



**Australian Government**

**Department of Communications and the Arts**

Our Reference: MC15-008828

Mr Gregory Watts  
President  
Northern Illawarra Chamber of Commerce Inc.  
PO Box 396  
HELENSBURGH NSW 2508

Dear Mr Watts

**National Broadband Network rollout in Northern Illawarra, New South Wales**

Thank you for your follow-up letter dated 25 November 2015 to Mr Darren Disney, Chief of Staff at the Office of Senator the Hon Mitch Fifield, concerning the National Broadband Network (NBN) rollout to communities across the Northern Illawarra region. The Minister has asked the Department to respond on his behalf.

As you are aware, NBN Co Limited (NBN Co) released its three-year rollout plan in October which provides details of the communities where work is scheduled to begin before September 2018. While it shows the construction activity for the next 7.5 million premises across Australia, you are concerned about the rollout and rollout schedule for communities in the local postcodes 2508 and 2515 and whether the network's deployment in these districts could be accelerated. In particular, you would like information about Darkes Forest, which is not included in the current three-year rollout plan.

The Australian Government has committed to completing the NBN as soon as possible. To deliver fast broadband sooner, at less cost to taxpayers and more affordably for consumers, the NBN will be completed using a multi-technology mix. This will match the right technology to the right location, make use of existing infrastructure where possible and will see the network finished by 2020 enabling nine out of ten Australians in the fixed line footprint to get access to download speeds of 50 megabits per second (Mbps) or more.

Due to the nature and size of Australia, the NBN network needs to be rolled out in a staged process that involves careful planning, design, construction and activation, ensuring that it is rolled out in the most organised, effective and efficient way possible. As with all construction projects of this size, detailed planning and design may influence the timing of activity. Accordingly, the three-year rollout plan is a dynamic forecast which NBN Co will update quarterly to provide further clarity on its construction schedule ahead of the rollout activity set to occur in the subsequent quarter and beyond.

Communities in both postcodes have already been designated to receive NBN services under the three-year rollout plan. In postcode 2508, localities in Coalcliff, Helensburgh, Lilyvale, Otford, Stanwell Park and Stanwell Tops will all receive fixed line technology. Similarly in postcode 2515, fixed line technology will be deployed in the communities of Austinmer, Coledale, Scarborough, Thirroul and Wombarra.

However, as you have noted, Darkes Forest is not in the current three-year construction schedule. When the community has been included in the schedule, the residents will know which technology will be used to serve their premises. It is likely Darkes Forest will be served by either the fixed wireless network or the Long Term Satellite Service (LTSS).

The LTSS will be a game changer for Australians. NBN Co will deploy two Ka-Band satellites to provide NBN access for those outside the fixed line and wireless footprints. The first of these satellites was rocket launched successfully on 1 October 2015 from the Guiana Space Centre in Kourou, French Guiana. Weighing some 6,400kg, and dubbed '*Sky Muster*', the craft is one of the world's largest communications satellites. A process of in-orbit tests is ensuring the satellite is functioning correctly and the full commercial launch of LTSS services is expected to occur in the second quarter of 2016.

The satellites will provide access to peak download speeds of up to 25 Mbps and upload speeds of up to 5 Mbps, with a total predicted aggregate system capacity across the two satellites of over 135 Gigabits per second (Gbps). The two satellites will provide unprecedented coverage and capacity.

The satellites will cover the entire Australian mainland and islands through 101 dedicated 'spot beams'. Each satellite beam has a different capacity in terms of maximum bandwidth, which is split across all end users in the beam, and cannot be changed. The highest capacity beam can serve approximately 15,000 premises, while the least 20 lowest-capacity beams can serve an average of 700 premises each.

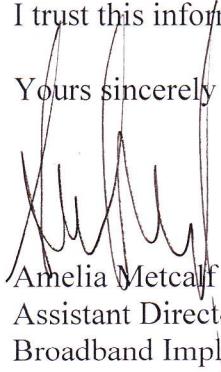
NBN Co is developing its wholesale pricing model in consultation with retail service providers. The company anticipates that retail service providers will be able to offer a range of plans and able to cater to the needs of different users. To avoid repeating the issues experienced on the Interim Satellite Service, NBN Co is focused on ensuring that the right tools are available to effectively and fairly manage LTSS capacity.

The LTSS is a key component of NBN Co's multi-technology mix. The LTSS will provide broadband internet access with enough capacity to provide for services from basic web browsing and banking transactions through to more advanced applications such as e-health services and distance education.

Businesses will have the ability to increase productivity, reduce costs and access new markets. Over 200,000 homes and businesses, including 1,600 public buildings and schools, are expected to connect to the LTSS, with the exact number that will be served to be determined as NBN Co finalises its construction planning for other technologies.

Thank you for bringing your residual concerns to the attention of the Minister's Office.  
I trust this information will be of assistance.

Yours sincerely

  
Amelia Metcalf  
Assistant Director  
Broadband Implementation