Barometer of fixed Internet connections in the Netherlands

H2 2021 − H1 2022

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1 Overall results

1.1 Summary table and nPerf score

Summary table - nPerf barometer H2 2021 - H1 2022
Fixed Internet connections in the Netherlands

nPerf We qualify your connection ■★ 1st in category	KPN kpn	T-Mobile Thuis T	Ziggo Ziggo
Download bitrate	113.16 Mb/s	143.07 Mb/s	**169.07 Mb/s**
Upload bitrate	94.97 Mb/s	**126.13 Mb/s**	27.37 Mb/s
Latency	**23.79 ms**	26.49 ms	24.90 ms
nPerf score	**140 965** nPoints	★ **144 767** nPoints	**136 595** nPoints

Best fixed Internet performance
H2 2021/ H1 2022

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

No.1 BROADBAND PERFORMANCE nPerf AWARDS H2 2021 H1 2022

T-Mobile Thuis provided the best broadband Internet performances in the Netherlands during the last two semesters.

nPerf

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, **517.363 tests.**

T-Mobile regains the leadership of the Dutch broadband Internet on our latest barometer.

It reaches the top place thanks to its very nice performance on the upload speed. Indeed, the difference between the three major ISP is larger on this KPI than on the others, which this provider doesn't win. Nevertheless, the formerly subsidiary of the German giant should watch its back, as competition could be tough on the forthcoming months.

KPN finishes second

After ending in last position in all the last studies, the national incumbent fixed operator shows a solid improvement since 2020, thus exceeding Ziggo and reaching the second step. KPN deserves the victory when it comes to the latency, with slightly better figures than its competitors.

Ziggo ends up in the last position of our ranking, despite making the difference on the most emblematic measure, the download speed.

In fact, its lead is wasted by disappointing upload throughputs : yet in early 2019, all its competitors did better than Ziggo still does today. Nevertheless, the final score allows it to turn the tide and stay in the game.

To sum up, these national figures are pretty good, and their trends encouraging. Nothing has to be taken for granted, as KPN and Ziggo are close behind the leader and won't give up that easily.

Will the next times bring some surprises ? 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 the Netherlands **517.363 speed tests**, distributed as follows, after filtering (see § 4.4) :

Country	Total
Netherlands	**458.552**

The overall distribution of the tests per provider is as follows:
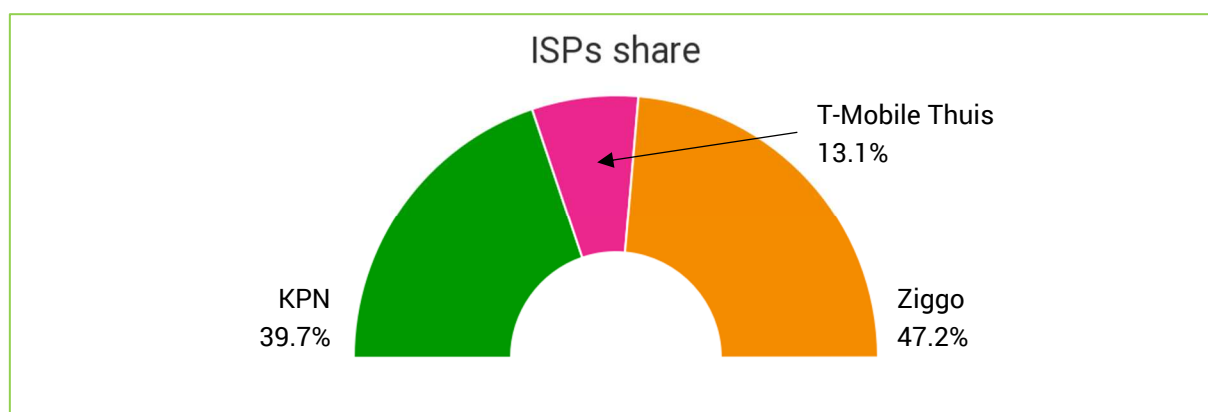
KPN, the national fixed-line incumbent operator, represents almost 40% of the tests carried out in the country during the last twelve months. Ziggo succeeds in overtaking it, with more than 47% of this year's panel, while the global winner, T-Mobile, only gets 13% of the share. Caiway, the 2020 winner, has been removed for not being a nationwide provider.

