



# Measuring Broadband Australia

## Monthly report (February to April 2020)

In 2017, the Australian Competition and Consumer Commission (ACCC) launched its project to measure internet performance. SamKnows was appointed to supply their Whiteboxes to internet users in Australia to measure the quality of experience for fixed-line internet.

The goal of Measuring Broadband Australia is to increase transparency and encourage greater performance-based competition and better internet performance throughout the country. SamKnows prepares these reports each month for publication by the ACCC. The metrics are also presented by the ACCC in a public dashboard at <https://www.accc.gov.au/consumers/internet-phone/broadband-performance-data>.

The program tests fixed-line services. It does not test fixed wireless and satellite services.

# Overview

February - March - April  
2020

This is the first monthly report issued as part of the Measuring Broadband Australia program. This report tracks the performance of NBN fixed-line services from February to April 2020.

In this report we present daily average download figures for the following NBN fixed-line plan speed tiers:

- 100/40Mbps
- 50/20Mbps
- 25/5Mbps

The daily averages are calculated by aggregating raw test results by Whitebox, tier and day and then averaging across all Whiteboxes for each tier.

Additionally, we have presented the percentage change from a baseline of February's monthly average download speed for each plan.

Calculations have been conducted for all hours and busy hours (7pm -11pm Monday to Sunday for the monthly report of the Measuring Broadband Australia project) and for all units.

All charts use a consistent set of Whiteboxes across the entire range used in the chart. If a Whitebox changed speed tier during the period, it is excluded.

---

## Note

- Monthly data presented should not be directly compared with corresponding data in the quarterly reports as the composition of sample sizes may vary between the quarterly and monthly report.
- 12/1 Mbps services are excluded from monthly reporting due to the limited sample size.

## Sign up

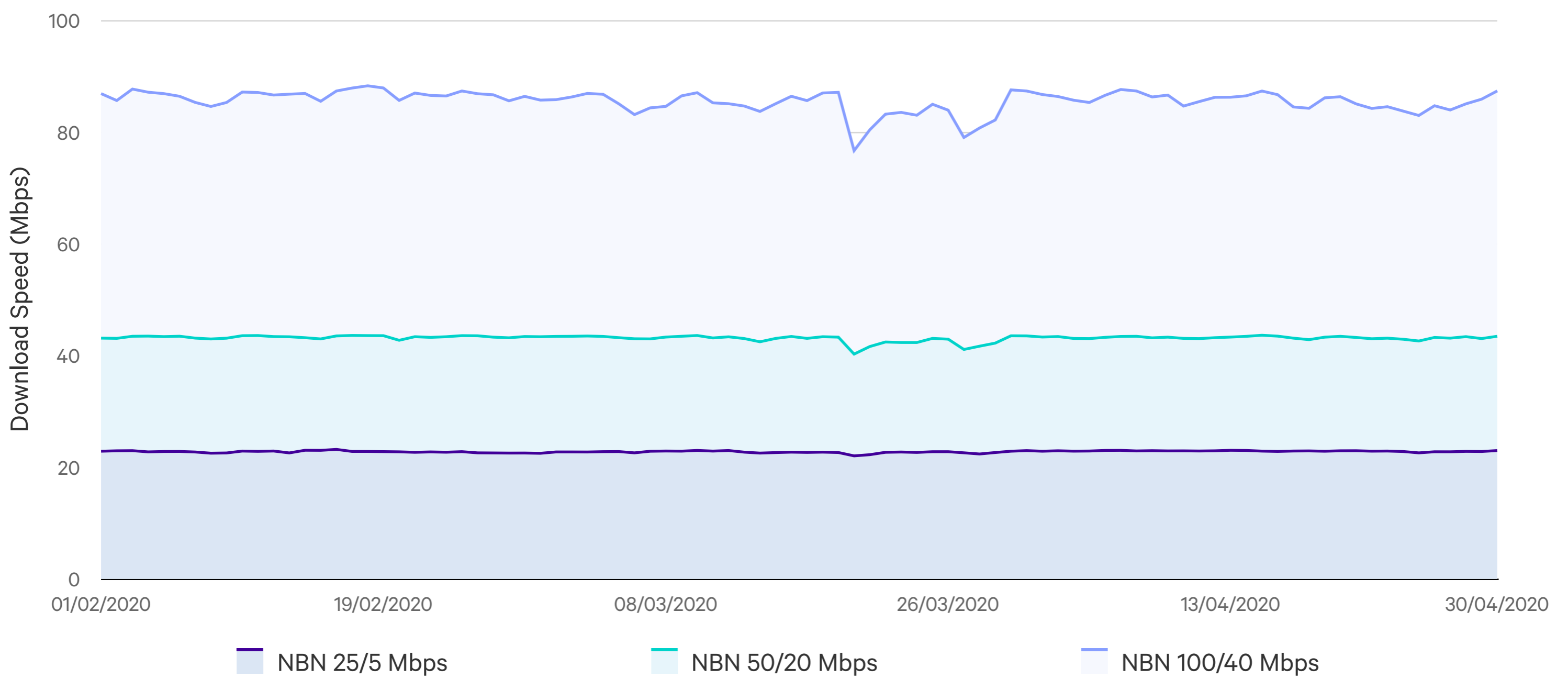
[Volunteer today!](#)

