Barometer of fixed internet connections in Thailand

First half of 2018

Content

1 Methodology

1.1 The panel

nPerf offers an Internet speed test application, which can be used for free at www.nPerf.com .

Everyone is free to use this app 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 test integrated on ADSLThailand.com and the other partner websites are also included in the panel.

Thus, the nPerf study is based on millions of tests, making it the study with the largest panel in Thailand.

1.2 Speed and latency tests

1.2.1 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.

1.2.2 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 Thailand and abroad. nPerf has also installed dedicated servers directly at Thai providers 3BB, AIS, TOT and True Internet to maximize measurement reliability.

The total bandwidth available for Thailand is greater than 60 Gb/s.

1.3   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 ...).

1.3.1   Filtering of "business" plans

To publish a study that best reflects the consumer market, we have excluded tests made from "business" connections. Tests performed on cellular connections (2G, 3G, 4G) are also excluded from this barometer.

2   Amount of data

From **January 1, 2018** to **June 30, 2018** we counted **4.043.963 tests**, distributed after filtering as follows:

Country	Tests
Thailand	**3.029.844**

Breakdown of tests by provider

ISPs share

CAT Telecom 5.12%
TOT 16.64%
AIS 15.08%
True Internet 37.01%
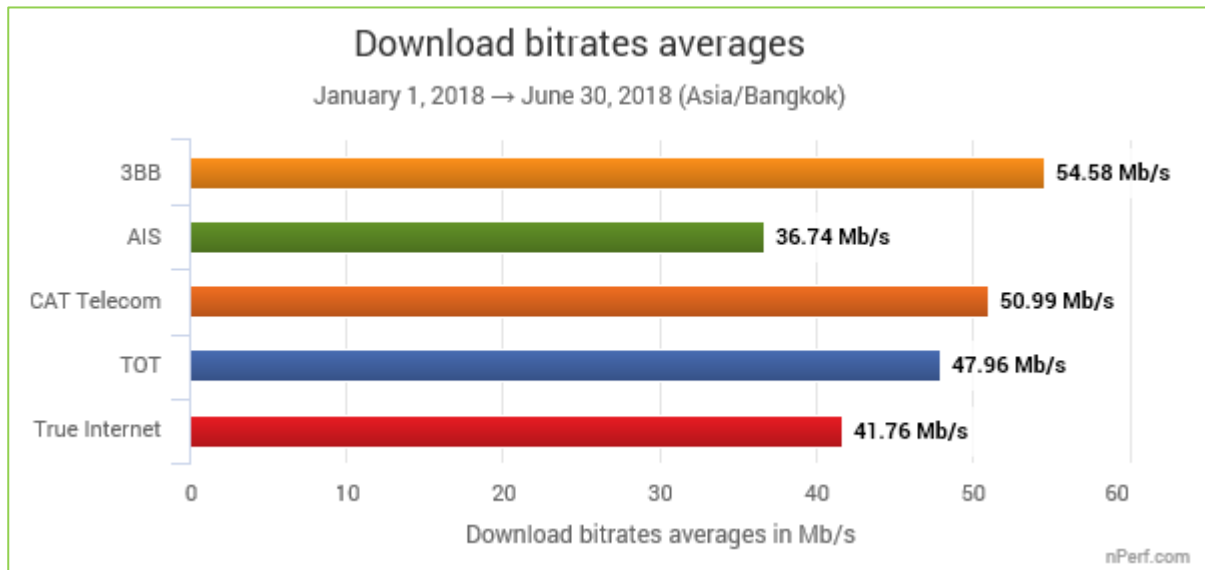3BB 26.16%
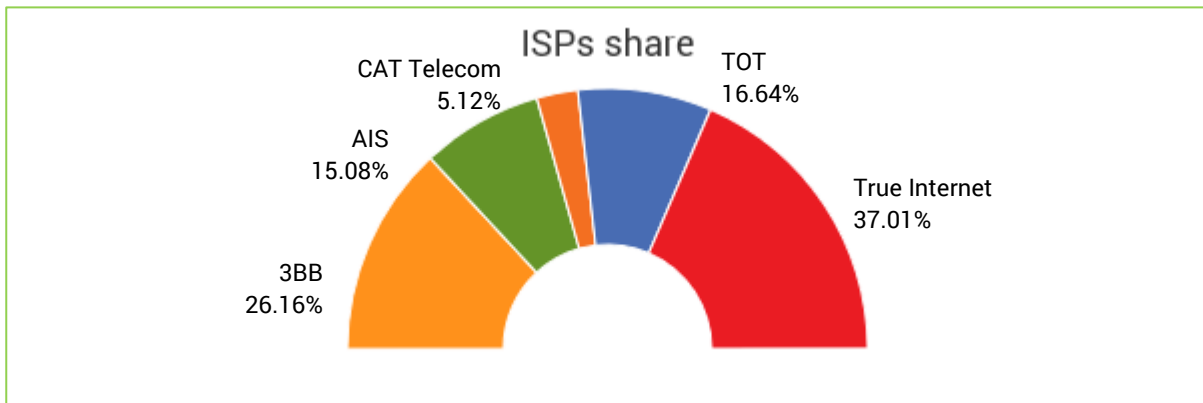
3 Bitrates and latency

