Barometer of fixed internet connections in New Zealand

H2 2020 – H1 2021

Table of contents

1 Summary of global annual results

1.1 Summary table and nPerf score, all technologies combined

nPerf barometer summary table H2-2020 / H1-2021
Fixed Internet connections in New Zealand

	2degrees	MyRepublic	Slingshot/Orcon	Spark	Vodafone
Download bitrate	282.63 Mb/s	**360.86 Mb/s**	181.92 Mb/s	128.73 Mb/s	118.69 Mb/s
Upload bitrate	179.69 Mb/s	**243.61 Mb/s**	122.68 Mb/s	85.60 Mb/s	68.18 Mb/s
Latency	24.68 ms	**15.29 ms**	19.21 ms	22.59 ms	25.47 ms
nPerf Score	159 658 nPoints	★ 175 569 nPoints	154 735 nPoints	143 205 nPoints	137 762 nPoints

Best fixed Internet performance

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

*** **MyRepublic,** the best fixed Internet performance during the last 2 semesters ***

1.2 Our analysis

During the last 12 months, nPerf users conducted **32,238** connection tests on New Zealand's five largest Internet Service Providers.

MyRepublic breaks into our study because it dominates the market, in terms of performance of fixed Internet connections, by leading on every indicator : first on download and upload average speeds, as well as in latency measures. Its commercial broadband plans clearly make the difference, when it comes to speed.

Its main rivals are the last year's winner, 2degrees, and Vocus Group, through its main domestic broadband brands, Slingshot and Orcon, which are third.

The score gap gets bigger in comparison to 2019/2020 : now the difference is around 16,000 nPoints between the first ranked operator and the second, and around 21,000 between the first and the third !

Spark and Vodafone are respectively ranked 4th and 5th, but are technically almost out of this performance race, although they gather almost 63% of the analysed tests.

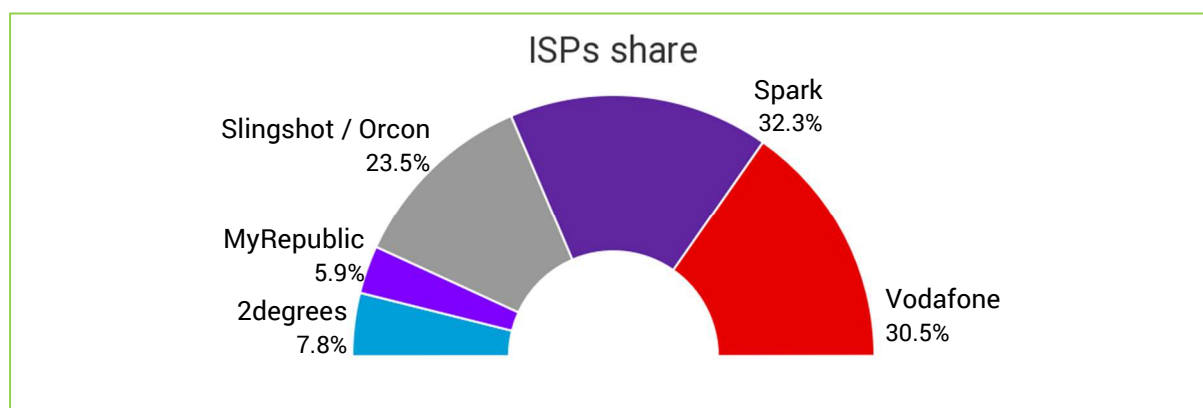A great battle in perspective for the next period!

2 Overall results, all technologies combined

2.1 Data amount and distribution

From July 1st, 2020 to June 30th, 2021 we counted **32,238** tests amongst the five largest New Zealand's fixed ISP, distributed after filtering as follows:

