

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 2

NBN Co Limited

Topic: Pricing review – outside agency

Senator Anne Urquhart asked:

Senator URQUHART: What is different between previous pricing reviews and the most recently announced pricing review? Is there anything different?

Mr Morrow: The process is the same.

Senator URQUHART: It is the same?

Mr Morrow: I should say it is similar; it is not quite the same.

Senator URQUHART: What makes it not the same but similar?

Mr Morrow: For example, we have an outside agency helping us to poll some of this.

Senator URQUHART: Who is the outside agency?

Mr Morrow: I don't know if we're allowed to share that; it could be within the nondisclosure agreement. I would have to take that on notice.

Senator URQUHART: Can you check that and let us know whether you do it confidentially or whatever.

Mr Morrow: Yes.

Answer:

AT Kearney has been engaged to support nbn in the Pricing Evolution project for strategic pricing advice and analytics.

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Committee hearing 1 August 2017

NBN Co Limited

Question No: 3

NBN Co Limited

Topic: Copper switch-off in satellite footprint

Mr Stephen Jones, MP asked:

Mr STEPHEN JONES: Thank you for that. I've had a number of representations made to me about customers who live within a residential area who are currently or have previously been receiving broadband via an ADSL signal. They have had that signal switched off and are now being forced onto a satellite service. Can you explain why this is occurring and how many of these premises we're going to have—people within a fixed line footprint receiving a satellite service?

Mr Morrow: Again, to make sure you keep everything in context and in perspective, if there is satellite-served area and they have ADSL within, we don't shut off—

Mr STEPHEN JONES: I understand. This is in a fixed-line area.

Mr Morrow: There is a very unique, rare circumstance where fibre to the node was put into a given area and the copper loop length from a few homes at the very end of that was too long to be able to offer 25 meg services. The solution was that we will give them satellite as an option. It meets the statement of expectation requirements and it can have 25 megabit per second capability. ADSL services and our services using VDSL technology can interfere with each other to a certain degree and take the speeds down a little bit. Hence, any area that's going to have VDSL needs to have all of that ADSL service ultimately turned off, which is typically after the 18-month disconnect window. So there is a rare circumstance where a home that is served by satellite, while the majority of the 400,000 can still elect to stay on the ADSL through the Telstra network if it's available there, these few will not be able to. That's where we are looking to see if that's reasonable and fair, and what the other options are. We look at the micronodes. What if we put a different micronode in there? What if we use some FTTC, in that example? That's really what's happening. It fits within the statement of expectation requirements.

Mr STEPHEN JONES: How many are in those circumstances?

Mr Rue: It's small. I don't know the number.

Mr Morrow: It's really, really small. We'll take that question on notice.

Mr Rue: We'll take that on notice and see if we can get you an answer. It's not many that will.

Answer:

Please refer to written Question on Notice relating to *Fixed line services beyond the NBN fixed boundary point* lodged with the Committee on 13 September 2017.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 4

NBN Co Limited

Topic: Overbuilding FTTN network

Mr Josh Wilson, MP:

Mr JOSH WILSON: I understand that. I think that would be generally welcome, because it's essentially upgrading as you go. It's upgrading the original plan, taking fibre much closer to the home, but it will leave a substantial number of homes with fibre to the node. We asked the department today and previously about whether the department has asked NBN Co for, or whether NBN Co has let them know about, a kind of overbuild plan or cost estimate that would cover the entirety of the fibre-to-the-node footprint, and the department has indicated to us that it has and that the cost of that future overbuild, or that upgrade, is part of the existing cost assumptions and corporate plan of NBN Co. Is that right or wrong?

Mr Morrow: I'd have to see what they had said to be able to comment accurately against it. But I will tell you this: what I do know is that our plan today to build this by 2020, to cost no more than \$49 billion in equity and debt and to produce the 3.2 to 3.7 per cent IRR is very much on the table, and that's what we are building. That includes a million FTTC and a little less than four million FTTNs.

Answer:

Please refer to Question on Notice 16 and Question on Notice 18.