3.1 Results by provider

3.1.1 Download speed

In the first half of 2018, the average download speed in Thailand was 45.87 Mb/s.

Download bitrates averages
January 1, 2018 → June 30, 2018 (Asia/Bangkok)

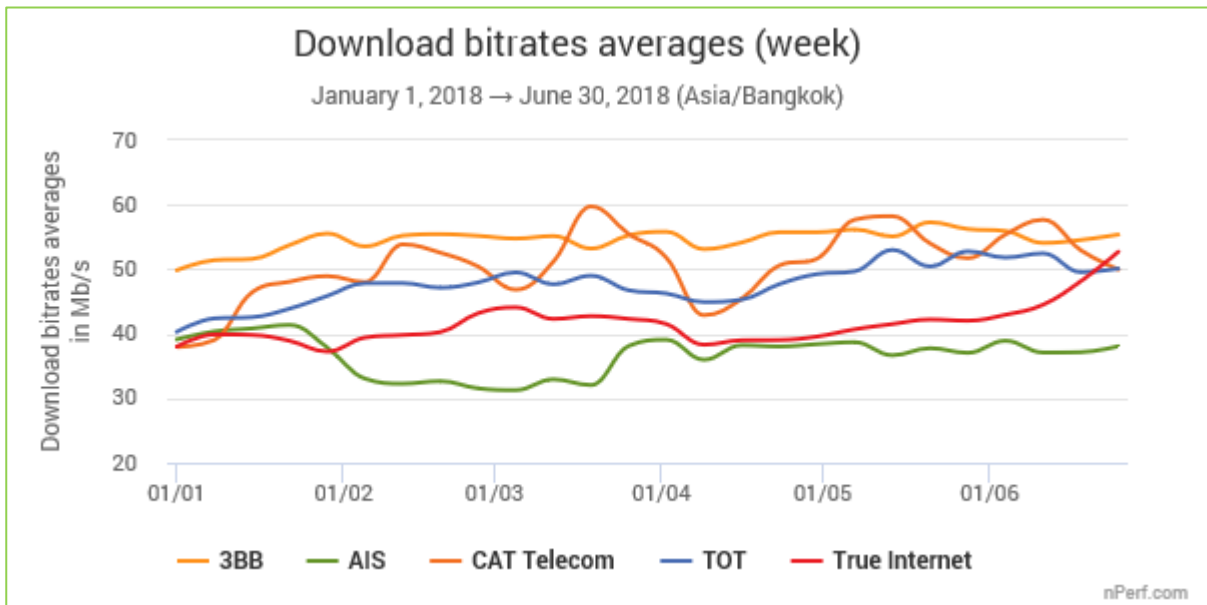| Provider	Download bitrates averages in Mb/s
3BB	54.58 Mb/s
AIS	36.74 Mb/s
CAT Telecom	50.99 Mb/s
TOT	47.96 Mb/s
True Internet	41.76 Mb/s

nPerf.com

The highest value is the best.

All technologies combined, 3BB offers on average the best download speed rate to its subscribers during the first half of 2018.

