Barometer of Fixed Internet Connections in Turkey

2019 Report

Publication of

February 19th, 2020
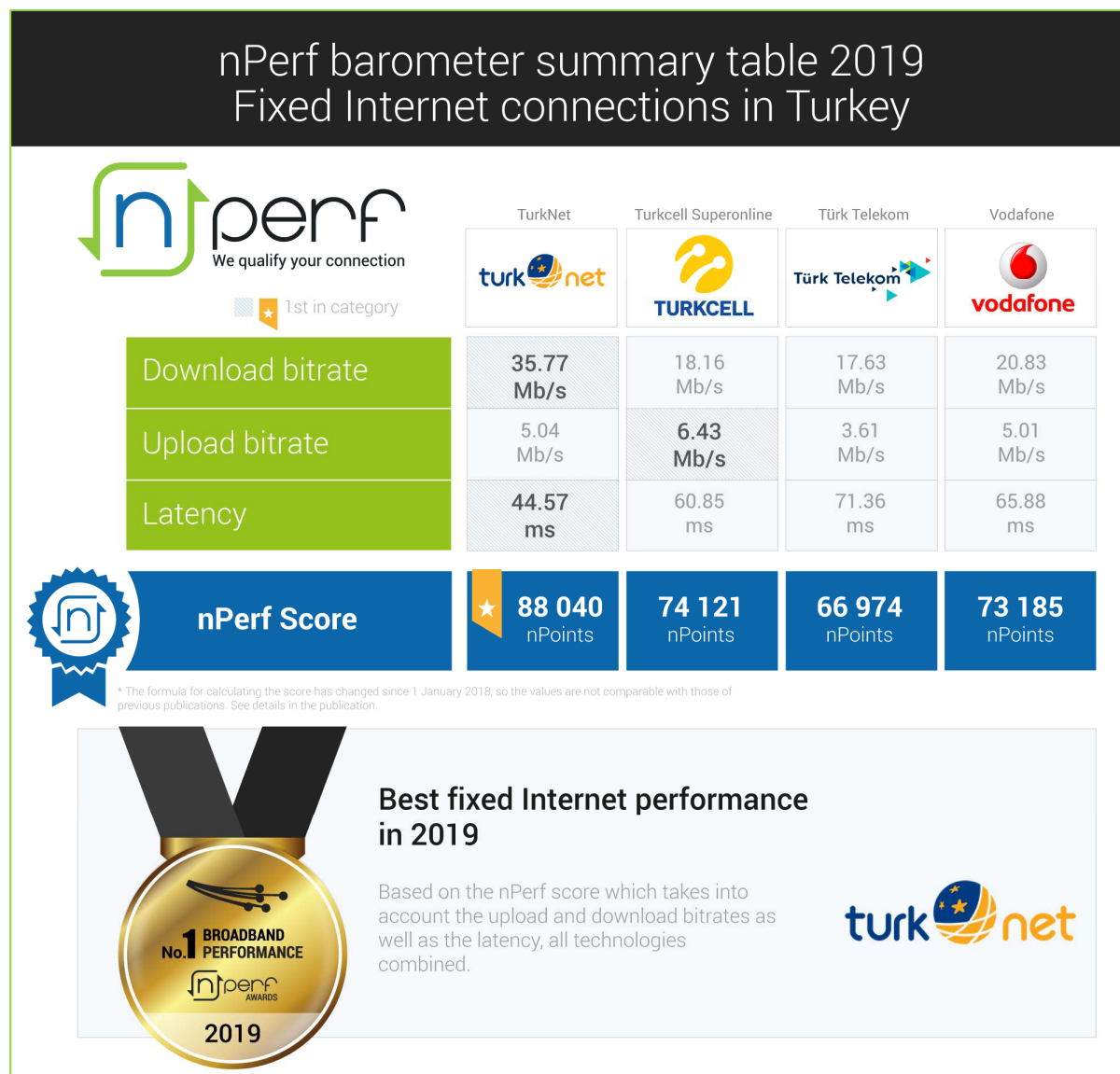
Web speed test

Test your ADSL, xDSL, cable, optical fiber or satellite broadband connection bandwidth.

