Barometer of fixed Internet connections in Norway

H2 2021 – H1 2022

Publication of

September 7th, 2022
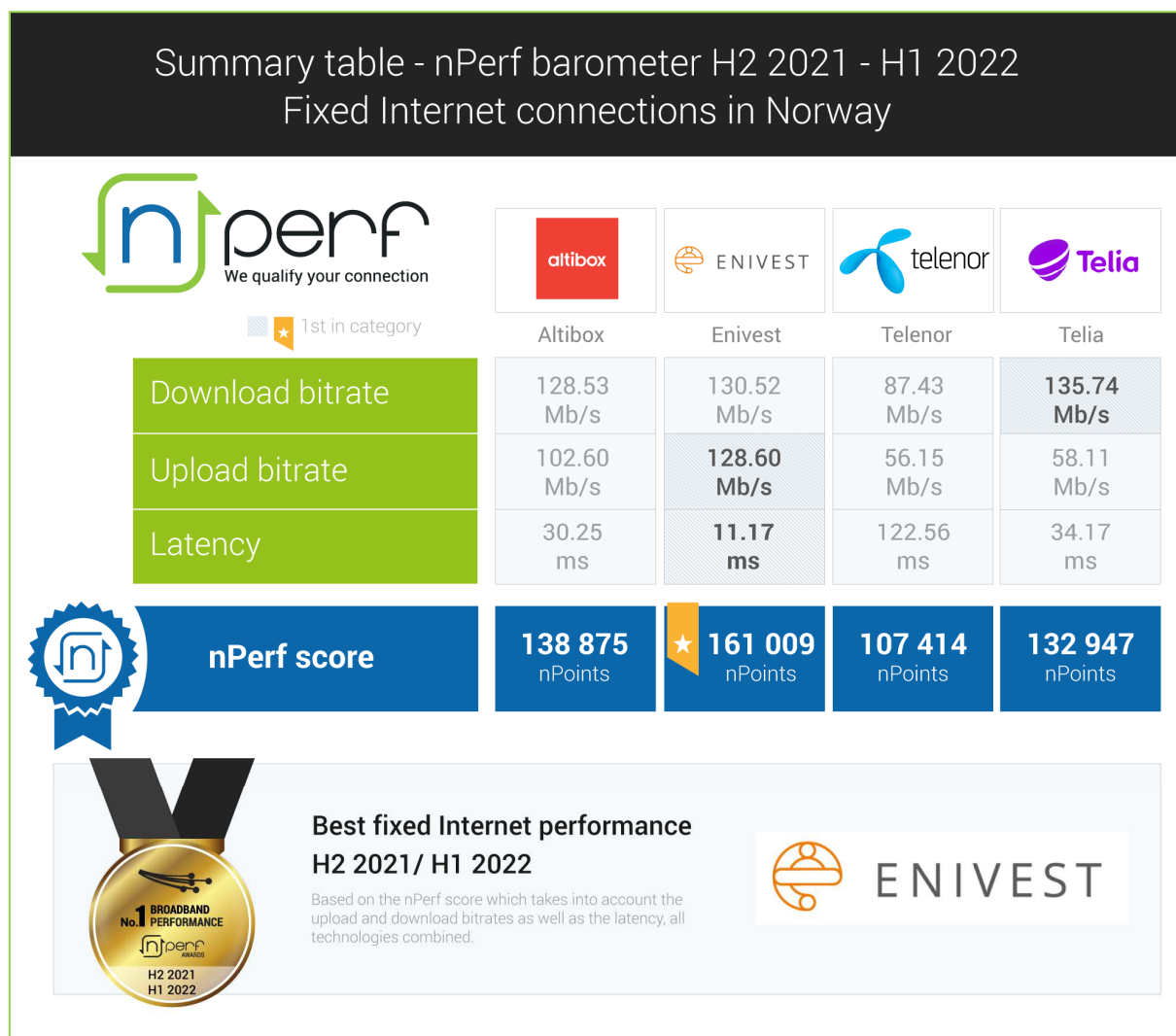
Contents

1 Overall results

1.1 Summary table and nPerf score

Summary table - nPerf barometer H2 2021 - H1 2022 Fixed Internet connections in Norway				
	Altibox	Enivest	Telenor	Telia
Download bitrate	128.53 Mb/s	130.52 Mb/s	87.43 Mb/s	**135.74 Mb/s**
Upload bitrate	102.60 Mb/s	**128.60 Mb/s**	56.15 Mb/s	58.11 Mb/s
Latency	30.25 ms	**11.17 ms**	122.56 ms	34.17 ms
nPerf score	138 875 nPoints	★ 161 009 nPoints	107 414 nPoints	132 947 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.