1.2 Download speed

The highest speed is the best.
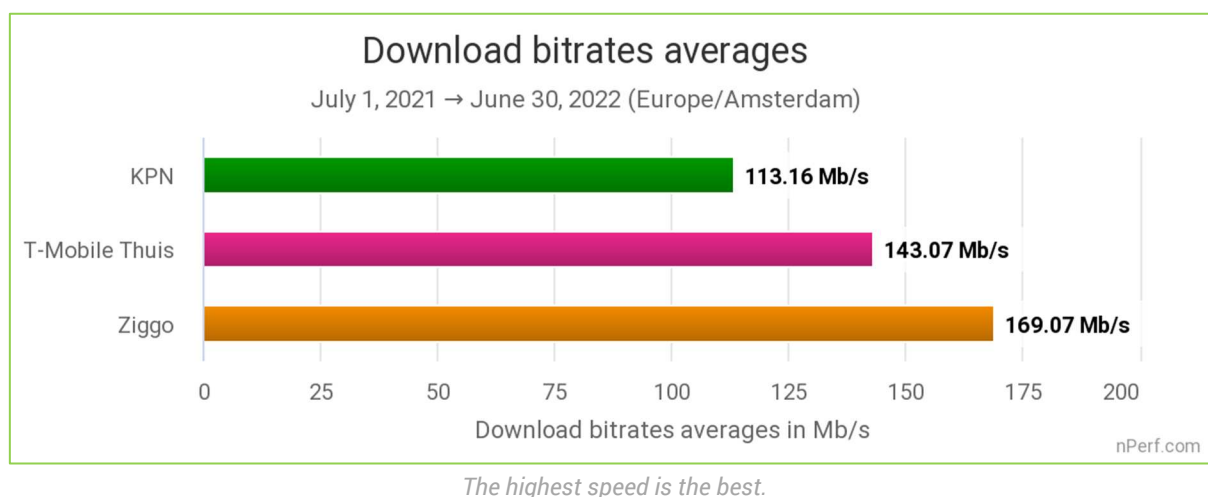
Ziggo subscribers enjoyed the best average broadband download speed, during the last two semesters.