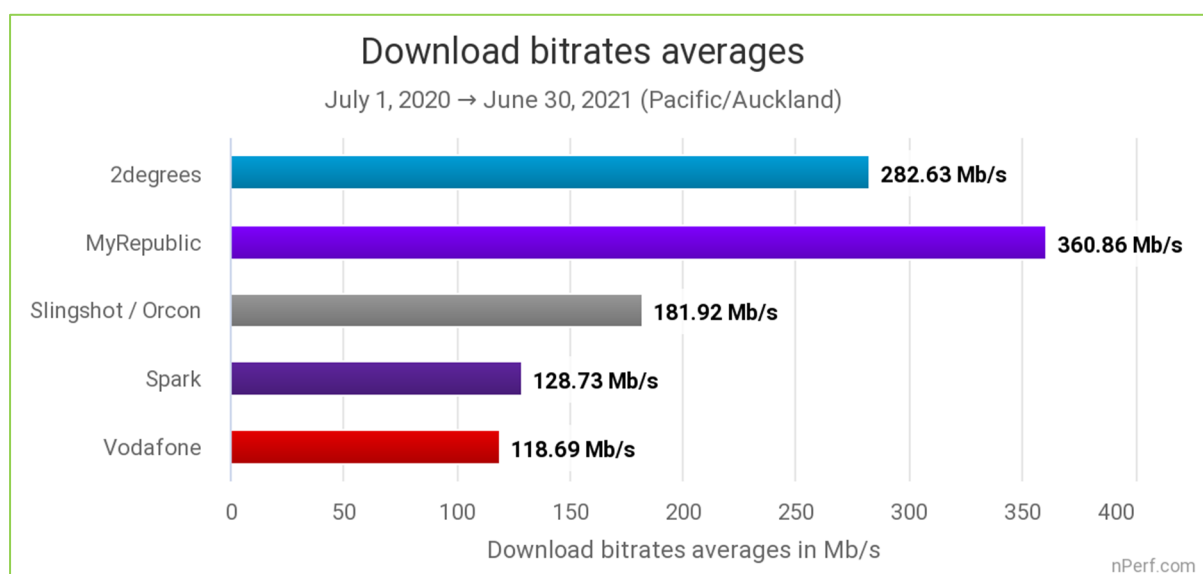| Country	Tests
New Zealand	**27,750**

Breakdown of tests by provider

TrustPower or WirelessNation, amongst others ISPs, haven't been considered for this period, because of the low number of tests carried out on these operators.
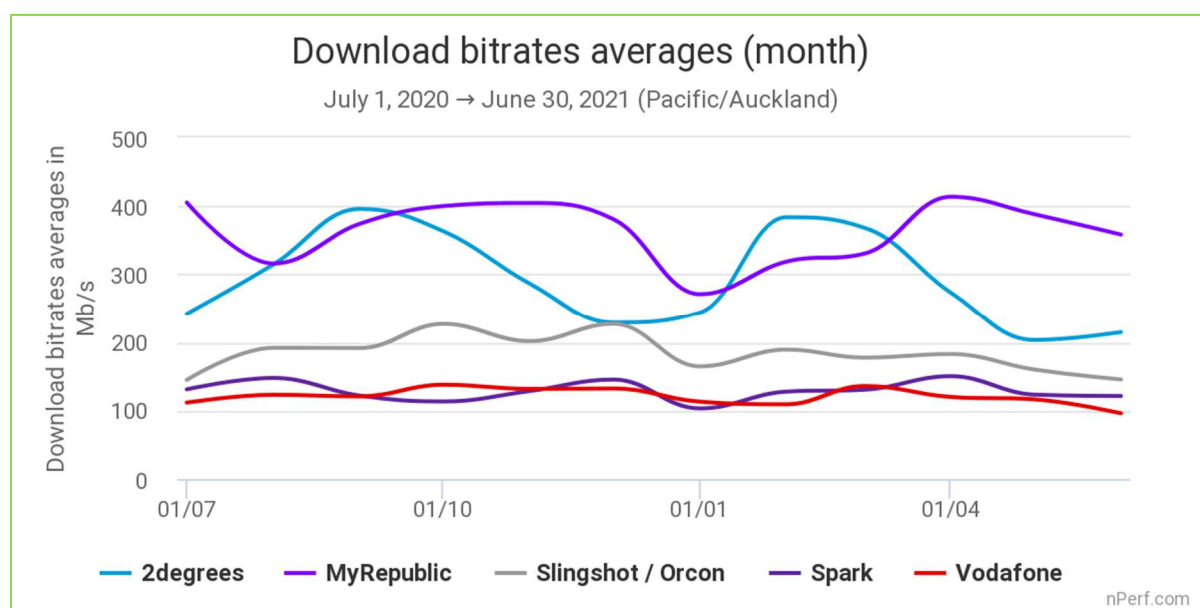
2.2 Download speed

The average download speed in New Zealand was 164 Mb/s during the last 2 semesters.