As Mr Morrow and Mr Rue have explained during committee hearings, nbn expects to have sufficient cashflow capacity in the long term to upgrade, where a business case exists.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

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NBN Co Limited

Question No: 7

NBN Co Limited

Topic: Customer satisfaction survey breakdown

Senator Deborah O'Neill asked:

Senator O'NEILL: Can I take you to the percentage of satisfied customers. Recently you said that 85 per cent of NBN consumers are satisfied, and then today you said that 85 per cent of consumers are neutral or satisfied. Could you please clarify for the record the scales used in the survey that you are referring to.

Mr Morrow: It's a one-to-10 scale or a zero-to-nine scale.

Senator O'NEILL: Is it both of those, or are there multiple?

Mr Morrow: Zero-to-nine scale—a 10-point scale. The dissatisfied is usually in the zero-to-four category. That is the 15 per cent that I'm rounding off that are dissatisfied. When you go above four and say you are a five and six, 'I think it's a seven,' you see that people are neutral. When you get above that, they are really satisfied. Nine is the highest score, I think, that one can register. We are seeing 15 per cent of all of the people are at that highest level of satisfaction. If you put the 15 per cent that are dissatisfied against the greater than 10 per cent that are extremely satisfied, this puts it in the proper context.

Again, we don't want anybody to be dissatisfied, we don't want anybody to have a poor experience. I would emphasise here that that's a measure of everything to do with broadband service. That is not isolating NBN experience or isolating RSP experience; that is the combined view of my retail service, my retail price, my NBN experience—it's the collective view of our industry today.

Senator O'NEILL: Getting your NBN on, whatever that means. To ensure I understood exactly what you said: zero to four is a combined dissatisfaction rating. Is there an extremely dissatisfied section? Is that zero?

Mr Morrow: That's the scale. Zero, yes.

Senator O'NEILL: What percentage are at zero?

Mr Morrow: I don't recall that specific number.

Senator O'NEILL: Would you be able to take on notice and provide a detailed breakdown of each of those?

Mr Morrow: We'll have a look at it.

Senator O'NEILL: You're saying 15 per cent are zero to four. Are five, six and seven what you call neutral?

Mr Morrow: It's in that range. Is it an 11-point or 10-point scale?

Mr Rue: It's 11. It's zero to 10. Eight to 10 are extremely satisfied; zero to four are the dissatisfied customers.

Mr STEPHEN JONES: Eleven is the board members.

Senator O'NEILL: That means five, six and seven are neutral.

Mr Morrow: Yes, it's considered: 'How do you feel about your broadband experience? Well, I'm neutral on it. I'm not unhappy; I'm not happy. I'm not dissatisfied; I'm fine with it.' That's the way it's viewed. It's very common in the industry, to keep this in perspective. Lots of people use this to track their percentage dissatisfied. Typically NPS, net promoter scores, take your satisfied and subtract your dissatisfied to give a rough idea as to, 'Are you positive or negative?' That's why

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you'll hear that term used a lot. I will say that the NPS for our industry has been on the decline as of late. If I go back three years, it was troublesome, an absolutely dire mess. It started to pick up, then with the volumes we've been cranking out lately we're starting to see that back on the decline, hence the need to arrest that and change the way in which the RSPs and NBN Co are interacting with the end user, with consideration given to all sorts of factors to make sure people get a good experience.

Senator O'NEILL: So when we put all of the explanations and the discussion away, we have 10 per cent satisfied, 15 per cent dissatisfied and the rest in the middle who don't really care.

Mr Morrow: No, it's not that way.

Senator O'NEILL: It looks a lot like that.

Mr Morrow: I gave you a 10 score that was in the double-digit range—don't quote me on that; I'm happy to go back and look at giving you all the numbers—but I can tell you the vast majority are either neutral or happy with the service. Again, we see people starting to come out and say, 'I don't know what all the negative hype is about; I've had a great experience.' It's less likely for somebody to speak up about a positive than a negative experience. I'm sure you guys have witnessed that in the tremendous research you have done. In our industry, having a 15 per cent overall dissatisfaction score is the focus. It's important that we wrestle with and take care of that, and there's no doubt in my mind that we will.

