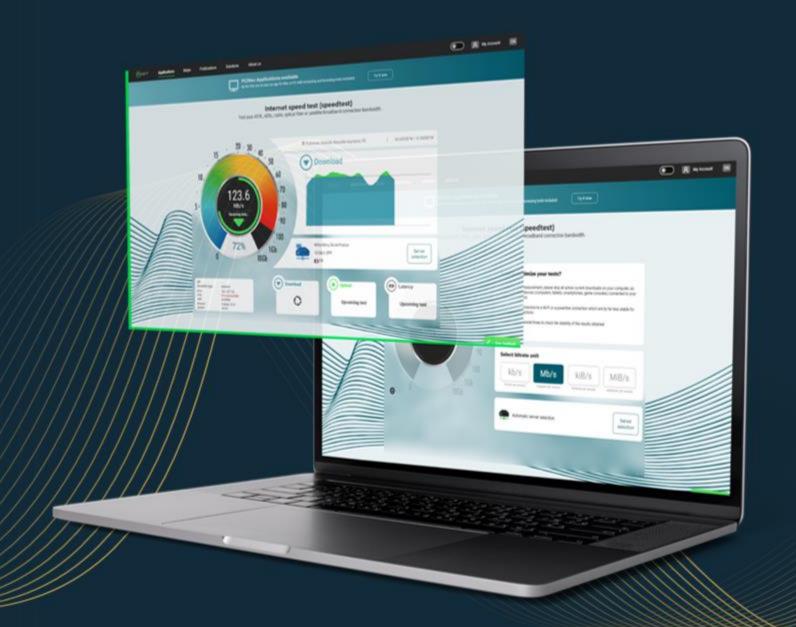
Barometer of fixed Internet connections in Thailand

01/01/2024 - 12/31/2024







### 1. Introducing nPerf



### **Expert in the telecom network optimization**

nPerf is an independent French company based in Lyon (France). For over a decade, nPerf has been a trusted partner for both fixed and mobile operators, providing comprehensive network testing solutions and analysis. Our mission is to accurately measure, evaluate, and enhance the understanding of Internet connectivity around the world.







## **Test your Internet connection with nPerf!**

nPerf allows you to test the quality of your fixed, mobile, or Wi-Fi Internet connections up to 10 Gb/s! Dowload our app or visit our website!







# 2. Executive Summary



The subscribers of True Online enjoyed the best fixed Internet performances in 2024.

		3BB	AIS	NT	True Online	dtac
•	Download bitrates (Mb/s)	284,24	310,18	196,03	348,26	34,31
	Upload bitrates (Mb/s)	217,80	226,20	167,64	276,11	10,34
•	Latency (ms)	11,96	10,77	21,38	11,49	37,69
	Web browsing (%)	69,60	70,74	62,40	69,92	61,44
0	Youtube streaming (%)	88,65	89,36	79,97	89,39	86,19
<u>(U)</u>	nPerf Score (nPoints)	136 689	140 486	111 127	141 986	70 867







The subscribers of AIS enjoyed the best FTTH Internet performances in Thailand in 2024.

		3BB	AIS	NT	True Online	dtac	
<b>▼</b> Do	wnload bitrates (Mb/s)	452,82	480,77	369,98	488,36	293,24	
<b>▲</b> Up	load bitrates (Mb/s)	354,80	357,82	326,32	393,35	236,47	
<b>◆▶</b> La	tency (ms)	9,56	8,42	13,12	8,90	17,72	
€ We	eb browsing (%)	75,11	75,59	72,47	73,95	64,69	
Yo	utube streaming (%)	93,04	92,82	90,73	92,69	75,42	
nP	Perf Score (nPoints)	156 413	158 285	146 055	157 130	118 009	



The subscribers of AIS enjoyed the best WIFI Internet performances in Thailand in 2024.

