Barometer of fixed Internet connections in Kazakhstan

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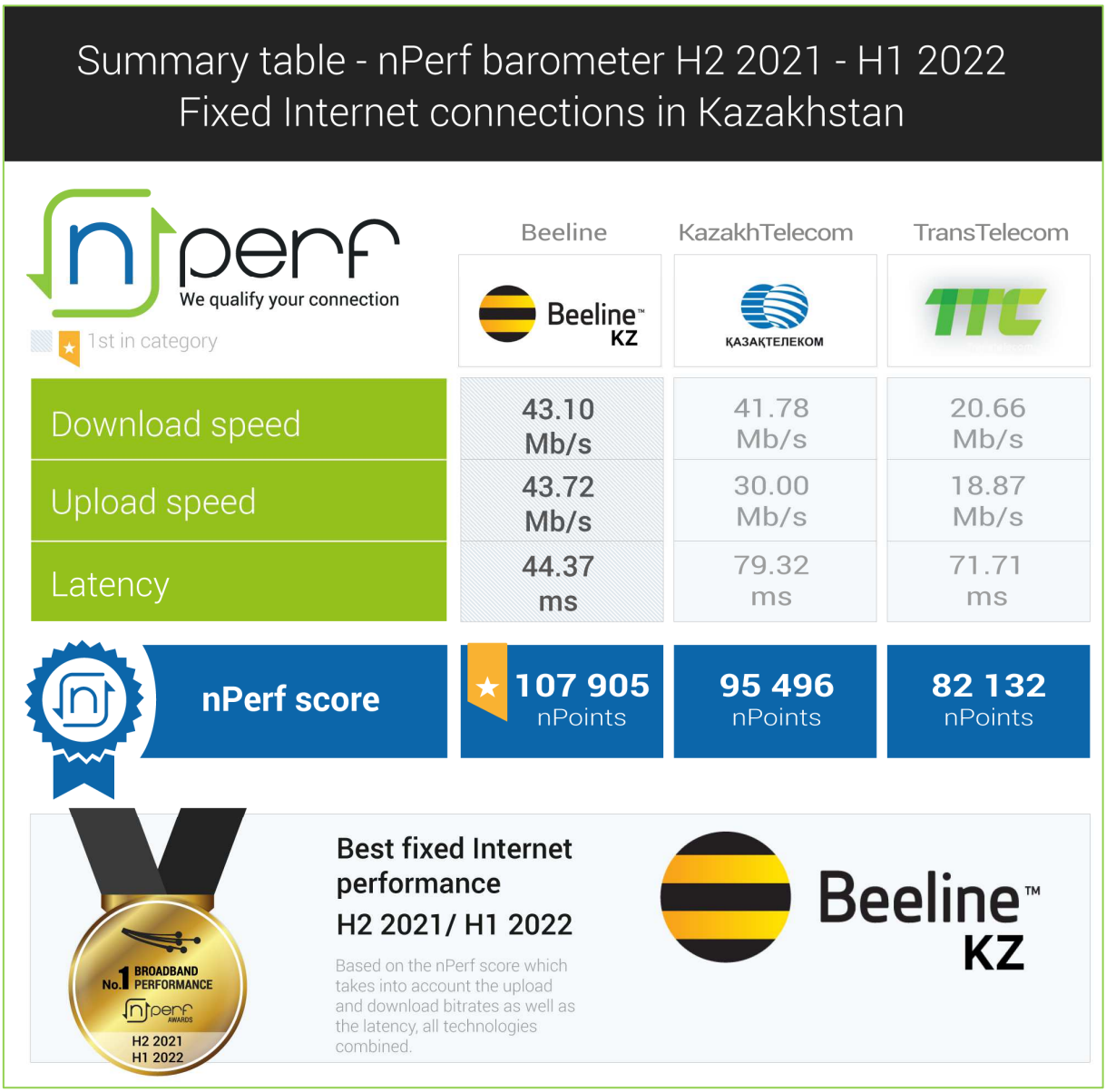
1 Overall results

1.1 Summary table and nPerf score



Beeline provided the best broadband Internet performances in Kazakhstan during the last two semesters.