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95.91
Mb/s

Content

1 Summary results

1.1 Summary table and nPerf score, all technologies combined

nPerf barometer summary table 2019
Fixed Internet connections in Turkey

	TurkNet	Turkcell Superonline	Türk Telekom	Vodafone
Download bitrate	35.77 Mb/s	18.16 Mb/s	17.63 Mb/s	20.83 Mb/s
Upload bitrate	5.04 Mb/s	6.43 Mb/s	3.61 Mb/s	5.01 Mb/s
Latency	44.57 ms	60.85 ms	71.36 ms	65.88 ms
nPerf Score	88 040 nPoints	74 121 nPoints	66 974 nPoints	73 185 nPoints

1st in category

* The formula for calculating the score has changed since 1 January 2018, so the values are not comparable with those of previous publications. See details in the publication.

Best fixed Internet performance in 2019

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

*** TurkNet, the best fixed Internet performance in 2019 ***

1.2 Our analysis

In 2019, nPerf users performed **107,187** connection tests on the four largest ISPs in Turkey. After filtering, our survey is based on **83,152 relevant tests**.

With 88,040 nPoints, **TurkNet has provided the best fixed internet performance 2019.**

TurkNet is the winner of two categories:

- **Best download speed** with 35.8 Mb/s
- **Best latency** with 44.6 ms

And is in second position on the upload speed with 5 Mb/s.

TurkNet leaves no chance to its competitors!

TurkCell Superonline first on upload speed

Regarding the upload speed, Turkcell Superonline has delivered the best upload speed on fixed networks with an average speed of 6.4 Mb/s.

Conclusion

On fixed networks, one provider clearly makes the difference. With a download speed of 35.8 Mb/s Turknet has no rivals for the moment but should still keep an eye on TurkCell Superonline who has been gradually approaching the score for the past few months.
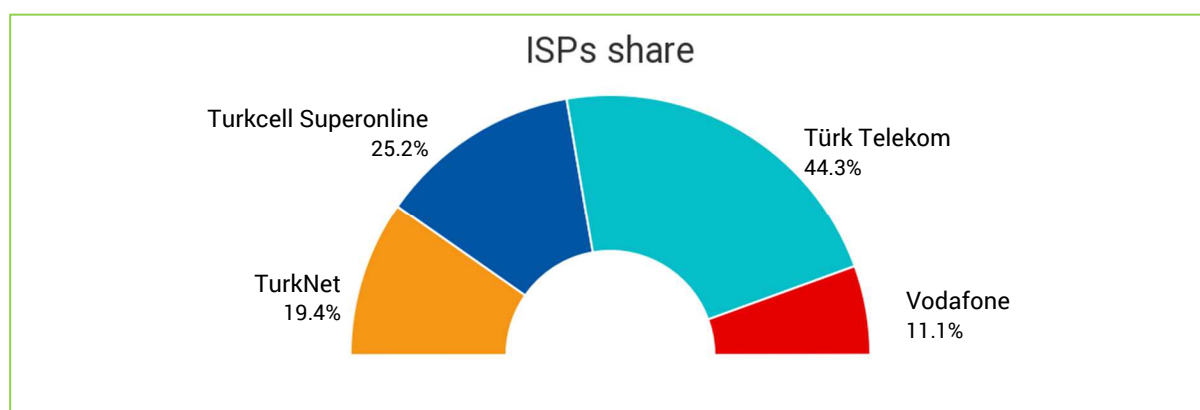
2 Overall results