Fortunately, all ISP have offered high average speeds, above 113 Mb/s (KPN's case). Ziggo leads the race with 26 Mb/s more than its closest competitor, the formerly Deutsche Telekom's subsidiary.
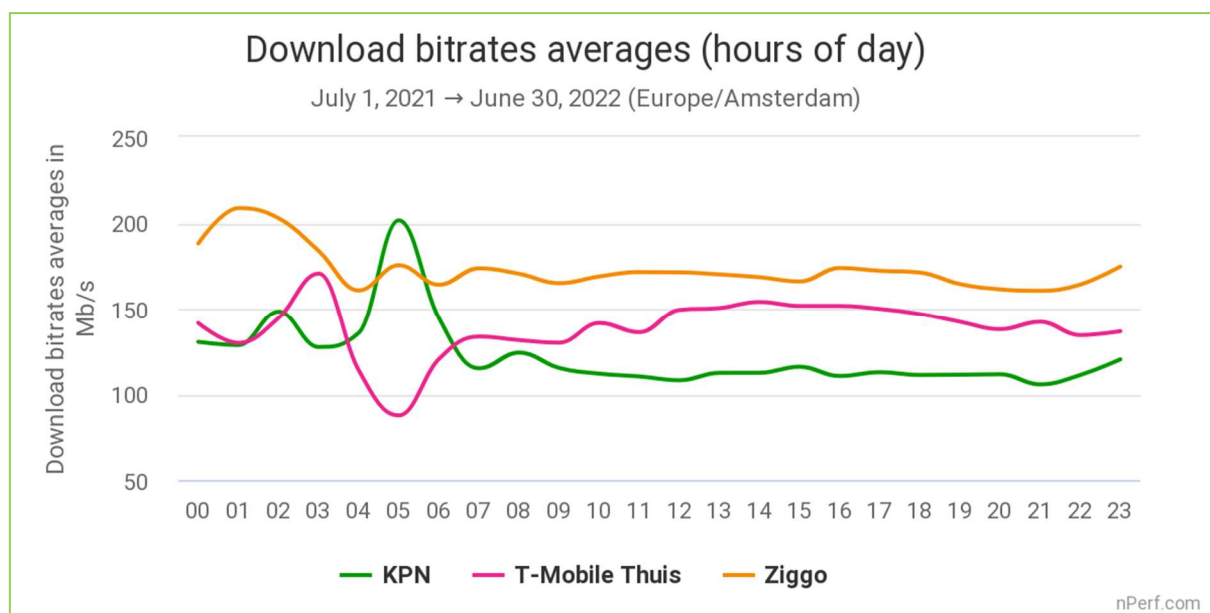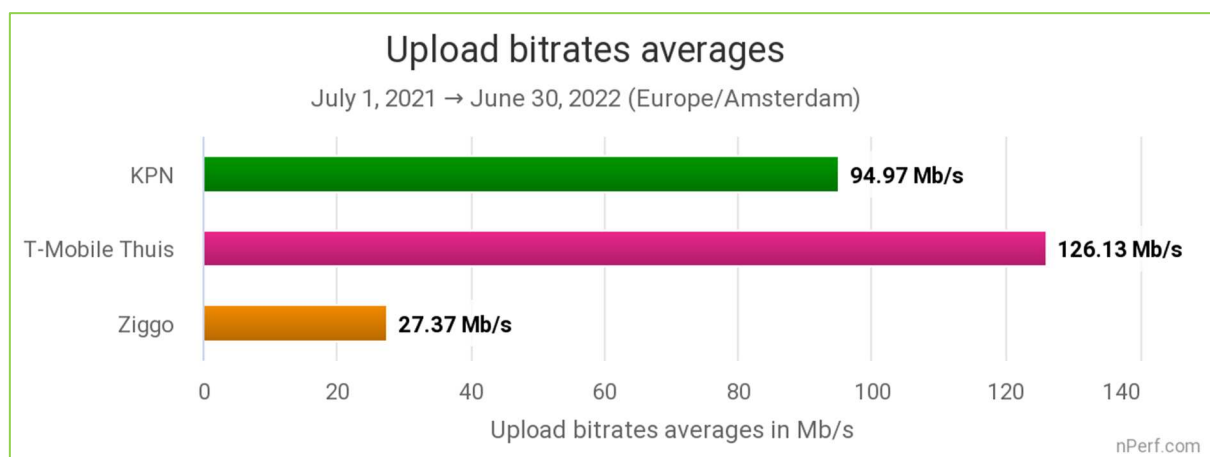

The graph above shows the evolution of the *hourly* average bitrates throughout the period.

The domination of Ziggo is totally apparent throughout the day, except between 5 a.m. and 6 a.m. (GMT +1), because of a very sharp peak of KPN's download speed at this schedule, which happens exactly at the same time than a strong drop for T-Mobile.
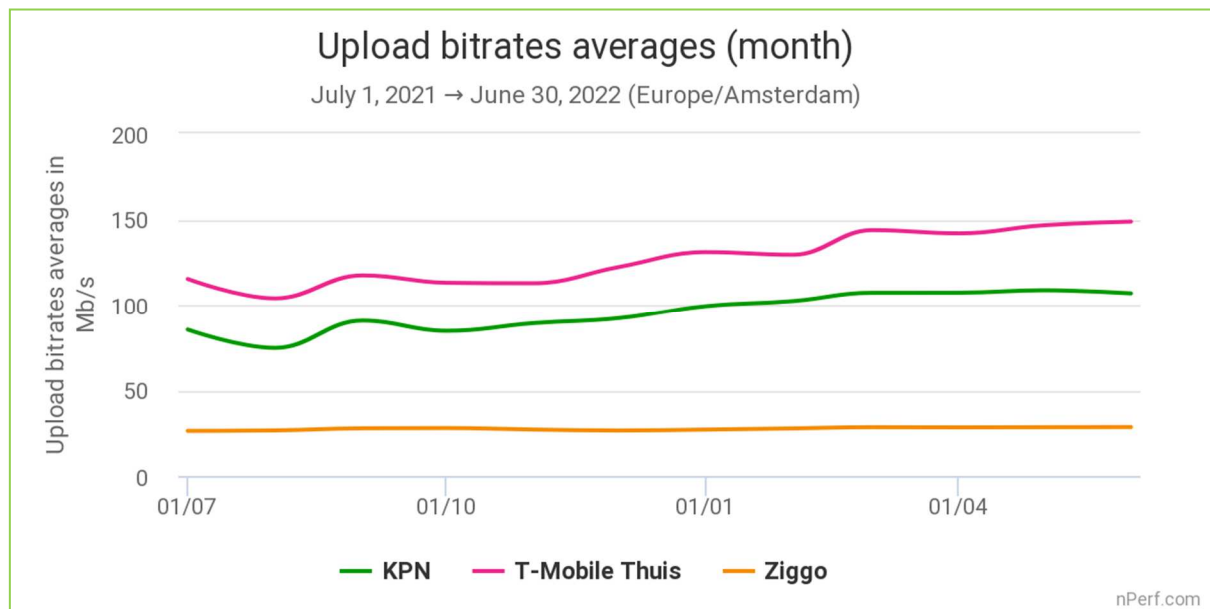
1.3 Upload speed