1.2 Our analysis

This study is based on tests carried out by users of the nPerf website. During the last two semesters, users of the nPerf app completed, before filtering, **128.755 tests.**

Beeline is the champion of the Kazakh broadband Internet. By leading all the main studied indicators, this provider obtains the best score : it is the only one above 100.000 nPoints.

The largest advantage for Beeline, when comparing to its rival, rely in the latency. Its bitrates record a particularly rare symmetry, so much so that its speed is slightly higher for uploading than for downloading! The score gap should be enough to keep its competitors to distance for a while.

KazakhTelecom is the closest challenger of this year's study.

Indeed, its download speed is quite close to the winner's one, its upload speed is in the exact middle between its rivals', but its time of response is the worst of all, overtaken by TTC.

By the way, and as obvious, its share in our testing panel is obviously particularly large.

TransTelecom ends up in the last position our ranking, after showing the worst bitrates (approx. 20 Mb/s each) and a poor latency too. It will need to seriously improve its results to be able to compete.

In general, the national figures are rather correct, but their progress haven't been impressive across the last months. Will the beginning of the improvement seen in May and June become sustainable and allow to cross a qualitative threshold?
Thus, should we expect any surprises in the forthcoming months ? Of course, nPerf will keep an eye on this!

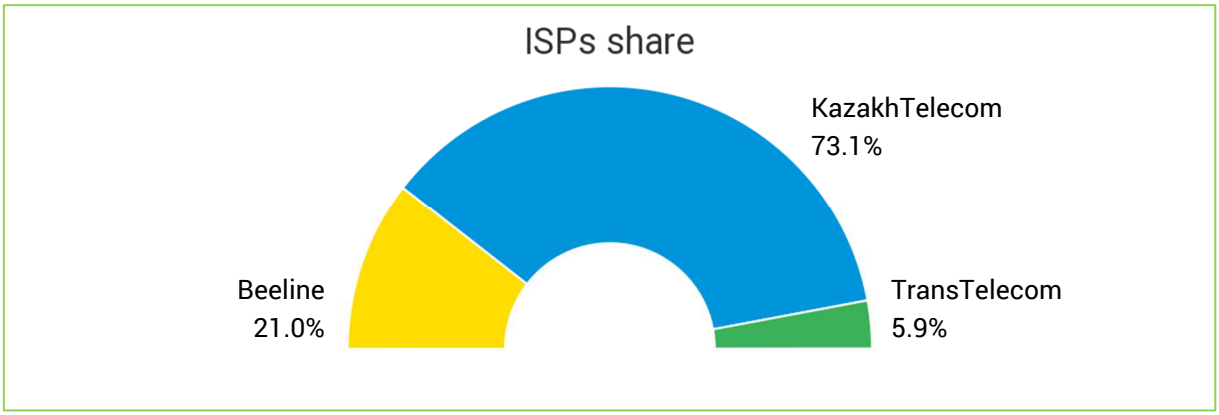
1 Results, all technologies combined

1.1 Data volume and distribution

Between **July 1st, 2021** and **June 30th, 2022** we counted in Kazakhstan **128.755 speed tests**, distributed as follows, after filtering (see § 4.4) :