2.1 Data amount and distribution

Between January 1, 2019 – December 31, 2019, we counted **107,187** unit tests, distributed as follows, after filtering (see § 3.4):
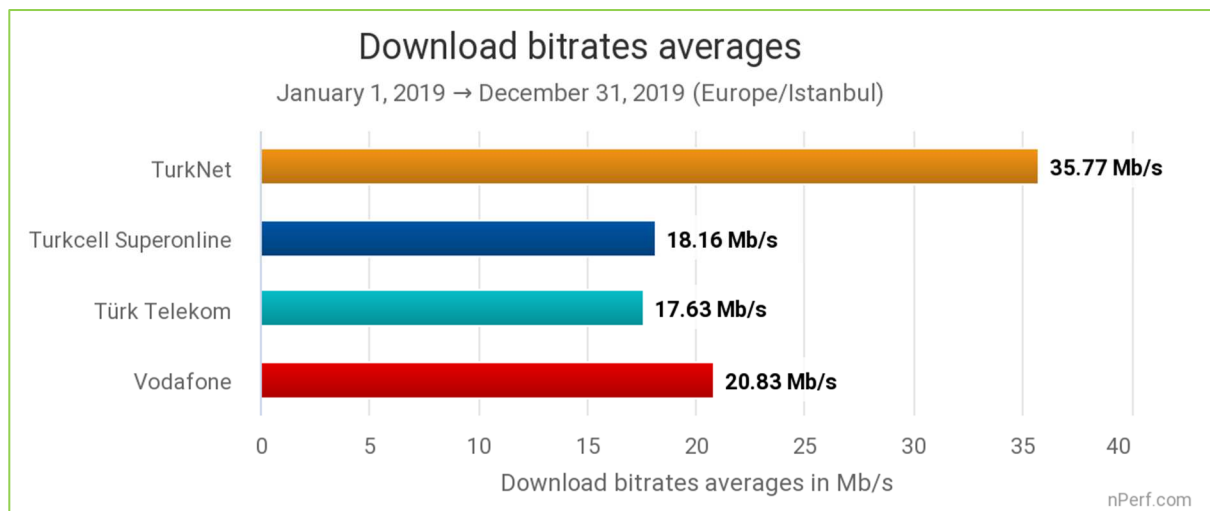
Country	Tests
Turkey	**83,152**

Breakdown of tests by provider

ISPs share

Turkcell Superonline 25.2%

Türk Telekom 44.3%

TurkNet 19.4%

Vodafone 11.1%

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2.2 Download speed

In 2019, the average download speed in Turkey was 21Mb/s.

Download bitrates averages
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

Provider	Download bitrates averages in Mb/s
TurkNet	35.77 Mb/s
Turkcell Superonline	18.16 Mb/s
Türk Telekom	17.63 Mb/s
Vodafone	20.83 Mb/s

The highest value is the best.

TurkNet has provided the best fixed download speed during 2019.

Download bitrates averages (month)
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

— TurkNet — Turkcell Superonline — Türk Telekom — Vodafone

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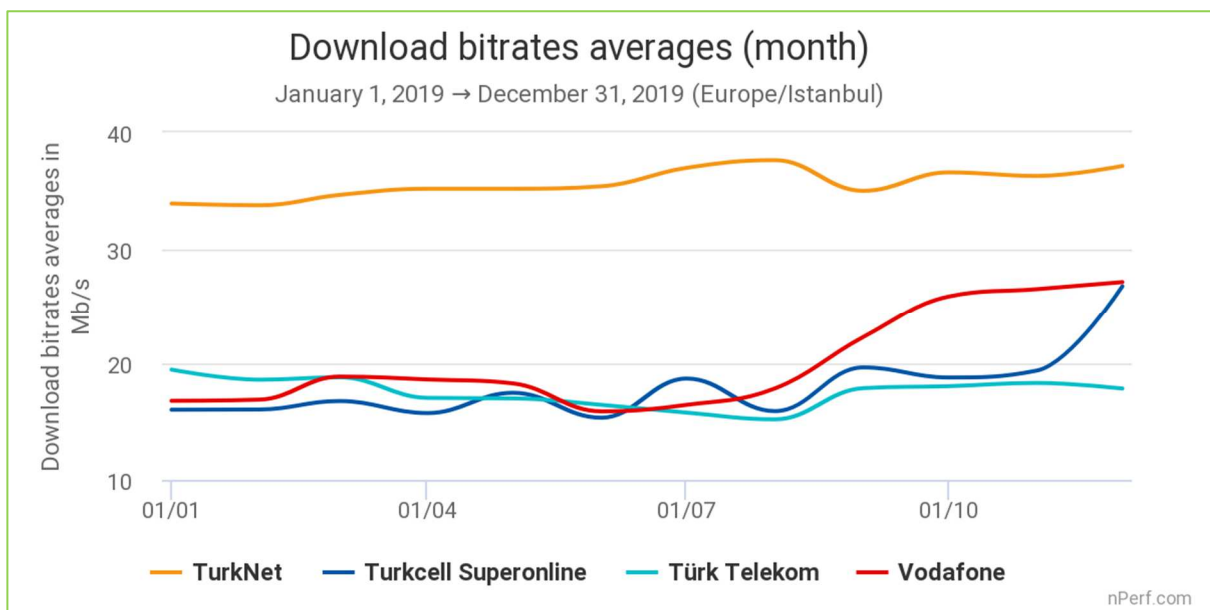
Above graph illustrates the ability of providers to maintain a constant download speed over the period regardless of network load (number of connected end-users).