	ЗВВ	AIS	NT	True Online	dtac	
Download bitrates (Mb/s)	164,90	209,31	140,99	199,49	17,35	
▲ Upload bitrates (Mb/s)	135,37	157,95	118,72	167,07	9,39	
<b>◀▶</b> Latency (ms)	13,45	12,53	19,38	15,15	43,99	
Web browsing (%)	70,27	71,63	66,75	70,35	49,10	
Youtube streaming (%)	89,39	90,17	86,01	89,91	71,26	
nPerf Score (nPoints)	126 964	133 393	114 550	129 871	49 244	

### 3. Analysis



#### Introduction

In 2024, the fixed-line internet market in Thailand has seen notable developments. True Online continues to hold its position as the market winner, maintaining its lead from the previous year. However, AIS emerges as a new leader in specific areas like WiFi and FTTH. The market has shown resilience and competitiveness, with True Online and AIS both excelling in different categories, creating a dynamic landscape.

The market winners for this period are True Online and AIS. True Online retains its dominance in download and upload speed, while AIS has shown strength in latency, browsing, and video streaming. This shift indicates a competitive environment with multiple operators excelling in various Key Performance Indicators (KPIs).

### True Online: Market Leader with Exceptional Performance.

True Online continues to lead the market with a strong overall score of 141,986 nPoints for the period. The company excels in download and upload speed, maintaining its position as the top performer in these KPIs. True Online also shares the lead in video streaming, reflecting its robust service quality in fixed-line internet.

### AIS: Dominance in Latency and Browsing.

AIS has emerged as strong competitor in the market, with an impressive performance in latency and browsing. Achieving the best latency score, AIS demonstrates a commitment to providing fast and reliable internet. The company also excels in video streaming, sharing the lead spot with True Online, and remains competitive in WiFi and FTTH focus areas.

### **3BB: Consistent performances**

3BB delivered consistent performances across most KPI and is definitely one of the top performer of the Thai telecom market.

### NT: A potential contender to the podium

NT shows commendable performance across most KPIs and especially on the consumer experience (streaming/browsing). One can expect NT to join the podium in the coming year.

### dtac: Room for improvement.

While dtac does not lead in any specific category, it provides consistent service across all KPIs.

#### Conclusion

True Online confirms again his leadership on the market. However, competition is very active and AIS has emerged as strong contender by taking the lead on the WiFi and FTTH segments. True Online leads in download and upload speed, while AIS shines in latency, browsing, and video streaming. The competitive nature of the market highlights the strengths of each operator, contributing to the overall improvement and service quality in Thailand's fixed-line internet landscape.

### 4. Methodology



nPerf provides a free application to assess Internet connection quality via its website and mobile apps (Android, iOS). Daily, thousands of people rely on nPerf for speed tests in their country, contributing to a comprehensive crowdsourced database covering all operators.

The study employs a strong filtering method to reflect real customer experiences on a specific network (mobile or fixed line). Measures are taken to prevent probes and measurement robots from affecting the results.

We assess:

#### Download birate

Indicates the amount of data your connection can receive in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.

### Upload birate

Indicates the amount of data your connection can send in one second to the nPerf server. The highest the measured value, the best is the bitrate of your connection.

### **◆►** Latency (ping)

It indicated the delay a small packet of data requires to make a round-trip from your computer to the nPerf server. The shorter the delay, the most reactive your connection is. The main is the minimum value

### Browsing performance

The browsing test assesses the load time of the fully loaded pages, including images, javascript, CSS, and fonts, for the five most popular sites. This indicator reflects the perceived quality by the user.

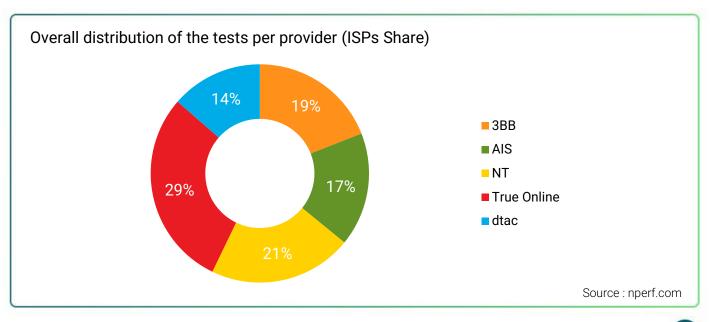
### Streaming performance

The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the perceived quality by the user.