Download bitrates averages
July 1, 2020 → June 30, 2021 (Pacific/Auckland)

Provider	Download bitrates averages
2degrees	282.63 Mb/s
MyRepublic	360.86 Mb/s
Slingshot / Orcon	181.92 Mb/s
Spark	128.73 Mb/s
Vodafone	118.69 Mb/s

Download bitrates averages in Mb/s

nPerf.com

The highest value is the best.

MyRepublic subscribers enjoyed the best average fixed download speed through the last 12 months.

Download bitrates averages (month)
July 1, 2020 → June 30, 2021 (Pacific/Auckland)

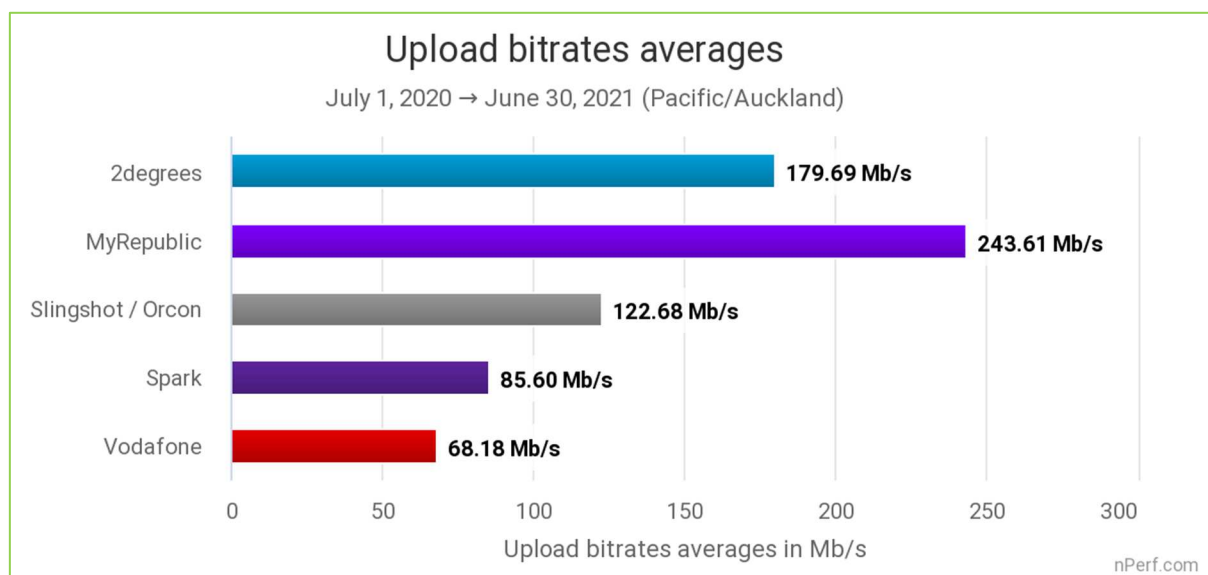— 2degrees — MyRepublic — Slingshot / Orcon — Spark — Vodafone

nPerf.com

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

In short, MyRepublic and 2degrees dominated this indicator across the whole period, but with some notorious variations from one month to the next. Spark, Vodafone and Slingshot/Orcon have been stable with lower average results surrounding 150 Mb/s.

