Media release

Friday, 17 April 2020

Australian Broadband Data Demand: upload demand on the rise as more Australians work from home and spend Easter at home

- *Australian Broadband Data Demand* **report now publishing weekly upload peaks**
- **On the main nbn wholesale service:**
    - **Weekly upload throughput peak of 1.06 Terabits per second (Tbps) recorded on Friday, 10 April during the Evening Busy Hours**
    - **Weekly download throughput peak of 13.8Tbps recorded on Wednesday, 8 April during the Evening Busy Hours**
    - **Download throughput peak of 11.6Tbps on 8 April recorded during the daytime business hours surpassed pre COVID-19 baseline evening peak for the first time**
- **Ninety-nine per cent of new nbn retail orders in the past week based on wholesale speed tier plans of 25Mbps or faster**

Upload demand on nbn's main wholesale access service has significantly increased compared to nbn's pre-COVID-19 baseline, as Australians continue to rely on the national broadband network to support daytime business activities and real-time video communication between friends and family.

For the week from Monday 6 April to Sunday 12 April, peak upload throughput (the measure of data flowing through the nbn™ access network) during daytime business hours increased by 102 per cent to 1.01 terabits per second (Tbps), compared to the last week of February (which nbn measures as its normal pre-COVID-19 baseline).

"Uploads over the nbn have significantly increased as more Australians use real-time communication applications such as video conferencing to learn and to connect with friends and family, and as the use of online business applications that require strong upload performance, continue to grow," said Brad Whitcomb, Chief Customer Officer – Residential at NBN Co.

"While the network continues to perform well, this unprecedented demand on our upstream has impacted a small number of end user customers when using video conferencing during the busiest periods of the day.

"We are therefore increasing the upload capacity in order to address this as well as looking at further enhancements to address future demand."

The new upload figures were published in the latest release of *Australian Broadband Data Demand*, a weekly report from NBN Co that shows the highest throughput (both upstream and downstream) recorded in a week during each of the following three periods: the daytime business hours, early evening hours and busy evening hours.

Upstream network usage

Compared to the pre-COVID-19 baseline, peak upload throughput on the main nbn wholesale service in the evening busy hours for the week beginning 6 April increased by 38 per cent to 1.06Tbps, while peak upload throughput in the early evening hours increased 54 per cent to 1.05Tbps.
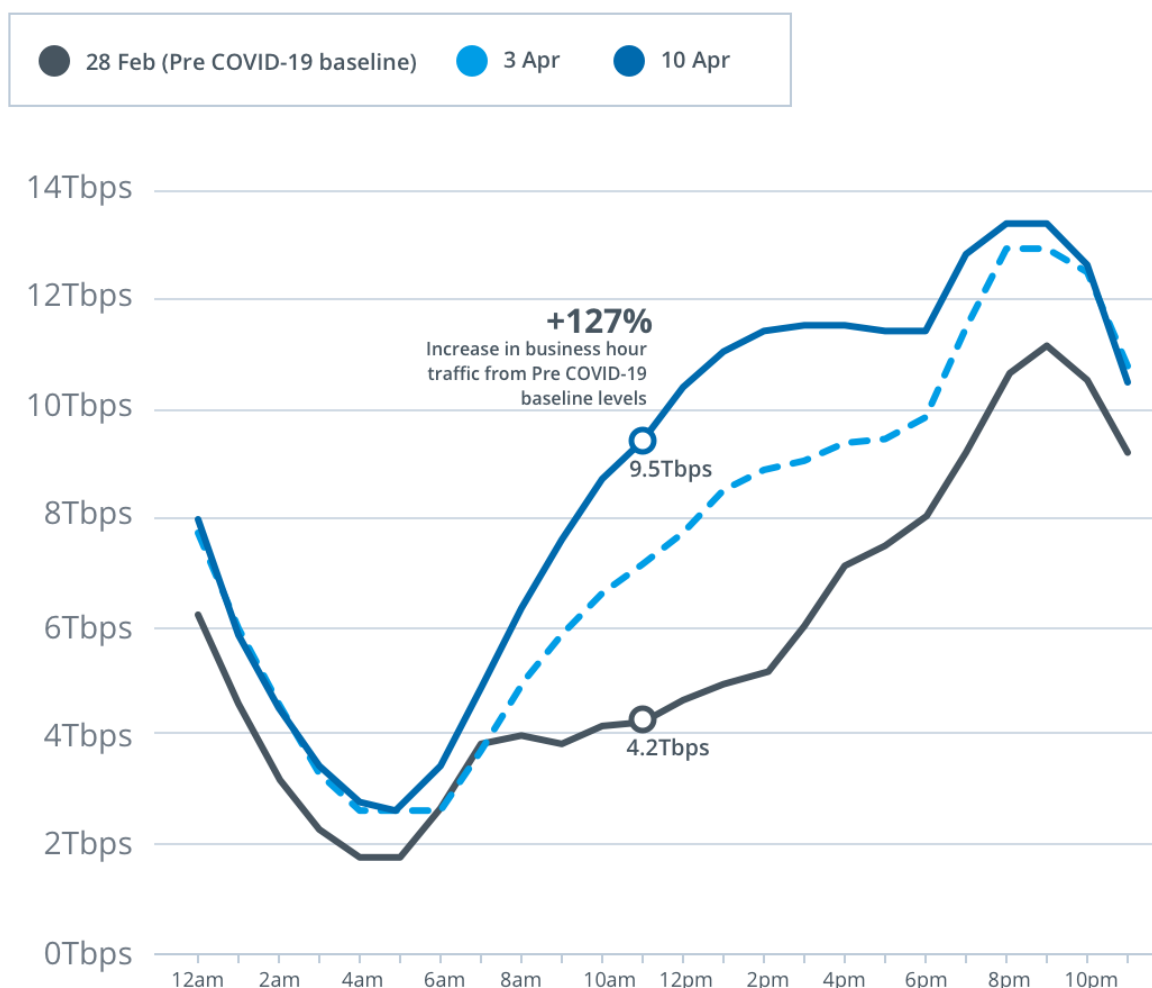
"Upload performance is critical for two-way video communication and for people trying to run their business from home. So if your business relies on faster upload speeds we encourage you to talk to your internet provider to ensure you are getting the business-grade features - like priority data and enhanced service levels - to support your business needs," Mr Whitcomb said.