Statistical precision is crucial in accurately determining winners. At nPerf, we prioritize test quality, precise reporting, and transparency. Analyzing a large volume of tests in this study, we've achieved 3% precision for absolute values, highlighting the reliability and accuracy of our data.

For a more comprehensive understanding of the user experience, our report features test results during both Busy hours (6 PM to 11 PM) and Idle hours (the rest of the day). Busy hours, marked by network strain, can impact user experience through congestion. This approach helps in understanding how network performance fluctuates throughout the day.

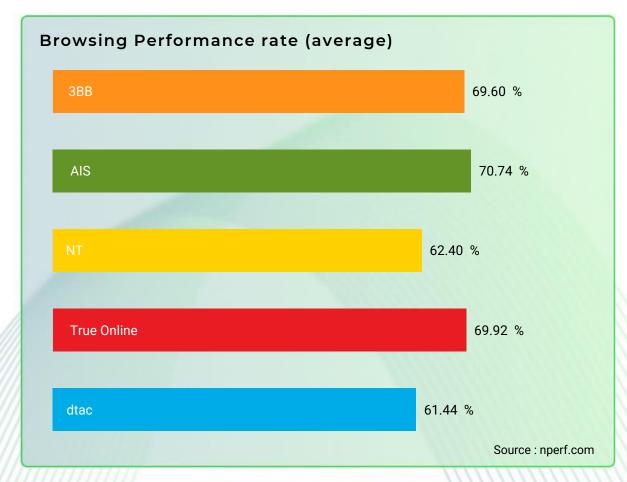
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



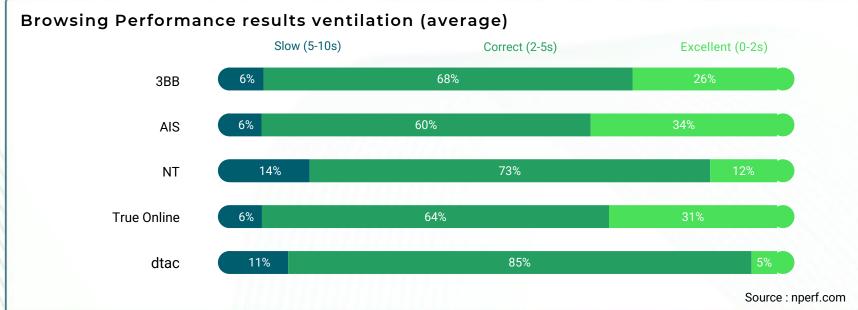


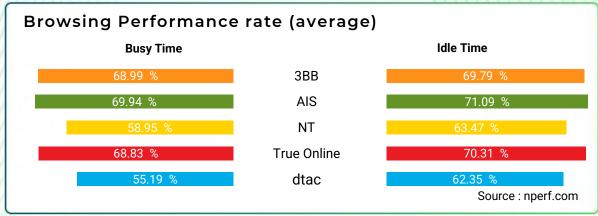
### **Quality of Experience: Browsing**

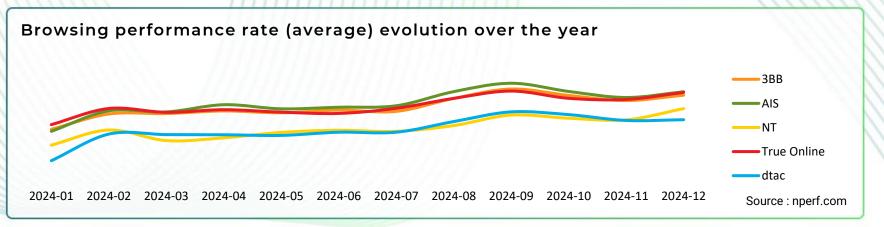




The subscribers of AIS enjoyed the best fixed Internet browsing performance in 2024.



