

# Barometer of mobile Internet connections in Sri Lanka

01/01/2023 - 31/12/2023













4 Methodology



## 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!







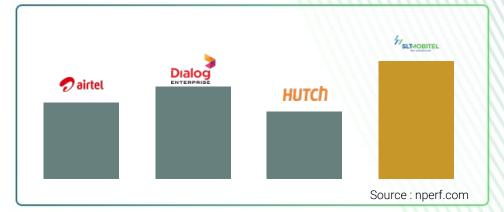
# 2. Executive Summary



The subscribers of Mobitel enjoyed the best mobile Internet performances in Sri Lanka during 2023.

	Airtel	Dialog	Hutch	Mobitel
Download bitrates (Mb/s)	5.01	6.62	4.37	6.90
Upload bitrates (Mb/s)	1.29	2.27	1.91	3.30
► Latency (ms)	146.49	187.37	159.00	129.77
Web browsing (%)	19.35	20.67	16.61	23.14
Youtube streaming (%)	51.33	51.88	46.41	58.94
nPerf Score (nPoints)	12 507	15 102	11 057	19 279





## 3. Analysis



#### Mobitel leads with outstanding performance

Mobitel emerges as the frontrunner with the highest download bitrate at 6.9 Mb/s and an upload bitrate of 3.3 Mb/s, the best among the ISPs analyzed. Coupled with a relatively low latency of around 130 ms, Mobitel offers a robust service conducive to a smooth online experience. Its web browsing score stands at 23.14%, and YouTube streaming at 58.94%, both leading the pack. The nPerf score of 19,279 npoints further reflects Mobitel's position as the market leader, showcasing its superior network quality and user satisfaction.

#### Dialog shows solid capabilities

Dialog follows with a competitive download bitrate of 6.62 Mb/s and an upload bitrate of 2.27 Mb/s. Despite a higher latency of 187.37 ms, which might affect real-time applications, Dialog maintains commendable web browsing and YouTube streaming scores at 20.67% and 51.88%, respectively. With an nPerf score of 15,102 points, Dialog demonstrates strong capabilities and a commitment to delivering quality internet services, albeit with room for improvement in latency management.

#### Airtel balances speed and content delivery

Airtel offers a download bitrate of 5.01 Mb/s and an upload bitrate of 1.29 Mb/s, positioning itself in the middle tier of the market. The latency is on the higher side at 146.49 ms, which could impact time-sensitive online activities. However, Airtel's web browsing and YouTube streaming scores,

at 19.35% and 51.33% respectively, indicate a decent quality of content delivery. With an nPerf score of 12,507 points, Airtel showcases a balanced approach, ensuring satisfactory service despite the challenges.

#### Hutch, room for growth

Hutch, while trailing with the lowest download bitrate of 4.37 Mb/s and an upload bitrate of 1.91 Mb/s, shows potential for growth. The latency of 159 ms is moderate, and the web browsing and YouTube streaming scores of 16.61% and 46.41% suggest areas for enhancement. An nPerf score of 11,057 points reflects Hutch's current standing and highlights the need for focused improvements to elevate user experience and competitive edge.

#### Strategic outlook

To thrive in Sri Lanka's evolving telecom landscape, ISPs might continue investing in the network. For Mobitel, maintaining its lead will require ongoing investments in technology and customer service. Dialog can leverage its solid base to improve latency issues and further enhance user experience. Airtel and Hutch, with targeted enhancements in speed, latency, and content delivery, can strengthen their market positions and challenge the leaders more effectively.

## 4. Methodology



nPerf provides a **free tool 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.

For mobile connections, we assess:

#### **Download bitrate:**

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 bitrate:

Indicates the amount of data your connection can send in one second from 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 user's perceived quality of the Internet network.

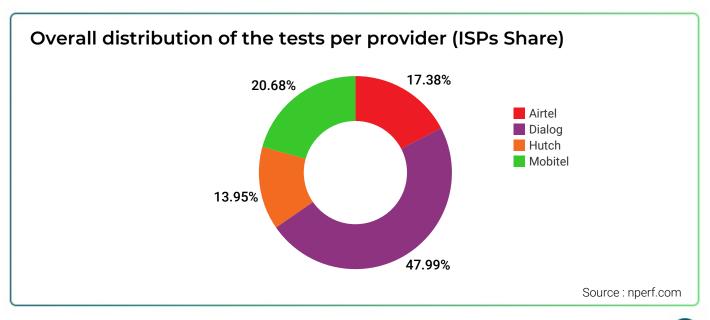
#### **Streaming performance:**

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 user's perceived quality of the Internet network.