Answer:

In this survey, end-users are asked to provide a number on a scale from 0 to 10, regarding their satisfaction with their current home internet service where 0 is 'not at all satisfied' and 10 is 'extremely satisfied'.

These raw scores were then measured against a calibration question, which allowed for the following distribution:

Exceeds expectations: 56%

Met expectations: 27%

Below expectations: 15%

There is an accounting discrepancy which is further classified as "Don't know": 2%

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NBN Co Limited

Question No: 8

NBN Co Limited

Topic: Speed awareness survey

Senator Deborah O'Neill asked:

Mr Morrow: ... Quite frankly, I think the discussion that's taking place and what's in the newspapers today can be healthy, because consumers may think, 'I didn't realise I have speed choices.' Through a recent survey that was done, 75 per cent—

Senator O'NEILL: By you or by somebody else?

Ms Lovell: It was done by an independent body we are working with.

Mr Morrow: We commissioned it, and a third party basically looked at a sample size of the two and a half million end users on the NBN network today. They asked, 'Do you know what your speed is on?' Three-quarters of them said no. So that may be an indication that the sales process was not a discussion about finding choices that best meet their needs and letting them know they can pay more and get more out of it. Maybe there is not enough of that discussion taking place.

Senator O'NEILL: Can you share that report with the committee?

Mr Morrow: Yes, we can...

Answer:

As part of the survey 736 residents located in nbn 'ready for service areas' were asked a series of questions about their perceptions and understanding of broadband speed, and its influence on take-up behaviour. The survey found that:

- 76 per cent of respondents did not know the maximum download speed at which their current service could operate;
- 75 per cent of respondents could not identify the most suitable speed for them;
- 35 per cent of respondents did not know that nbn-based services offer a range of speed tiers.

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NBN Co Limited

Question No: 9

NBN Co Limited

Topic: nbn towers with mobile colocation

Senator Stirling Griff:

Senator GRIFF: How many of your towers are currently being utilised for shared services?

Mr Morrow: Not as many as you would think. I can get the exact number to you. They call them grids and they overlay them on a map and say, 'Here is where we want our towers to be for mobile coverage.' We build for a fixed wireless application that has a different grid look to it. Therefore, not many of them overlap.

Senator GRIFF: If you take that on notice, and the providers associated with that, it would be fantastic...

[Later in transcript]

Mr Morrow: Just before Senator Griff leaves, I do have an answer for you on the number of towers that are shared. It is 71 of our 1,600 that have other telco equipment on them. We've had 500 applications that we've received that the carriers are not proceeding with. But 71 out of the 1,600 are shared.

Senator GRIFF: And you will break that down by telco?

Mr Morrow: Yes, we will.

Answer:

Of the 71 sites, 9 fixed wireless base stations have active access seeker equipment co-located comprising 7 sites being utilised by Telstra and 2 by Optus. A further 62 nbn fixed wireless facilities are in the process of having co-located access seeker equipment installed (installation can take up to 3 months to complete). The relevant carriers are Telstra (21), Optus (25) and Vodafone (16).

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Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 10

NBN Co Limited

Topic: Statement of Expectations – USO like obligation

Mr Stephen Jones, MP asked:

Mr STEPHEN JONES: You said that under the SOE you have a USO-like obligation to connect every house and home. Unlike the USO, however, and the customer service guarantee, it doesn't provide end users with any rights vis-a-vis the NBN. What is your disposition to a USO-like obligation that provides end users with a right vis-a-vis the NBN?

Mr Morrow: I don't know if I'm familiar enough with those details to answer that question. I would like to take that on notice.

Answer:

nbn notes that the proposed Statutory Infrastructure Provider (SIP) legislation is intended to ensure all Australian premises can access fast broadband. Under these proposed arrangements, nbn would be the default SIP for all of Australia, and be required to connect premises to high speed broadband following a reasonable request from a retail service provider. This provides an appropriate framework to deliver certainty to end-users, reflecting the industry structure where nbn is a wholesale-only provider of inputs to retail voice and broadband services.

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Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 12

NBN Co Limited

Topic: Workers involved in activations

Ms Sussan Ley, MP asked:

CHAIR: How many people are employed building the network now?