ENIVEST

Enivest provided the best broadband Internet performances in Norway 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, **8.166 tests.**

Enivest keeps the lead on the Norwegian broadband Internet.

Its outrageous win on the upload speed and on the latency help it to obtain its third victory in a row on our newest barometer. By showing a symmetrical bitrate and an outstanding latency of 11 ms through a consistent fibered-network, its 161 009 nPoints and the large score gap with the rest of the contenders are truly deserved.

Altibox and Telia fight for second place

Those ISP have done a good work throughout the year and will compete to become the main challenger of Enivest. Their scores are tight (respectively 139k and 133k nPoints, approx.), and while Telia has a very thin advantage on the bitrates, Altibox has it on the latency.

Telenor should improve quickly

After losing almost 19.000 nPoints in twelve months, and showing an obvious issue when it comes to the time of response, it's really not been the best year for the national incumbent historic operator on the fixed network. Serious efforts will need to be done to come back in the race.

Will the next months bring some surprises ? Of course, nPerf will keep an eye on this!
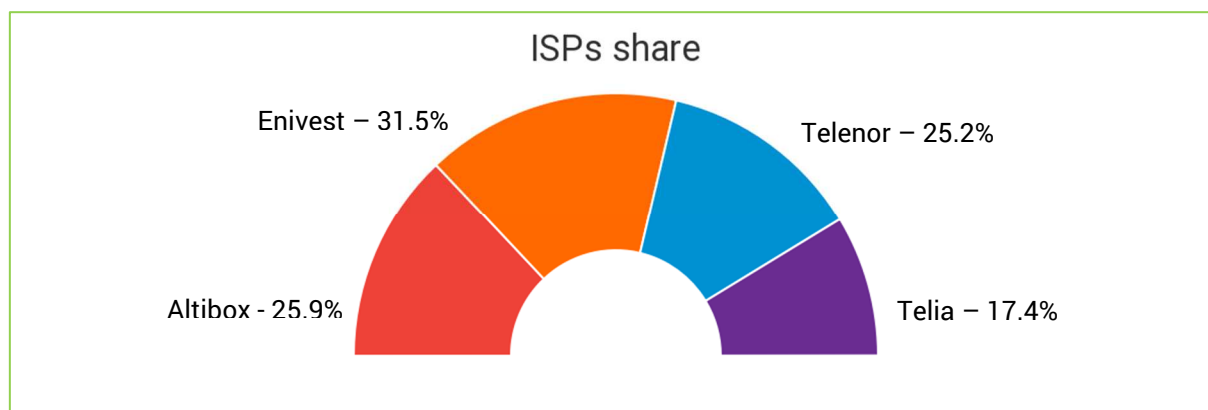
1 Results, all technologies combined