The highest speed is the best.

T-Mobile Thuis subscribers enjoyed the best average broadband upload speed, during the last two semesters.
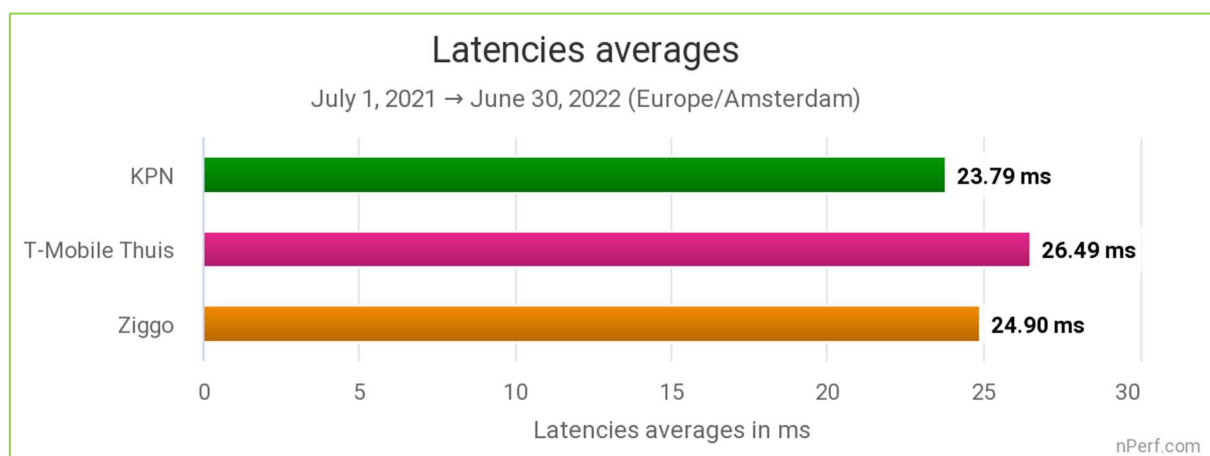
Here, T-Mobile leads comfortably. Its bitrates are quite symmetrical, thus its performance goes beyond what any of its rivals can offer. Indeed, it's the only one above 100 Mb/s, by far, and reaches a value 4 to 5 times higher than Ziggo!

Upload bitrates averages (month)
July 1, 2021 → June 30, 2022 (Europe/Amsterdam)