Mr Morrow: Roughly, internally, we can tell you that we have about 5,700 to 5,800 employees and we have about 900, close to 1,000, temporary staff that are with us at any given time. If you take that 7,000 to 8,000 number, we believe that there are over 24,000 people that are within our service delivery partners helping us design, build, construct and operate the network. All in all, well over 30,000 people now are trying to change the digital face of the nation.

CHAIR: Roughly, how many of those would you say are involved in activations?

Mr Morrow: We would have to come back to you and give you an answer on that. I wouldn't venture a guess on it.

Answer:

There are approximately 7,500 personnel engaged in activations-related tasks, consisting of internal nbn employees, contracted support services and field workforce, including technicians and non-technical workers, such as traffic controllers, civils and administration staff.

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NBN Co Limited

Question No: 13

NBN Co Limited

Topic: Activation timeframes – FTTN vs FTTP

Ms Sussan Ley, MP and Senator Deborah O'Neill:

CHAIR: What would be the speed of activations for FTTN versus FTTP?

Mr Morrow: I think they're fairly similar—aren't they, Stephen?

CHAIR: That's probably a follow-up from my previous question about relative resources needed to be applied at different points. You can come back to me, that's fine.

Mr Morrow: All right, please.

Senator O'NEILL: I'd like that answer if you can get it on the record.

CHAIR: If you've got numbers of—

Mr Morrow: No, I don't. I'd need to look at it and slice the numbers a different way to give you the answer that you want.

CHAIR: We will pause in the interests of accuracy for later.

Answer:

The speed of activation depends on the relative demand and the impact on resources in a particular area. In areas of high demand the timeframe can be longer than in areas of moderate demand. In areas of equal demand, the activation process for FTTN would be significantly faster than for FTTP.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 14

NBN Co Limited

Topic: Micronodes - fibre not running through node

Senator Anne Urquhart:

Senator URQUHART: So it might be different. Have NBN Co deployed any micronodes in a manner where the fibre does not run back to the FTTN node?

Mr Morrow: I don't know.

Senator URQUHART: Maybe it's been run to some different aggregation point somewhere else?

Mr Morrow: I'd have to look to see. We would have to take that on notice.

Senator URQUHART: Can you take that on notice?

Mr Morrow: Sure.

Answer:

Yes. There are instances of Compact Sealed DSLAMs (CSDs) deployed where the fibre does not run back to an FTTN Cabinet.

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Committee hearing 1 August 2017

NBN Co Limited

Question No: 16

NBN Co Limited

Topic: CPP to upgrade FTTN to FTTC

Mr Josh Wilson, MP:

Mr JOSH WILSON: You have an FTTN brownfield, per-premises, average working cost. If you were to take an area where FTTN was ready for service and then you changed it from FTTN to FTTC, have you looked at what that additional cost per premises would be? Can you take that on notice.

Mr Rue: Yes, we can.

Answer:

The forecast cost of FTTC is highly variable on an area-by-area basis, and is particularly dependent on the number of premises to be served in a given area. As noted in Question on Notice 10 from the Department of Communications and the Arts to this committee, there is no current plan to upgrade specific sections of the network. The company is working to complete the network build and then upgrade as businesses cases present themselves when demand emerges.

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Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 17

NBN Co Limited

Topic: Rollout of nbn in Regional Australia

Ms Cathy McGowan, MP:

There are concerns that the rollout of the NBN is not delivering on what has been promised to rural and regional Australia. This is supported by representations by my constituents in Alexandra and Mansfield. Within both these towns, part of the residential area will be covered by Fibre to the Pit (FTP), while other areas will be covered by NBN Fixed Wireless.