1.1 Data volume and distribution

Between **July 1ˢᵗ, 2021** and **June 30ᵗʰ, 2022** we counted in Norway **8.166 speed tests**, distributed as follows, after filtering (see § 4.4) :
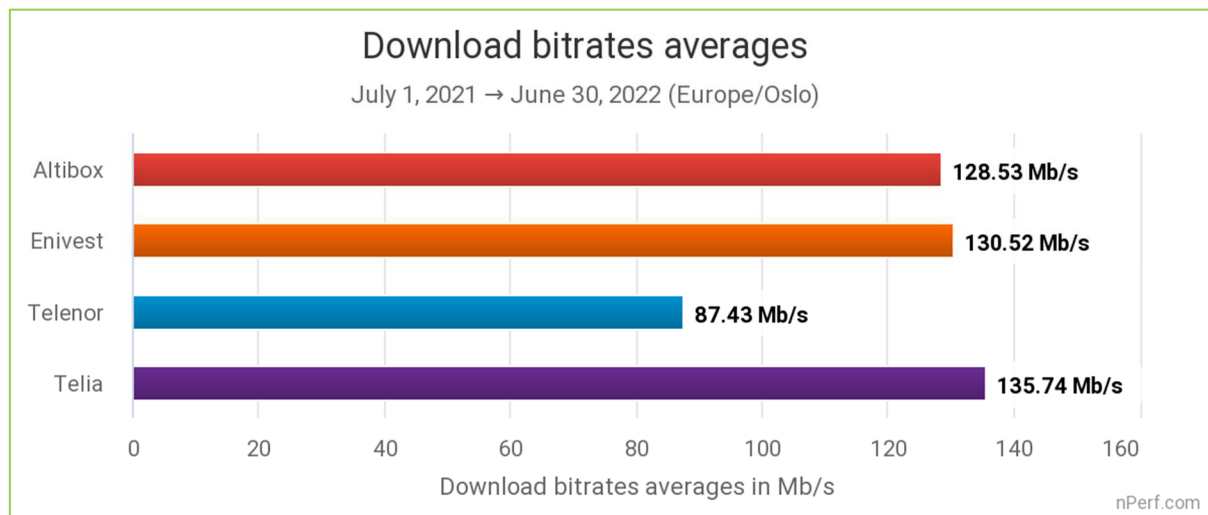
Country	Total
Norway	**6.393**

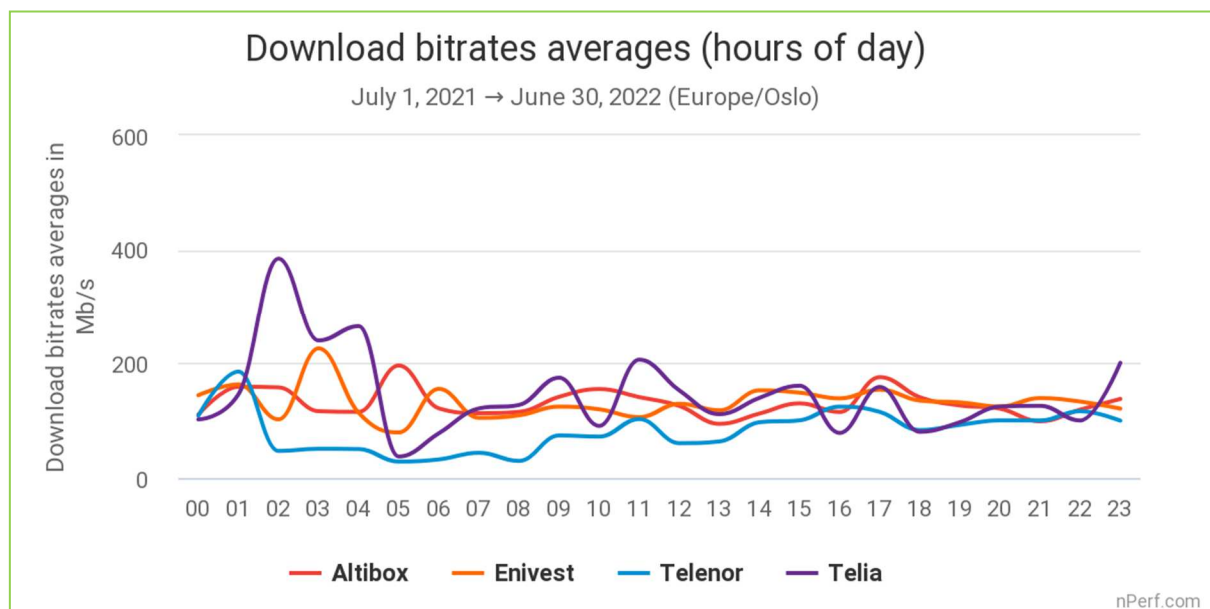The overall distribution of the tests per provider is as follows:

1.2 Download speed

The highest speed is the best.

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

The first three positions are very tight : from 129 Mb/s for Altibox to 136 Mb/s for Telia, which leads alone. Only Telenor is relegated far behind its competitors, with 87 Mb/s on average. Nationwide, these global speeds have decreased of about 6% since 2020/2021, and the best evolution has been for Enivest (+14,4 Mb/s, i.e. +12,4%).

