Question No: 321

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Rollout Plan

Senator Birmingham asked:

Once again, we are working through the monthly ready for service rollout plan. Between now and 30 June, how many FSAMs are scheduled to have active services? Is it 113?

Mr Hassel: If you are reading that from the rollout plan from last week then that is the case, but we can check on that.

Senator Conroy: We will just get that information so we can be completely correct for you, Senator Birmingham; I would not want to mislead you.

Senator BIRMINGHAM: You would not be misleading me; it would be misleading the committee.

Mr Hassel: Can we come back to you on that in a few moments?

Answer:

There are 100 FSAMS on the October Monthly Ready for Service (MRFS) Rollout Plan listed as having an expected Ready for Service date prior to June 30. The MRFS does not include FSAMs that are already RFS.

In the October Estimates hearing, Mr Hassel stated: "When [NBN Co] produce[s] the ready for service and the rollout plan ... the dates that we provide in that are the ones that we have finalised and had agreed with construction partners which we know we will complete on. Our target for the year is 286,000. That is what we are aiming for in the corporate plan. We do not put everything in there if we have not finalised a date. So we know we have got those premises covered, 262,000 or 263,000. With the remaining premises we bring forward from a number of different constructions that we have got underway to achieve the 286,000. We want to give some very precise numbers in those ready-for-service plans as we put them out."

Question No: 322

Program No: NBN Co Limited

Hansard Ref: 16/10/2012 (Pg 116-117)

Topic: NBN in Julia Creek, QLD

Senator MacDonald asked:

I did alert Mr Quigley to the fact that I would be seeking information here. This relates to the question I have discussed with Mr Quigley over a long period of time and that is the town of Julia Creek in north-western Queensland where the trunkline, if I can call it that, fibre passes through the town but they cannot connect to it. NBN did do an assessment and came up with a figure of \$1.4 million to allow the town just to be hooked in. My letter to Mr Quigley almost a month ago asked that he might let me have the details of how that \$1.4 million was calculated, on the basis that the community itself is prepared to contribute, either in money or in kind, if we can find out how the \$1.4 million is calculated.

Mr McLaren: I am not aware of the correspondence but I am aware of the work that was done. I have not got the detail here on how that was costed but maybe I can refer you and the community to our network extension projects and policy. We have a policy in place for those communities that are outside our fibre footprint. We do have a process in place where the community, or individuals if that is appropriate, can make an application to us, effectively for us to put a cost quote together for the build or extension of the fibre network to cover that community or location. That would be the process I expect it would be possible for Julia Creek to go through to get a detailed costing of what it would cost to bring the community into the fibre footprint. That is something we are making available right across the country so communities can take advantage of what possibilities they have to raise funds to be able to extend the fibre footprint.

Senator IAN MACDONALD: ... Okay. Can I go back to the premise? I will move on because I know my colleagues have lots of questions. I have too but I am not going to ask them. What I want to know is how you got to whatever the figure is, if you can list it in a reasonably simple way. Your box that requires specialist things—perhaps that is \$1 million of the \$1.4 million. That is what we want to know so they can have a look and make an informed decision. You can save by giving them a satellite dish or something, which the council is willing to look at. They have asked: I have asked.

I was interested to hear, Mr McLaren, the information you have just now given me. I was not aware of that and I must say the council, which has been approaching you, was not aware of that. I did write to indicate—to give notice—on 26 September so you would have the information here tonight. I am sorry that you have not. Perhaps Mr Quigley has it in his back pocket because it was addressed to him. If you could you take that on notice now and give me that information, and also refer me to the program you are talking about.

Mr McLaren: The network extension policy? Yes, that is available on our website; I am sure we can provide further details.

Senator Conroy: I think to be fair, Senator Macdonald, you start asking about Julia Creek before NBN Co. had finalised their network extension policy. They were in the process of completing a policy along those lines but I think you actually predate the policy—I say that in the kindest possible way.

Senator IAN MACDONALD: I predate everything.

Senator Conroy: I was not going to say that, Senator Macdonald.

Senator IAN MACDONALD: Be that as it may, I am just trying to resolve the situation here and I had hoped we might be able to do it tonight; but, if not, can you do it on notice?

Answer:

NBN Co has published procedures for communities to apply for a Network Extension to build an alternate access technology to that which was planned for the national rollout. The Network Extension policy was launched on 12 July 2012. Individuals, businesses and governments can apply for NBN Co to extend the fibre or fixed wireless network. The expectation from the Government is that NBN Co will recover the incremental cost of extending the network which is the basis for the costing to install fibre infrastructure in Julia Creek.