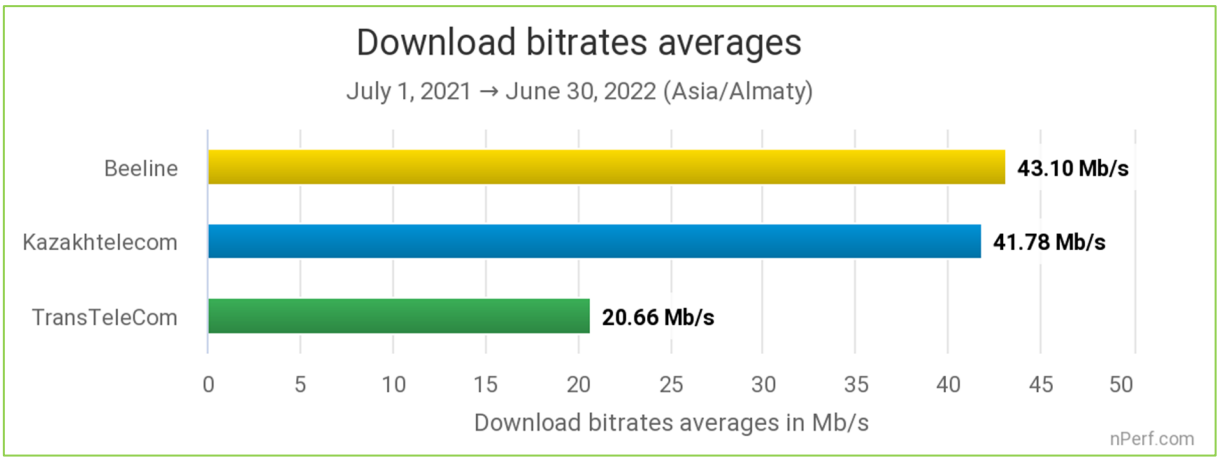
Country	Total
Kazakhstan	**116.989**

The overall distribution of the tests per provider is as follows:



KazakhTelecom, the national fixed-line incumbent operator, accounts for the vast majority of tests carried out in the country during the last twelve months. TransTelecom has replaced Alma+ in our latest barometer.

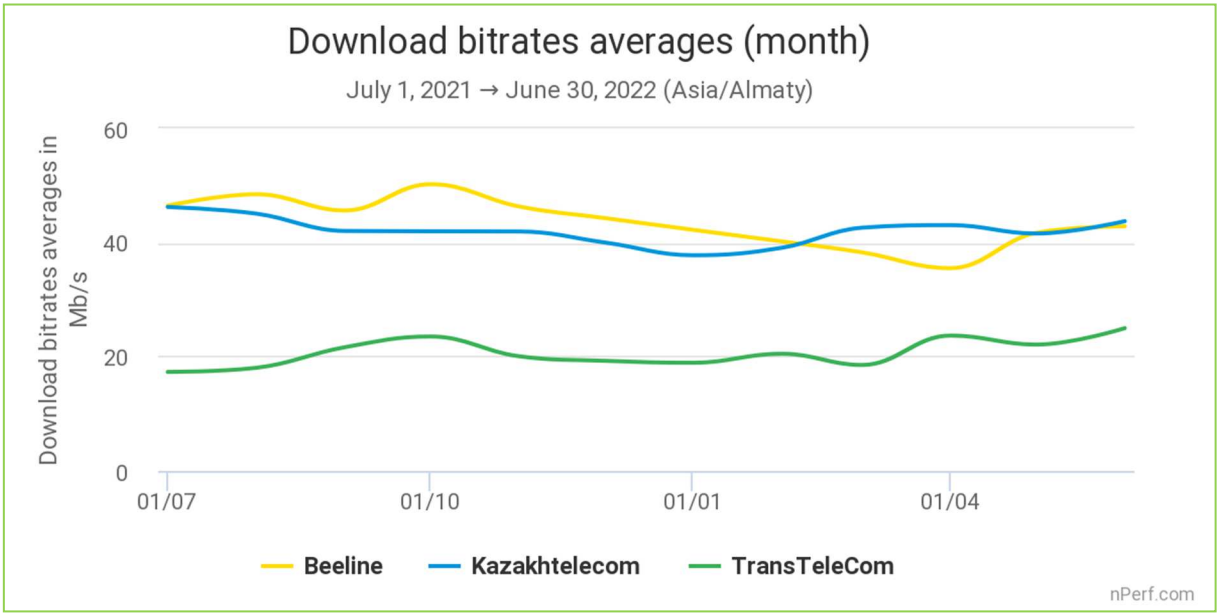
1.2 Download speed



The highest speed is the best.