Globally, all ISPs provided stable download speeds in the first half and then accelerated in the second.

Download bitrates averages (hours of day)
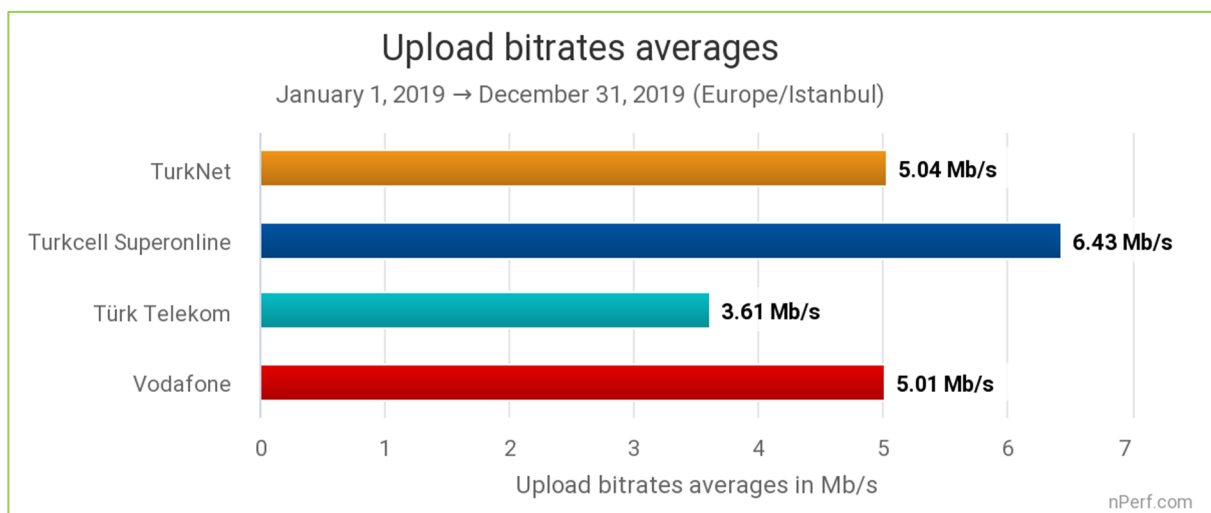January 1, 2019 → December 31, 2019 (Europe/Istanbul)
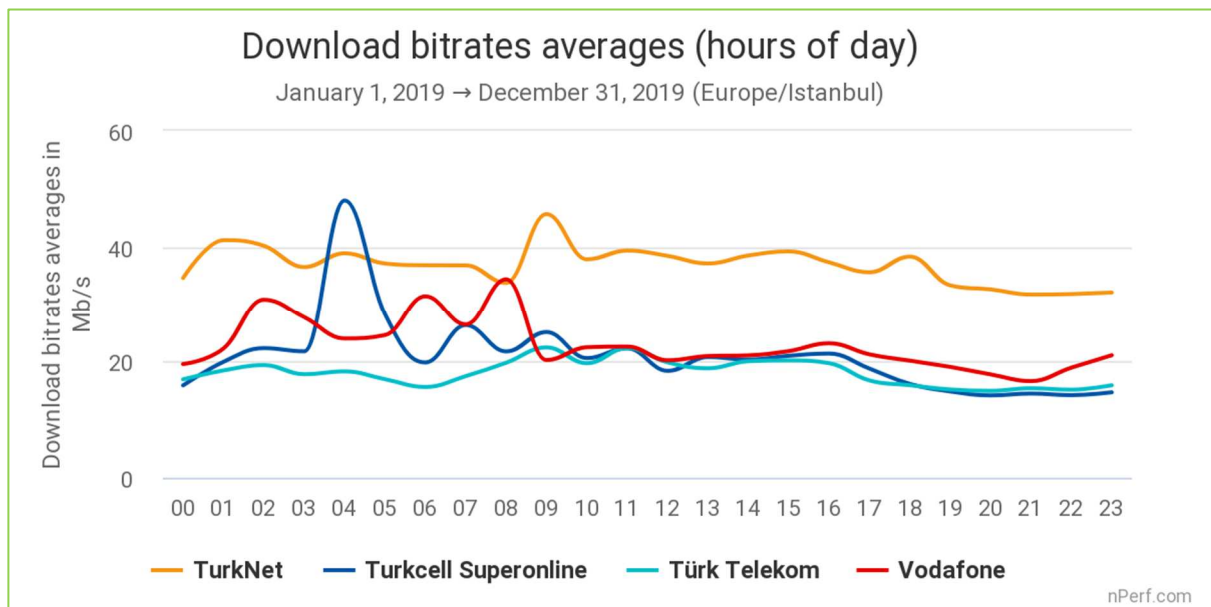
This graph illustrates the ability of providers to ensure a constant download speed throughout the day, regardless of network load (number of connected end-users).