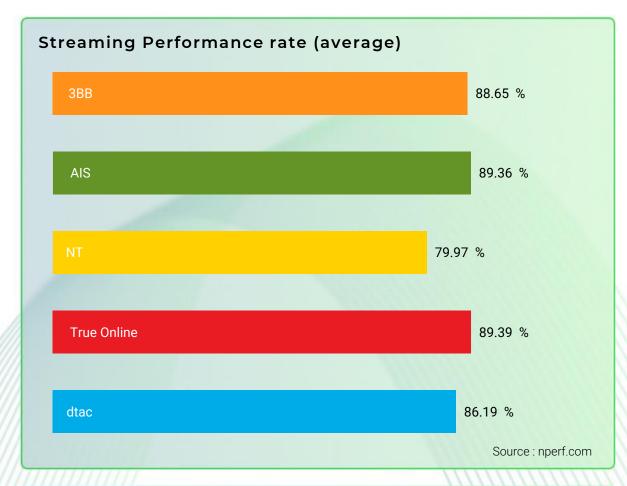




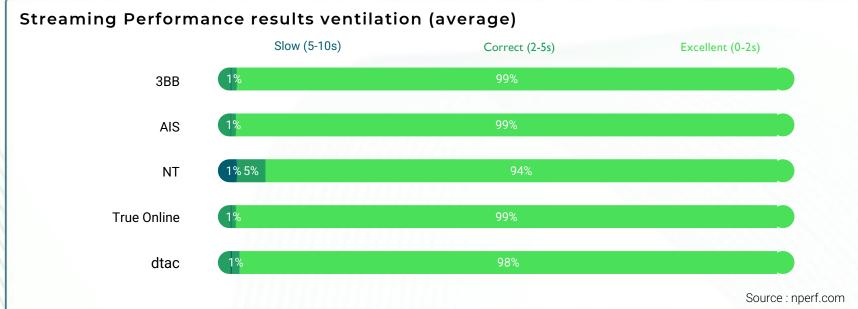


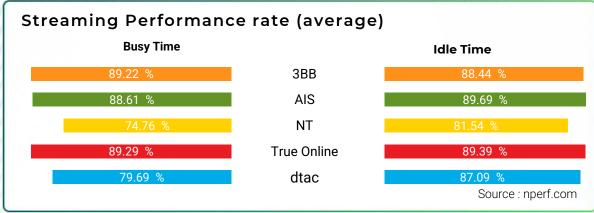
## **Quality of Experience: Streaming**

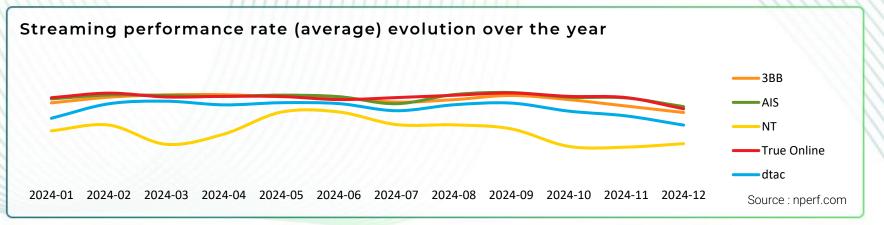




The subscribers of AIS and True Online enjoyed the best fixed Internet streaming performance in 2024.