Beeline subscribers enjoyed the best average broadband download speed, during the last two semesters.

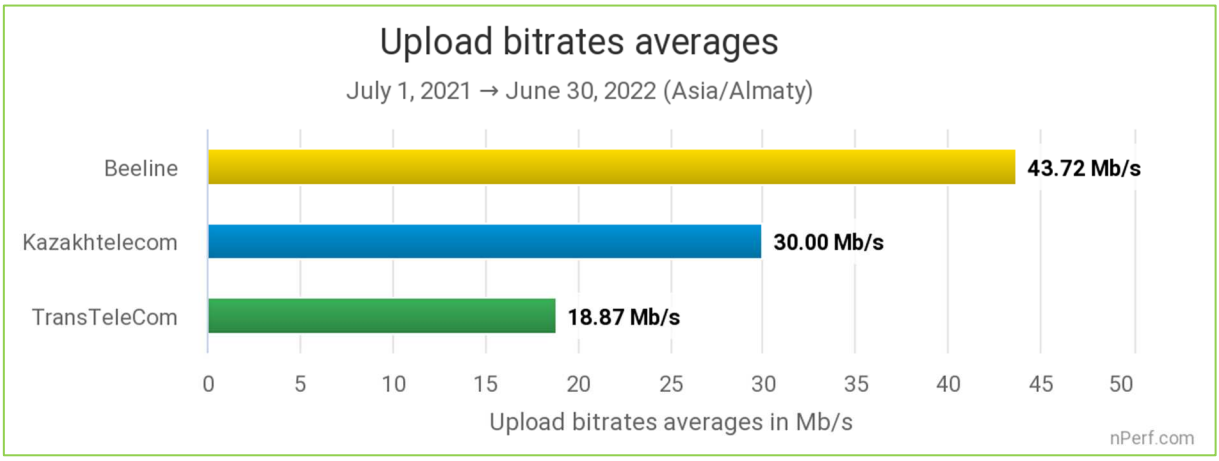
KazakhTelecom follows it closely, still above 40 Mb/s, while TransTelecom finishes far below them with a bitrate that is twice as slow.



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

KazakhTelecom only manages to overtake its winner opponent in last March an April. TransTelecom doesn't even get close to its rival at any moment, staying around 20 Mb/s constantly.