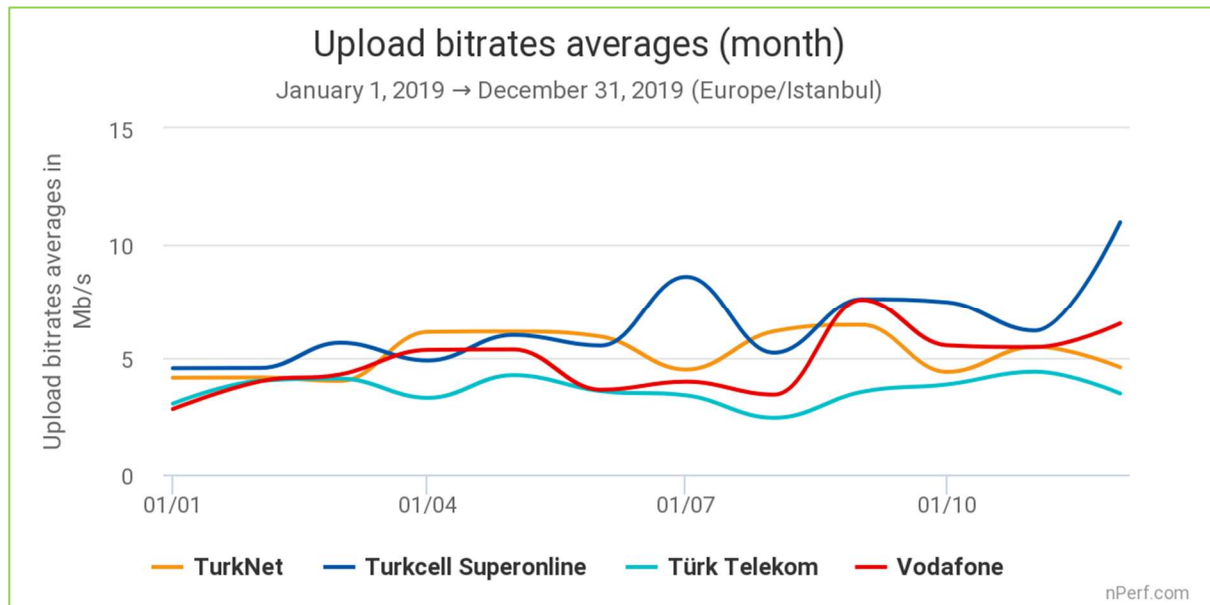We note that there is a decline of the troughput during the busy hours.