# Monthly report

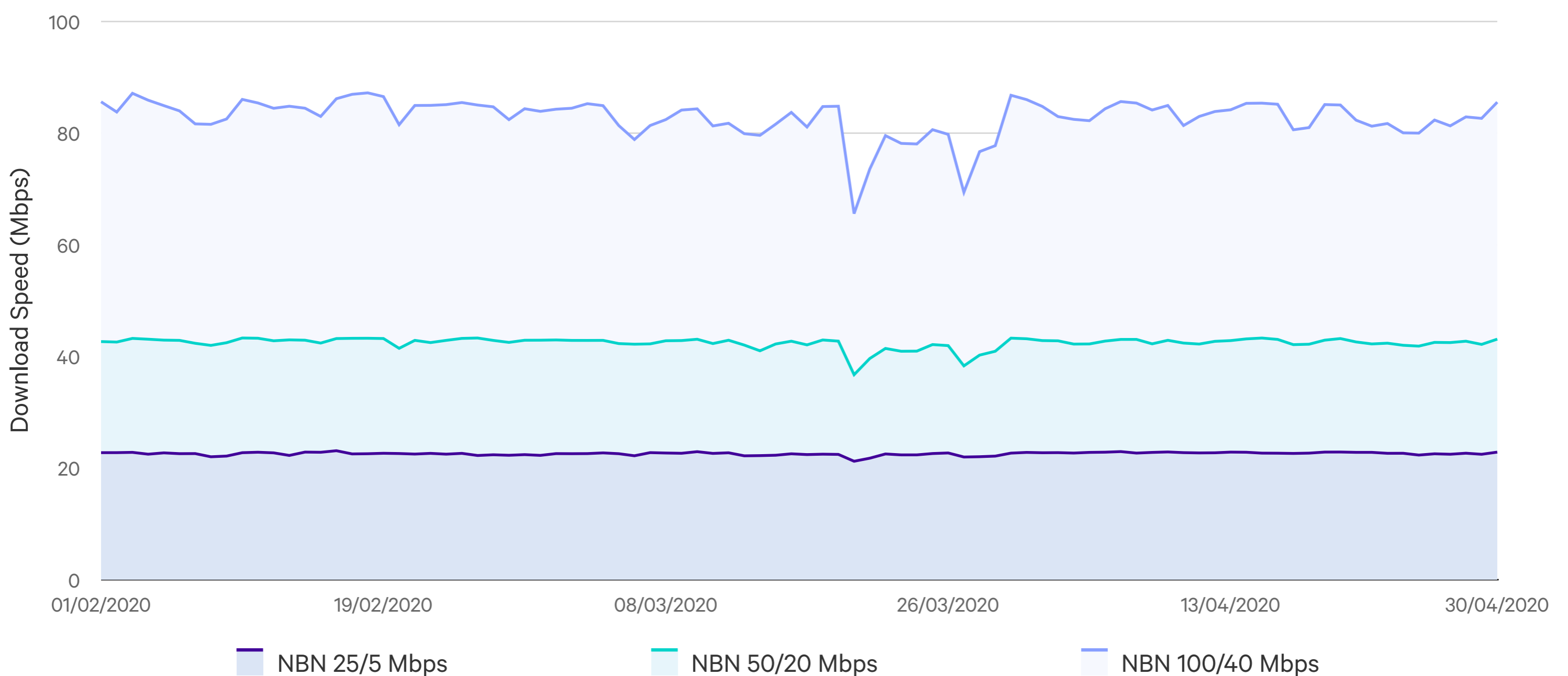
February - March - April  
2020

Figures 1 and 2 track the average daily download speeds by plan for the period of February to April 2020. The most striking development seen is a fall in performance for the NBN100 and NBN50 speed tiers during March 2020. A similar smaller fall was seen for the NBN25 speed tier (figure 1). These falls were more pronounced in busy hours compared to all hours (figure 2).