Download bitrates averages (hours of day)
July 1, 2021 → June 30, 2022 (Europe/Oslo)

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

Telia seems to offer a very better bandwidth during the night hours, particularly from 2 a.m. to 5 a.m., reaching almost 400 Mb/s the first hour ! This is a pretty classic phenomenon, as the network is usually much less requested throughout the night.
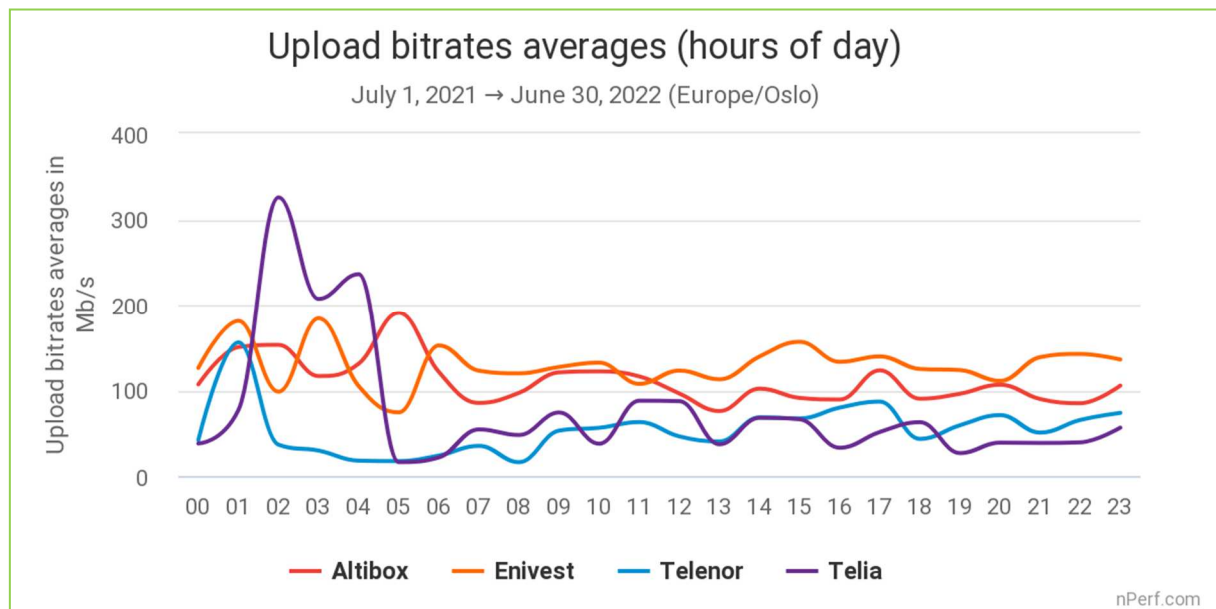
1.3 Upload speed

Upload bitrates averages
July 1, 2021 → June 30, 2022 (Europe/Oslo)
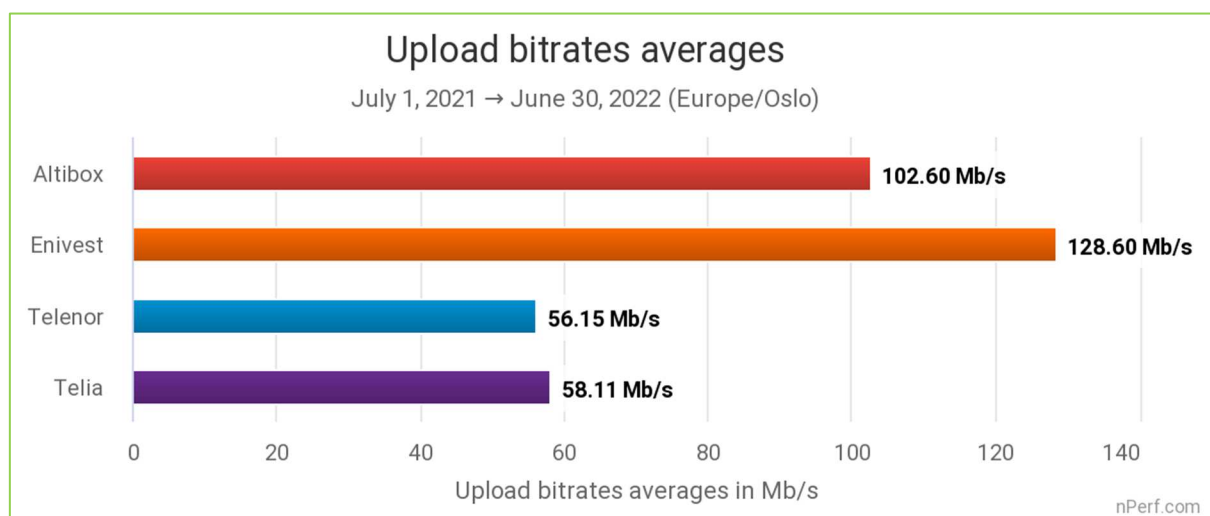
The highest speed is the best.