2.3 Upload speed

In 2019, the average upload speed in Turkey was 4,7 Mb/s.

Upload bitrates averages
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

TurkNet — 5.04 Mb/s
Turkcell Superonline — 6.43 Mb/s
Türk Telekom — 3.61 Mb/s
Vodafone — 5.01 Mb/s

Upload bitrates averages in Mb/s

nPerf.com

The highest value is the best.

Turkcell Superonline has provided the best fixed upload speed during 2019.

Upload bitrates averages (month)
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

Legend: TurkNet — Turkcell Superonline — Türk Telekom — Vodafone
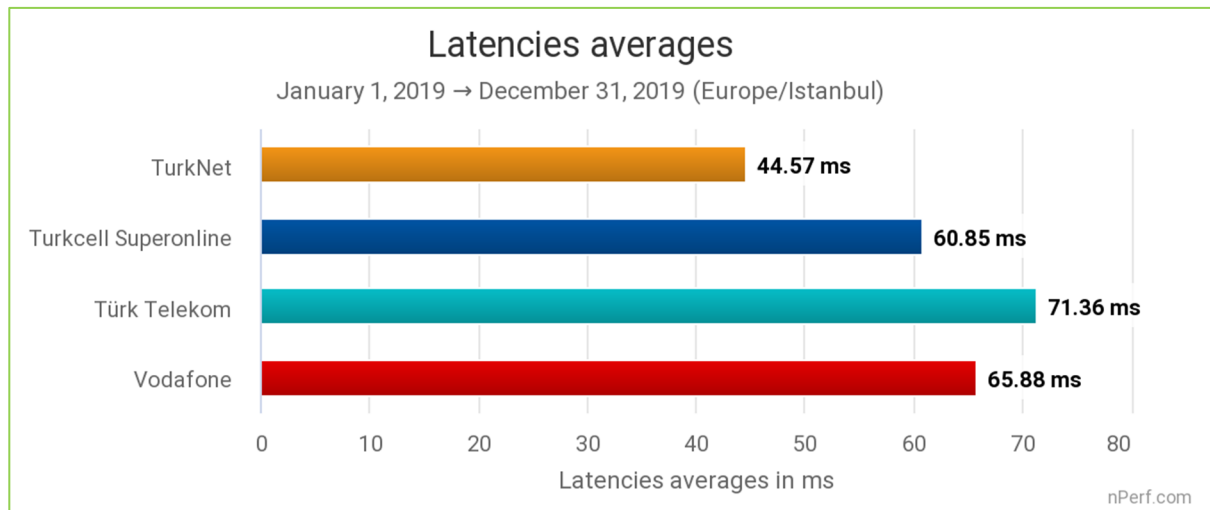
nPerf.com