3BB still leads on these performances in download speed but it will face the rise of CAT Telecom and TOT which increased by 58% and 42% respectively.
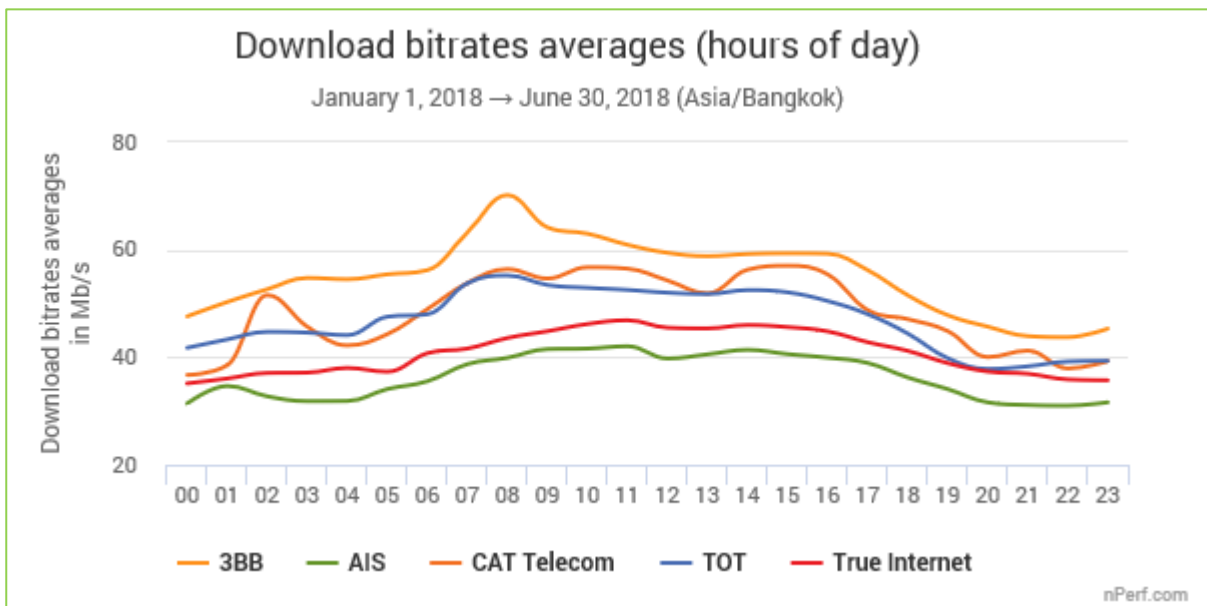
On average, ISP's increased by 27% their download speed rate compared to end 2017.

Download bitrates averages (week)
January 1, 2018 → June 30, 2018 (Asia/Bangkok)

Legend: 3BB, AIS, CAT Telecom, TOT, True Internet

The highest value is the best.

Above graph illustrates the ability of providers to maintain a constant download speed during the first half of 2018, regardless of network load (number of connected clients).

CAT Telecom offers good performance in average but quite fluctuant from 1 month to an another one.

Download bitrates averages (hours of day)
January 1, 2018 → June 30, 2018 (Asia/Bangkok)

Legend: 3BB, AIS, CAT Telecom, TOT, True Internet

The highest value is the best.

This graph illustrates the ability of providers to ensure a constant download speed throughout the day, regardless of network load (number of connected clients). We note for all operators a significant decline in download speed late in the day.

nperf

# In the first half of 2018, the average upload speed in Thailand was 22.72 Mb/s.
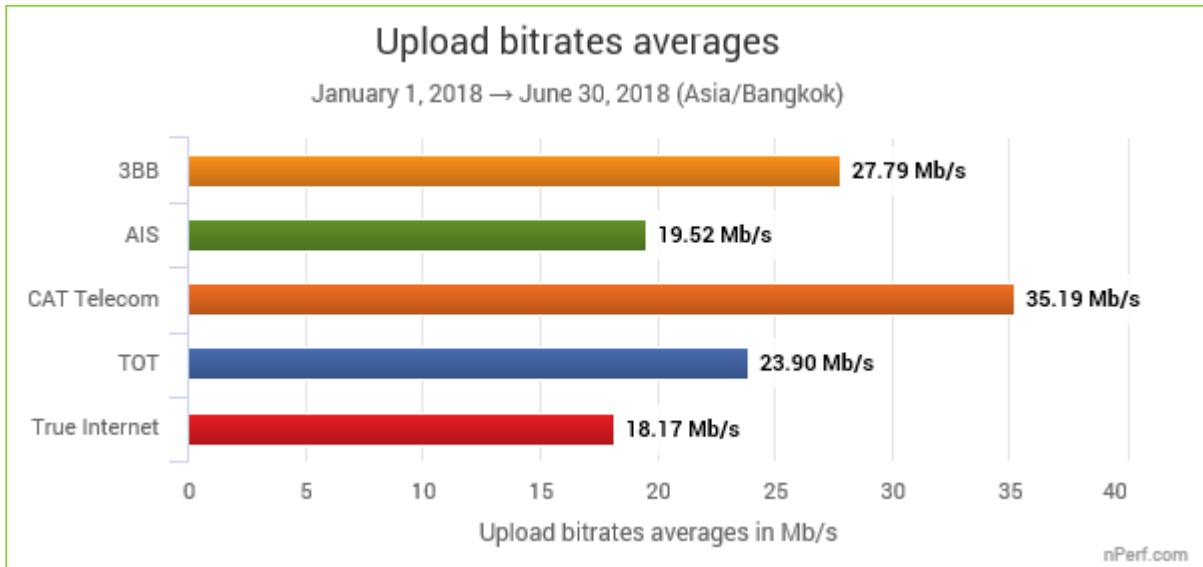
The highest value is the best.