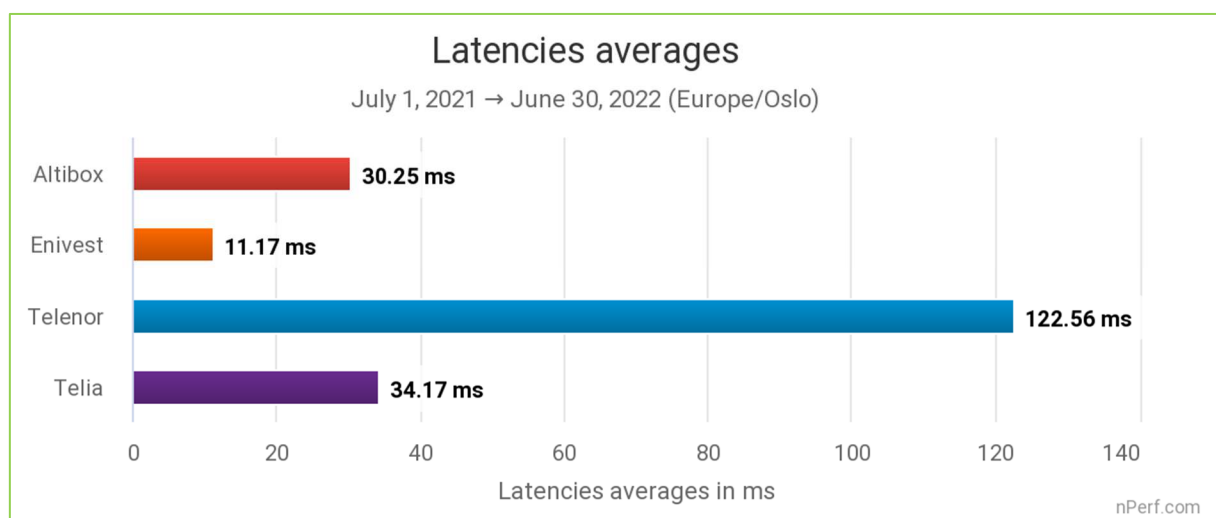**Enivest subscribers enjoyed the best average broadband upload speed, during the last two semesters.**

This time, Enivest makes the differences and records a striking performance on the upload speed. Its connexion is almost perfectly symmetrical, and allows it to reach the top position at the expense of Altibox. The latter which does a good job too, with more than 102 Mb/s even if this ISP has stepped back since last year. Telia and Telenor are, on average, more than two times slower than the leader. These global statistics have increased of 7% during the las couple of semesters, and the strongest improvement comparing to 2020/2021 is for Enivest (+16 Mb/s).