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

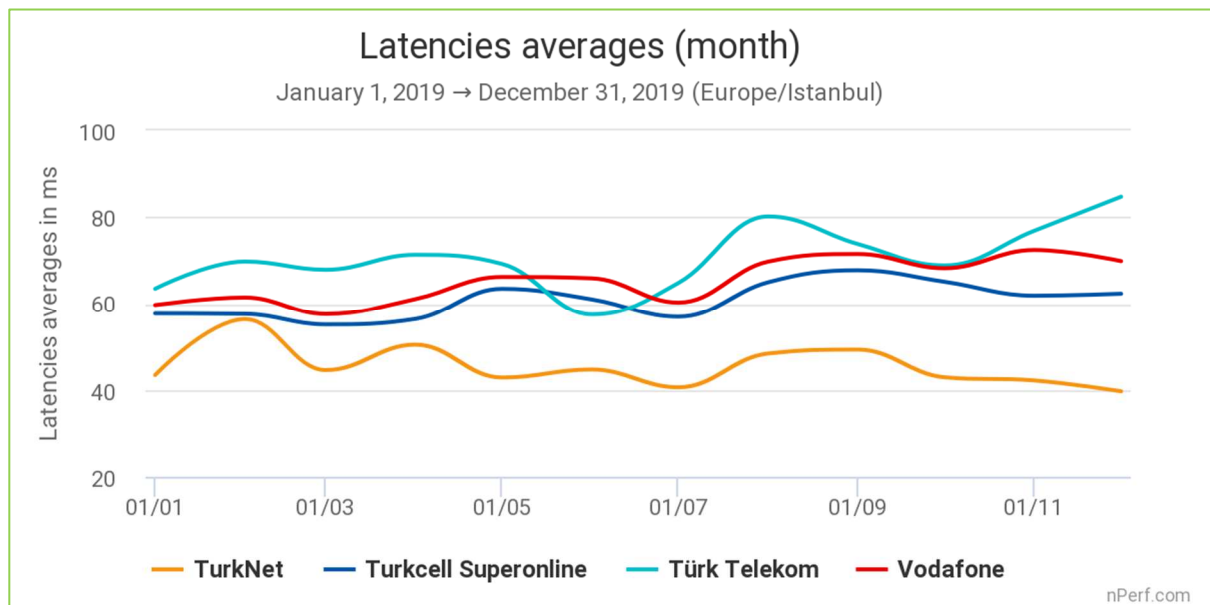Turkcell Superonline and Vodafone are the ISPs who have the most accelerated their upload speed in 2019.

2.4 Latency

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In 2019, the average latency in Turkey was 63 ms.

Latencies averages
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

ISP	Latency
TurkNet	44.57 ms
Turkcell Superonline	60.85 ms
Türk Telekom	71.36 ms
Vodafone	65.88 ms

Latencies averages in ms

nPerf.com

The lowest value is the best.

TurkNet has provided the best fixed latency during 2019.

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Latencies averages (month)
January 1, 2019 → December 31, 2019 (Europe/Istanbul)
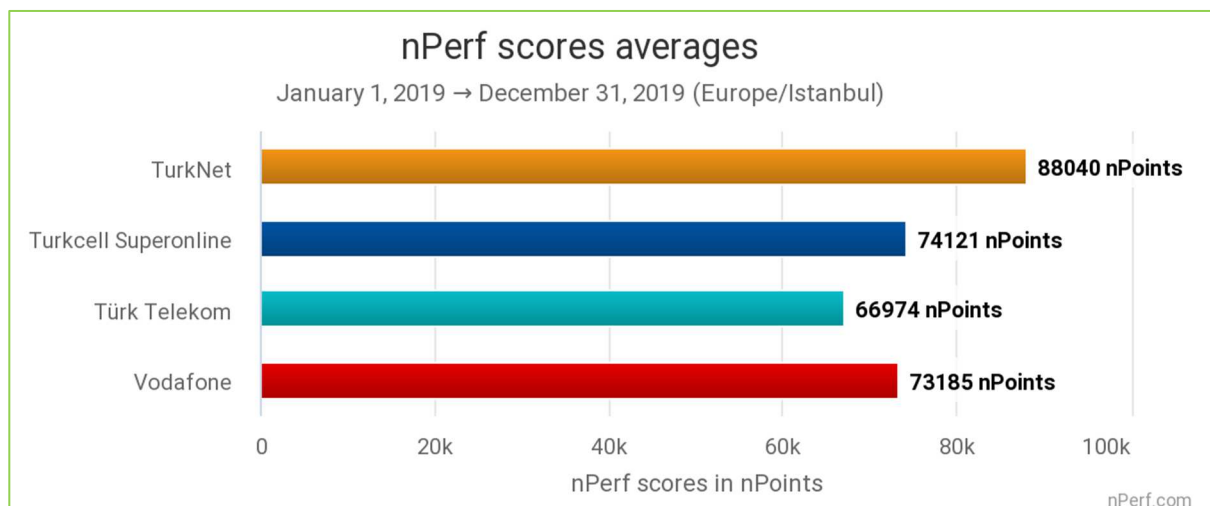
The lowest value is the best.

