



Media release

31 July 2020

Australian Broadband Data Demand: nbn continues to support strong data demand

- **Weekly download throughput peak of 15.1 Terabits per second (Tbps) recorded on Saturday, 25 July during the evening busy hours**
- **Weekly upload throughput peak of 0.95 Tbps recorded on Sunday, 26 July during the evening busy hours**

The **nbn's** main wholesale access service has experienced another week of strong data demand, according to new figures from the *Australian Broadband Data Demand* report.

Factors contributing to strong data demand and network utilisation include the activation of 600,000 new premises connected to a plan over the **nbn™** network since March 2020, and organic growth in data demand across the entire customer base.

Changed internet usage habits due to COVID-19 are also contributing to data demand, with homes in Victoria in particular, demonstrating high levels of usage.

For the week from Monday, 20 July to Sunday, 26 July, peak download throughput (the measure of data flowing through the **nbn™** network) during the busy evening period increased by 37 per cent to 15.1 Terabits per second (Tbps) on the main **nbn** wholesale service, compared to the last week of February (which **nbn** measures as its normal pre-COVID-19 baseline).

Peak download throughput during the same week also increased during daytime business hours, up 18 per cent to 9.2Tbps, and early evening hours up 39 per cent to 13.6Tbps, compared to the pre-COVID-19 baseline.

To help Australians remain connected during COVID-19, nbn recently announced it would extend its offer to provide internet retailers with a credit to offset increases in certain wholesale capacity charges up to 40 per cent (where available, depending on access technology) to internet providers based on the February 2020 baseline at no extra cost until 19 September 2020.

NBN Co also completed work to overprovision the download component of wholesale fixed line speed tiers by around 10 – 15 per cent, where possible (with the exception of the new Home Ultrafast speed tiers^{1,2,3}) at all 121 Points of Interconnect (POIs) to the **nbn** by 30 July 2020.

NBN Co's provision of additional download capacity at the wholesale layer is designed to accommodate protocol overhead, which includes the code used to help ensure the correct delivery of data packets, that otherwise impact a customer's broadband speed.

The intention is that more customers can experience download speeds that are closer to the maximum theoretical download speed of their chosen retail speed tier, subject to factors such as the

capacity of the internet retailer’s network and the efficiency and throughput of their in-home wiring, router and Wi-Fi equipment.

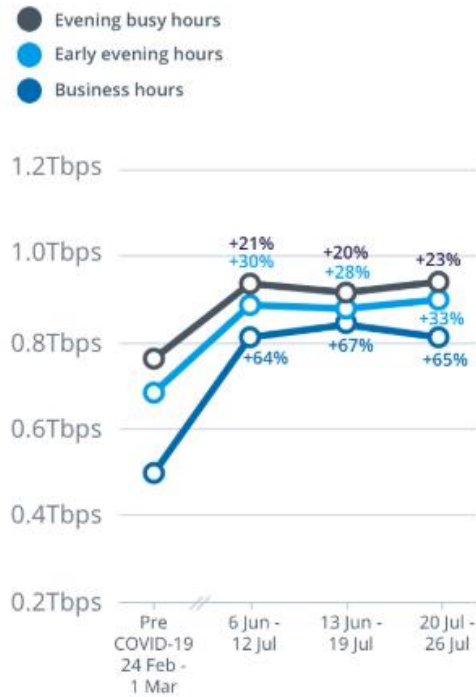
Retail Service Providers (RSPs) were advised last week of the scheduled completion of this work by 30 July, and RSPs will need to implement a minor technical modification to their respective networks to pass on this capacity and speed enhancement to their customers.

Australian Broadband Data Demand is a weekly report into the peak throughput recorded in a week during daytime business hours, early evening hours and busy evening hours.



