also pretty good.

> ⓘ Find this global indicator directly in the website, or on your mobile device, via the « Compare » function at the end of the (full) test. It is updated in real time over 14 rolling days.
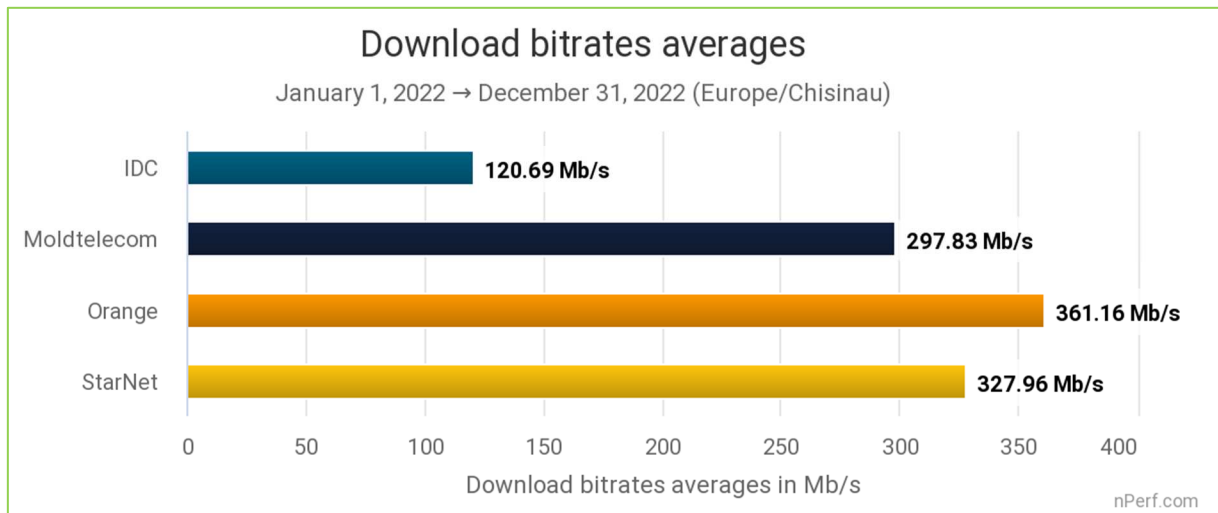
2 Results - fibre optics (FTTH)

2.1 Data volume and distribution

Between **January 1st, 2022** and **December 31st, 2022** we counted in Moldova 10.858 speed tests through the main fibre optics national networks. After filtering (see § 5.4), **6.685 tests** have been retained, and their overall distribution per provider is as follows :