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 and 1 point for percentage-based results, 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.

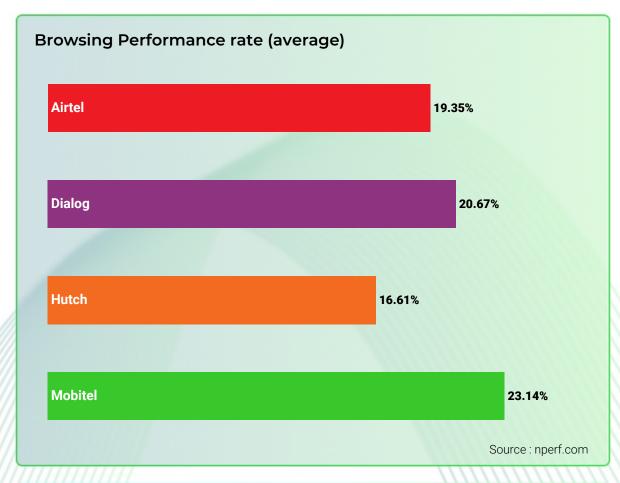
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



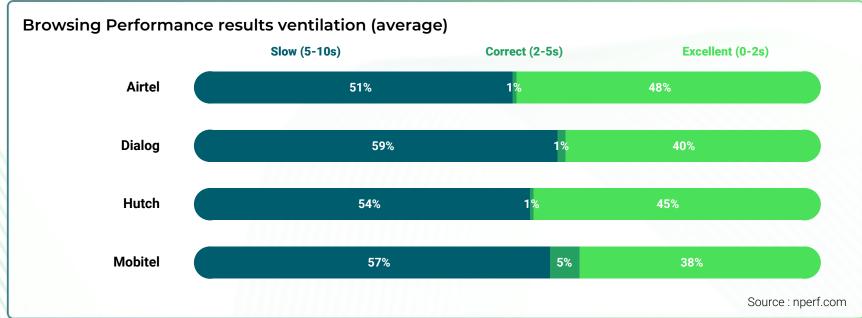


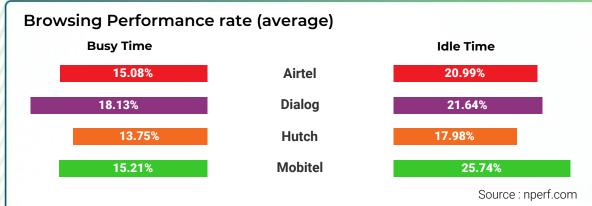
# **Quality of Experience: Browsing**

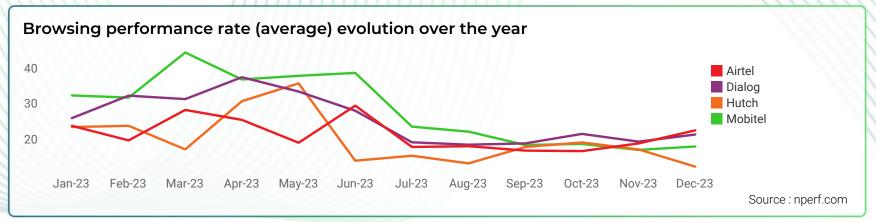




The subscribers of Mobitel enjoyed the best mobile Internet browsing performance in 2023.