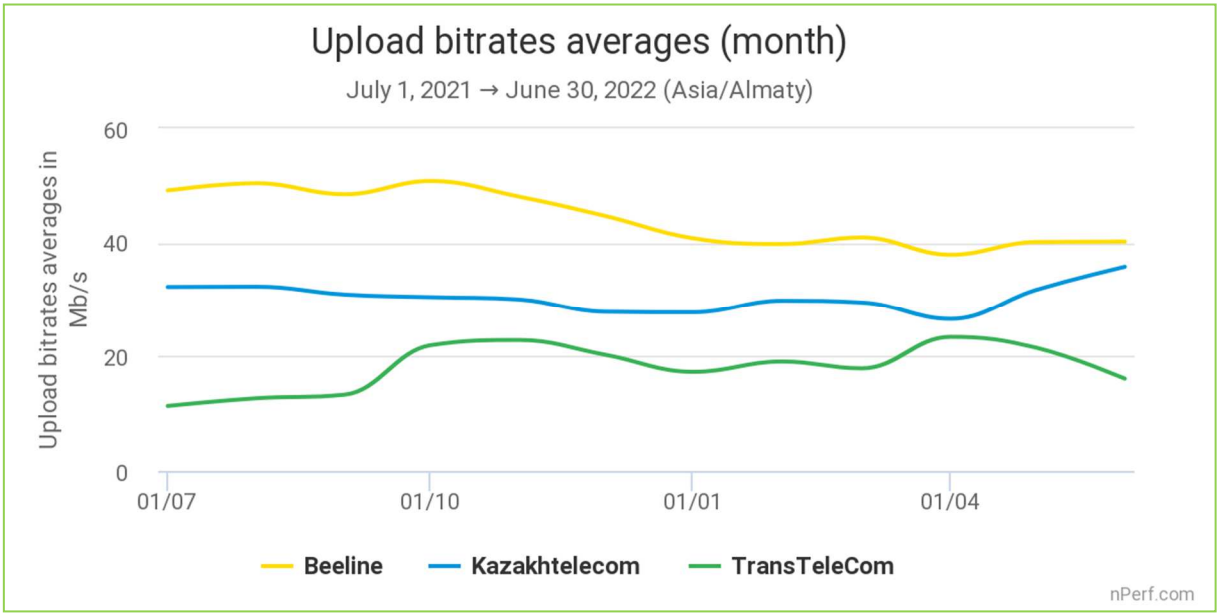
1.3 Upload speed



The highest speed is the best.

Beeline subscribers enjoyed the best average broadband upload speed, during the last two semesters.

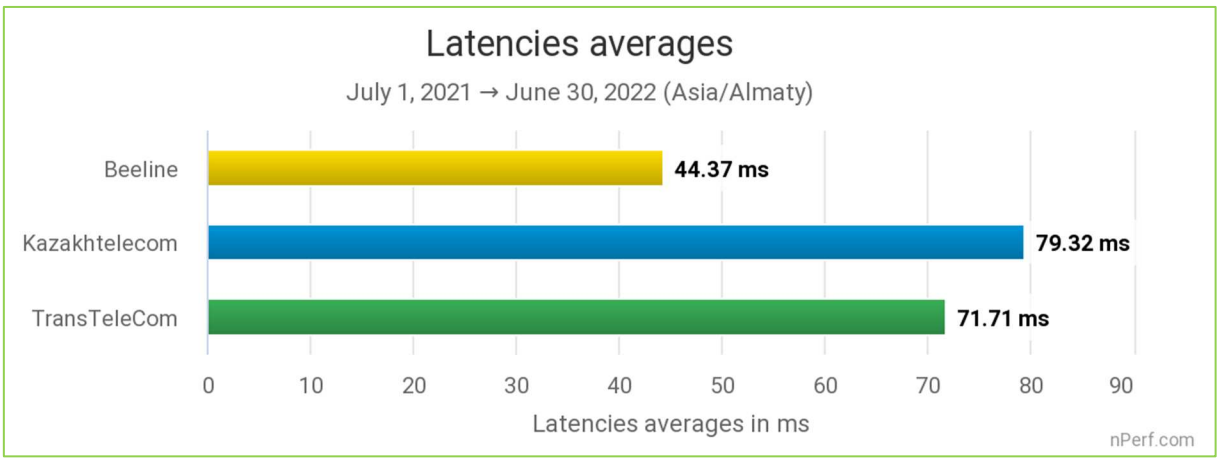
Here, the perfectly symmetric bitrates of Beeline help it to easily lead the upload speed battle. KazakhTelecom shows only 69% of Beeline's bitrate, whereas TTC remains under 19 Mb/s.



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

Nevertheless, Beeline seems to worsen its upload speed, falling from 50 to 40 Mb/s approximately. On the other hand, KazakhTelecom has markedly improved its figures in May and June 2022.

