# Barometer of fixed Internet connections in the Netherlands



H2 2022 - H1 2023





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# 1 Overall results

# 1.1 Summary table and nPerf score





Delta Fiber provided the best broadband Internet performances in the Netherlands 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 **424.337-unit tests**, **after filtering**.

**Delta Fiber enters our barometer in the best possible way as they take the lead** of the Dutch broadband Internet industry. The company reaches the top place thanks to its very high performances on the three KPIs (download and upload speeds and latency).

**T-Mobile ends at the second place**, despite its continuous improvement on download and upload speeds.

**KPN also improved the upload and download speed,** but it is not enough and the firm remains behind T-Mobile but is reducing the gap.

**Ziggo ends up in the last position** of our ranking, due to a very low upload speed (34 Mb/s). Ziggo is the only operator to keep a flat Upload speed since the 2 years.

To sum up, these national figures are pretty good, and their trends encouraging. Nothing has to be taken for granted, as T-Mobile and KPN 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!

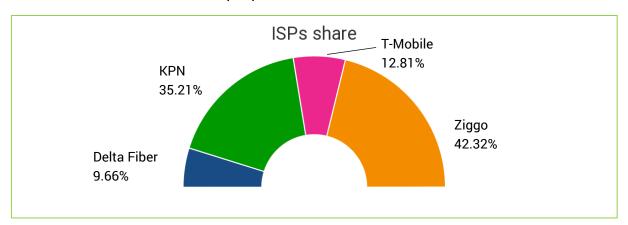


# 1 Results, all technologies combined

#### 1.1 Data volume and distribution

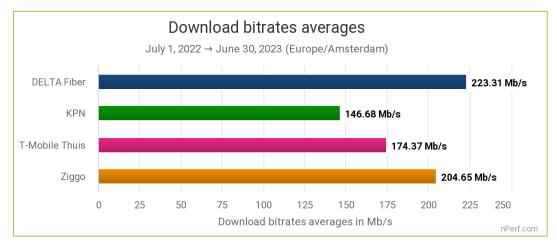
Between July 1st, 2022 and June 30th, 2023 we counted in the Netherlands 424.337-unit tests.

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



Ziggo became the first operator in the country when it comes to ISPs share, with 42.32% of the market. KPN, the national fixed-line incumbent operator, represents around 35% of the tests carried out in the country during the last twelve months.

## 1.2 Download speed

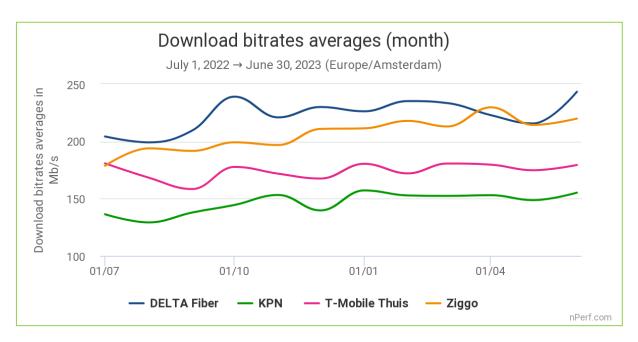


The highest speed is the best.

The subscribers of Delta Fiber enjoyed the best average broadband download speed during the last two semesters.

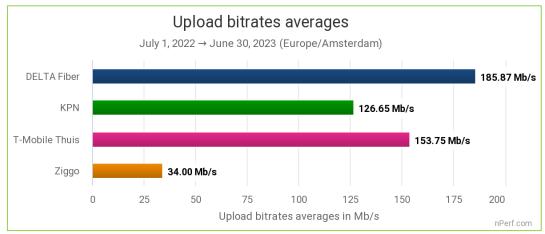
Fortunately, all ISP have offered high average speeds. Delta Fiber leads the race with 223.31 Mb/s.





The graph above shows the evolution of the *monthly* average bitrates throughout the period. The leading of Delta Fiber is quite clear on the period, even if the competition with Ziggo is tight.