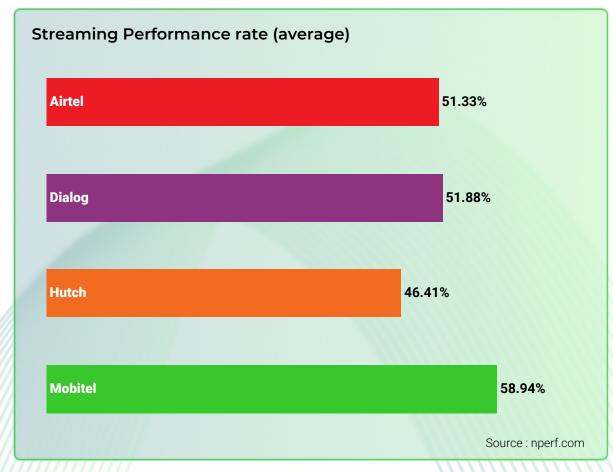




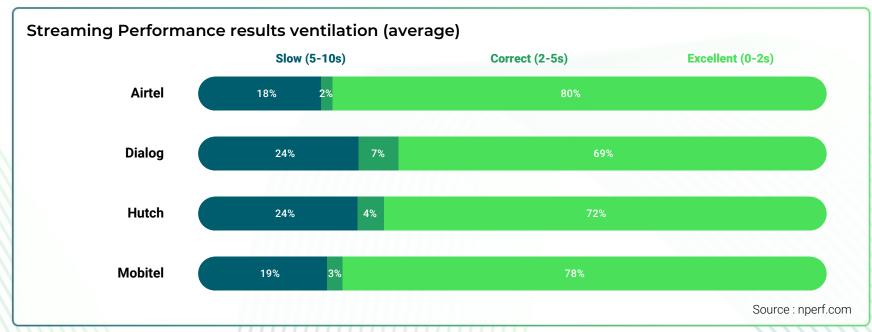


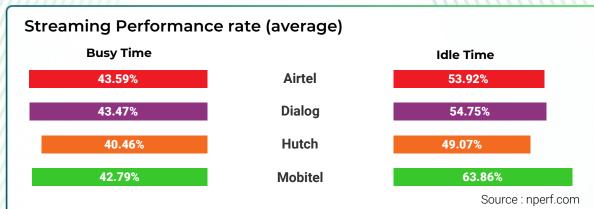
# **Quality of Experience: Streaming**

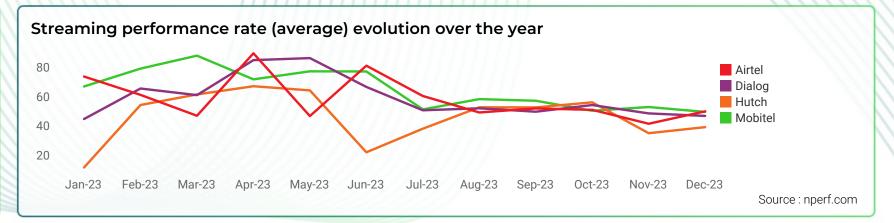




The subscribers of Mobitel enjoyed the best mobile Internet streaming perforance in 2023.