ISPs share

Orange - 62.9%

Moldtelecom - 15.1%

IDC - 6.7%

StarNet - 15.3%
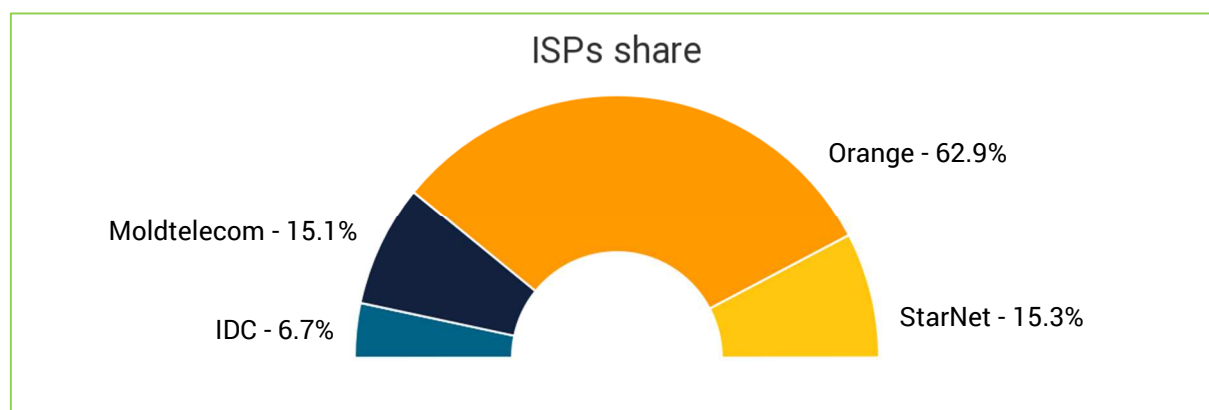
The indicators that follow in this section relate only to the FTTH technology (Fiber to the home) proposed by the carriers. In order to isolate the FTTH tests for the comparison, we have chosen to filter on an upload bitrate greater than or equal to 100 Mb/s. Thus, only the FTTH results stand out, the technologies like FTTLA / FTTB, G-Fast or VDSL are discarded. However, this filter also eliminates "bad" FTTH tests, at least those that have a bitrate below 100 Mb/s. This filtering is identical for all operators, it does not put into question the comparison.
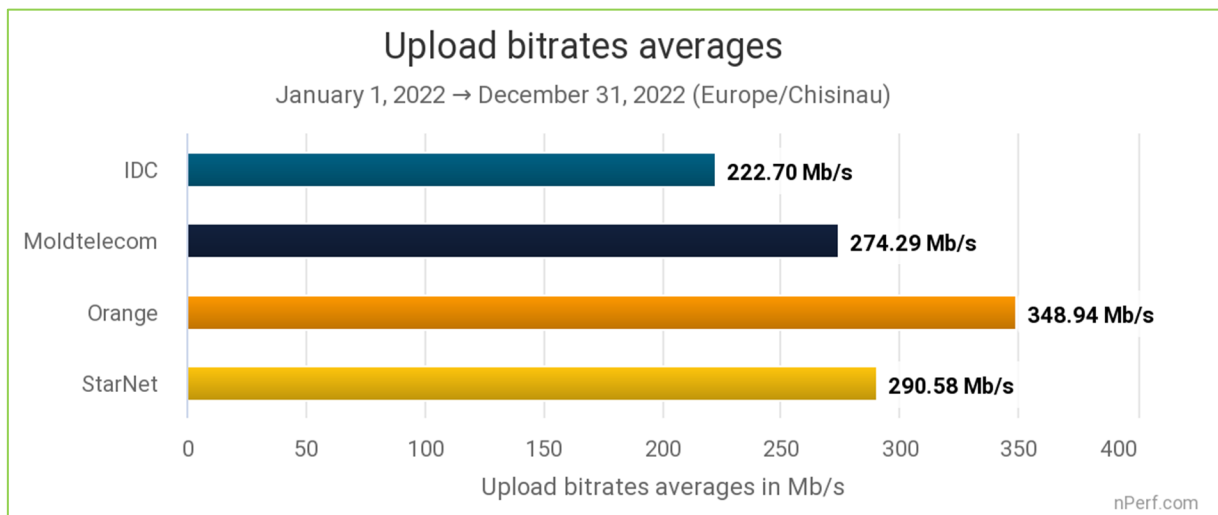
2.2 Download speed (FTTH)

Download bitrates averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

Provider	Download bitrates averages in Mb/s
IDC	120.69 Mb/s
Moldtelecom	297.83 Mb/s
Orange	361.16 Mb/s
StarNet	327.96 Mb/s

nPerf.com

The highest value is the best.

Orange subscribers enjoyed the best average FTTH download speed in 2022.

2.3 Upload speed (FTTH)

Upload bitrates averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

Provider	Upload bitrates averages in Mb/s
IDC	222.70 Mb/s
Moldtelecom	274.29 Mb/s
Orange	348.94 Mb/s
StarNet	290.58 Mb/s

nPerf.com
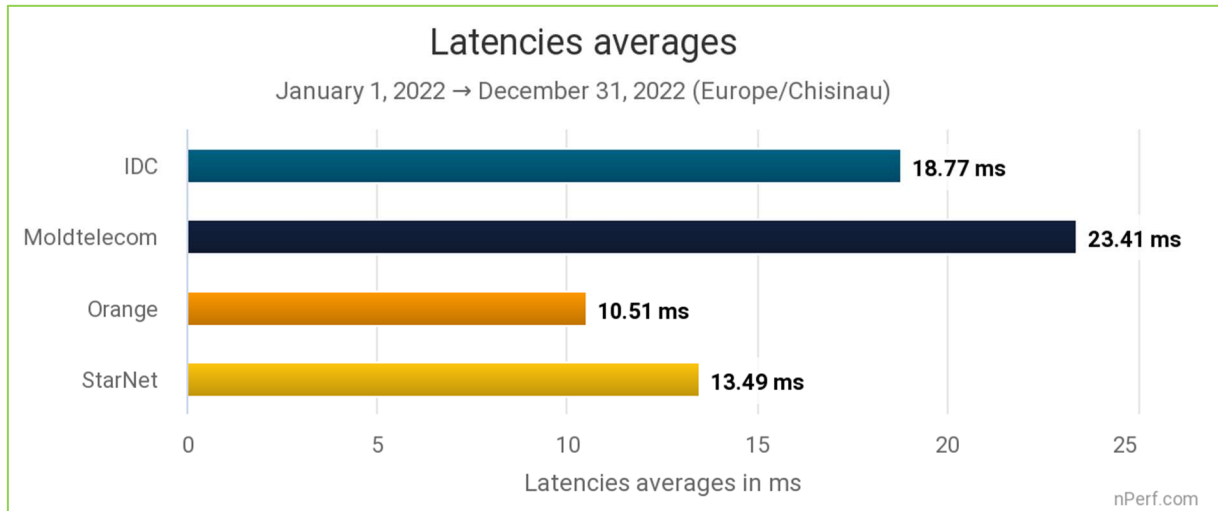
The highest value is the best.

