Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 274

Program No: NBN Co Limited

Hansard Ref: 12/2/2013 (Pg 104-105)

Topic: NBN Co customers in Tasmania

Senator Birmingham asked:

Well this is a completely contemptuous way to treat the committee, but can I go to the specific question here, and that is to take the easy one of Senator Bushby's that I have highlighted—because there are numerous others—how many new customers has NBN Co. signed up in Tasmania in the last 12 months?

Senator Conroy: I am happy to take that on notice.

Senator BIRMINGHAM: You did take it on notice and we did not get a bloody answer!

Senator Conroy: I am happy to take it on notice.

Senator BIRMINGHAM: You took it on notice and the answer does not tell us.

Senator Conroy: I am happy to take it on notice for you.

Answer:

Detailed information on national, state and local brownfields fibre take up over time was provided by NBN Co to the Joint Parliamentary Committee on 19 April (see in particular page 15 of NBN Co handout).

To assist the committee, the Fibre Service Area (FSA) location codes are provided below. Specific geographic locations for these FSAs are available on NBN Co's website at:

http://www.nbnco.com.au/when-do-i-get-it/about-the-rollout/communities-in-the-rollout.html?icid=pub:when-do-i-get-it:1yr:bod:all-towns-maps

2ARM	Armidale NSW	7НОВ	Hobart TAS
2CFS	Coffs Harbour NSW	7KIN	Kingston Beach TAS
2KIA	Kiama/Minamurra NSW	7SCL	Scottsdale, TAS
3BRU	Brunswick VIC	7SMO	Smithton, TAS
3SMR	South Morang VIC	7SOR	Sorell, TAS
4GUL	Gulliver, QLD	7STH	St Helens, TAS
5ALD	Willunga, SA	7TRA	Triabunna, TAS
7DEL	Deloraine, TAS	9CRC	Crace, ACT
7GEW	George Town TAS		

Senate Standing Committee on Environment and Communications Answers to Senate Estimates Questions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 275

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Syntheo

Senator Birmingham asked:

Senator BIRMINGHAM: Between June 2011 and March 2012, did the NBN Co. contractor Syntheo commence work on 25 FSAMs, or fibre-serving area modules—in South Australia, Western Australia and the Northern Territory?

Mr Quigley: That sounds the right order of magnitude. I would have to check on exactly those numbers—obviously, I do not have them with me—but that sounds about right.

Senator HEFFERNAN: You could bring them and—

Senator BIRMINGHAM: Okay. And would the order of magnitude in terms of the number of premises those 25 FSAMs cover constitute about 66½ thousand premises?

Mr Quigley: That is about right also, yes—2,500 x 25 is about right.

Senator BIRMINGHAM: Okay. Noting that this work was commenced between June 2011 and March 2012, how many premises in these FSAMs are able to obtain active services today, 19 months after that work first commenced?

Mr Quigley: That we will have to have a look at. I have not got that detail with us tonight, but we can work it out.

Answer:

As at 12 February 2013, there were no premises in these FSAMs that were able to obtain an active connection. The reasons for this are outlined in the media release of 21 March 2013:

http://www.nbnco.com.au/about-us/media/news/nbn-co-updates-short-term-fibre-rollout-timeline.html?rss=news

Question No: 276

Program No: NBN Co Limited

Hansard Ref: In 12/2/2013 (Pg 109)

Topic: Syntheo

Senator Birmingham asked:

What payments have been made to Syntheo to date in relation to these 25 FSAMs?

Mr Quigley: I do not have that number with me. There have obviously been some payments made for the designs of each of those FSAMs and some mobilisation payments. I could not give you the number off the top of my head. I would have to take that one on notice.

Answer:

Payments made by NBN Co to its contractors are commercial in confidence.

Question No: 277

Program No: NBN Co Limited Hansard Ref: 12/2/2013 (Pg 124)

Topic: NBN rollout

Senator Birmingham asked:

Noting that some premises are under assessment and so on at present, if the NBN rollout schedule is delivered and executed as currently scheduled, how many premises by June of this year or by the end of this year will have been passed where there is existing fibre or other technologies that might meet the definition of being adequately served?

Senator Conroy: I am not familiar with each fibre home. It is not like there are tens of hundreds of builders. I am just not familiar with the individual circumstances of each built, so I am not sure I can answer your question. I will take it on notice and see if there is anything I can do to assist, but I do not know that I can give you a definitive answer, because I do not know what the build process—whether each of them is open access, whether everyone is selling. I do not know the answer to those questions, so I cannot prospectively give you a tick.

Answer:

Please see answer to QoN 268.

Senate Standing Committee on Environment and Communications Answers to Senate Estimates Ouestions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 278

Program No: NBN Co Limited Hansard Ref: 12/2/2013 (Pg 127)

Topic: NBN Co performance – Mr Fletcher comments

Senator Cameron asked:

How do you view the proposition put by Mr Fletcher in another opinion piece, on 4 December 2012, in the *Australian*:

Broadband Minister Stephen Conroy and NBN Co have tried every trick in the book to disguise the poor performance. They abandoned the original corporate plan and issued a new one in August this year.

Why would this executive who claims to be an experienced telecommunications expert not understand the need to change corporate plans for changed circumstances?

Senator Conroy: I am not sure that Mr Fletcher has got quite the experience that you are attributing to him in this area.

CHAIR: I am trying to be kind.

Senator Conroy: I know you are and I do appreciate that. If it is possible, Chair, there are a couple of things I would like to say before we finish.

CHAIR: Maybe you could take that on notice and come back to us on that...

Answer:

Mr Quigley has addressed the question of changes to the Corporate Plan on a number of occasions; for example, at the April 2012 JCNBN hearing, he said:

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Mr Quigley:

I will return for a couple of moments, if I can, to make some comments on the corporate plan from December 2010 and comparisons of the current rollout with the targets that were in that plan. In the fourth quarter of 2010, when we were finalising the plan, there were a number of assumptions we had to make which were based on the best information that was available to us at the time. Those assumptions were highlighted and bolded and put in a box, in fact, on page 16 of the corporate plan. A number of assumptions we made at that time have changed for reasons which we simply could not control. The most obvious of which was the deal with Telstra, which we assumed would be finalised by June 2011. In fact, it was not finalised until nine months later, in March this year.

The second was that, just weeks before the December 2010 plan was released, we had anticipated that the network would use 14 points of interconnect. You may recall that, at the end of November 2011, the ACCC recommended to government that the network use 121 points of interconnect. The list of these was not finalised until May 2011. While we attempted to include this change in the corporate plan, we could not know the full consequences of that decision and the impact it would have on the rollout.

The third area—in fact, just days before the 2010 corporate plan was released—is that the government announced the greenfields policy. While we did our best to factor the impact of this policy into the plan, it is now clear that our estimates of greenfields demand was far too high. Our plan also did not take into account the large proportion of connections for new housing that were transferred back to Telstra as the policy was finalised. So two fundamental assumptions driving our greenfields numbers changed. The best estimate of project demand of new developments turned out to be way too high and a change in policy saw us move a lot of those numbers that we had assumed in December 2010 back to Telstra. As a result we need to reflect these changes in our new corporate plan targets to be provided to the government in May. Those were probably the three most significant assumptions in the December 2010 plan which had to be modified but there were also others.

We are now in the process of developing a new corporate plan based on current assumptions and we will provide this to government at the end of May. So it is neither reasonable nor valid to compare NBN Co.'s performance with the deployment forecasts that were included in the December 2010 corporate plan.

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 279

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN contractors

Senator Abetz asked:

- 1) How many Collective Agreements across the construction of the NBN, including with contractors?
- 2) Are contractors working on the NBN subject to the *Building Code*?
- 3) How does the Department ensure that all contractors are compliant with the Building Code?
- 4) What was the anticipated labour costs of the project from the outset?
- 5) What is the current actual and forward estimate on labour costs?
- 6) What is driving more expensive labour costs?
- 7) Is the NBN aware of pattern bargaining taking place across the NBN?
- 8) What safeguards have been put in place to ensure that this isn't occurring?