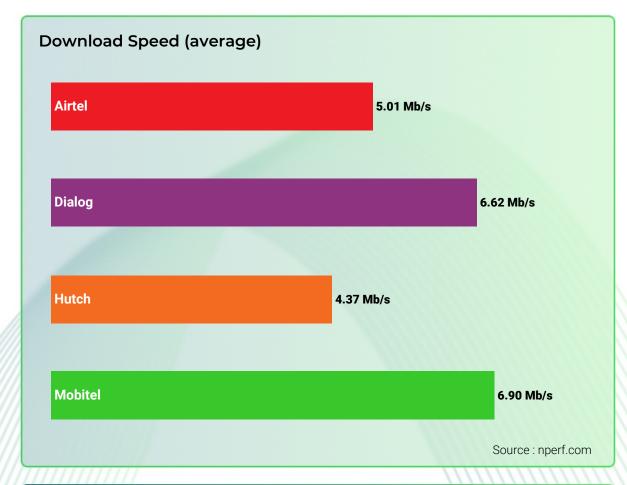






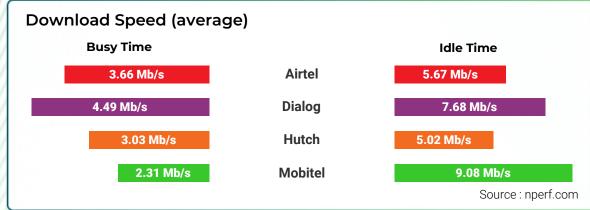
## Speed: Download

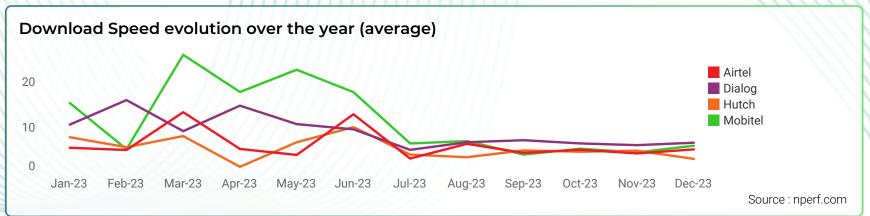




The subscribers of Mobitel enjoyed the best average mobile Internet download speed in 2023.



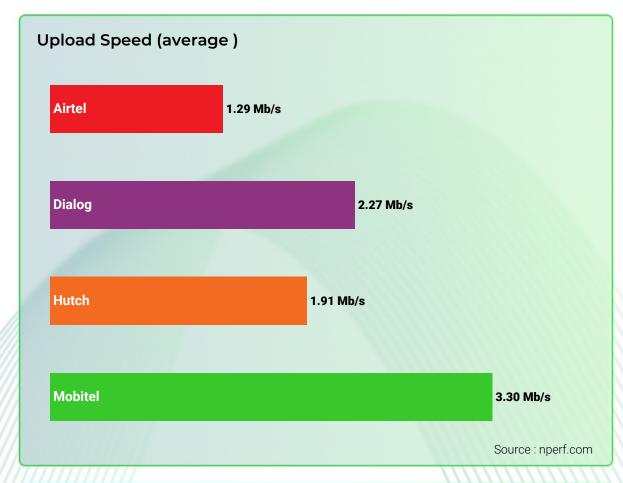




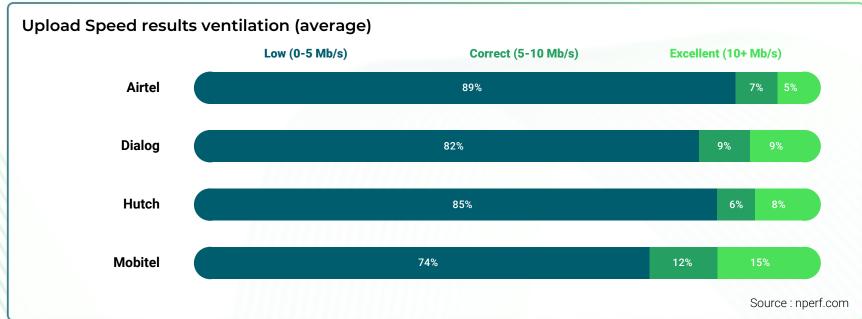


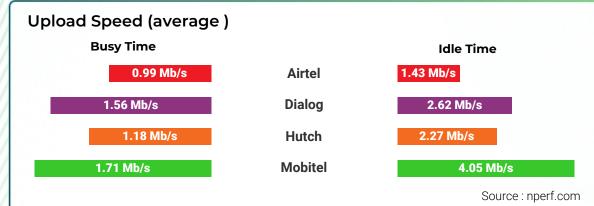
# Speed: Upload

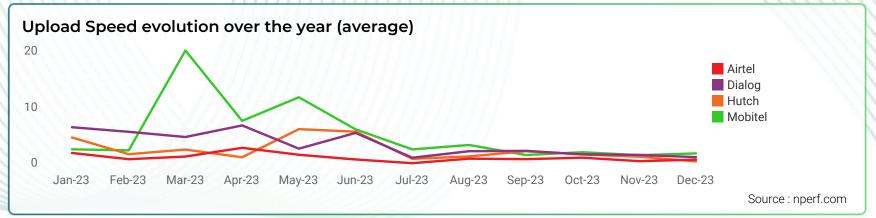




The subscribers of Mobitel enjoyed the best average mobile Internet upload speed in 2023.