— KPN   — T-Mobile Thuis   — Ziggo

nPerf.com

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

As we can clearly see, the evolution of Ziggo on this KPI has been non-existent within the studied period, whereas T-Mobile and KPN have had, at a higher level, synchronous and crescent developments.
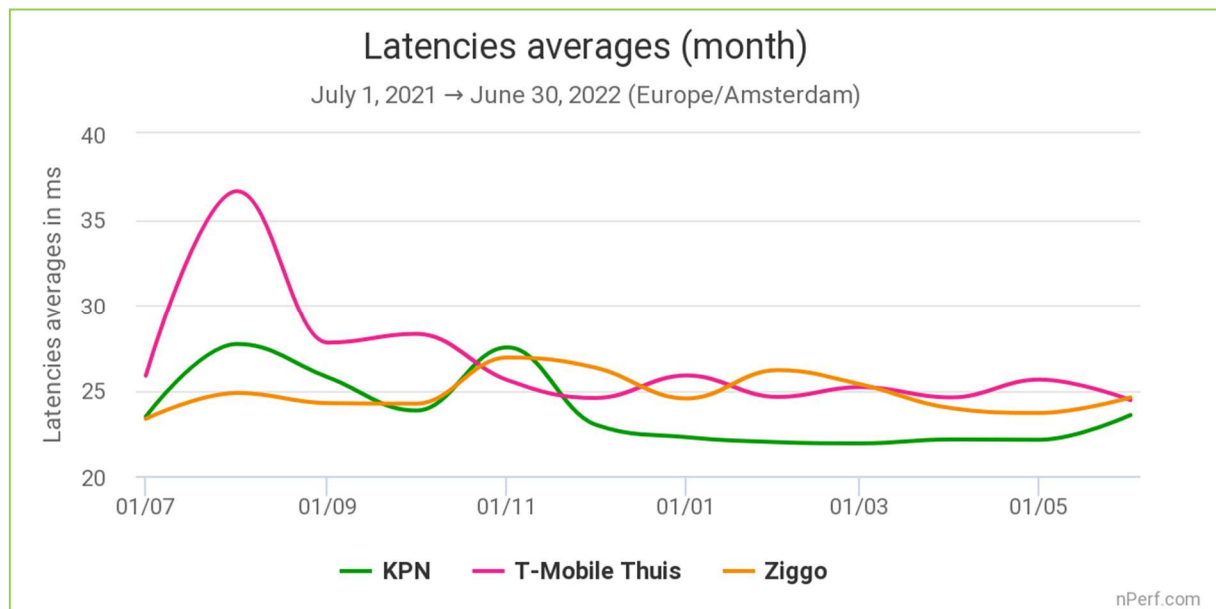
1.4 Latency

Latencies averages
July 1, 2021 → June 30, 2022 (Europe/Amsterdam)

KPN	23.79 ms
T-Mobile Thuis	26.49 ms
Ziggo	24.90 ms

Latencies averages in ms

nPerf.com

The shortest time is the best.

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

By showing an average time beneath 24 ms, the formerly state-owned operator shows the more attractive latency of the country. Despite the win, the situation is not that comfortable as Ziggo is only 1 ms slower, and T-Mobile 3 ms slower.

Latencies averages (month)
July 1, 2021 → June 30, 2022 (Europe/Amsterdam)

nPerf.com

— KPN — T-Mobile Thuis — Ziggo

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

The main phenomenon observed here is the sudden explosion in response time for T-Mobile in August 2021, before coming back to normal the next month. Otherwise, results have been surrounding 25 ms but, since last December, KPN has improved and situates sustainably one step ahead of its competitors.
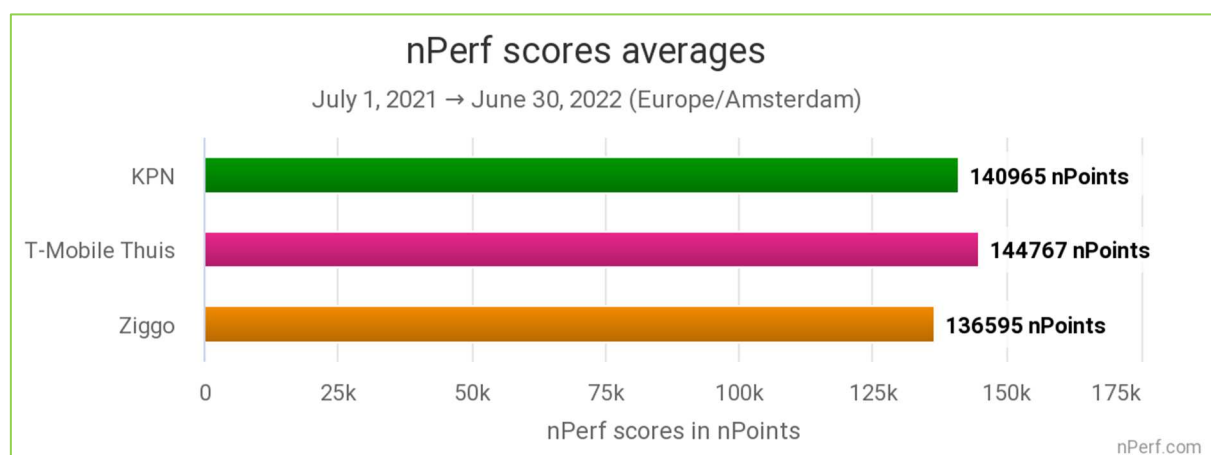
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1.5 nPerf scores