All technologies combined, CAT Telecom offers, on average, the best upload speed to its subscribers during the first half of 2018.

3BB lost the first place and will have to react quickly in order not to be outdistanced by CAT Telecom on upload performances.

On average, ISP's increased by 45% their upload speed rate compared to end 2017 which is a significant step.
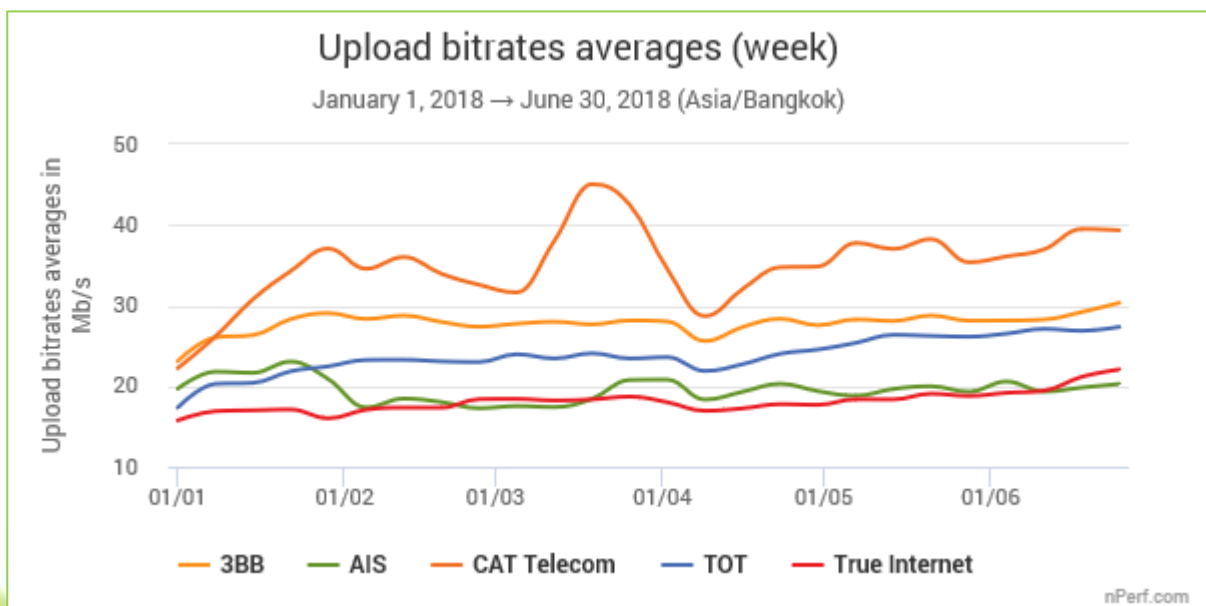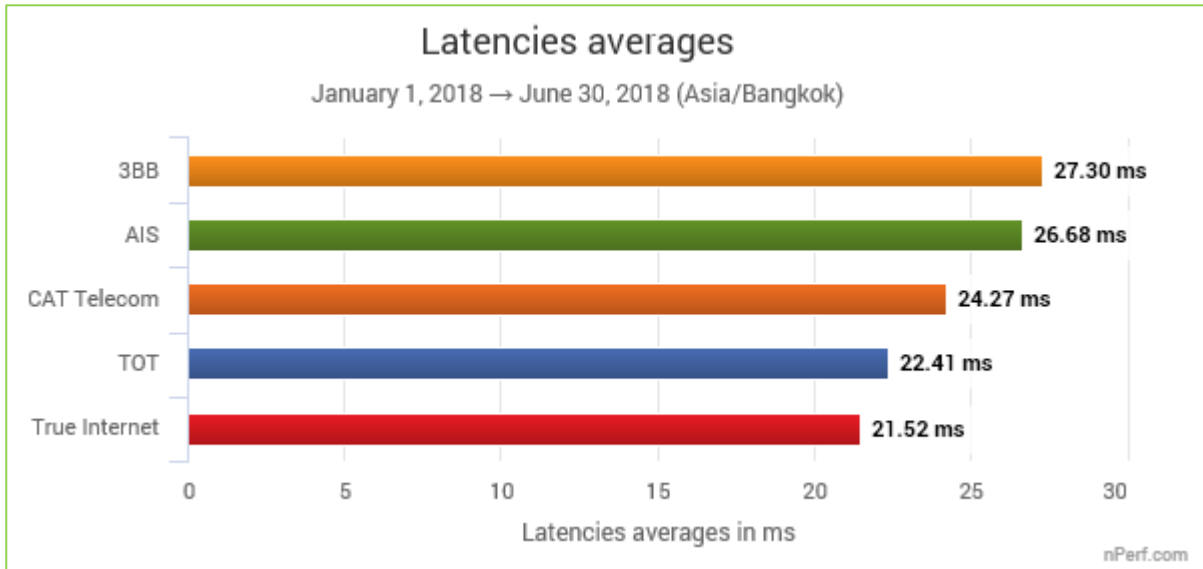