Answer:

- 1) NBN Co. currently has four Collective Agreements. Contractors are responsible for their own collective bargaining arrangements.
- 2) Yes.
- 3) Contracts with construction companies include compliance with the Building Code. Code compliance certificates are provided and reporting against the Code is also required.
- 4) The capital expenditure relating to labour costs for the fibre network and transit network over the period to FY2021 is publicly available in 2011–13 Corporate Plan published in December 2010.
- 5) This information in publicly available in the current 2012 15 Corporate Plan published in August 2012.
- 6) This information is publicly available in 2012 15 Corporate Plan on pages 13 and 44.

(7 & 8)

Contractors are responsible for their own collective bargaining arrangements and for negotiating their own agreements. NBN Co does not interfere with or intervene in the discussions between contractors and unions.

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Question No: 280

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Retail Customers

Senator Birmingham asked:

- 1) How many retail customers access NBN services through each of Satellite, Wireless and Fibre? Please break down by state.
- 2) Please provide the number of retail customers connected through each RSP without revealing the name of the RSP.
- 3) Please provide the total number of retail customers connected in each FSAM or other relevant geographical metric.

Answer:

- 1) Please refer to NBN Co's media release of 15 May 2013, available at: http://www.nbnco.com.au/about-us/media/media-releases.html and NBN Co's submission "Financial and rollout data" of 19 April 2013 to the public hearing of the Joint Committee on the NBN.
- 2 & 3) As stated in the response to QoN 336 from May 2012 Estimates and QoN 374 from the October 2012 Estimates, questions regarding the number of retail customers connected through RSPs are a matter for the RSPs. Information provided by NBN Co could in many cases be ascribed to particular RSPs; therefore, disclosure of this material would effectively be disclosure of customer confidential information under the Wholesale Broadband Agreement (WBA), which NBN Co cannot do without the express consent of each customer. Without that consent, any disclosure would have a significant and negative impact on our commercial relationships. Trying to obtain consent from each customer would be an unreasonable diversion of resources, and we believe it is unlikely that consent would be granted in most if not all cases.

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 281

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Connections Rollout

Senator Birmingham asked:

- 1) On average how long does it take to progress from the NBN Co issuing contract instructions to fibre actually physically being rolled out?
- 2) How many of the 758,000 premises that are claimed to be 'premises where construction has commenced or been completed' have actually been passed by and connected to fibre?
- 3) How many wireless towers are planned? In reference to Question on Notice 352 from October Estimates, why would NBN Co not be able to put up a tower where one was planned?
- 4) Does NBN Co have a list of wireless towers being planned, constructed or completed?
- 5) In reference to Question on Notice 343 how is providing this list, which no doubt has already been compiled, a significant diversion of resources?
- 6) Please provide a list of all operational NBN wireless sites including details on the date when the site became operational, how many customers could potentially access the site and the number of customers connected to each site.
- 7) Please provide a list of all operational NBN FSAM sites including details on the date when the site became operational, how many customers could potentially access the site and the number of customers connected to each site.

Answer:

- 1) Please see answer to QoN 293.
- 2) Please see NBN Co media release of 29 January 2013, which contains the December 2012 numbers for premises passed and premises activated.
- 3) Please see answer to QoN 343 from October 2012 Estimates. Towers need to go through an approval process, which is not guaranteed.
- 4) Towers at any point in time are at various stages of planning, approval, and construction and locations change for a number of reasons it is a dynamic footprint. Current planning details of the Fixed Wireless rollout (Construction Commenced and Estimated Ready for Service dates) are posted monthly on our public website and reflected on the NBN Rollout map.
- 5) Please see (4) above.

6) Please refer to the table below:

Site Name (Base Station)	In Service Date	Eligible Premises (GNAFs)	Active Premises (Week 9)
UNE	24-Feb-12	197	53
Kellys Ridge	24-Feb-12	370	57
Withcott	04-May-12	224	22
Relay Mt Lofty	18-Jun-12	0	0
Ballarat North	20-Jun-12	180	18
Alfredton	20-Jun-12	215	15
Mitchell Park	20-Jun-12	305	39
Ross Creek	20-Jun-12	398	57
Bald Hill	20-Jun-12	0	0
Mt Moonbi	20-Jun-12	0	0
Creswick	25-Jun-12	403	55
Mt Callender	26-Jun-12	111	13
Snake Valley	26-Jun-12	356	19
Daruka	26-Jun-12	218	29
Kootingal	27-Jun-12	269	22
Bendemeer	27-Jun-12	110	12
Somerton	28-Jun-12	110	19
Winton	28-Jun-12	152	33
Geraldton Airport	28-Jun-12	195	4
Toowoomba South	29-Jun-12	375	9
Hallsville	29-Jun-12	189	17
Attunga	29-Jun-12	243	22
Kingswood Reservoir	29-Jun-12	219	16
Tamworth Country Rd	29-Jun-12	164	17
Duri	30-Jun-12	160	21
Sugarloaf Mountain	30-Jun-12	44	11
Lyeholme	30-Jun-12	0	0
Smythesdale	30-Jun-12	635	42
Haddon	30-Jun-12	456	55
Calala Lane	30-Jun-12	161	11
Woolomin	01-Jul-12	108	53
Cabarlah	03-Jul-12	215	25
Haddon West	06-Jul-12	367	52
Moresby Range	09-Jul-12	494	6
Southbrook	25-Jul-12	261	18
Glenvale	25-Jul-12	263	22
Warrenheip	27-Jul-12	369	32

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Kingsthorpe	27-Jul-12	266	29
Mt Warrenheip	27-Jul-12	402	22
Greenmount	27-Jul-12	267	21
Oakey	27-Jul-12	155	7
Bloodwood Hill	27-Jul-12	69	4
Pittsworth	31-Jul-12	217	19
Gordon	31-Jul-12	176	15
Brookstead	01-Aug-12	96	14
Invermay	24-Aug-12	224	25
Nundle	31-Aug-12	183	18
Mt Crawney	30-Aug-12	0	0
Mt Buninyong	28-Sep-12	386	29
Enfield	29-Aug-12	234	34
Lal Lal	28-Sep-12	312	28
Mt Egerton	24-Sep-12	263	17
Moonyoonooka	20-Nov-12	74	1
Creswick Central	18-Dec-12	242	13
Mt Hollowback	18-Dec-12	381	21
Sebastopol South	18-Dec-12	370	32
Moonbi	21-Dec-12	214	10
Wallace	21-Dec-12	290	11
Learmonth	21-Dec-12	271	10
Humpty Doo	28-Feb-13	0	0
Wagait Beach	28-Feb-13	224	0
Larrakeyah	28-Feb-13	0	0
Lambells Lagoon	28-Feb-13	67	0

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7) Please refer to NBN Co's submission "Financial and Rollout Data" of 19 April 2013 (page 15 diagram) to the Joint Committee on the NBN for a list of all 27 operational FSAMs (at February 2013). Details of Premises Passed for each Brownfield FSAM are set out in the table below. Providing details of specific dates when each site became operational would involve an unnecessary diversion of resources.

FSAM	Premises Passed	
7SCL-01	1,183	
7SMO-01	1,707	
7SOR-02	1,273	
2ARM-01	2,303	
5ALD-01	1,075	
3BRU-01	2,891	
2ARM-02	1,978	
2ARM-03	497	
2KIA-01	2,370	
4GUL-01	2,822	
7TRA-01	468	
7SOR-01	1,267	
7DEL-01	1,353	
7KIN-01	1,018	
7GEW-01	2,333	
7STH-01	2,216	
2ARM-04	2,489	
3SMR-03	2,346	
2ARM-05	2,687	
9CRC-03	2,458	
9CRC-06	1,547	
2CFS-01	2,640	
4TOB-01	1,715	
7HOB-01	1,845	
3SMR-02	1,809	
4APL-01	514	
3BAC-02	543	

Question No: 282

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fibre

Senator Birmingham asked:

Will fibre be more resilient than copper has been during natural disasters?