1. What level of NBN service was promised to customers in fringe and peri-urban areas within regional areas where there is low density residential development?
2. What level of NBN was promised to customers in regional urban towns and cities where there is medium to high residential density?
3. What are the characteristics that determine whether NBN services to regional towns and cities are delivered via Fibre to the Pit (FTP) or NBN Fixed Wireless?
4. Can you explain why changes were made to rollout plans for the NBN in towns in rural and regional Australia? For example Fibre to the Node (FTN) replaced by Fibre to the Pit in Alexandra?
 - a. Who made these decisions?
 - b. What consultation was held with customers and communities?
 - c. What was the economic impact of these decisions?
5. Is Fibre to the Pit a more reliable service than NBN Fixed Wireless and less subject to congestion?
6. Are there more complaints of limited bandwidth from users of NBN Fixed Wireless as well as users of NBN Satellite (Sky Muster)?
7. What recourse do rural and regional towns have when NBN service delivery is altered from what is expected? What steps do they need to take? Do they have a right of appeal?
8. Can you confirm:
 - a. Residents and businesses located on the northern side of Alexandra township, from an east-west line roughly north of and including Vickery Street and Aitken Street are now being told they have to connect to NBN Fixed Wireless and not FTP?
 - b. This takes in approximately 30pc of the Alexandra township and includes businesses and households that were to have Fibre to the Pit?
 - c. 15 to 19 per cent of the residential area of Mansfield will now be serviced by Fixed Wireless?
 - d. Is Fixed Wireless being rolled out in residential urban areas of medium to high residential density in Mansfield, for example Cambridge Drive and Somerset Crescent?

Answer:

1-2

nbn has not promised particular technologies to particular areas. The Australian Government has instructed nbn to provide access to a minimum of 25 mbps to all Australians as quickly and as cost

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effectively as possible through a mix of technologies. In our public forecasts and messaging we have made it clear that all forecasts are subject to change as we go through the planning and design process to determine what technology is best suited to each area. There will be occasions where nbn changes the technology for a particular area.

3. nbn makes planning decisions based on a number of factors, including the cost per premises to serve the area and the availability of existing infrastructure (such as HFC cables, transit fibre, fixed wireless facilities, and satellite capacity for example).

4. Decisions are made at the planning and design phase and can be based on a number of factors as outlined above. nbn is constantly reviewing and optimising its rollout plans in order to rollout as quickly and as cost effectively as possible.

5. FTTC has not been deployed yet, so no comparative data is available. It is worth noting, however, that fixed wireless is nbn's most successful product in terms of customer satisfaction scores. Speeds of up to 50 mbps are currently available, and a 100 mbps product is scheduled to be introduced next year.

6. Sky Muster is the only nbn technology that has a Fair Use Policy in place around data usage. This is due to the unique nature of satellite technology and ensures that the satellite capacity is used appropriately and that a small proportion of users do not degrade the experience for the majority of users.

7. As set out in the Statement of Expectations, nbn has flexibility and discretion in operational, technology and network design decisions within the constraints of the government's broadband policy directives. If a town is not satisfied with the technology servicing their area, they can apply under the technology choice program to change the technology. There is a cost involved in this process, and details of the application process are set out on the nbn website.

8.

a-b Residents in the northern parts of Alexandra, including parts of Vickery Street and Aitkin Street, are now able to order a fixed wireless services from their retailer. For specific details residents can check their address on nbn's website.

c. Some parts of Mansfield are being serviced by fixed wireless and can now order a Fixed Wireless service from their retailer. For specific details residents can check their address on nbn's website.

d. Those areas to the north of Mansfield, including Somerset Crescent and Cambridge Drive can now order a fixed wireless service. For specific details residents can check their address on nbn's website.

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NBN Co Limited

Question No: 19

NBN Co Limited

Topic: Future upgrades - criteria

Mr Josh Wilson, MP:

In relation to the FTTN footprint the NBN CEO stated:

“We can use that revenue to fund future upgrades if and when the demand emerges.”

Has NBN modelled the financial or commercial criteria that would justify an FTTN overbuild?

Answer:

As Mr Rue outlined in the hearing, what nbn would do is look at business cases for upgrades as and when demand emerges and we would apply capital where it made business sense to do so.

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Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 23

NBN Co Limited

Topic: Pricing reviews

Mr Josh Wilson, MP:

How many ‘perpetual’ NBN pricing reviews have NBN undertaken since 1 July 2015?
For example, this could include consultation papers distributed to retail providers seeking input.

Answer:

nbn has undertaken three pricing review consultations since 1 July 2015, in addition to the current consultation underway with industry.