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**.
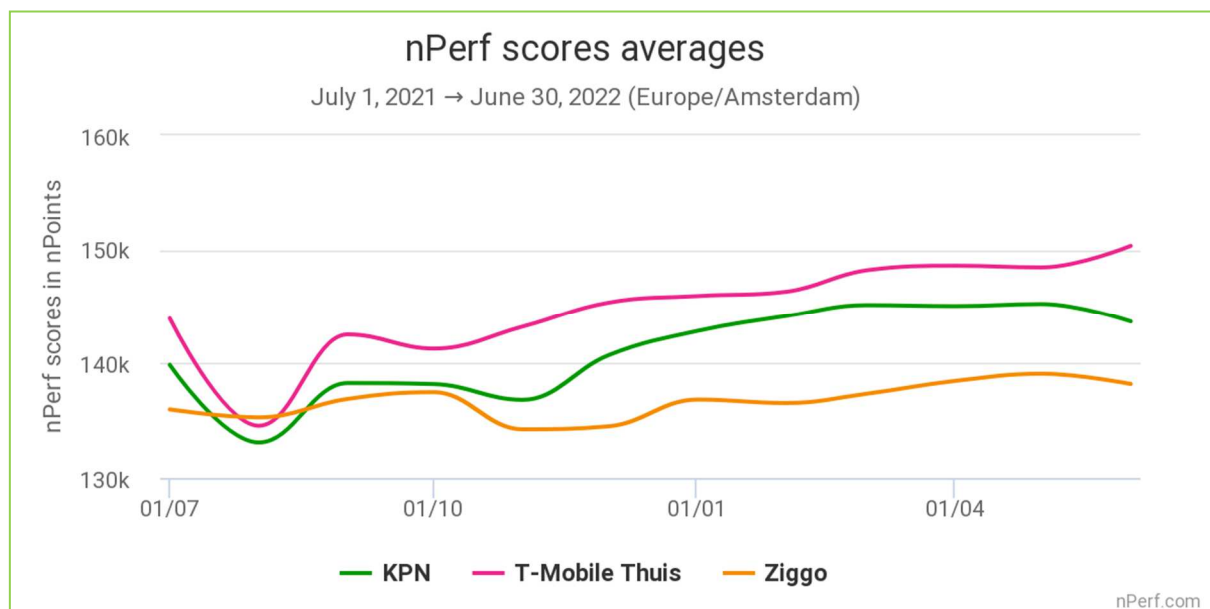
The results below consider all the previous indicators and therefore all the tests carried out. As technologies are grouped together, the proportion of tests in different technologies strongly impacts this global trend.

nPerf scores averages
July 1, 2021 → June 30, 2022 (Europe/Amsterdam)

	nPerf scores in nPoints
KPN	140965 nPoints
T-Mobile Thuis	144767 nPoints
Ziggo	136595 nPoints

nPerf.com

The highest value is the best.

T-Mobile Thuis subscribers enjoyed the best broadband Internet performances, during the last two semesters.

nPerf scores averages
July 1, 2021 → June 30, 2022 (Europe/Amsterdam)

Legend: — KPN — T-Mobile Thuis — Ziggo

nPerf.com

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

After a poor month of August last year, specially for KPN and T-Mobile, all ISP have seen their results continuously enhance since last December, even if Ziggo does a bit slower. The average scores are tight, within an interval of 8.000 nPoints approximately, with T-Mobile has always keeping the lead.

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.

nperf

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 the **Netherlands**. 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 **tens of 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 the **Netherlands** is **42 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	458.552	2%	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**.