Answer:

Please see answer to QoN 84 from the 30 October 2012 JCNBN hearing.

Question No: 283

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Advertising

Senator Birmingham asked:

- 1) What is the total cost of advertising planned for the remainder of this financial year and next financial year until September 14?
- 2) What is the total cost of advertising planned for the 2013-14 financial year? What is the total cost from 1 July until September 14 2013?

Answer:

1 & 2) The total cost of advertising, including advertising associated with Local-level Public Information Campaigns, planned for the remainder of this financial year (from April 1 to June 30, 2013) is \$780,000. NBN Co has not yet finalised budgets for the 2013–14 financial year.

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Broadband, Communications and the Digital Economy Portfolio **NBN Co Limited**

Question No: 284

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Staffing

Senator Birmingham asked:

- 1) How many senior executives have left NBN Co since its establishment?
- 2) What is the average tenure of an NBN Co senior executive?
- 3) How many Executive level employees (or equivalent metric) does NBN Co employ?
- 4) How many executive level employees have left NBN Co since its establishment?
- 5) What process led to Mr Flemming's redundancy? Was an independent external or internal review conducted? If so, by whom? What structural changes were received and what were acted upon?
- 6) Were any other employees made redundant at the same time as Mr Flemming? If so, how many?
- 7) What was the cost of Mr Flemming's redundancy? Was there a non-disclosure clause? Who is responsible for construction now?
- 8) How many employees does NBN Co currently employ? Please provide a breakdown by classification/level.

Answer:

- 1) Since October 2009, 12 ongoing and two temporary contract senior executives have left NBN Co.
- 2) As at 28 February 2013, the average tenure for onboard senior executives was 23.6 months. This included ongoing staff.
- 3) As at the 28 February 2013, NBN Co employed 194 executive level employees. This included ongoing, non ongoing and contract staff.
- 4) Since October 2009, 55 executive level employees have left NBN Co. This included ongoing, non ongoing and contract staff.

- 5) NBN Co does not comment on internal staffing matters such as individual redundancies. The company regularly reviews the organisation structure to ensure that it meets the needs of the organisation as it continues to scale operations. As a result of this process, the Construction function was changed and the role of Head of Construction became redundant.
- 6) No.
- 7) Mr Flemming was paid contractual terms. The terms of his redundancy are subject to confidentiality. Mr Richard Thorpe was appointed in the role of Executive General Manager, Construction following the restructure.
- 8) As at 28 February 2013, NBN Co had 2477 employees. This included 56 contract or labour hire staff, 69 max term staff and 2352 permanent staff.

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Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 285

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: End User Prices

Senator Birmingham asked:

- 1) Does NBN Co agree with Optus that "rate of return regulation creates a systematic bias favouring excessive expenditure?" If not, what controls and/or oversight will prevent overinvestment by NBN Co akin to that we've seen by electricity distributors?
- 2) Does NBN Co agree with Telstra that the proposed CPI-1.5 per cent price control, and I quote, "will translate into higher retail price increases for end-user"?
- 3) Does NBN Co agree with Telstra the NBN SAU terms may have an adverse impact on margins and potentially even the viability of retail service providers? Hasn't this already been proven by the contraction of the fixed broadband industry to essentially four large players?
- 4) Does NBN Co agree with both carriers that if current usage trends continue, real revenue collected by NBN Co from each user will increase substantially? After all, the financial projections on page 72 of the revised Corporate Plan show ARPU rising from \$24 in 2012 to \$63 in 2021.
- 5) The forecast increase in revenue per over those nine years translates into prices growth of about 9 per cent per year above inflation, if we assume inflation of 2.5 per cent. When was the last time that the fixed line communications industry was able to achieve such a large increase in revenue per user over a decade?
- 6) Dose NBN Co expect retail prices will rise at the same rate as wholesale prices? Or will margins for retail service providers be compressed?
- 7) On January 14, 2013, the NBN Co's General Manager Engagement and Group Coordination Richard Home stated in a letter to Optus's Andrew Sheridan:

The initial prices (as set out in the SAU) were developed in consultation with access seekers so as to enable a smooth transition for end users from legacy networks to the NBN. As such the initial prices are not the result of modelling of NBN Co's costs and demand and NBN Co has been very clear on this in its consultation with access seekers.

Given that current prices are no reflection of the NBN Co's actual costs or demand; can you please advise when prices will actually reflect your true costs?

8) A former Telstra economist, Mr John de Ridder, has argued all users should receive 100 megabits per second for a flat rate to encourage uptake and more innovative use of network capabilities. What is your response? Do you agree current proposed pricing discourages such innovation?

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Answer:

- 1) NBN Co's SAU cannot be characterised as "rate of return regulation". The SAU contains extensive commitments in relation to what expenditure can be included in NBN Co's Regulatory Asset Base (RAB) and incorporated in its Annual Building Block Revenue Requirement (ABBRR) during the network construction phase of the NBN (approx first 10 years). The SAU also includes provisions over the remainder of its 30 year term in relation to how expenditure can be incorporated in the RAB and ABBRR, including the ability for the ACCC to establish its own expenditure forecasts in the event the ACCC did not find NBN Co's to be reasonable.
- 2) No. As described in NBN Co's Corporate Plan, wholesale prices are expected to fall in both real and nominal terms.
- 3) No and no.
- 4) No. NBN Co forecast of prices is below the proposed price control. The financial summary on page 72 of the Corporate Plan does not include ARPU values stated in the question. These appear to be calculated by dividing annual revenue by the average number of connections in a year. As the number of customers connected in the early years ramps up substantially through the year this methodology can underestimate ARPU in the early years. Given that \$24 is the lowest AVC price it is impossible for that to be the average revenue per user.
- 5) This forecast of ARPU growth is based on an inaccurate calculation of ARPU. See answer to QoN 266.
- 6) NBN Co cannot comment on retail pricing strategies that will occur in an open competitive market.
- 7) As is clear in the link provided, the quotation referred to is actually from a letter from NBN Co's Head of Regulatory Affairs and Industry Analysis, Caroline Lovell. Mr Home works at the ACCC, and is a CC to that letter. As described in the supporting submission NBN Co lodged with the SAU [pp 99-100], NBN Co's pricing has been designed to fulfil a number of objectives, including to deliver uniform national wholesale pricing, allow a transition from legacy networks and deliver cost recovery over the long term. The commitments made in the SAU ensure that NBN Co cannot recover more than its prudent long term costs (inclusive of an appropriate rate of return). Once the long term revenue constraint becomes binding, NBN Co's prices from that time on will need to be set consistent with the Annual Building Block Revenue Requirement (ABBRR). This means that prices over the cost recovery period would be cost reflective from a long term average perspective and that all prices in subsequent years will be similarly cost reflective in aggregate. In NBN Co's context, the concept of cost reflectivity necessarily attaches to average rather than to individual prices given the existence of significant economies of scale and scope.
- 8) We do not accept Mr de Ridder's proposition. As per our response to the previous question, NBN Co's pricing has been developed to fulfil a number of objectives, which are not reflected in his proposal. We also note that Mr de Ridder proposes an access fee of around \$38 per month for 100 Mbps services, with no options for lower price and lower speed services for those who do currently require such speeds (noting that Mr de Ridder has suggested that an entry-level option could be made available to those who do not require high levels of

downloads, in the form of a cheaper monthly fee service with higher usage price). NBN Co's price for its 100Mbps is \$38 per month, but importantly, and consistent with a number of its objectives, also provides options from \$24 per month for end-users who do not need this capability at present.