- In mid-2015, nbn sought feedback from industry on the pricing construct. The outcome was to retain the existing pricing construct based on industry feedback.
- In early 2016, nbn consulted further with industry which resulted in a modification to the pricing construct providing a price reduction to partly offset increased bandwidth costs to RSPs (the construct is referred to as the Dimension Based Discount).
- In late 2016 to early 2017, nbn consulted again with industry which resulted in modification to the Dimension Based Discount and further discounts for industry.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 25

NBN Co Limited

Topic: Flat 50 mbps product

Mr Josh Wilson, MP:

- Has NBN modelled a flat 50 mbps product?
- If yes, was this with a flat AVC charge? Or AVC and CVC?

Answer:

nbn is currently in the process of discussing various pricing options with retailers and will provide more detail on the outcome of this round of industry consultation in due course.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 26

NBN Co Limited

Topic: Monthly NBN reports

Mr Josh Wilson, MP:

Please outline each category of information included in NBNC's monthly reports to the Minister on NBN issues.

Answer:

Please see the Department of Communications' response in QoN 11 from the 1 August hearing. nbn supports that statement that the Monthly Shareholder Reports contain a range of corporate and financial commercial-in-confidence information and release of this information would be harmful to nbn.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

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NBN Co Limited

Question No: 27

NBN Co Limited

Topic: NBN Micro-nodes

Mr Josh Wilson, MP:

- Have NBN had to replace hardware in any of the existing micro nodes which had been deployed?
- If yes, in how many micro nodes? And what hardware was replaced?

Answer:

There has been limited replacement of some ancillary hardware in some units to optimise monitoring of the performance of the units. The hardware that was replaced was a component used to monitor the performance of the batteries within the micro node cabinet. This hardware had no impact on the actual performance of the micro nodes in regard to service speed.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 28

NBN Co Limited

Topic: NBN Micro-nodes

Mr Josh Wilson, MP:

- Have NBN had to replace hardware in any of the existing micro nodes which had been deployed? Please describe the “classic engineering adjustments” the CEO referred to.
- If yes, in how many micro nodes? And what hardware was replaced?

Answer:

Refer to Question on Notice 27.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 29

NBN Co Limited

Topic: NBN Micro-nodes – SNR

Mr Josh Wilson, MP:

- Please provide more detail about the SNR issue on micro nodes. Was the SNR too low? Or too volatile?
- What is the optimal SNR for performance over an FTTN micro node? What was the performance of the micro node after

Answer:

nbn continues to work with its vendors on optimising the performance of FTTN equipment, including micro nodes. A key component of this is the optimisation of Signal to Noise Ratio (SNR). nbn activates FTTN services with a standard SNR profile. In some circumstances to match our nbn equipment (e.g. micro node) to the individual cables servicing homes, nbn does adjust the SNR profile to optimise the service performance.

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NBN Co Limited

Question No: 30

NBN Co Limited

Topic: NBN Micro-nodes – post codes QLD

Mr Josh Wilson, MP:

Please provide a post code for every micro node which has been deployed in Queensland.

Answer:

nbn can advise that as at 1 August, 2017, 1487 micronodes had been deployed nationwide, of which 268 are now active. We expect the remaining backlog to be activated in coming months. Providing the additional detail requested would require an unreasonable diversion of resources as node location data is not readily available in a postcode-matched form.

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NBN Co Limited

Question No: 31

NBN Co Limited

Topic: NBN Micro-nodes – post codes TAS

Mr Josh Wilson, MP:

Please provide a post code for every micro node which has been deployed in Tasmania.

Answer:

Please see the response to Question on Notice 30 to the committee.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 32

NBN Co Limited

Topic: NBN Micro-nodes – post codes NSW

Mr Josh Wilson, MP:

Please provide a post code for every micro node which has been deployed in NSW.

Answer:

Please see the response to Question on Notice 30 to the committee.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 35

NBN Co Limited

Topic: Deployment of Fixed-Wireless in Bellingen

Mr Josh Wilson, MP:

Sunset Ridge Drive in Bellingen is currently able to receive NBN through fixed-wireless. Can NBN please confirm whether this area was previously in its fixed-line footprint?