Two ISP record a very good progression in this field over the last 2 semesters : 2degrees (+33%, meaning +71 Mb/s) and Slingshot / Orcon (+41%, meaning +53 Mb/s).
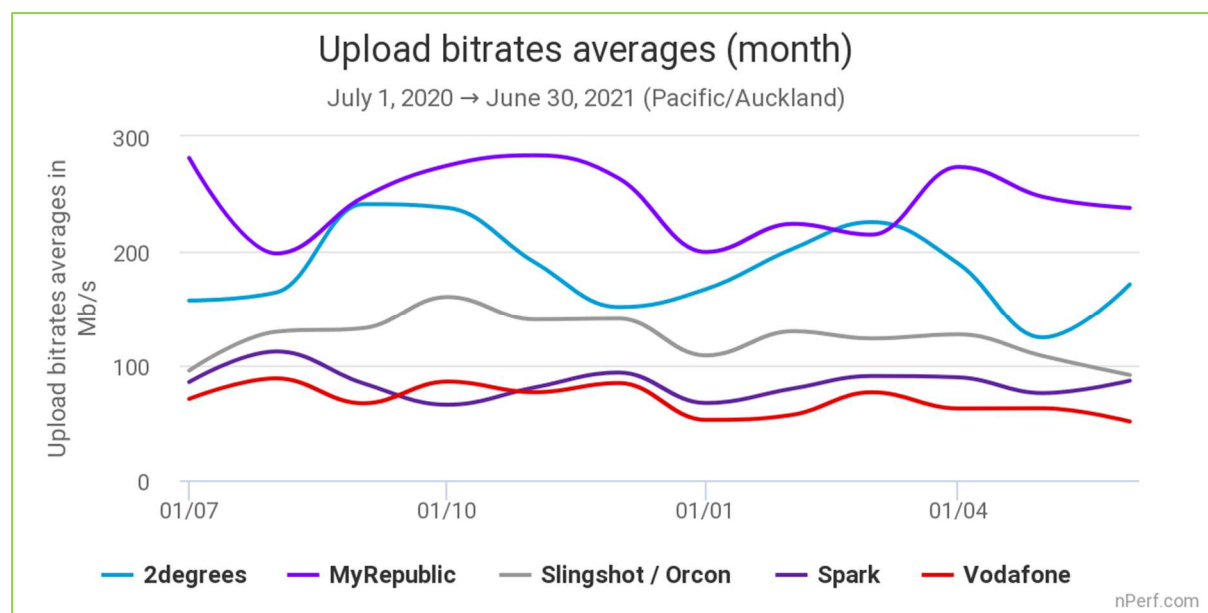
2.3 Upload speed

The average upload speed in New Zealand was 106 Mb/s during the last 2 semesters.

The highest value is the best.

MyRepublic subscribers enjoyed the best average fixed upload speed through the last 12 months.
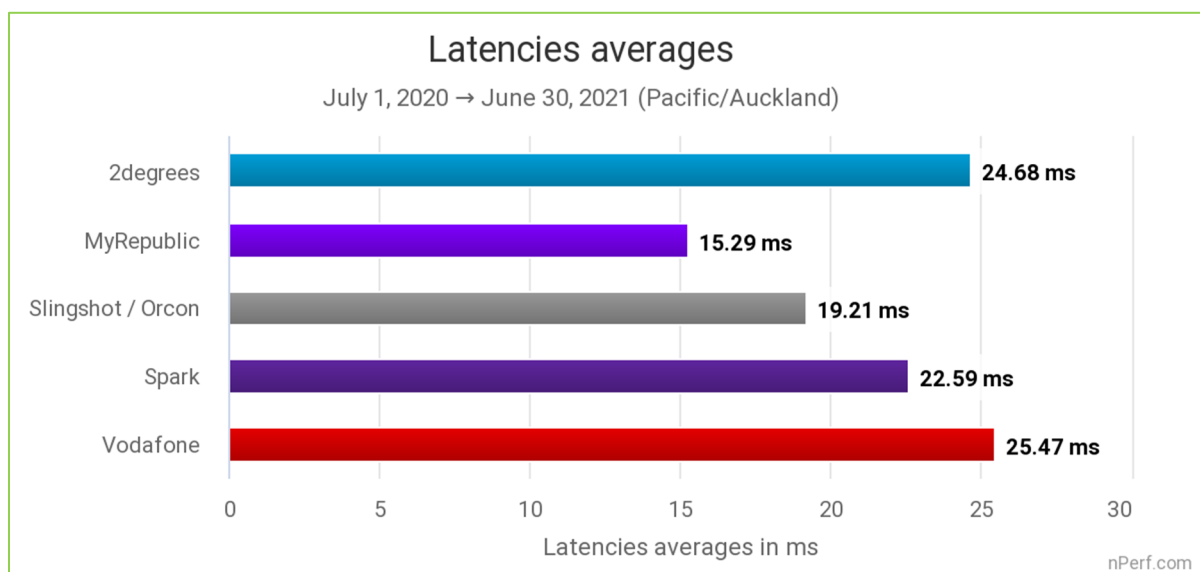
The above graph illustrates the ability of providers to maintain a constant upload speed over the period regardless of the network load (number of connected end-users).