This graph illustrates the ability of providers to maintain a constant upload speed during the first half of this year, regardless of network load (number of connected clients).

The performance of all operators is progressing steadily. CAT Telecom makes the difference on the last two months.
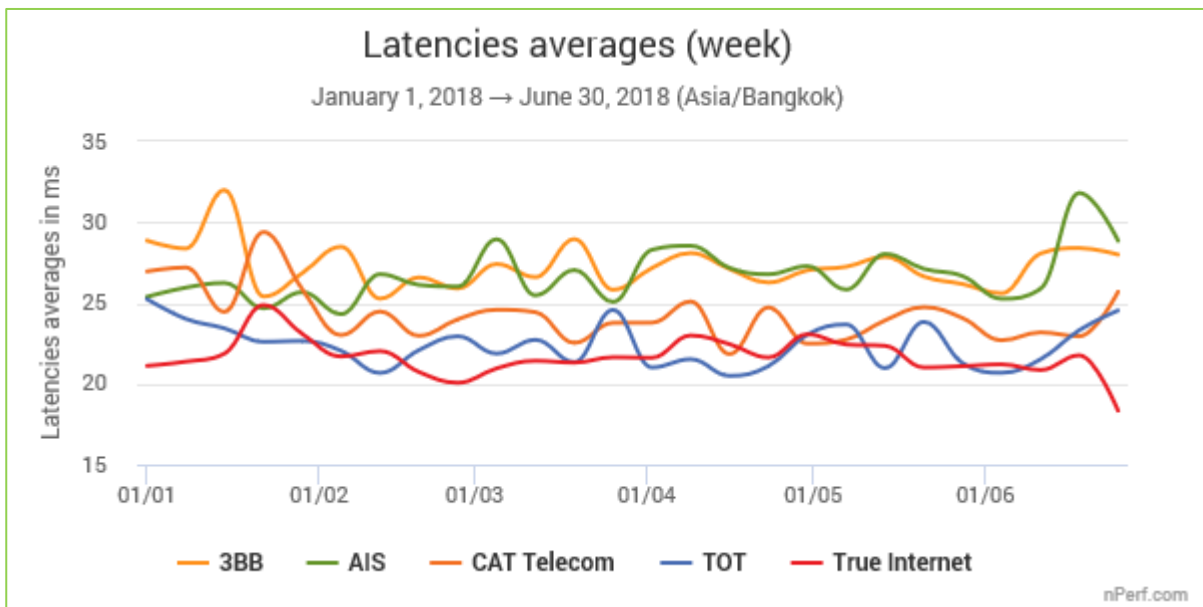
3.1.3 Latency

In the first half of 2018, the average latency in Thailand was 24.10 ms.

The lowest value is the best.

It is the provider True internet which offers the best average latency to its subscribers during the first half of 2018.

Note that TOT has the best progress on the performance of latency during the last six months.

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 clients).

4   You too, participate in the nPerf panel!

To participate in the panel, simply test your connection on the websites www.nperf.com or http://speedtest.adslthailand.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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