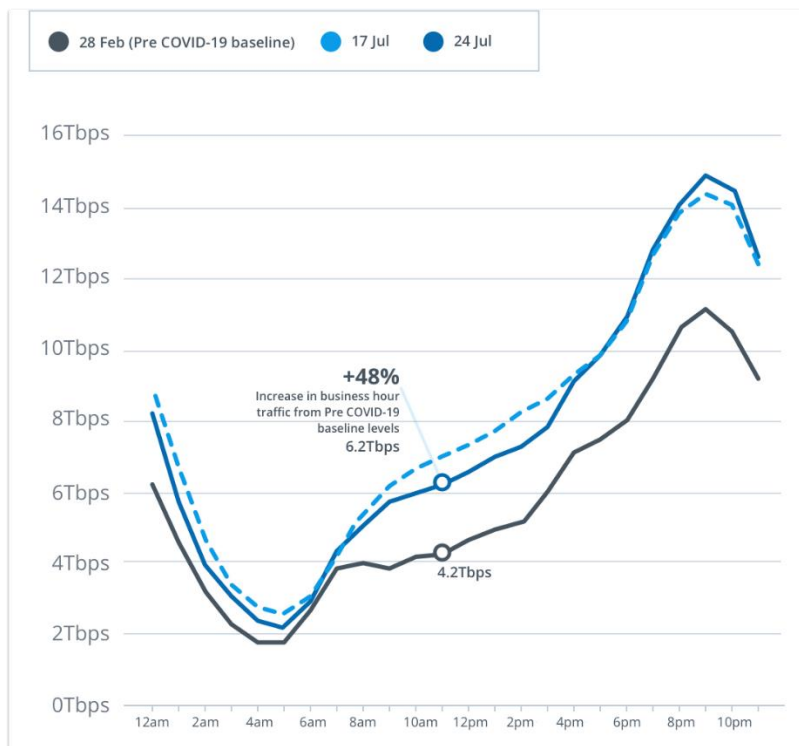
Peak upstream throughput on the main **nbn™** wholesale service in the evening busy hours for the week beginning 20 July increased by 23 per cent to 0.95Tbps, compared to the pre-COVID-19 baseline. In the early evening hours, peak upload throughput increased 33 per cent to 0.90Tbps; and peak throughput during daytime business hours increased by 65 per cent to 0.82Tbps, compared to the pre-COVID-19 baseline.

Upstream network usage



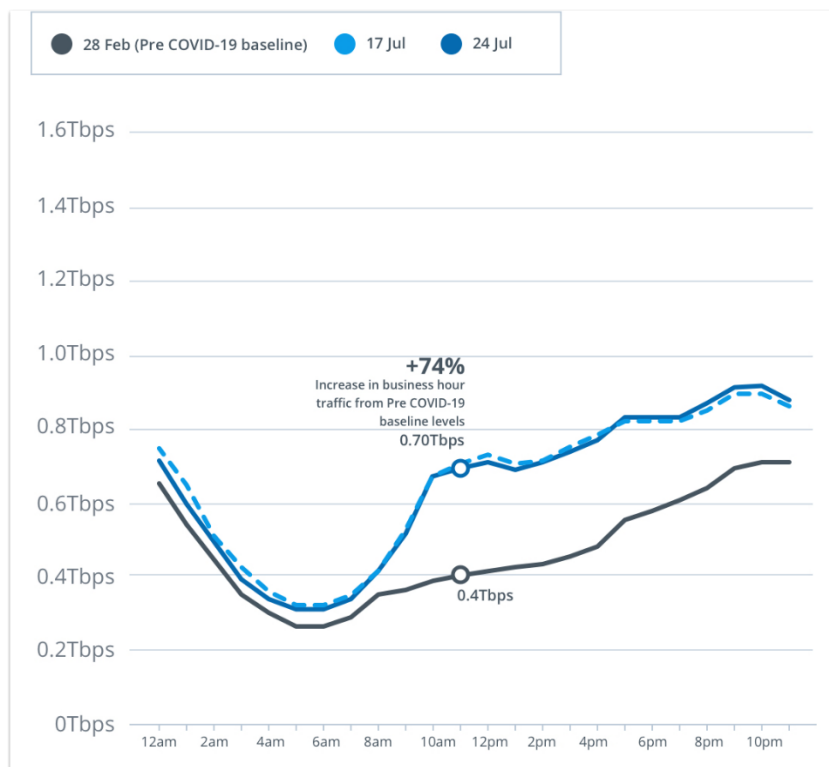
Compared to the pre-COVID-19 baseline before social distancing measures were implemented, downstream network usage on the **nbn™** main wholesale service during business hours on 24 July 2020 was 48 per cent higher (as shown in the graph below at 11am) than pre-COVID-19.