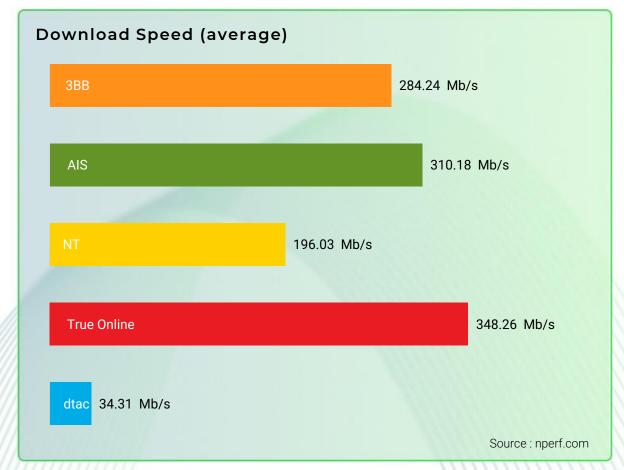




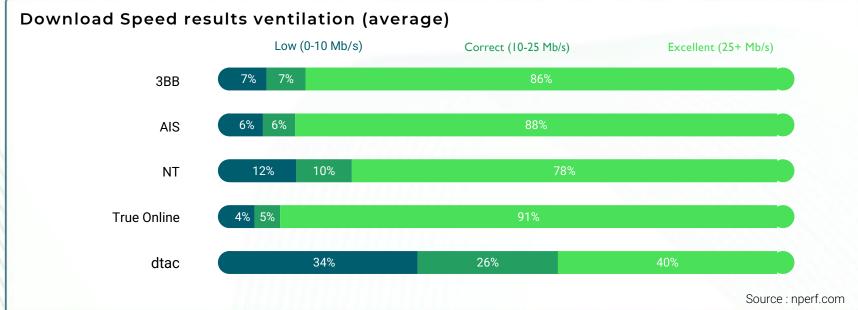


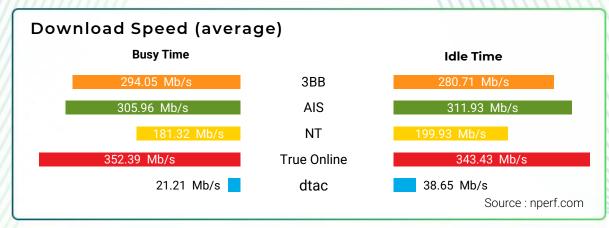
### Speed: Download

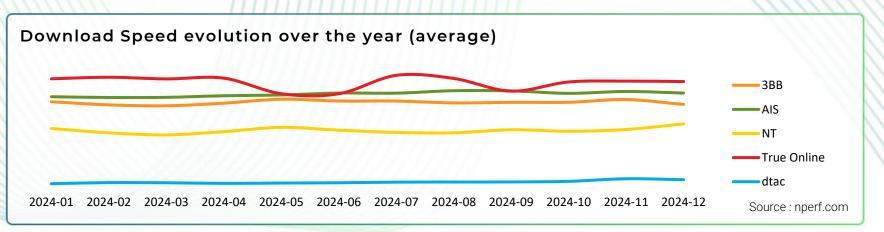




The subscribers of True Online enjoyed the best average fixed Internet download speed in 2024.