Upload bitrates averages (hours of day)
July 1, 2021 → June 30, 2022 (Europe/Oslo)

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

Same phenomenon than for the downloading : Telia records a high peak from 2 a.m. to 5 a.m., before the figures converge again throughout the daytime hours.
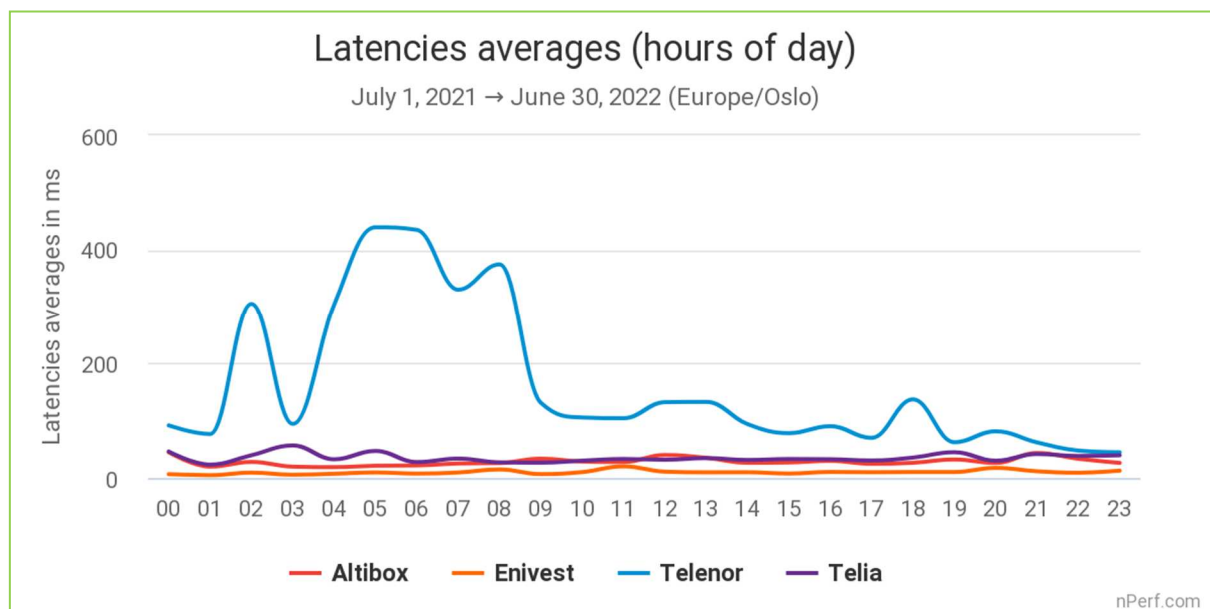
1.4 Latency

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

The shortest time is the best.

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

Here come the most outstanding KPI of the study : with only 11 ms as an average time of response, Enivest crushes the competition. This provider offers a three-times faster latency than its more serious contenders, Altibox and Telia, which situate at a good average level of 32 ms. Moreover, the winner of this KPI is the only one to enhance its figures since the last year.

Telenor is totally out of the race, as it offered a three times worse latency than its last level (41 ms). This may have been caused by a server issue concerning Telenor's network.

Latencies averages (hours of day)
July 1, 2021 → June 30, 2022 (Europe/Oslo)

Altibox — Enivest — Telenor — Telia

nPerf.com

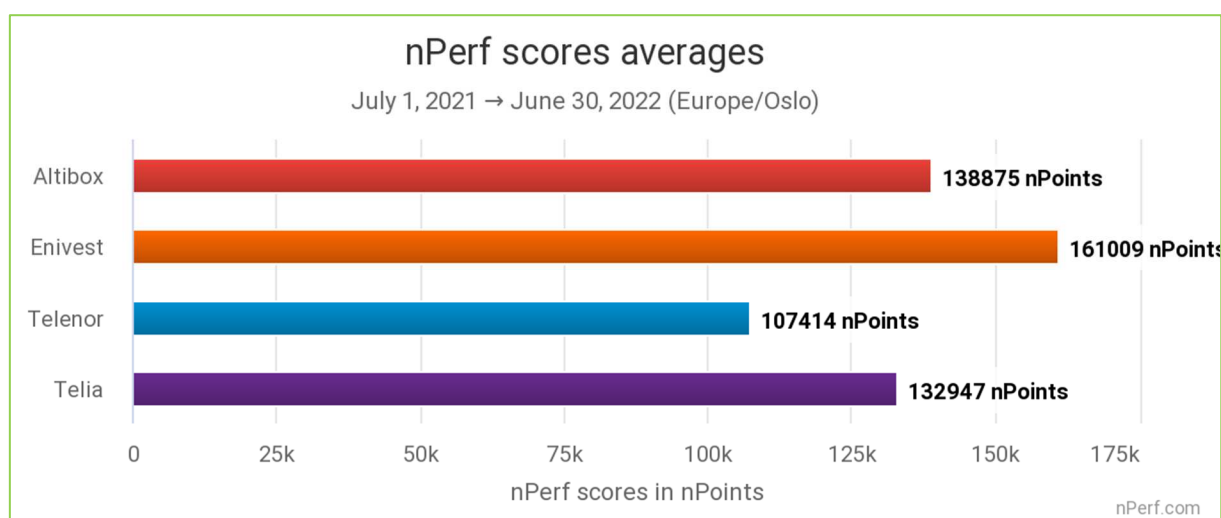The graph above shows the evolution of the *hourly* average latencies throughout the period.