Orange subscribers enjoyed the best average FTTH upload speed in 2022.

2.4 Latency (FTTH)

Latencies averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

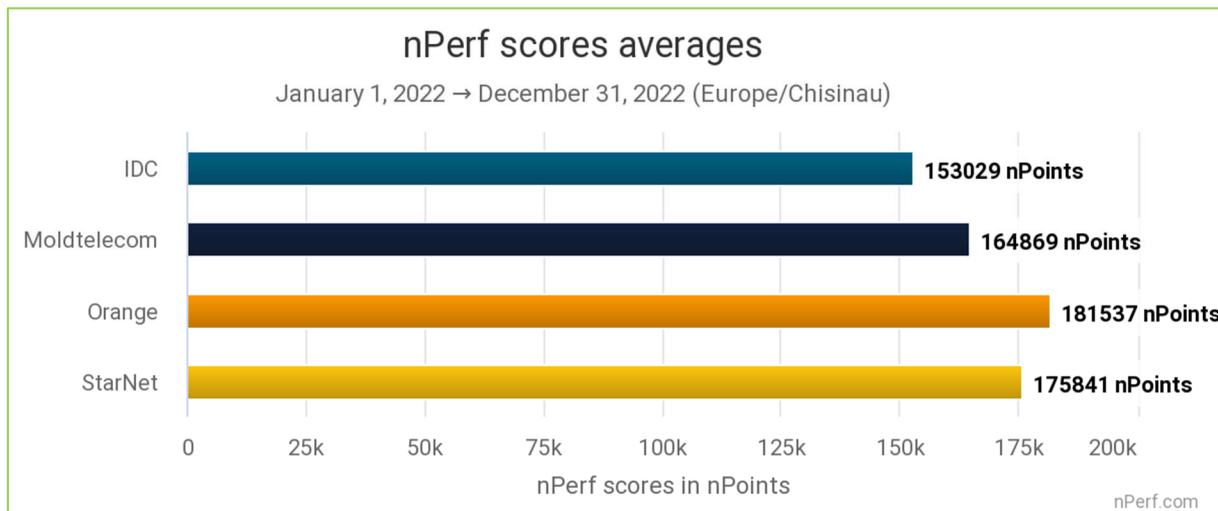|	Latency
IDC	18.77 ms
Moldtelecom	23.41 ms
Orange	10.51 ms
StarNet	13.49 ms

The shortest time is the best.

Orange subscribers enjoyed the best average FTTH latency in 2022.

2.5 nPerf score (FTTH)

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.

nPerf scores averages

January 1, 2022 → December 31, 2022 (Europe/Chisinau)

	nPerf score
IDC	153029 nPoints
Moldtelecom	164869 nPoints
Orange	181537 nPoints
StarNet	175841 nPoints

The highest value is the best.

Orange subscribers enjoyed the best 2022 Internet performances on FTTH networks.

On this category, the situation is quite similar as for the general results, with Orange leading every single indicator and its main challenger is StarNet. These results are in line with those observed in the main countries of western Europe.

3 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.

4 Custom analysis & contact

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

You can contact nPerf via www.nperf.com through the "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!

5 Methodology

5.1 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 quality of their Internet connection. The panel of this study is formed by its users **in Moldova**. 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 the **thousands of tests** carried out monthly, exclusively by the operators' end customers, which makes it the "crowdsourced" study based on **one of the largest panels of the country.**

These tests reflect the **actual experience of the general public** on the various Internet networks.

5.2 Speed and latency tests

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.

5.3 nPerf servers

To ensure maximum user bandwidth at all times, nPerf relies on a network of servers dedicated to this task. These servers are hosted in the country and abroad. Indeed, nPerf has also installed dedicated servers directly at some providers' facilities, to maximize measurement reliability. **Local carriers are welcome** to install nPerf servers, that's free !

The total bandwidth available for Moldova is **30 Gb/s**, and reaches more than **12 Tb/s** worldwide**, with more than **2.560** active nPerf servers!

13

5.4 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…).

The exclusive nPerf algorithm retains only the relevant tests, thus eliminating biases related to the overrepresentation of certain terminals, users or test locations.

The results are classified by provider. Tests performed on cellular connections (2G, 3G, 4G & 5G), or on business/wholesale/military/academic/public/private networks are also excluded from this barometer.

5.5 Statistical accuracy

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

Category	Number of tests (filtered)	Absolute values	Percentages
Global	26.741	3%	1 point
FTTH	6.685	3%	1 point

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

14