**Figure 1: Daily NBN download speeds during all hours by plan**



**Figure 2: Daily NBN download speeds during busy hours by plan**

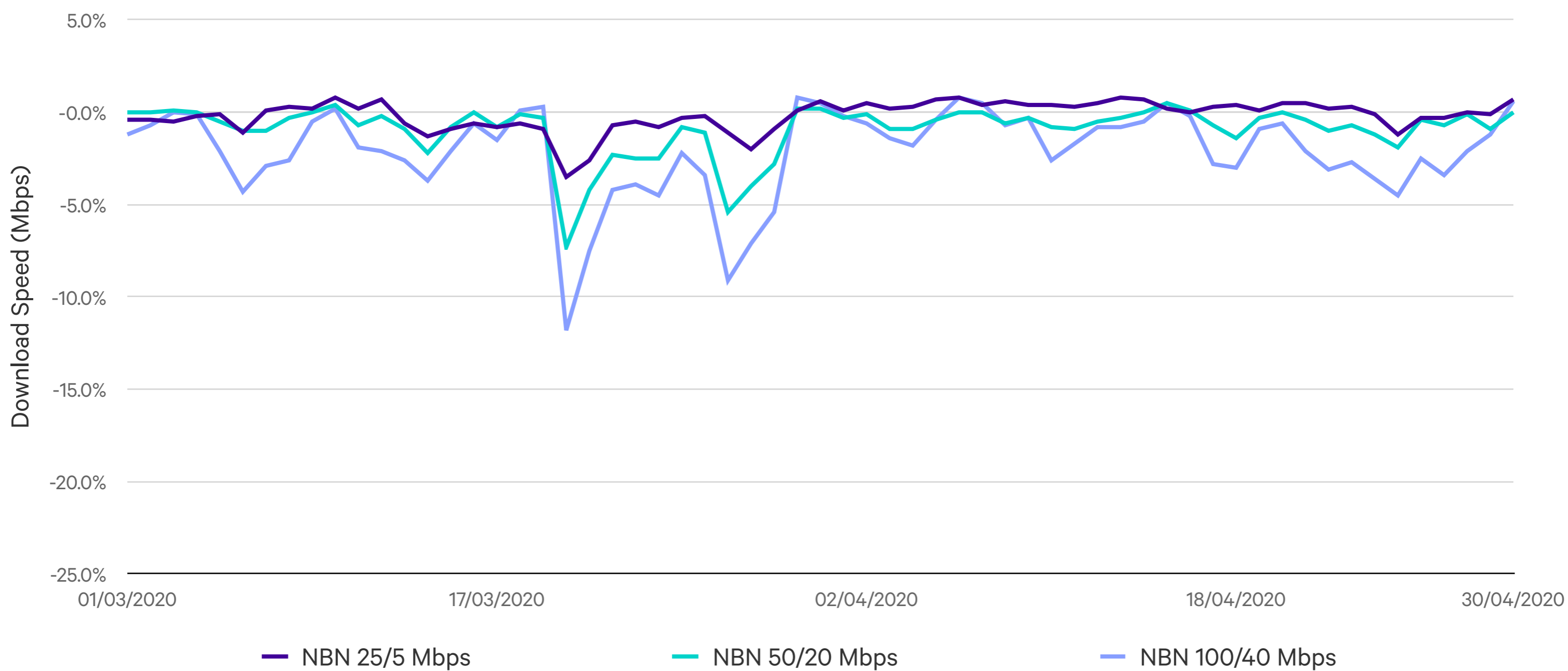


# Monthly report

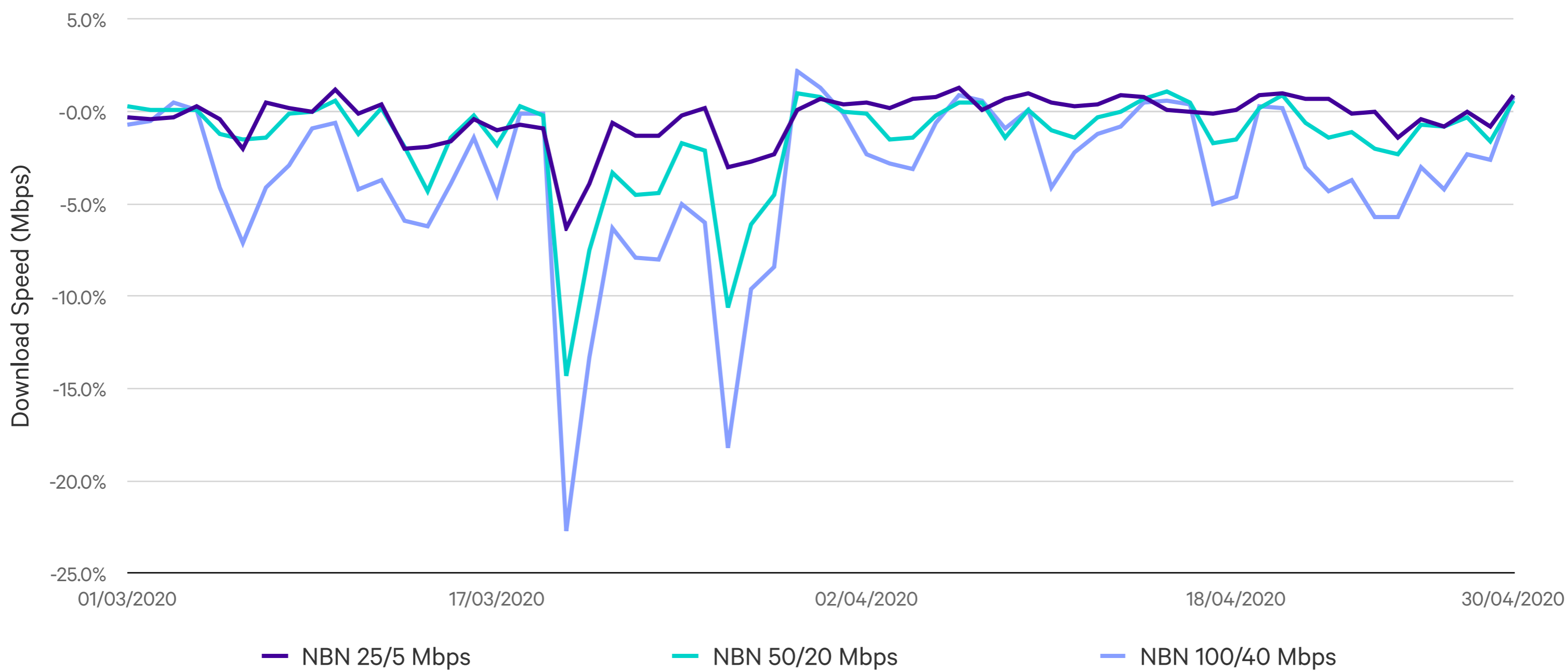
February - March - April  
2020

Figures 3 and 4 track the average download speed recorded each day over the period by plan speed against the February 2020 monthly average data. These show there have been significant drops in the NBN100 and NBN50 speed plans of up to 12% and 8% respectively during all hours (figure 3). During busy hours, the impact is larger with decreases of up to 23% and 14% for the NBN100 and NBN50 plans respectively (figure 4).

**Figure3: Daily NBN download speeds during all hours by plan**



**Figure4: Daily NBN download speeds during busy hours by plan**



# How we test

## SamKnows One analytics

- View all your data in one place.
- Create customised charts and save the results that mean the most to you.
- Track changes in your connection over time.













## Measuring homes across Australia

- The SamKnows Whitebox is a purpose-built testing agent that connects to your router.
- Measures every aspect of your internet service delivered to your home.
- Runs at regular intervals when you're not using the internet.

**Volunteer today!**

## Tests

Metric	Definition
 <b>Download</b>	The speed data travels from our test server to your device, measured in bits per second.
 <b>Upload</b>	The speed data travels from your device to our test server, measured in bits per second.
 <b>Latency</b>	How long it takes a data packet to go from your device to our test server and back to your device.
 <b>Jitter</b>	Measures the amount of difference between packet delays, or the stability of your latency.
 <b>Packet Loss</b>	When a packet of data becomes lost (does not arrive for two seconds) measured as a percentage of packets lost out of packets sent.
 <b>YouTube</b>	Measures the highest bitrate you can reliably stream for the most popular video in your country.
 <b>Netflix</b>	An application-specific test, supporting the streaming of binary data from Netflix's servers using the same CDN selection logic as their real client uses. The test has been developed in direct cooperation with Netflix.
 <b>Web browsing</b>	Measures how long it takes to fetch the HTML and referenced resources of a popular website.
 <b>CDN measurements</b>	Measures download performance for the same (or very similar) object from a variety of popular Content Delivery Networks over HTTP.
 <b>Voice over IP</b>	Measures the suitability of a broadband connection for VoIP calls.