We notice the same trends than with the download speed : MyRepublic and 2degrees way above the three other ISPs, which have provided similar and stable upload speed capacities throughout the 12 months, but with lower figures, particularly Vodafone and Spark.

Again, two ISP record a very good progression in this field over the last 2 semesters : 2degrees (+23%, meaning +34 Mb/s) and Slingshot / Orcon (+43%, meaning +37 Mb/s).

2.4 Latency

The average latency in New Zealand was 22 ms during the last 2 semesters.

Latencies averages
July 1, 2020 → June 30, 2021 (Pacific/Auckland)

Operator	Latency
2degrees	24.68 ms
MyRepublic	15.29 ms
Slingshot / Orcon	19.21 ms
Spark	22.59 ms
Vodafone	25.47 ms

Latencies averages in ms
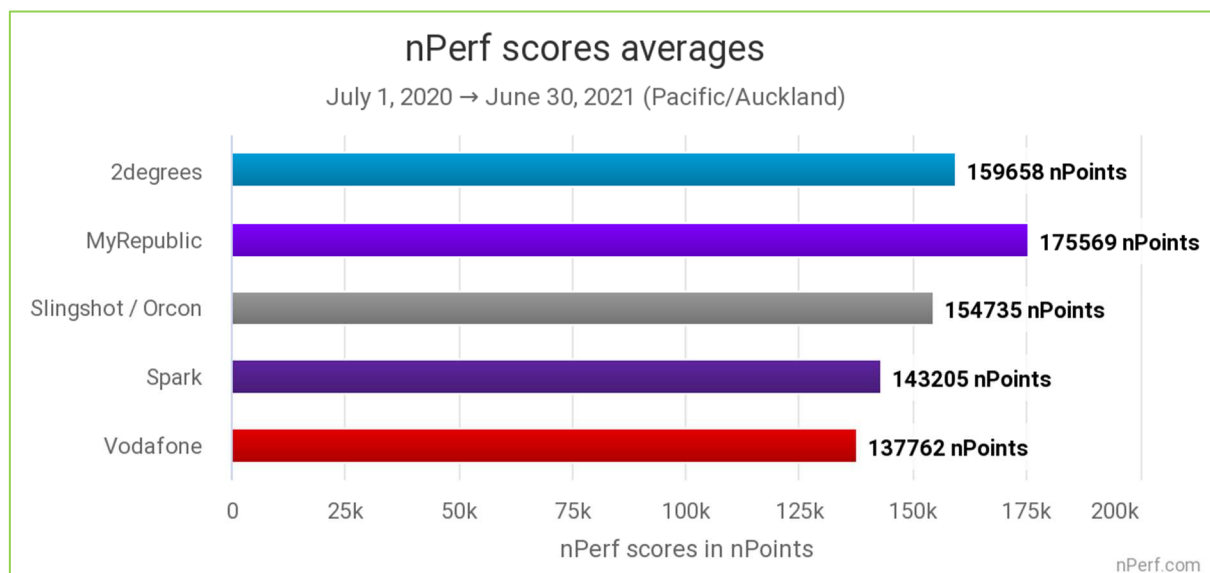
nPerf.com

The lowest value is the best.

MyRepublic subscribers enjoyed the best average fixed latency through the last 12 months.

The best progression in this field correspond to Spark, with a 3,6 ms improvement compared to 2019/2020. Vodafone records a nice enhancement too : 3 ms faster than last year. On the contrary, 2degrees worsens, with a latency almost 2 ms slower.