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 286

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Rollout cost

Senator Birmingham asked:

- 1) What is the average capex cost of premises which have been connected to fibre as of February 2013? Please be transparent and explicit about any/all assumptions made regarding the allocation of fibre rollout or other capex not directly related to the local access network (e.g. spending on the transit/backhaul networks).
- 2) In a reply to a question on notice, the Senate has been told that data on the cost of the FTTP rollout per premise is commercial in confidence. Since over 72,000 premises are claimed to have now been passed, and each contractor has deployed fibre in variable geographies and conditions (with different costs) why exactly would publication of an average cost per premises compromise NBN Co's interests?
- 3) Do you agree the per-premise cost of the rollout is an important influence on the economics of the current NBN, and thus the real prices consumers are likely to face over time?
- 4) In the absence of real world data from NBN Co, how are policymakers meant to evaluate the financial viability or lack of viability of the current proposed FTTP NBN?
- 5) Likewise, in the absence of real data that the NBN Co can meet its claimed budget for FTTP, how is the regulator supposed to evaluate the currently proposed SAU, which includes scope for NBN Co to recover its costs in full (whatever those may be) from end users over time?
- 6) In a recent research note dated 22 January, telecoms analyst Andrew Levy from Macquarie Bank used an estimate of average capital costs of \$4000 per FTTP premise passed. This is substantially higher than the \$2700 or so embodied in the NBN Co's revised Corporate Plan. Why would Mr Levy use a higher figure than the NBN Co has estimated in his analysis?
- 7) Given analysts such as Mr Levy are plainly sceptical about NBN Co's ability to roll out the NBN within the budget set out in the Corporate Plan, surely it is in NBN Co's interests to reveal its investment per fibre premises passed so far?
- 8) Wouldn't the release of such data demonstrate your publicly claimed plan and budget is credible, which given the delays and lack of financial transparency from NBN Co so far is a matter where we frankly have little or no confidence?
- 9) At what date or which stage of the rollout dose NBN Co believe that it will be appropriate to release detailed public information on the cost per premise passed and cost per premise connected of the FTTP, fixed wireless and satellite rollouts?

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Answers:

- 1) Please refer to NBN Co's submission "Financial and rollout data" of 19 April 2013 to the public hearing of the Joint Committee on the NBN.
- In the last six months NBN Co has publicly provided information about trends in cost per premises as statistically meaningful data started to emerge. This information was first provided at the Joint Committee of the NBN in October 2012. It should be noted that NBN Co is at the early stages of its rollout, therefore trends have to be assessed with this limitation in mind.

In the very early stages of NBN Co's operations cost per premises information was considered commercial in confidence for a number of reasons including:

- It could have influenced outcomes of discussions with Telstra and Optus over negotiations on agreements for infrastructure access and disconnection / migration of End User premises from Copper / Hybrid Fibre Coaxial (HFC) to Fibre.
- There was potentially significant value for contractors and suppliers to understand NBN Co's assumptions at the time of the negotiations of very large initial procurement contracts.
- There is ongoing commercial sensitivity around publication of an average cost per
 premises. Contracts with delivery partners typically have terms of two to four years, and
 will need to be renegotiated periodically. Publication of NBN Co's detailed long term
 cost assumptions may prejudice the company's negotiating position when it comes to
 renewing these contracts and/or adding more delivery partners.
- Very few companies rolling out large infrastructure projects that span many years provide
 detailed cost information at the early stage of their rollout, if at all. For the reasons stated
 above that providing such information may prejudice longer term financial objectives,
 and because it is difficult and inappropriate to draw any conclusions about long term
 trends from very small, early sample sizes.
- Capex for LNDN can only be captured when the entire FSAM is complete.
- 3) Cost per premises is an important key performance indicator for NBN Co over time. NBN Co's proposed Special Access Undertaking (SAU) sets out that prices will be subject to a CPI-1.5% individual price increase limit (applied on an annual use it or lose it basis), and a number of Reference Offers (including the Basic Access Offers on Fibre, Wireless and Satellite) are subject to flat nominal maximum prices until 30 June 2017. The proposed SAU also subjects NBN Co's prices to a long term revenue constraint, which provides NBN Co with the opportunity to recover only its prudently incurred costs of supply (inclusive of an appropriate return on capital) but subject to the CPI-1.5% restriction.

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- 4) There is no absence of this data. NBN Co's Corporate Plan contains a significant amount of financial information which establishes the financial viability of NBN Co. NBN Co also presents annual audited financial accounts and half-yearly accounts to the Joint Committee on the NBN. See also NBN Co's submission "Financial and rollout data" of 19 April 2013 to the public hearing of the Joint Committee on the NBN.
- 5) See answer to 4.
- 6) NBN Co cannot comment on the approach taken by Mr Levy.
- 7) See answer to 1.
- 8) See answer to 1.
- 9) See answer to 1.

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 287

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Statistics & Reporting Senator Birmingham asked:

- 1) What percentage of the total number of premises (including households or businesses in multiunit dwellings or situated in Greenfield estates) that the NBN Co cites as 'passed' in its reporting could obtain a service over the NBN within two days?
- 2) Do you accept that the NBN Co definition of 'passed' varies considerably from the definition stated in NBN Co's own original definition in the 2010 Corporate Plan? Have changes made since then had the effect of increasing or decreasing the number of premises the NBN Co can report as 'passed'?
- 3) What exactly does NBN Co now define a 'premise passed' to be? Can all premises passed activate their service without further works?
- 4) Given the rollout and financial viability of the NBN is a central issue in the approaching election, and you and the Government claim a ramp up is underway that will allow NBN Co to achieve its publicly stated rollout targets, will NBN Co agree to release figures on premises passed and premises connected on a monthly basis during 2013?
- 5) If the election falls on September 14, what is the last date for which NBN Co will supply figures on its rollout (premises passed and customers connected) and its financial performance (capital spent on the network to date, and revenue)?
- 6) The NBN currently serves only 137 premises in MDUs, and only in December signed its first contracts for the provision of fibre inside MDUs. What does it say about the NBN Co's execution that four years after its establishment, and after spending more than half a billion dollars on employee salaries, it has only just begun to address getting the fibre network to the 34 per cent of Australians who work or live in MDUs?
- 7) How many MDUs has NBN Co passed with fibre but has been unable to complete installation in? How many premises are in these MDUs?

Answer

- 1) NBN Co has not done this calculation as the definition of 'premises passed' includes no reference to obtaining a service "within two days".
- 2) & 3) No, the definition of 'Premises Passed' in the body of the Corporate Plan has not changed:

NBN Co 2011-13 Corporate Plan, p.15

A premise is passed / covered when the shared network and service elements are installed, accepted, commissioned and ready for service which then enables an end user to order and purchase a broadband service from their choice of retail service provider.

NBN Co 2012-15 Corporate Plan, p.36

Premises are passed / covered when the shared network and service elements are installed, accepted, commissioned and ready for service which then enables an End-User to order and purchase a broadband service from their choice of retail service provider.

4) & 5)

This has not yet been determined.

6) & 7)

In the early stages of the rollout, NBN Co has been conducting trials in MDUs to determine the most efficient way of connecting them going forward. The commencement of the volume rollout of MDUs began after these trials were completed in September 2012. NBN Co is focusing specialist attention on the complex task of connecting flats and units, recently signing contracts with four companies to begin the wide-scale rollout to MDUs Australia-wide.

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 288

Topic: Fibre Overbuilds

Senator Birmingham asked:

- 1) If NBN Co achieves its rollout targets, what is the total number of locations across Australia where existing fibre or HFC networks will be overbuilt by the end of 2013?
- 2) What is the total number of premises in such areas?
- 3) How many premises currently have, or are estimated by NBN Co to have, existing fibre or HFC networks passing them?
- 4) What would you say to the approximately two million Australian households or businesses in areas which currently do not have access to adequate fixed line broadband about the NBN Co's decision to use public resources to overbuild existing super-fast broadband networks in 2013?

Answer:

- 1-2) NBN Co has not done these calculations as any overbuild of existing networks would be subject to a process around determining if a particular location is adequately served or not. The Government has released a policy paper setting out the criteria and a process for determining whether existing fibred premises are adequately served. NBN Co will not be required to overbuild existing networks which are adequately servicing premises.
- 3-4) Please refer to Answer to QoN 268.