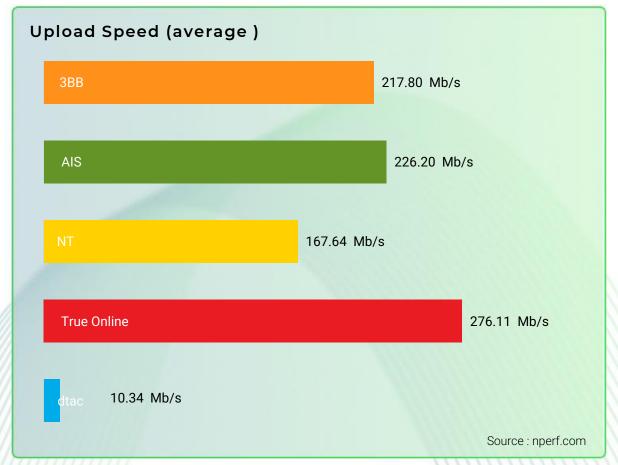




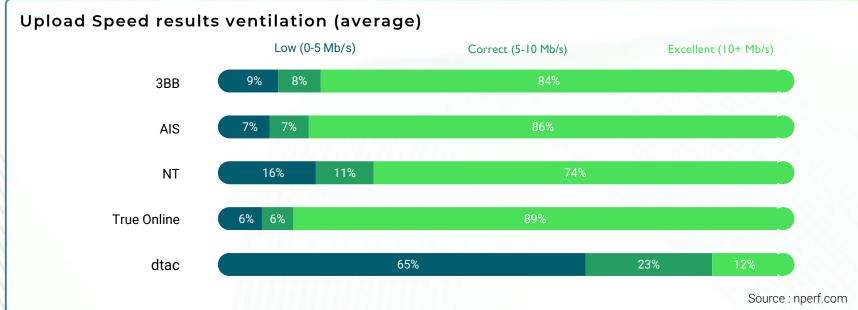


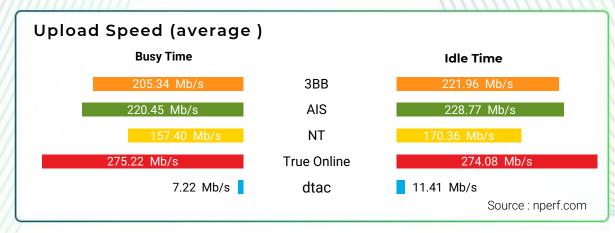
## Speed: Upload

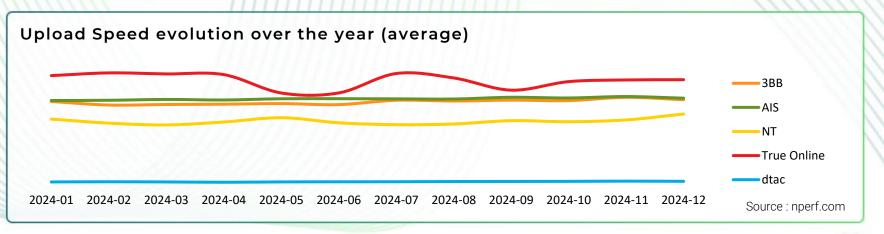




The subscribers of True Online enjoyed the best average fixed Internet upload speed in 2024.