The increase in uploads over the **nbn**™ access network comes as data demand surged on Good Friday (10 April), with a more than 120 per cent increase in downstream throughput to 9.5Tbps during the daytime business hours (as shown in the graph below at 11am), compared to the pre-COVID baseline. Uploads on Good Friday also grew strongly, increasing 93 per cent to 0.77Tbps in the daytime business hours.

While download and upload demand on Good Friday significantly increased when compared to previous weeks, it's important to note that the network profile on public holidays more closely resembles typical weekend usage when people are at home using their internet connections for communication and entertainment needs.

Downstream throughput on Good Friday peaked at 13.5Tbps but it remained below the weekly peak that was recorded in the evening busy hours of Wednesday, 8 April when network demand reached 13.8Tbps.

Downstream network usage over 24 hours

Legend: 28 Feb (Pre COVID-19 baseline) · 3 Apr · 10 Apr

+127%
Increase in business hour traffic from Pre COVID-19 baseline levels

9.5Tbps

4.2Tbps

Wednesday, 8 April was the busiest day of the week from Monday 6 April to Sunday 12 April, with week-high peaks recorded across all three time categories. These peaks coincided with an update to the popular video game Call of Duty.

In this same week, the highest, weekly download throughput of 13.8Tbps on nbn's main wholesale service was recorded in the evening busy hours of 8 April and represented an increase of 25 cent compared to the pre COVID-19 baseline.

The peak download throughput on the main nbn wholesale service recorded in the early evening hours for the week beginning 6 April was 13.3Tbps, an increase of 36 per cent to compared to the pre-COVID-19 baseline.

The peak download throughput on the main nbn wholesale service recorded during daytime business hours increased by 49 per cent to 11.6 terabits per second (Tbps), compared to the pre-COVID-19 baseline.

That daytime peak of 11.6Tbps on 8 April was the first time that download throughput in the daytime business hours had surpassed the pre COVID-19 baseline evening peak of 11Tbps.

Downstream network usage
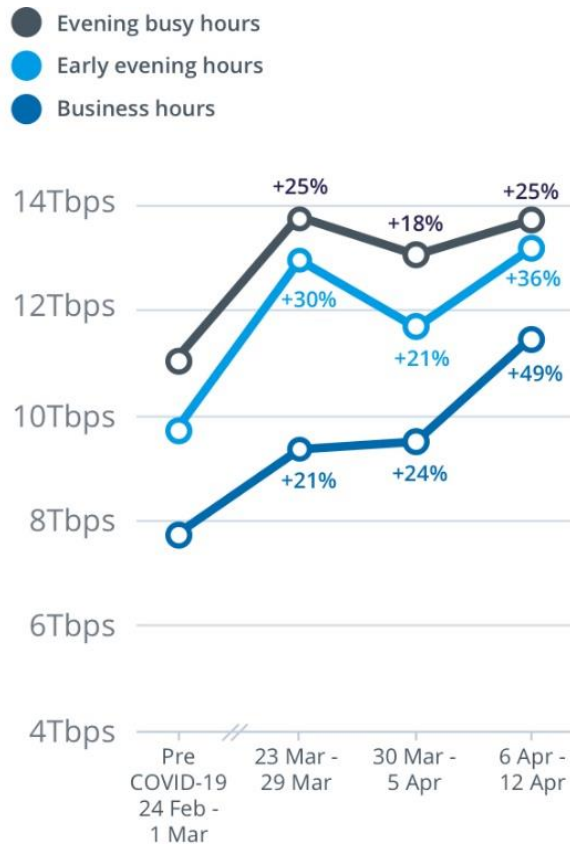
The increases in download and upload throughput (when compared against the pre COVID-19 baseline) come as orders for higher speed nbn wholesale plans gather pace.

"As uploads and downloads increase we have seen more orders for higher speed nbn plans come through our internet provider partners. In the past week, ninety-nine per cent of new nbn wholesale orders were on plans of 25mbps or faster, with 69 per cent were on 50Mbps and 16 per cent were on 100Mbps or faster," Mr Whitcomb said.

"These increases in data demand underline the importance of the **nbn**™ access network as it continues to support Australians working and studying from home."

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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Notes to editor:

- These metrics represent the upstream/downstream throughput peak each week, across the following three distinct periods:
  - 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.