## 1.3 Upload speed

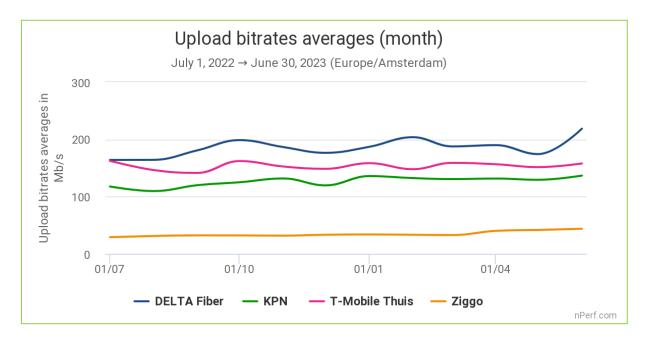


The highest speed is the best.

Delta Fiber subscribers enjoyed the best average broadband upload speed during the last two semesters.

The company leads comfortably, with 185.87 Mb/s. Note than Ziggo ends last with only 34 Mb/s as upload speed, low and stable for the last 2 years.

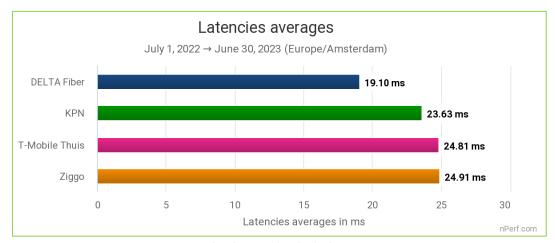




The graph above shows the evolution of the *monthly* average bitrates throughout the period.

As we can clearly see, Delta Fiber, KPN and T-Mobile Thuis lead the market when it comes to upload speed compared to Ziggo.

## 1.4 Latency

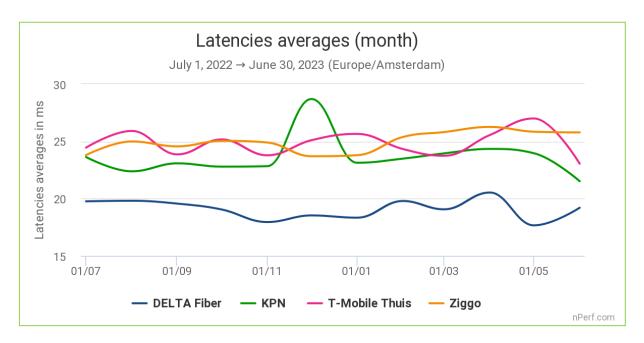


The shortest time is the best.

#### Delta Fiber subscribers enjoyed the best average broadband latency during the last two semesters.

Here again, the company leads the market with a quite large gap with its competitor (more than 4.5 ms less than KPN for instance). However, when it comes to ping, the four operators show impressive averages.





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

KPN, T-Mobile Thuis and Ziggo are close when it comes to latency performances. Delta Fiber is constantly better than the competitors over the months.

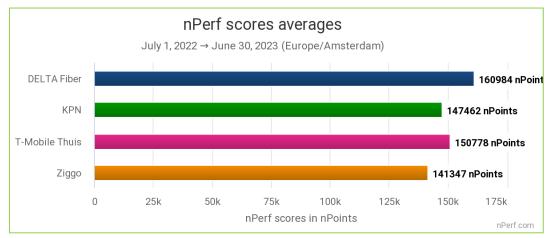


#### 1.5 nPerf scores

The nPerf score, expressed in nPoints, gives an overall picture of the quality of a connection. It takes into account the measured bitrates 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 experiences 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.

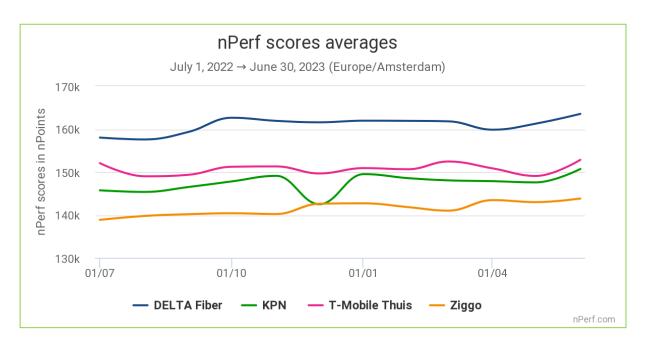


The highest value is the best.



Delta Fiber subscribers enjoyed the best broadband Internet performances during the last two semesters.





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

To sum up, Delta Fiber has been higher than its competitor on the period.



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 <a href="www.nPerf.com">www.nPerf.com</a> 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 **50 Gb/s**, and reaches more than **14 Tb/s** worldwide, with more than **2.800** 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**.