As commented before, we can clearly notice the huge difference between Telenor's latency and the usual average level of its opponents, every hour of the day, but specially across the night.

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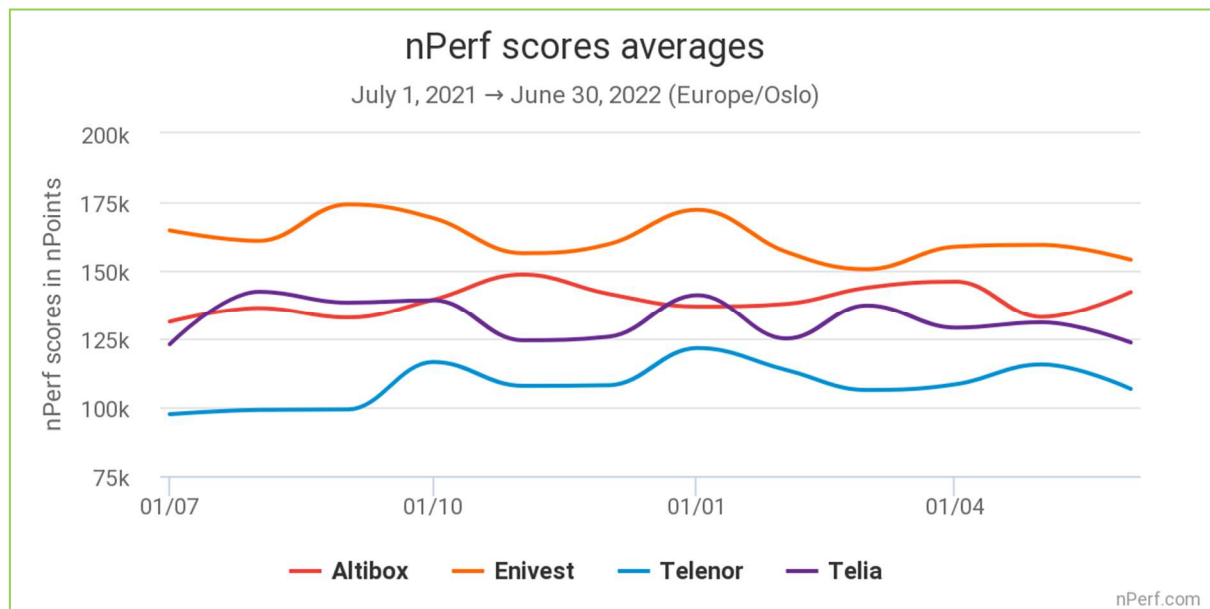
The results below consider all the previous indicators and therefore all the tests carried out. As technologies are grouped together, the proportion of tests in different technologies strongly impacts this global trend.

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

Altibox — 138875 nPoints
Enivest — 161009 nPoints
Telenor — 107414 nPoints
Telia — 132947 nPoints

nPerf scores in nPoints

nPerf.com

The highest value is the best.

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

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

nPerf scores in nPoints

— Altibox — Enivest — Telenor — Telia

nPerf.com

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

Besides the constant domination of Enivest over its rivals with its 161 009 nPoints, and on the contrary the delay of Telenor, we can notice the consecutive changes of Altibox and Telia for the second and third place, bounded between 125.000 and 150.000 nPoints.

> ⓘ 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!

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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 Norway. 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 yearly, 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 Norway is **45 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	6.393	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**.