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Question No: 289

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Overhead Fibre Cabling

Senator Birmingham asked:

- 1) In answers to Questions on Notice NBN Co advises it has signed contracts with nine of Australia's 16 electricity providers to gain access to their poles for aerial deployment. Can you advise how many of these are enduring agreements that is, they allow access to assets throughout the rollout and not just for the first and second release sites?
- 2) What providers and what locations are covered by these agreements?
- 3) Does NBN Co still aim to deploy 25 per cent of its fibre overhead, as stated in the 2010 Corporate Plan?
- 4) Is the NBN Co deploying cables in the power corridor of electricity poles [ie, the area six feet above and below the electricity lines?
- 5) If the NBN is deploying in the power corridor, on what percentage of electricity assets has this occurred? And what are the additional costs in having to hire skilled linesmen to gain access to the corridor?

Answer:

- 1) NBN Co has signed 'long term' agreements with eight energy utility providers and three 'Interim' Agreements overall 11 agreements.
- 2) Energex Energy utility distribution network footprint

Jemena – Energy utility distribution network footprint

SP Ausnet – Energy utility distribution network footprint

Citipower – Energy utility distribution network footprint

Powercor – Energy utility distribution network footprint

SAPN (ETSA) – Energy utility distribution network footprint

Power& Water – Energy utility distribution network footprint

Aurora – Energy utility distribution network footprint

Ergon Energy – Specified areas of the distribution area as per rollout (Interim Access Agreement).

Essential Energy – Specified areas of the distribution area as per rollout (Interim Access Agreement).

Endeavour Energy – Specified areas of the distribution area as per rollout (Interim Access Agreement).

3) Yes – Estimates of aerial network requirements for the Local Network are at approximately 25%.

4-5) The power corridor is defined by the 'safe approach' distance to the low voltage conductor(s). This distance is defined by Technical and Safety standards of the energy utility and, in some cases, the State government. NBN Co undertakes installation of the Fibre Optic Cable in accordance with these technical, safety and accreditation/authorisation standards and requirements. This includes training and accreditation/authorisation requirements from utility and State governments. No installations within the power corridor have been required to date.

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 290

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Adequately Served Senator Birmingham asked:

- 1) In a speech last year, NBN Co chairman Harrison Young said: "Having multiple suppliers of natural monopoly services is socially wasteful. They make inefficient use of an economy's resources." If having two superfast networks service a community is socially wasteful as Mr Harrison argues, why is the Department both giving cherry picking exemptions to companies to build out alternative networks to the NBN and then refusing them adequately served status so the NBN must overbuild them?
- 2) In the DBCDE's discussion paper it lists stakeholders consulted over adequately served status. They include: AAPT, Amcom, Clubcom, The Competitive Carrier's Coalition, Internode, Macquarie Telecom, NBN Co, Nextgen networks, Opticomm, Optus, Pipe Networks, Pivit, Primus, Telstra and TransACT. How many of these companies have applied for adequately served status?
- 3) Roughly what percentage of current fibre connections in the Australian market does this account for?
- 4) Did the NBN Co begin to overbuild any superfast networks before the September 30 deadline for operators to declare any adequately served networks, for instance in Crace, ACT?
- 5) If NBN Co meets its rollout targets, what is the total number of locations across Australia where existing fibre or HFC networks will be overbuilt by the end of 2013?

Answer:

Please see answer to QoN 268.

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 291

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fibre Precondition for 'Adequately Served

Senator Birmingham asked:

- 1) Is it correct that superfast networks offering up to 100 mbps speeds cannot be counted as adequately served if they are not FTTP connections?
- 2) Can NBN Co identify one application that a customer on a fibre connection with download speeds of 100 megabits per second and upload speeds of 40 megabits per second can access that a customer on a HFC or VDSL network on those same speeds can't access?
- 3) Can NBN Co identify any externalities that having a fibre connection of 100/40mbps will deliver that a connection of that same speed on HFC won't deliver?
- 4) Has NBN Co sought to quantify the benefits of having a fibre connection offering 100/40mbps and weighed those against the costs of overbuilding those networks

Answer:

See response to QoN 269.

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 292

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Syntheo

Senator Birmingham asked:

- 1) Does the NBN Co have any contingencies in place for achieving its rollout targets if Syntheo at any stage advises it is unable to deliver according to the schedule set out in the revised NBN Co Corporate Plan?
- 2) Has any such advice been received from Syntheo at any stage?
- 3) On what date was NBN Co senior management first advised Syntheo was unlikely to reach the publicly released rollout targets for South Australia, Western Australia and the Northern Territory?
- 4) On what date did NBN Co senior management first obtain a credible estimate of the probable quantum of this delay?
- 5) On what date was NBN Co's board of directors first advised Syntheo was unlikely to reach the publicly released rollout targets for South Australia, Western Australia and the Northern Territory?
- 6) On what date was NBN Co's board of directors first obtain a credible estimate of the probable quantum of this delay?
- 7) On what date was the most recent pre-payment (or similar payment) from NBN Co to Syntheo made?
- 8) What is NBN Co's total current financial exposure to Syntheo arising from payments made in advance of completion of any part of the fibre rollout within its responsibility?
- 9) Which executive at NBN Co was responsible for signing the contract with Syntheo?
- 10) What time period remains on their current contract? When does it expire?
- 11) What are the reasons for the delay in rollout by Syntheo in SA, WA and the NT? Has Syntheo had to change any of its subcontractors since commencing construction? If so, why and at the additional cost?

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Answer:

- 1) Please see NBN Co Media Release of 21 March 2013, which outlines the actions that NBN Co is taking.
- 2) Yes. NBN Co has received advice from Syntheo and they have also made public statements on this matter. On 21 March 2013 Lend Lease, on behalf of Syntheo, advised that:
 - "Syntheo has been experiencing difficulties in reaching the construction figures originally anticipated for the NBN in Western Australia, South Australia and the Northern Territory. As a consequence, Syntheo has revised its forecast for premises passed by 30 June 2013, in consultation with NBN Co. Syntheo, as a joint venture, has significantly strengthened its resources to recover the situation and we are committed to working with NBN Co to deliver this important piece of infrastructure."
- 3) The initial advice from Syntheo that they were under significant project pressure was signalled to NBN Co on 21 December 2012. The revised forecast received from Syntheo at this stage still allowed NBN Co to reach its target of 286,000 GNAFs by 30 June. It is important to note that NBN Co was at this time receiving mixed information from various sources regarding the forecasts. Please see the discussion on page 35 of Hansard from the JCNBN Hearing of 19 April 2013.
- 4) As stated above, NBN Co was progressively receiving information from Syntheo through a variety of sources (weekly data and senior management meetings) throughout January and February 2013.
- 5) The relevant Board committee was informed on 8 February 2013 of the material shortfall of the Syntheo forecast.
- 6) see above
- 7) The last order to Syntheo that initiated a pre-payment was issued 5 March 2013 for the third FSAM in South Australia's Gawler (5GAW-03).
- 8) Payments made by NBN Co to its contractors are commercial in confidence.
- 9) The contract was signed by both the Chief Executive Officer and the Head of Corporate and Commercial.
- 10) Syntheo has two separate contracts; the first one was awarded for Western Australia and expires in September 2013. The second contract for South Australia and Northern Territory expires in November 2013.
- 11) The delay has been caused by an inability of our construction partner to mobilise its workforce at the right time and in the right place. That is, they haven't mobilised enough workers fast enough to meet their targets and subsequently didn't supervise and sequence the work appropriately. There has been no formal notice or advice given to NBN Co regarding changes to subcontractors.

Question No: 293

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Construction Timeframes

Senator Birmingham asked:

- 1) Publicly available information on the NBN Co website suggests that of 65 FSAMs where construction began between June 2011 and March 2012, construction periods have averaged 16.4 months from commencement to completion. Is this analysis of the data accurate?
- 2) If not, what is the average construction period for these FSAMs?
- 3) Why has this sample of FSAMS produced an average duration of construction that is 25 per cent higher than the average duration repeatedly cited by NBN Co management?
- 4) What penalties apply to contractors where they exceed the promised construction timeframes?
- 5) In how many instances have these penalties been applied so far?