- If yes – why was it removed from the fixed-line footprint? When did this change occur?
- Are there any other streets or areas in Bellingen which were previously in the fixed-line footprint, that have been moved into the fixed-wireless footprint?

Answer:

nbn is continually optimising the rollout to deliver broadband as quickly and cost-effectively as possible. As such, nbn can make changes to its footprint boundaries and particular areas can move from one technology to another during the planning stage.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 36

NBN Co Limited

Topic: FTTC - definition

Mr Josh Wilson, MP:

- What is the maximum number of premises that will be connected to a DPU under the planned FTTC rollout?
- How does NBN define FTTC? What is the maximum drop length that falls within this definition?

Answer:

nbn is currently procuring distribution point units with four available ports to serve up to four premises.

The definition of FTTC is related to the technology used in deployment, rather than a particular line length. FTTC will use a specific DPU, rather than a node.

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NBN Co Limited

Question No: 37

NBN Co Limited

Topic: FTTC - costs

Mr Josh Wilson, MP:

NBN has previously referred to FTTC costs as being between \$2,700 to \$2,900.

Mr Rue said during committee “we think the cost is around \$2,800 to \$2,900”.

Can NBN clarify the current cost per premises estimate for FTTC?

Answer:

nbn provided a forecast estimate of the cost per premises as part of the updated Corporate Plan released at the end of August 2017.

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Answers to Questions on Notice

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NBN Co Limited

Question No: 38

NBN Co Limited

Topic: Demand

Mr Josh Wilson, MP:

During the public hearing in Sydney Mr Morrow said:

“we acknowledge that there's consumer growth. We've talked before about a two per cent CAGR per month that we're seeing in terms of consumption.”

Please clarify what growth Mr Morrow is referring to. And what is the precise CAGR figure NBN have observed?

Answer:

This is in reference to the growth in the average amount of data downloaded by end users on the nbn network. nbn periodically reports on the average data downloaded per end user, which is currently at 157GB per month as at June 2017, and has observed growth of 33.1% in the year to June 2017.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 40

NBN Co Limited

Topic: Customer satisfaction

Mr Josh Wilson, MP:

NBN has made reference to 85 per cent of consumers being neutral or satisfied.

Please provide the following:

- Scale used
- An indication for each number on that scale whether it is (extremely dissatisfied, dissatisfied, neutral, satisfied, extremely satisfied etc).
- The percentage of consumers identifying with each number in that scale.

Answer:

Please refer to Question on Notice 7.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 41

NBN Co Limited

Topic: FTTC deployment times

Mr Josh Wilson, MP:

In the JSC public hearing Mr Morrow said:

“When we first started looking at involving fibre and the experience that we had with fibre to the premises and looking at fibre to the curb, which uses a slightly different approach to putting fibre down in a neighbourhood, the estimate was about 50 weeks. Through this process of improvement and this obsession with, 'What can we do today to make tomorrow better than yesterday?' and the challenge of saying, 'How many FTCs can we get in place to stay within the SOE requirements and the basic three measures that we often talk about?' we were able to reduce that 50 weeks down to 30 weeks, and we are pushing for even quicker than that.”

Is the CEO saying NBN have achieved a 40 per cent reduction in the time to deploy FTTC from their initial estimates?

In what forum/trial has the deployment been reduced to 30 weeks?

What improvements allowed NBN to achieve that reduction in rollout time?

Answer:

Yes, based on modelled cycle times nbn has achieved a 40 per cent reduction in the estimated time to deploy FTTC. The accelerated FTTC Design and Construct (D&C) process has been implemented into the planned delivery of approximately 300K premises of FTTC-only SAMs in Sydney Metro and Melbourne Metro (ex-Optus HFC footprint).

Using Zero Based Design (ZBD) methodology, potential improvements in the end to end D&C process were identified and agreed in areas such as address validation, documentation and approvals, and IT interfaces.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing 1 August 2017

NBN Co Limited

Question No: 42

NBN Co Limited

Topic: Staff numbers

Mr Josh Wilson, MP:

Please confirm the total number of staff in the following categories:

- Full and part-time employees directly employed by NBN Co
- Temporary staff

Answer:

nbn reports total staff numbers in its annual report. As at 30 June 2016 the total headcount was 4,913.