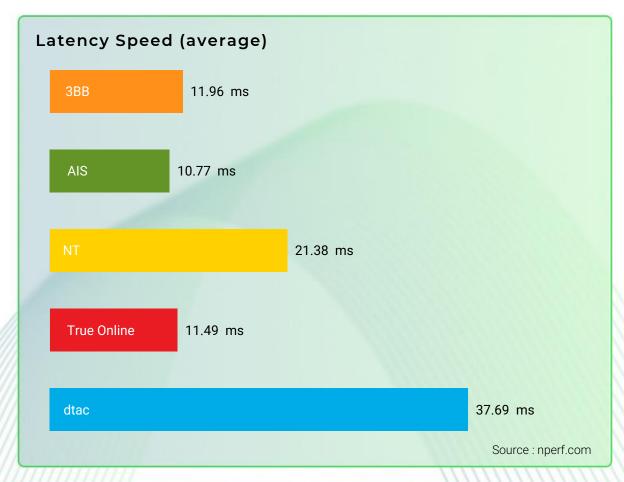




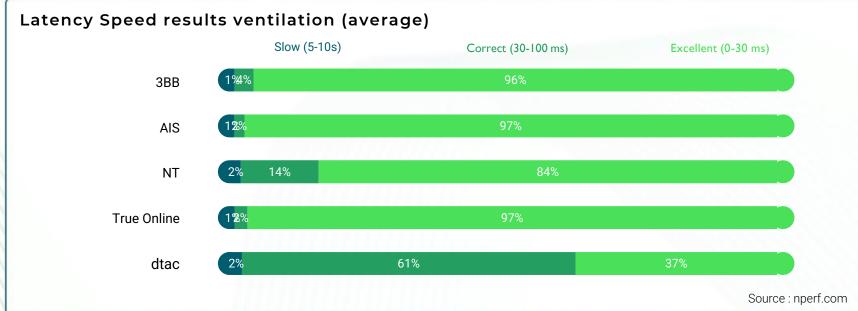


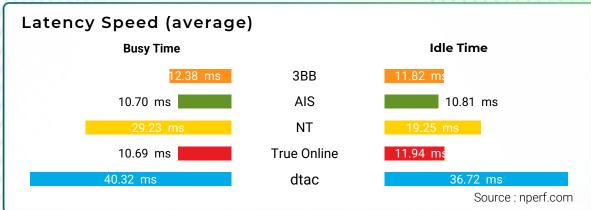
# Speed: Latency

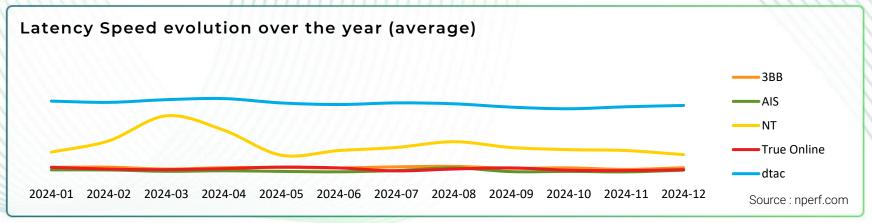




The subscribers of AIS enjoyed the best average fixed Internet latency speed in 2024.

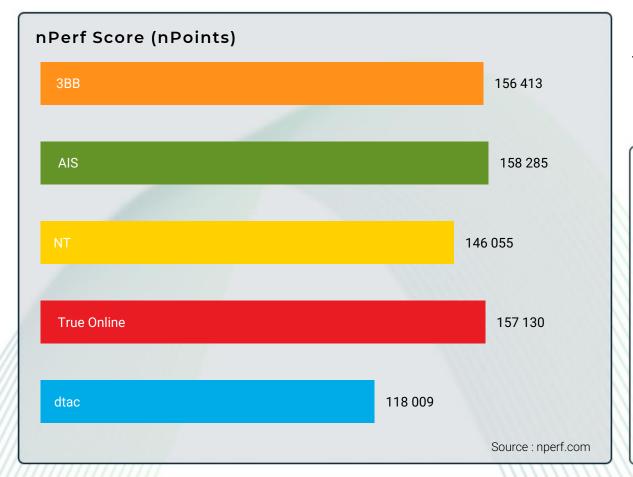






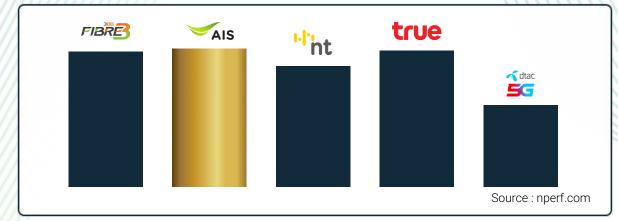
## Fixed Internet performance in Thailand

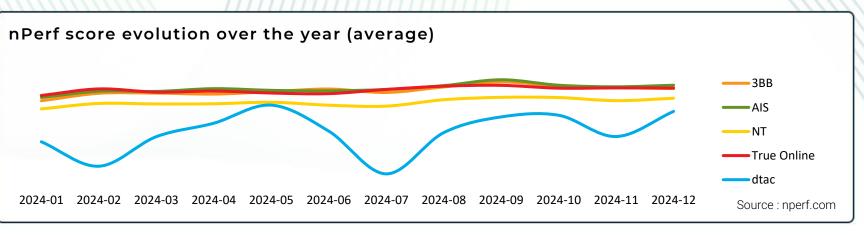




The subscribers of AIS enjoyed the best FTTH Internet performances in 2024.