This graph illustrates the ability of providers to maintain a constant latency during the period, regardless of network load (number of connected end-users).

We note a good improvement in the latency of the TurkNet network while its competitors have rather degraded theirs.

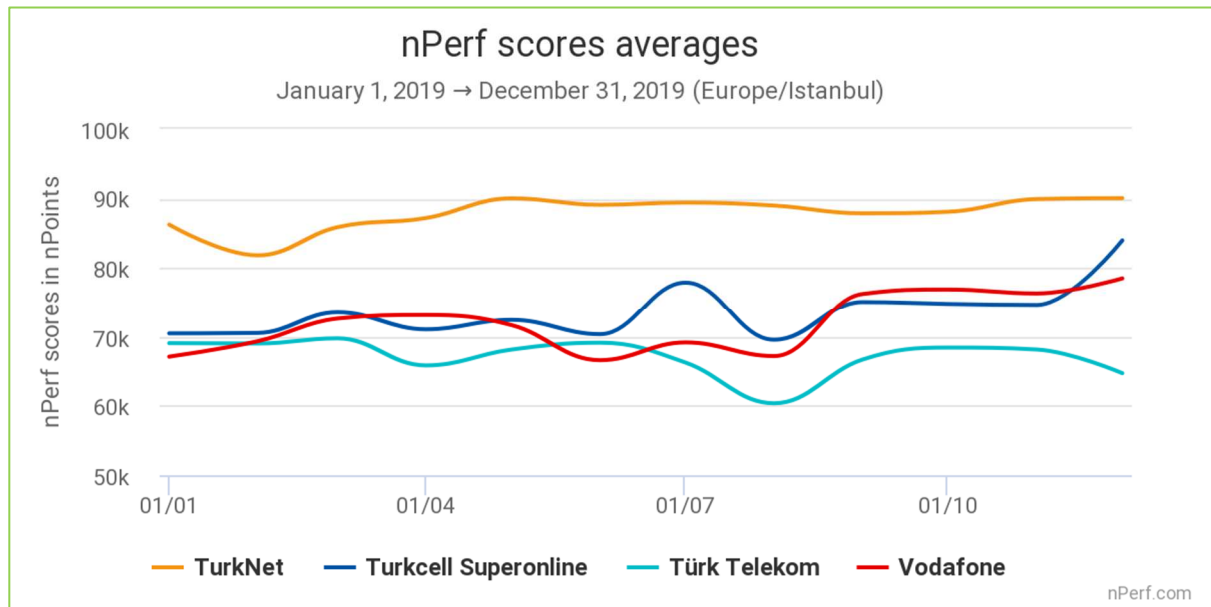## 2.5 nPerf score, all technologies combined

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.

nPerf scores averages
January 1, 2019 → December 31, 2019 (Europe/Istanbul)

Provider	nPoints
TurkNet	88040 nPoints
Turkcell Superonline	74121 nPoints
Türk Telekom	66974 nPoints
Vodafone	73185 nPoints

The highest value is the best.

TurkNet, the best fixed Internet performance in 2019.

nPerf scores averages

January 1, 2019 → December 31, 2019 (Europe/Istanbul)

TurkNet — Turkcell Superonline — Türk Telekom — Vodafone

nPerf.com

TurkNet is far ahead from its competitors.

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 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 the largest panel in Turkey.

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 WiFi 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 Turkey and abroad. Indeed, nPerf has installed dedicated servers directly at some Turkish providers to maximize measurement reliability.

Other local providers are welcome to install nPerf servers, that's free!

The total bandwidth available for Turkey is greater than 30 Gb/s.

3.3 Statistical accuracy

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

✓ 3% for absolute values

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

3.4 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 ...).

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

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, on Google Play for Android devices and on the Windows Store for Windows Phone and Windows Mobile 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.

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Stay in touch with us, follow us!