Downstream network usage over 24 hours



Upstream network usage on the **nbn™** main wholesale service during business hours on 24 July 2020 was 74 per cent higher (as shown in the graph below at 11am) than the pre-COVID-19 baseline.

Upstream network usage over 24 hours



The *Australian Broadband Data Demand* report is updated weekly on nbn’s Transparency dashboard at: www.nbn.com.au/updates

For tips on how to make the most of your nbn connection and to learn more on what NBN Co is doing to support Australia through COVID-19, please visit: www.nbnco.com.au/campaigns/covid-19

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For further information, visit www.nbnco.com.au

Notes to editor:

- These metrics represent the upstream/downstream throughput peak each week, across the following three distinct periods:
 - o Business hours - Monday to Friday 8am to 4:59pm

- Early evening hours - Monday to Sunday 5pm to 7:59pm
 - Evening busy hours - Monday to Sunday 8pm to 11:59pm
- For Business Hours, the peak is determined by taking the highest downstream throughput for our TC-4 service from the busiest 15-minute increment for downstream throughput, and from the busiest 30-minute increment for upstream, between Monday to Friday. The Early Evening Hours and Busy Evening Hours figures are recorded using the same methodology, but over a seven day period.
- TC-4 is nbn's standard wholesale broadband service that is designed primarily for general internet and standard data services across all access technologies.
- NBN Co considers the throughput peak metric for our TC-4 service as the most appropriate measure for growth in data flowing through the network as it shows when network use is at its highest in each defined period in a week for our wholesale access service most used for residential broadband services.
- This graph shows TC-4 usage (measured in terabits per second for both upstream and downstream) over a 24 hour period (using Australian Eastern Standard/Daylight time on the dates shown in the key). It compares the results from those two dates against a corresponding 24 hour period from nbn's pre-COVID-19 baseline on 28 February 2020 (the last week of February). Each marker on the x axis represents an hour period in the day. The y axis shows, for each of the 60 minute periods in that 24 hour period:
 - The downstream throughput measure calculated by recording the highest downstream throughput for our TC-4 service from the busiest 15 minute increment in that 60 minute period.
 - The upstream throughput measure calculated by recording the highest upstream throughput for our TC-4 service from the busiest 30 minute increment in that 60 minute period.
- The terabits per second (Tbps) value is rounded to one decimal place. The percentage increase is rounded to the nearest whole number.
- ¹ Regardless of the retail service customers purchase, the actual wholesale speeds delivered by the nbn 1000 wholesale speed tier product will be less than 1Gbps due to equipment and network limitations. Reference to speeds are not end user speeds; they are wholesale layer 2 peak information rate bandwidth provided to the RSP.
- ² For the HFC Home Ultrafast bandwidth profile, the Layer 2 wholesale downstream service will be configured at the Layer 2 network management to a Maximum Sustained Information Rate of 750Mbps with the potential to burst up to a maximum of 990Mbps (depending on but not limited to, the Frame Size and line speed capability - see note 2 above) at potential burst durations between 1 to 50 seconds at least once a day (see section 2.2.2.5 of the [nbn™ Ethernet Product Technical Specification](#)).
- ³ nbn provides wholesale services to phone and internet providers. nbn™ wholesale speed tiers available to providers vary depending on the access technology in an end customer's area. End customer experience, including the speeds actually achieved over the nbn™ broadband access network, depends on the nbn™ access network technology and configuration over which services are delivered to their premises, whether they are using the internet during the busy period, and some factors outside of nbn's control (like their equipment quality, software, chosen broadband plan, signal reception, or how their provider designs its network).