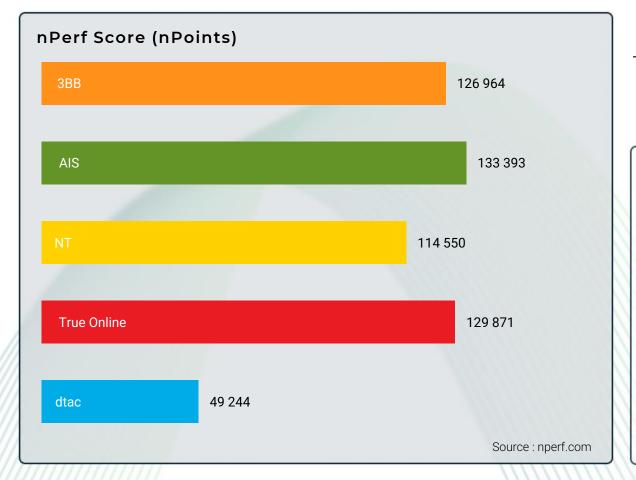
- Best performances FTTH: AIS
- Best web browsing performances FTTH: AIS
- Best video streaming performances FTTH: 3BB
- Fastest performances (Download) FTTH: True Online
- Fastest performances (Upload) FTTH: True Online
- FTTH connections with the lowest latency: AIS





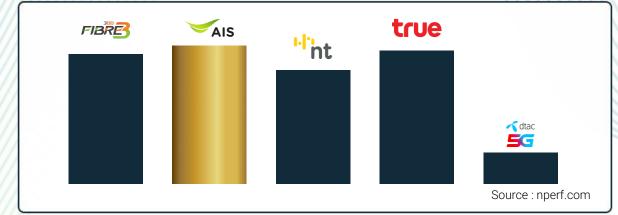
## Fixed Internet performance in Thailand

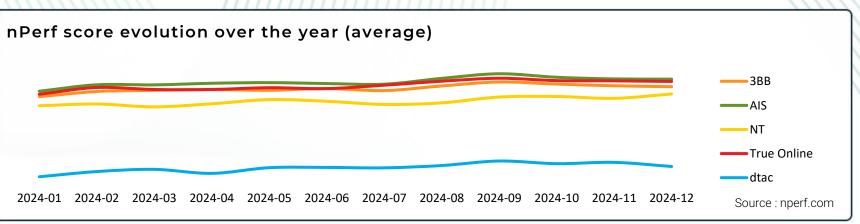




The subscribers of AIS enjoyed the best WIFI Internet performances in Thailand in 2024.

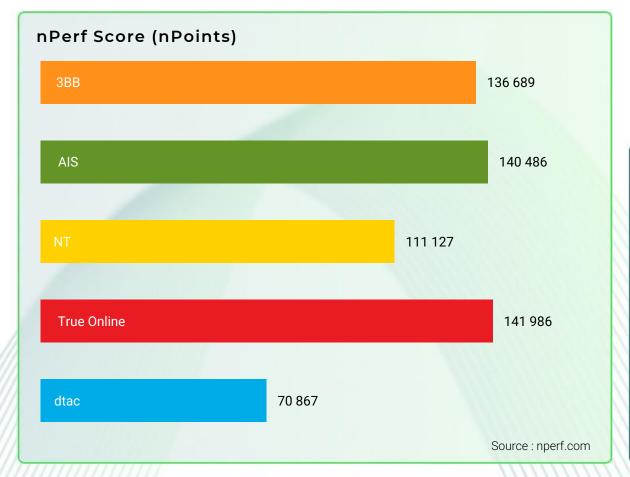
- Best performances WIFI: AIS
- Best web browsing performances WIFI: AIS
- Best video streaming performances WIFI: AIS
- Fastest performances (Download) WIFI: AIS
- Fastest performances (Upload) WIFI:
- WIFI connections with the lowest latency: AIS





## Fixed Internet performance in Thailand





The subscribers of True Online enjoyed the best fixed Internet performances in 2024.

The nperf score takes into account the measured bitrates, the latency and the Qoe tests.

The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

Thus, this score reflects the overall quality of the connection experienced by the user.