Answer:

Mr Quigley addressed this in his opening statement at the 2013 Additional Estimates hearing when he said: "I would also remind you that it takes approximately one year from construction commenced to an FSAM being passed. As I have mentioned previously, that is an average time. We expect it to take somewhat longer at the beginning of the build and reduce over the first three years—and that is a clear indication of what we are seeing."

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Question No: 294

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Medical Devices

Senator Birmingham asked:

- 1) How many people in Greenfields estates who require a working connection for their medical alarms or personal response services do not have a connection due to NBN Co failing to rollout in Greenfields developments? Is NBN Co aware that this is a potentially life threatening situation?
- 2) Has NBN Co consulted with PERSA, the Personal Emergency Response Services Association?
- 3) Is NBN Co aware that many medical devices require an analogue port?
- 4) Is NBN Co aware that there is no mandatory requirement for RSPs to support UNI-V ports as required by medical devices?

Answer:

- 1) There are no Greenfields retirement villages waiting for NBN Co connection and therefore there are no impacts in relation to medical alarms or personal response services. NBN Co works consultatively with developers of retirement villages to understand their requirements prior to retirement villages being connected to the NBN.
- 2-4) Please see answers to October 2012 JCNBN QoNs 26, 27, 28 & 34 which go into detail on these issues.

Question No: 295

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Battery Backups

Senator Birmingham asked:

- 1) What does NBN Co expect the cost/saving of retrofitting battery backups where requested to be?
- 2) How does this compare with the cost universal instillation to start with?

Answer:

The 2011-13 Corporate Plan assumed that NBN Co would be required to provide battery backup to 100 per cent of Fibre end-user connections. The 2012-15 Corporate Plan assumes that end-users will be able to nominate whether or not they want NBN Co to provide battery backup ('must-opt' model). Priority Assistance households will be provided with a battery backup.

It is now assumed that 50 per cent of fibre end-users will elect not to have battery backup, with a consequent reduction in capital expenditure.

It is not clear what the term "retrofitting" in the question refers to, so it is assumed this refers to cases where when an end-user elected not to have battery back-up at the time of connection, but subsequently changes their mind, requiring the premises to be revisited to install the battery backup. This is not expected to be a common occurrence and would therefore have little impact on the forecast reduction in capital expenditure moving from a mandatory back-up model to a 'must-opt' model.

Question No: 296

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Cost to premise owner

Senator Birmingham asked:

Are there any additional costs a household or business may face to get their premise connected to the NBN, such as electrical works, changes to plugs or wiring or the like? If so, please detail what may be required, the circumstances under which such costs may be incurred and whose responsibility the meeting of such costs may be.

Answer:

A standard installation of the NBN fibre optic cable and connection box at a home or business will be free of charge. At the 2013 February Estimates hearing Mr Quigley said:

"There should not be a need to rewire or recable the home unless the householder wants to do something unusual. So we can go in and install our NTD. They can plug their telephone into it. The retail service provider will probably plug in a residential gateway device, so there should not be any need for rewiring."

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Question No: 297

Topic: Construction contracts

Senator Birmingham asked:

- 1) When does each of NBN Co's current construction contracts expire?
- 2) When did or will renewal processes begin?
- 3) What tenders does NBN Co expect to be undertaking during 2013? Please detail services being sought, length of contract being entered into and any publically available values or costs associated with such planned tenders.
- 4) If new contracts have been signed or are soon to be signed, has NBN Co altered any of the termination clauses from previous contract periods?

Answer:

1 & 2) See table below

Construction Categories	Major Contracts (Modules)	Supplier	Expiry Date (Initial term)	Renewal Process Commenced Date
Passive Fibre	WP1 - Passive (LN/DN & CC)	Silcar	30 June 2013	Aug 2012
	WP2a- Passive (LN/DN & CC)	Transfield	5 Sept 2013	Oct 2012
	WP2b- Passive (LN/DN & CC)	Syntheo	5 Sept 2013	Oct 2012
	WP3 - Passive (LN/DN & CC)	Syntheo	13 Nov 2013	Oct 2012
	WP4- Passive (LN/DN & CC)	Visionstream	25 Mar 2016	N/A
	WP 5 – LN/DN-&DU Build Drop	Transfield	20 Mar 2015	Not Commenced
	WP 6 – LN/DN-&DU Build Drop	Downer	13 Feb 2015	Not Commenced
	WP 7 – LN/DN-&DU Build Drop	Visionstream	13 Mar 2015	Not Commenced
	WP 8 - LN/DN-&DU Build Drop	Visionstream	13 Mar 2015	Not Commenced
	WP 9 – LN/DN-&DU Build Drop	Visionstream	13 Mar 2015	Not Commenced
Transit	DWDM Equipment Installation	NSN	14 May 2013	Not Commenced
	Common Network Infrastructure (CNI) & Active Equipment	Visionstream	20 Feb 2014	Not Commenced
	Intermediate Access Point	Silcar	14 Feb 2015	Not Commenced
	Intermediate Access Point	PFM	17 Mar 2015	Not Commenced
Fibre Links	Fibre Links Modules	Silcar	31 Jan 2015	Not Commenced
	Fibre Links Modules	Visionstream	13 Mar 2015	Not Commenced

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New	New Developments FTTP	Service Stream	31 Dec 2013	Not Commenced
Developments	New Developments FTTP	Service Stream	31 Dec 2013	Not Commenced
	New Developments FTTP	Service Stream	31 Dec 2013	Not Commenced
	New Developments FTTP	Visionstream	31 Dec 2013	Not Commenced
	New Developments FTTP	Visionstream	31 Dec 2013	Not Commenced

3) Currently Under Procurement 2013. Estimated costs are not publicly available.

Construction Categories	Major Contracts (Modules)	Term (Years)
Passive Fibre	WP1- SDU Build Drop	~2
	WP2a -SDU Build Drop	~2.5
	WP4 - SDU Build Drop	~3
Fibre Links	Fibre Links Modules	2+1
	Fibre Links Modules	2+1
New Developments	New Developments FTTP	2+1
20.010pmones	New Developments FTTP	~0.75

The program of future procurements is still to be finalised.

4) As part of contract negotiations there have been changes to aspects of the contracts, including to termination clauses. NBN Co makes changes if we believe there is an advantage to NBN Co to do so.

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Question No: 298

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Contractors

Senator Birmingham asked:

In some areas of NSW, NBN Co contractors are working seven days per week, and twelve hours per day rolling out the NBN fibre network. Are the contractors working these long hours at the request of NBN Co? Are the contractors being paid a premium by NBN Co for working long hours and working on weekends? Is this high work pace included within the original project budget, or is it at an additional cost to the project? If so, what is the total additional amount to be paid to the contractors for working long hours and on weekends?

Answer:

No; NBN Co entered into a prime contractor agreement with the principal contractor and does not direct any sub-contractors to work longer hours or on weekends.

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Question No: 299

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Coffs Harbour launch Senator Birmingham asked:

What was the total cost of the official launch event for the NBN in Coffs Harbour on Wednesday 13 February 2013, including the cost of accommodation for NBN Co staff who attended the event, flights and travel costs for NBN Co staff who attended the event, print media expenditure associated with the event, electronic media expenditure associated with the event, and any venue or equipment hire associated with the event?

Answer:

The total cost of the Coffs Harbour community outreach and media event was \$102,570.66. This figure includes venue hire in two locations; equipment hire including audio visual equipment in two locations and technical support for the event at both locations; NBN Co staff travel including return flights, accommodation, vehicle hire and incidentals; public relations support and photography.

The figure includes additional costs because severe weather and flooding in northern NSW led NBN Co to postpone the event. Originally due to take place on 30 January, the event was rescheduled and took place two weeks later on 13 February.

The event received strong support from the local council and community with attendance by representatives from Coffs Harbour City Council, Southern Cross University, local TAFE, Coffs Coast Community College, iPrimus and local businesses.

These events are held as part of NBN Co's local area communications marketing process to raise awareness of the availability of the NBN in the community and to encourage activations through telephone and internet service providers.