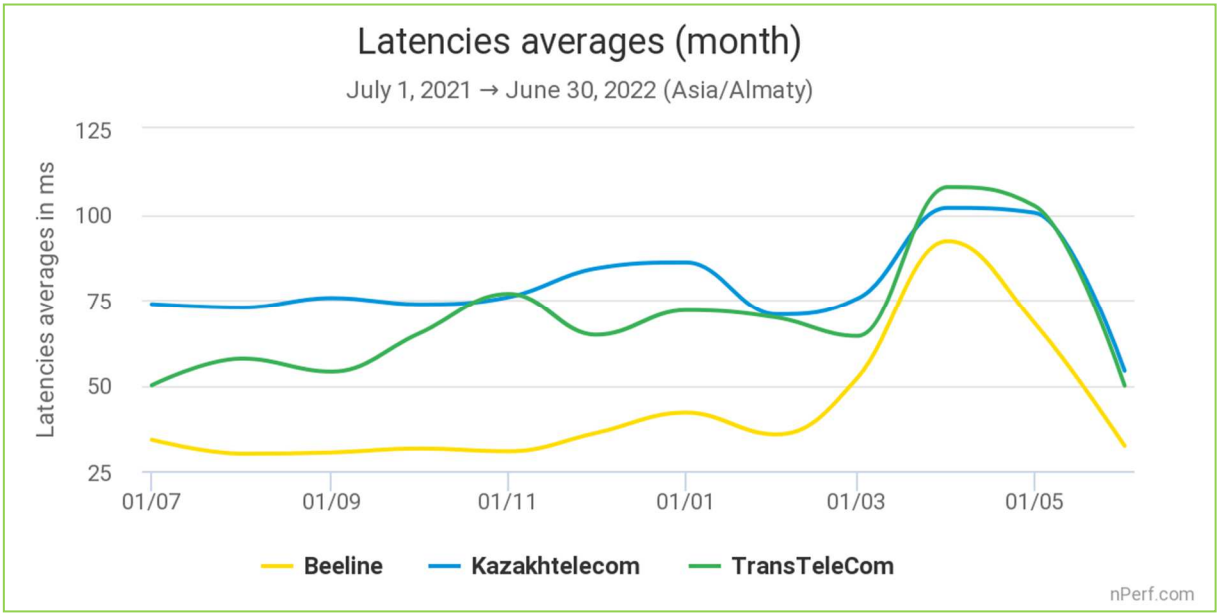
1.4 Latency



The shortest time is the best.

Beeline subscribers enjoyed the best average broadband latency, during the last two semesters.

By showing average figures of 44 ms, Beeline records the fastest times of response of the country. Its victory is comfortable, as its rivals situate far behind, between 70 and 80 ms on average.



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

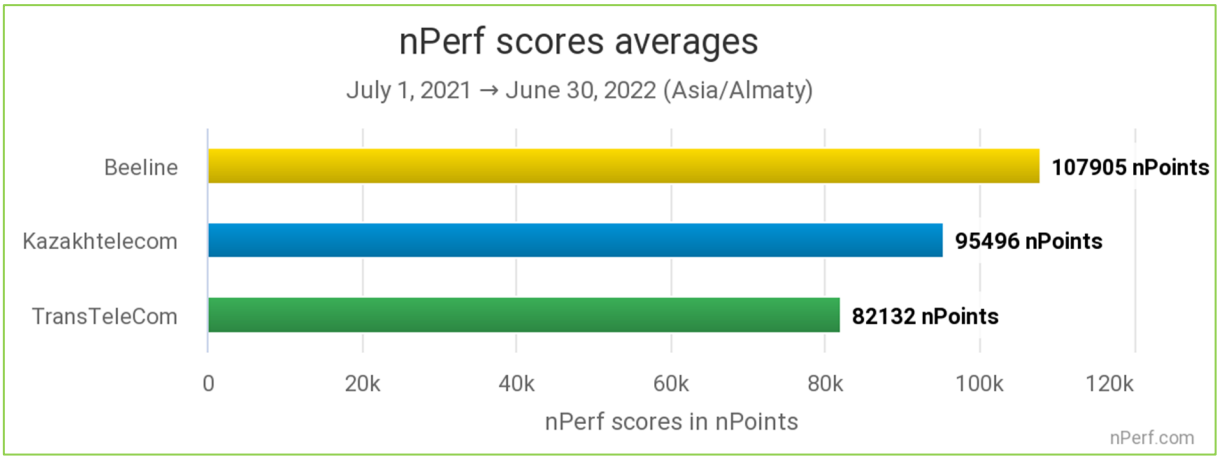
There must have been an issue, for all ISP and from March to May, regarding the time of response : figures exploded until reaching 100 ms approximately. This event seems to have occurred a month earlier on Beeline's network. The situation had already returned to normal in June.