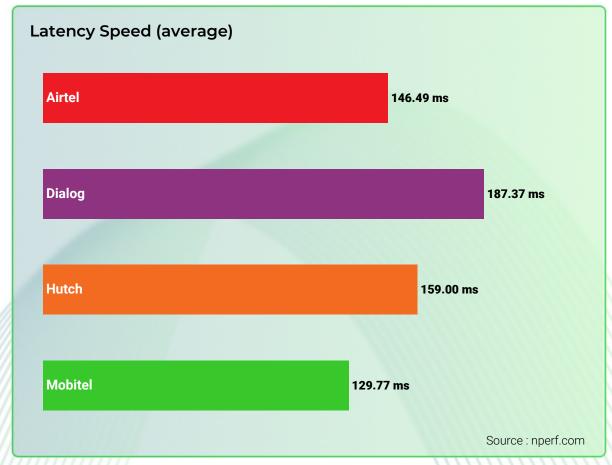




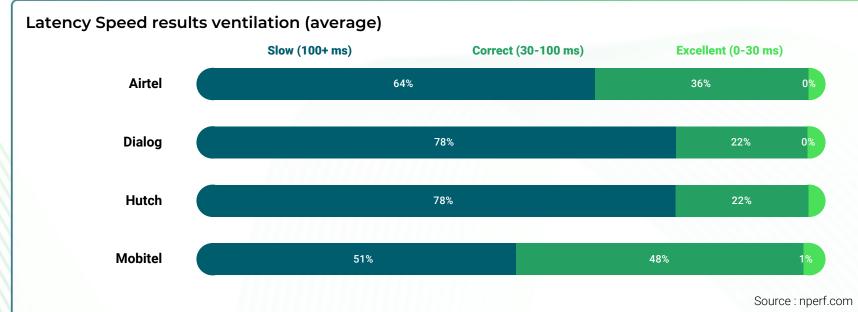


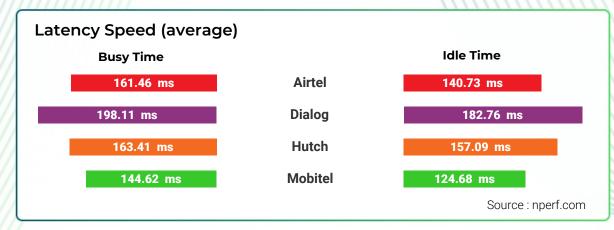
# Speed: Latency

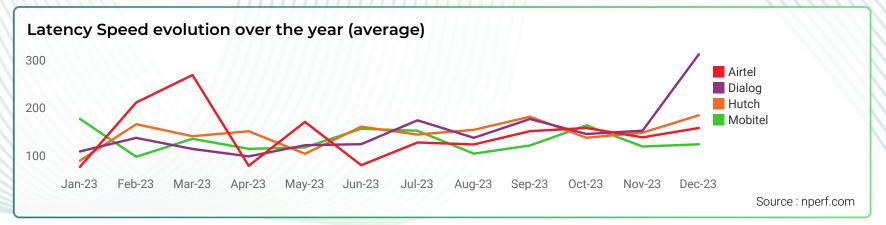




The subscribers of Mobitel enjoyed the best average mobile Internet latency speed in 2023.

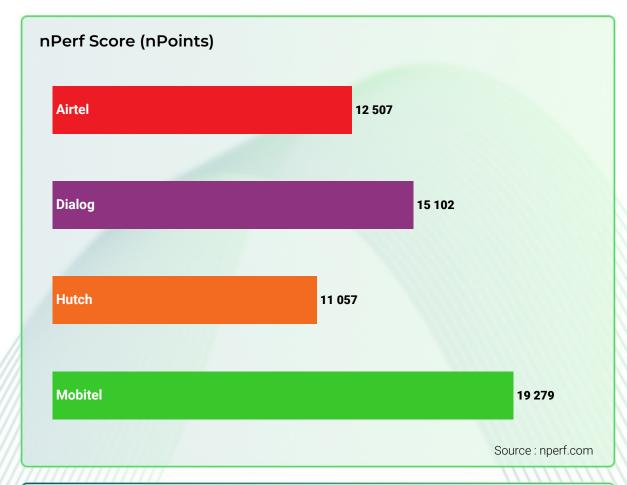






# Mobile Internet performance in Sri Lanka





The subscribers of Mobitel enjoyed the best mobile Internet performances in Sri Lanka during 2023.

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.

Source: nperf.com