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Question No: 300

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN take-up

Senator Birmingham asked:

- 1) What are the current fibre take-up rates in each of the following locations (For each site, please provide a breakdown of take-up by speed tier):
 - a. Kiama
 - b. Armidale
 - c. Coffs Harbour
 - d. Scottsdale
 - e. Smithton
 - f. Gungahlin
 - g. Bacchus Marsh
 - h. Toowoomba
 - i. Willunga
- 2) What is the current take-up rate for the NBN wireless network?
- 3) How many customers are currently connected to an NBN wireless service?
- 4) What is the current number of customers connected to the NBN interim satellite service?
- 5) How many customers activated an NBN interim satellite service in each of:
 - a. January 2013
 - b. December 2012
 - c. November 2012
 - d. October 2012
 - e. September 2012
 - f. August 2012?

Answers:

- 1) Please refer to NBN Co's submission "Financial and rollout data" of 19 April 2013 to the public hearing of the Joint Committee on the NBN.
- 2, 3 & 4) Please refer to NBN Co's media release of 15 May 2013, available at:

http://www.nbnco.com.au/about-us/media/media-releases.html

5)

- a. January 2013: 1,218
- b. December 2012: 1,526
- c. November 2012: 2,321
- d. October 2012: 2,032
- e. September 2012: 2,312
- f. August 2012: 2,878

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 301

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Towers

Senator Bushby asked:

- 1) What kind of information is provided to residents in areas where NBN Co or associated telecommunications companies intend to erect towers for NBN use?
- 2) How are sites for towers chosen?
- 3) Please list the locations where towers are currently erected in Tasmania.
- 4) Please list the locations of towers which are currently awaiting Council approval.
- 5) Please list other locations which NBN Co. or associated telecommunications companies intend to erect towers.
- 6) How many towers relating to the delivery of the NBN will Tasmania need?
- 7) Please list the estimated height of the towers that are currently awaiting approval in Tasmania.
- 8) Where else do you propose to construct towers in Tasmania?
- 9) Do residents who agree to have a towers erected on their property receive any payment?

Answers:

- 1) Information is provided through several different forms including pre-engagement with Council and communities prior to submission of a development application, community information sessions, mail-outs, local radio and print media announcements. Residents are provided with information relating to the proposal including the type of facility and location of the structure as well as where they are able to obtain further information should they have any specific interest in the proposal. NBN Co undertakes the appropriate level of notification at all times, often going beyond what is normally prescribed.
- 2) There are a range of other factors that can influence quality of the fixed wireless service which NBN Co has to take into account when choosing a site with the right characteristics. Achieving a clear 'line of sight' free from obstructions like trees, hills or other buildings must be considered in order to achieve the required coverage objectives for local communities. Environmental and planning considerations are also assessed to ensure these items have been factored into the site selection process for all candidate sites. The suitability of the candidate also must include consideration of the proposed site being able to "connect" back to the network via the neighbouring site(s).

Wherever possible, NBN Co will actively look to utilise existing infrastructure to provide a fixed wireless service. This is often referred to as 'co-location.'

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3) There are currently eight sites in Tasmania where towers are erected:

No.	Site Name	Cluster Name
1	Huonville	Hobart
2	Sorell	Hobart
3	Deloraine	Launceston
4	Herringback	Hobart
5	Westbury	Launceston
6	Spreyton	Launceston
7	Perth	Launceston
8	Wynyard	Launceston

4) The location of towers currently awaiting approval are:

No.	Site Name	Cluster Name
1	Round Hill	Launceston
2	Riana	Launceston
3	Wynyard West	Launceston
4	Meander	Launceston
5	Kingston	Hobart
6	Mountain River	Hobart
7	Sisters Beach	Launceston
	Boat Harbour	
8	Beach	Launceston
9	Boat Harbour	Launceston
10	Allens Rivelet	Hobart
11	Middleton	Hobart
12	Forthside	Launceston
13	Abbotsham	Launceston
14	Campania	Hobart
15	Neika	Hobart
16	Doctors Rocks	Launceston
17	Lewisham	Hobart
18	Coles Bay East	Launceston
19	Edgcumbe Beach	Launceston
20	Musselroe Bay	Launceston
21	Tomahawk	Launceston
22	Coles Bay	Launceston

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5) NBN Co plans sites in the general vicinity of the areas below, noting that these areas may also have a fibre presence

Site Name	Cluster Name	
Cygnet	Hobart	
Carlton	Hobart	
Huonville	Hobart	
Snug	Hobart	
New Norfolk	Hobart	
Sorell	Hobart	
Bridport	Launceston	
Beaconsfield	Launceston	
Round Hill	Launceston	
Badajos	Launceston	
Deloraine	Launceston	
Spreyton	Launceston	
Perth	Launceston	
Georgetown Central	Launceston	
Legana	Launceston	
Port Sorell	Launceston	
Rosebery	Launceston	
Scamander	Launceston	
Scottsdale	Launceston	
Smithton	Launceston	
Swansea	Launceston	
Wynyard	Launceston	

- 6) Tasmania will require a total of 82 new structures.
- 7) The heights vary from 20 to 55m, with the vast majority of towers at 30 to 40m in height.
- 8) Refer to answers 3, 4, 5 above.
- 9) Yes. NBN Co will look to enter into a direct commercial agreement with those property owners.

Answers to Senate Estimates Questions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio

NBN Co Limited

Question No: 302

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NEC box replacement

Senator Bushby asked:

1) How many premises in the three Tasmanian trial sites are yet to have their NEC boxes

replaced?

2) What is the total cost of replacing these NEC boxes?

3) Is the Department and NBN Co confident that the technology that has replaced the NEC boxes

won't have to be replaced again

Answer:

1) All end users that nominated to migrate have been migrated.

2) The migration is forecast to cost \$1.25M and to date is on target.

3) The technology replacing the NEC boxes is same as that used in the rest of the NBN

rollout. The NBN Network Termination Device (NTD) technology has been carefully selected

under detailed specifications to meet NBN quality standards and is based on globally accepted

technology standards.

Senate Standing Committee on Environment and Communications Answers to Senate Estimates Ouestions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 303

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN in Tasmania

Senator Bushby asked:

According to answers provided to me following February 2012 estimates, as at 6 April 2012, 702 premises had ordered services on the network in Tasmania, 3,987 premises were passed by the NBN in the first three trial sites and the take up rate for Midway Point was 27%, Smithton 14% and Scottsdale 13%. Please update these statistics to reflect:

- a) How many Tasmanian homes and businesses in Tasmania have signed up to the NBN?
- b) How many homes and businesses in Tasmania does the NBN pass?
- c) What is the take-up rate for the first three locations in Tasmania?
- d) What is the take-up rate for all other locations in Tasmania where the NBN is available?

Answer:

As at 28 February 2013:

- a) 3,425 homes and businesses had signed up to the NBN (brownfields fibre).
- b) 14,663 premises had been passed (brownfields fibre).
- c) and (d) please refer to NBN Co's submission "Financial and rollout data" of 19 April 2013 to the public hearing of the Joint Committee on the NBN.

Answers to Senate Estimates Questions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 304

Topic: NBN speeds in Tasmania

Senator Bushby asked:

- 1) Have you received customer feedback regarding NBN speeds currently being delivered in Tasmania? If so, please detail.
- 2) What percentages of customers in Tasmania have broadband speeds over the fibre network of 100 megabits per second?
- 3) Has the Department of NBN Co received any complaints about the speed of the NBN in Tasmania?