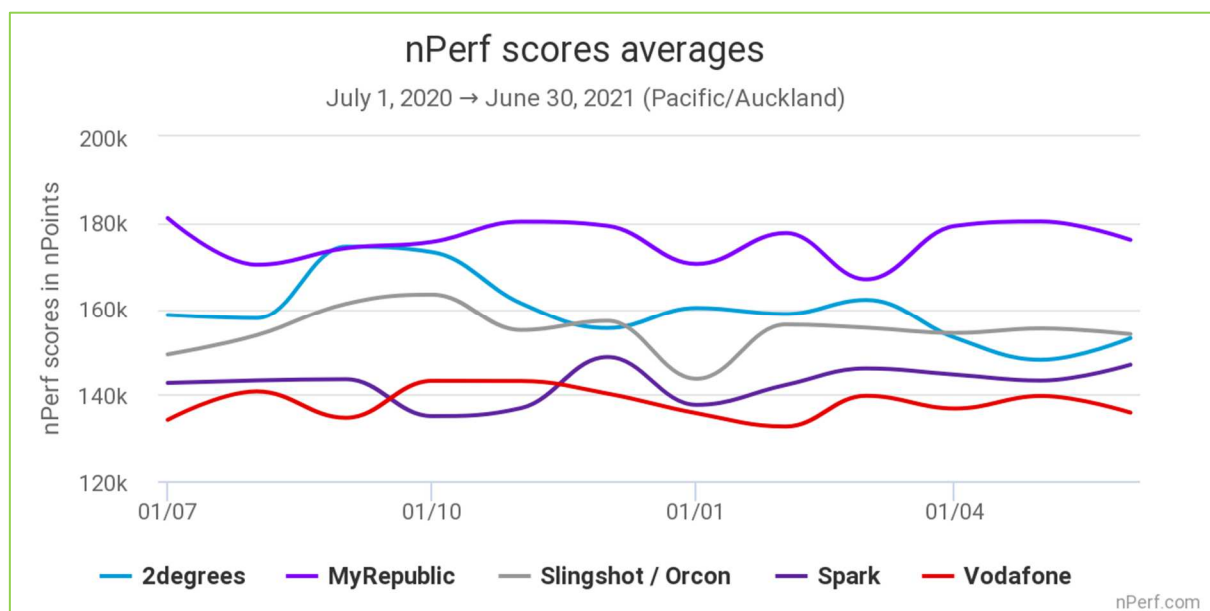## 2.5 nPerf score, all technologies combined

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.

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nperf

nPerf scores averages
July 1, 2020 → June 30, 2021 (Pacific/Auckland)

ISP	nPoints
2degrees	159658 nPoints
MyRepublic	175569 nPoints
Slingshot / Orcon	154735 nPoints
Spark	143205 nPoints
Vodafone	137762 nPoints

nPerf.com

The highest value is the best.

MyRepublic subscribers enjoyed the best fixed Internet performance during the last 2 semesters.

nPerf scores averages
July 1, 2020 → June 30, 2021 (Pacific/Auckland)

— 2degrees — MyRepublic — Slingshot / Orcon — Spark — Vodafone

nPerf.com

We note that all the ISP's slightly increased their score during the last 2 semesters and that Slingshot/Orcon is much closer to 2degrees than in 2019/2020. Besides, the leadership of MyRepublic has never been challenged (except September 2020 by 2degrees) and Vodafone and Spark have never managed to equal -or do better- than their competitors.

Thereby, we will keep an eye on this passionate race for the next months... Indeed, the burst of this performant troublemaker called MyRepublic can definitely change it all !

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 one of the largest panel in New Zealand.

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 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.

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 New Zealand and abroad. nPerf has also installed dedicated servers directly at local ISPs to maximize measurement reliability.

Every local provider are welcome to install nPerf servers, that's free !

The total bandwidth available for New Zealand is greater than **62 Gb/s**, and exceeds **8 Tb/s** worldwide, with more than **2,000** active nPerf servers.

3.3 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.

3.4 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.

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, and on Google Play for Android 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!