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.

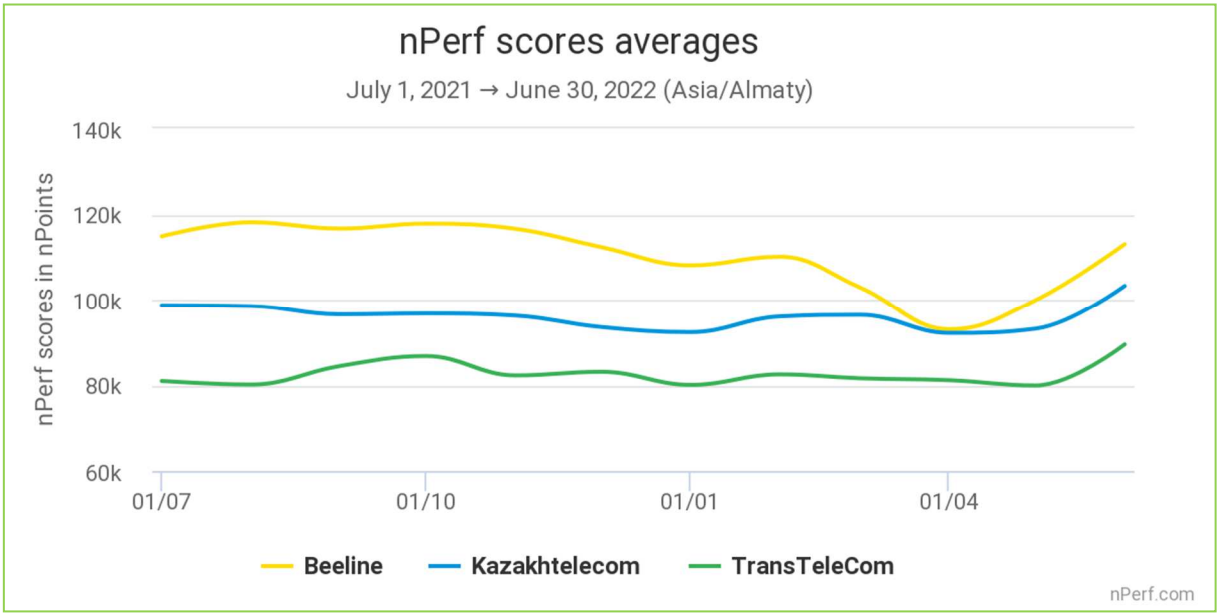
Thus, this score reflects the overall quality of the connection **felt by the user**.

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.

Beeline subscribers enjoyed the best broadband Internet performances, during the last two semesters.



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

The step ahead of Beeline has been constant. Its closest challenger is KazakhTelecom. To sum up, the scores are evenly spaced, from 82.000 nPoints for TTC, to 108.000 for Beeline, with the national incumbent operator finishing in the middle.
The global evolution haven't been outstanding across the last months. What if the beginning of the improvement seen in May and June becomes sustainable and allows to cross a qualitative threshold soon?

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 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.

3 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!

4 Methodology

4.1 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 **Kazakhstan**. 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.

4.2 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.

4.3 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 **Kazakhstan** is **24 Gb/s**, and reaches more than **10 Tb/s** worldwide**,** with more than **2.300** active nPerf servers!

4.4 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 professional/business/military/academic networks are also excluded from this barometer.

4.5 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	116.989	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**.