Answer:

- 1) Yes. For example:
 - Lou Barrett, from the IGA supermarket in Scottsdale, Tasmania, said: "The speed and reliability that we get from our connection to the NBN means that we have been able to take advantage of a range of new applications and content that have helped us streamline our business practices. This has helped us improve our service to our loyal and valued customer base in Scottsdale" (North Eastern Advertiser, p.1, 20 June 2012).
 - Jan Ochi, a small business owner of Wafu Works in Kingston Beach, Tasmania, says: "I've got an online shop, and I've got a blog, and I can upload very, very quickly almost instantaneous upload of photos and things, sending out newsletters to my regular customers" (WIN News Hobart, 3 October 2012).
 - Catholic Education Tasmania wrote to the Minister for Communications, Broadband & the Digital Economy following the launch of services in Tasmania to say the current cost over the NBN of their 100 megabits per second services is about \$1,400 per year. They told me a comparative cost for a similarly fast service before the NBN was rolled out was \$60,000 per year.
 - Principal Patrick Bakes of the Circular Head Christian School said after his school was connected to the NBN that: "In the past, [our] students had to leave to access education beyond Year 10. One of the big advantages gained from the NBN is being able to provide a greater range of learning opportunities for all our students, but particularly those in Years 11 and 12" (Hobart Mercury, 2 July 2011). As well as these benefits, the school has found that their NBN connection has resulted in cost savings of more than \$200 per month.
 - More feedback on the speed, reliability and affordability of NBN services can be provided upon request.
- 2) As at May 2013, 20 per cent of NBN Co's FTTP end-users in Tasmania were on the highest available speed tier (100/40 Mbps). This compares to an assumption of 18 per cent in the Corporate Plan 2012-15.

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As at 4 April 2013, NBN Co had received two complaints from Tasmania that were categorised as relating to speed or connection quality on fibre, and two complaints relating to satellite. NBN Co had also received four queries about connection quality or speed on satellite in Tasmania.

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NBN Co Limited

Question No: 305

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN and personal medical alarms

Senator Bushby asked:

1) Has any consideration been given to implementing a Free Call consumer hotline or home visits for users of medical alarms that will be affected by the rollout of the NBN? If not, can an undertaking be given to do so?

- 2) Has consideration been given to continuing network support for conventional analogue medical alarms until at least 2020 as recommended by industry body PERSA?
- 3) Is the Department and NBN Co aware of the concerns of some stakeholders who believe that the back-up battery being developed by NBN Co is impractical due to high power consumption, its size and cost and the ongoing costs for maintenance? What is being done to address these concerns?
- 4) Does the back-up battery incorporate any power saving measures?

Answer:

- NBN Co is working closely with industry stakeholders, including the Personal Emergency Response Services (PERSA), medical alarm providers and RSPs on a variety of issues, including the most appropriate means of keeping end-users informed. Consumer education will continue to play a vital role in ensuring end users make accurate and informed decisions regarding their telecommunications needs. The Telecommunications Consumer Protection Code makes it clear that when Australians identify a particular need to their RSP, the RSP must make it clear whether they can support that need. The Communications Alliance is also developing a set of recommendations for how RSPs should inform end-users of their legacy service support when they order an NBN service. NBN Co also has information available online and in its communications to end-users as part of the 18 month switch over.
- The NBN is capable of supporting the operation of analogue alarms, including medical alarms. Analogue alarms run off the voice port (UNI-V) on the network termination device (NTD), which is supported by the backup battery. Australians are using medical alarms on the NBN today. For example, the Peninsula Grange aged care facility in Victoria is connected to the NBN and has a fully functional medical alarm system through the UNI-V port. Some of the largest medical alarm providers, such as Tunstall Healthcare, offer medical alarm services that function over the NBN. As Tunstall's Health Services Director Gary Morgan has advised: "even our 10 year old medical alarms work on the NBN network, so all of our current clients can be rest assured their alarms will continue to work when they switch over to NBN services." End users should speak to their phone service provider to determine if they offer a phone service suitable for analogue alarms.

¹ See: http://www.tunstallhealthcare.com.au/news/394/tunstall-provides-24/7-reassurance-for-grantham-resident

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NBN Co Limited

- 3) If an end-user does not require battery backup capability as they have access to other calling capabilities during a power outage (such as a mobile phone) they can elect to not have the battery backup service when optional battery backup (OBB) is launched. The NBN Co Battery Backup Power Supply Unit's power usage is comparable with other DSL modems or cable modems and routers. The ongoing battery maintenance costs for providing at least five hours calling capability during a power outage is considered low. The material cost to replace a battery is estimated at between \$20.00 and \$30.00 and the typical expected lifecycle of a battery requiring replacement is estimated at five years in most cases.
- 4) Yes. The back-up battery provides a reserve of electrical energy that can be used to power the Network Termination Device (NTD) during periods of failure of the mains electricity supply. As an additional safeguard for emergency situations, once the battery has depleted to 30-40 per cent power reserve the user can manually intervene by pressing the 'emergency use' button on the battery back-up, which allows them to make emergency calls until the battery is fully discharged (which can last several weeks).

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Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 306

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN removal of speed limits

Senator Macdonald asked:

Speed limitations currently imposed by NBNCo on users has been characterised by a former Telstra chief economist as discouraging greater use of the network.

- a. What maximum speeds are currently being offered by NBNCo to retail customers?
- b. Does NBNCo impose charges on the third party ISP, or on both the ISP and the retail customer?
- c. Does the NBNCo plan to increase the maximum speeds that are offered to retail customers?
- d. What is the NBNCo doing to address concerns raised by ISPs and third-party telecommunications providers that the regulatory framework governing the NBNCo is insufficient to provide the protections that are required to support commercial operating agreements spanning decades?

Answer:

- a) NBN Co provides wholesale services to Retail Service Providers (RSPs). Packages and plans available to end-users are available from the respective RSPs. The maximum speed wholesale service NBN Co currently provides is 100 mbps.
- b) See a) above
- c) NBN Co will offer gigabit services (1,000mbps) by the end of the year. The fibre architecture of the NBN also allows for further upgrades (e.g. 10 gigabits, or 10,000mbps) to be offered in the future.
- d) Please see parts 2 to 8 of QoN 285.

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Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 307

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Installations and Connections of Services

Senator Macdonald asked:

In answer to Questions on Notice at previous Estimates (Supplementary Estimates QON 381) NBNCo has advised that it will not in fact conduct any installations or connections itself. Instead these installations and connections will be conducted by Service Delivery Partners, and third party sub contractors retained by the Service Delivery Partners.

Consideration is evidently also being given to enabling Access Seekers (ISPs etc) to conduct installations and connections.

Under the modelling suggested by the answer to Question on Notice 381, NBNCo will not be able to provide first-hand oversight and support to installation and connection processes. In fact, as many as three separate tiers of field workforce must be managed and deployed by third-party arrangements to maintain installation and connection works.

- a. Does the operational model for maintenance of the network mirror the model indicated in the answer to Question On Notice 381 that there will be three un-related tiers of maintenance workforce: Service Delivery Partners, sub contractors to those partners and (potentially in the future) Access Seeker-deployed technical staff?
- b. What interface system functionality is the NBN Co putting in place to ensure that across these multiple workforce streams sufficient coordination takes place to ensure Service Level Agreements are met?

Answer:

- a) The answers to QoN 381 are correct. These answers do not mention "three un-related tiers".
- b) NBN Co has contracts in place with delivery partners that require certain conditions to be met.

Answers to Senate Estimates Questions on Notice

Additional Estimates Hearings February 2013

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 308

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Priority Assistance Technical Network Maintenance

Senator Macdonald asked:

In answer to Questions On Notice at previous Estimates (Supplementary Estimates QON 383) NBNCo has advised that Priority Assistance Technical Network Maintenance will *not* be conducted by NBNCo, but instead by Retail Service Providers.

However, in answer to Questions on Notice 381 at previous Estimates NBNCo explicitly states that Access Seekers (the RSP/ISP) will *not* be responsible for installations and/or connections.

- a. What workforce will be conducting the Priority Assistance Network Maintenance tasks?
- b. Who will be co-ordinating this workforce and from where will they retrieve their network technical data?
- c. How can RSPs be expected to manage service restorations particularly under a 24hour Service Level Agreement when they have had no previous input in, exposure to or experience with the network they are being charged to repair?
- d. How does NBNCo account for the discrepancy between the answers to QON 381 and 383 in terms of whether or not retail service providers will be deploying network maintenance technicians?

Answer:

The answer to QoN 383 does not state this. It says:

"Fault repair and maintenance works will be carried out by third parties contracted to deliver on NBN Co's commitment."