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing - written

NBN Co Limited

Question No: Written

NBN Co Limited

Topic: Fixed line services beyond the NBN fixed boundary point

There are concerns for consumers who are in theory located in fixed line areas but are too far from the node to guarantee the minimum speeds. In some of these cases nbn is assigning these consumers to satellite technology. Due to potential interference these consumers may not be able to keep ADSL services. It is understood that POTS is compatible but that ADSL and FTTN cause interference issues. After the 'co-existence' period the legacy ADSL services may have to be switched off to ensure FTTN services can function. This would leave these premises with Sky Muster as their only potential fixed line service. Other consumers with Sky Muster are able to keep their ADSL.

1. How many premises in FTTN/B areas are found to be too far from the node to ensure that the network can deliver the minimum speeds?
2. What technology is being offered to these consumers and what is the process to examine other options for the premises?
3. What is the future of Telstra fixed line services in this scenario which share the same lines that nbn is using to deliver FTTN/B services? How many lines are estimated to be in this situation and what is the impact likely to be?

Answer:

There are two different situations which are conflated in this question. There is a situation in which premises *within* the fixed line footprint are too far from the node to get 25 mbps after the coexistence period, and these areas are generally provided with a micro-node solution or with FTTC in the future. The second situation is where a premises that is located *outside* the fixed line footprint is currently serviced from a pillar that is being jumpered to an nbn node. As these premises are outside the fixed line footprint, they receive fixed wireless or satellite even though they may have an existing ADSL service. In this situation, the ADSL on the line can interfere with the VDSL signal.

1. & 2. As per the above explanation, premises within the fixed line footprint are generally serviced with a micro-node, bringing FTTN closer to the premises, or through FTTC deployment. Services that do not reach minimum speeds after connection would undergo rehabilitation/remediation where required.
3. As at August 2017, approximately 1,500 services outside the fixed-line footprint are potentially impacted by this scenario. In the hearing on 1 August 2017, Mr Morrow said that nbn was still looking into the options to address this impact:

"there is a rare circumstance where a home that is served by satellite, while the majority of the 400,000 can still elect to stay on the ADSL through the Telstra network if it's available there, these few will not be able to. That's where we are looking to see if that's reasonable and fair, and what the other options are." Hansard p.50

Joint Standing Committee on the National Broadband Network

Answers to Questions on Notice

Committee hearing - written

NBN Co Limited

Question No: Written

NBN Co Limited

Hansard Ref:

Topic: Tasmanian Bridge Association Inc.

Mr Josh Wilson MP:

The Tasmanian Bridge Association Inc. has premises at 5 Marine Esplanade, New Town, Tasmania. They have been given a quote of \$57,700 which they understand is to connect to the NBN.

The quote was provided verbally over the phone by NBN Co representative Sarah Bavage, whose title is 'Case Manager, Commercial Work'.

The Check Your Address facility on NBN Co's website (<http://www.nbnco.com.au/connect-home-or-business/check-your-address.html>) advises for 5 Marine Esplanade, New Town "There's still work to do before we connect your premises" even though according to the NBN rollout map a fixed line service is available to the area.

1. What work needs to be done to connect 5 Marine Esplanade, New Town, Tasmania to the NBN?
2. When is this work expected to be completed?
3. What is the quote of \$57,700 to the Tasmanian Bridge Association for and why were they provided it? Please include a breakdown of items that make up the quote, if available.

Answer:

1. To provide a Fibre to the Premises connection to these premises, extensive civil construction work would be required. This includes the excavation and installation of telecommunications duct (approximately 400 metres), pits, breakout/reinstatement of bitumen/pavers, hauling of 400 metres of nbn fibre.
2. See below
3. Refer to Part 1 for civil works included in the verbal quote. At the time of the nbn rollout to New Town, there was no existing telecommunications connection to the premises at 5 Marine Esplanade and the instruction from the land owner (Hobart City Council) was that no service was required. The subsequent request for a service by the end user is therefore managed outside of the rollout process, and involves a non-standard installation, which under nbn's deployment rules is at the cost of the applicant.