There are many different components that make up a quote. For commercial reasons, NBN Co is not able to provide detailed breakdowns of each component.

Information on the Network Extension program is available at: www.nbnco.com.au/networkextension

Question No: 323

Program No: NBN Co Limited Hansard Ref: 16/10/2012 (Pg 118)

Topic: Visionstream Tasmania

Senator Bushby asked:

Mr McLaren: We are definitely working with contractors. The main contractor in Tasmania, as

you might be aware, is Visionstream. They are obviously building the network—

Senator BUSHBY: Are they doing this retrofit?

Mr McLaren: I would need to take that on notice, but my initial thought would be that it is Visionstream. We are working with them to engage with each and every end user to make sure the changeover is effective, efficient and able to be done in a way that takes them to the latest technology.

Answer:

NBN Co is using Visionstream for the migration in Tasmania. Visionstream have engaged a number of local contractors to perform this work.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Estimates Hearings October 2012

${\bf Broadband, Communications\ and\ the\ Digital\ Economy\ Portfolio}$

NBN Co Limited

Question No: 324

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Take – up rates, Tasmania

Senator Bushy asked:

I would like to know how many Tasmanian homes and businesses have now signed up for the NBN in Tasmania, how many homes and businesses have—

Senator Conroy: From my recollection, there are over 1,000 on all the platforms. I was just down there, so I got an update. I think there are over 1,000 on the platforms. The take-up rate is ahead of our forecast in every site in Tasmania. We forecast 11 per cent to 12 per cent, and the average across Tasmania, I think, is about 17 per cent or 18 per cent with a midway point up in the high 20s.

Senator BUSHBY: The midway point was 27 per cent—**Senator Conroy:** Yes, I think it is roughly around there.

Senator BUSHBY: I am interested in where it is now; what the take-up rate is for each of the sites.

Senator Conroy: I would have to take it on notice for you.

Senator BUSHBY: Can you also take on notice to find out how many new customers have signed up to the NBN in Tasmania in the last 12 months?

How are business take-ups going in Tasmania?

Answer:

Now that NBN Co has reached volume rollout, it is impractical for NBN Co to provide ad hoc updates on financial and deployment metrics to a level of granularity not already provided for in public releases, parliamentary reporting processes and regular rollout information provided on our website for the use of access seekers.

However, to assist the Committee, NBN Co's most recent deployment metrics are provided below.

Key NBN metrics^

	June 2011	June 2012	Dec 2012	June 2013
Construction commenced or completed	1			
	29,600	305,000	784,600	1,220,000
Premises/lots passed				
Brownfield	18,000	29,000	46,100	286,000
Greenfield		10,000	26,300	55,000
Fixed wireless		9,000	17,300	220,000
Satellite*	165,000	165,000	250,000	320,000
Total	183,000	213,000	339,700	661,000
Premises activated		-		
Brownfield	600	3,400	6,600	44,000
Greenfield	1 -	500	3,800	10,000
Fixed wireless	-	100	1,000	27 700
Satellite	200	9,600	23,100	37,700
Total	800	13,600	34,500	91,700

[^]rounded up to the nearest '00

^{*}coverage indicates estimated number of eligible end-users

Actual	Target

Question No: 325

Program No: NBN Co Limited Hansard Ref: 16/10/2012 (Pg 122)

Topic: NBN Victoria

Senator McKenzie asked:

In the interests of time I will be quick. I have an issue at the Napoleons in Victoria which I am sure you are aware of. Prior to asking questions on that, on notice could you outline the process that NBN has to consult with communities in regional areas with respect to the corresponding need for NBN towers and outline the consultation processes you have taken in regional communities within Victoria specifically in terms of who, what, when and how. Also, please supply requirements for tendering arrangements around the building of new NBN towers in regional areas.

How many applications on behalf of the NBN have been made for new NBN towers in regional Victoria?

Mr McLaren: I will take on notice your question on the actual number in Victoria.

Senator McKENZIE: As you are taking that on notice, could you also provide the status for each of those applications.

Mr McLaren: To the best of our ability, yes. Do you want to know about community consultation?

Senator McKENZIE: No, take that on notice. I am sure it will be a process that you can outline for me with some details. On the Napoleons, my question goes to a comment Mr Quigley made when one of the nine applications for towers was rejected. The council has actually said that the NBN proposal for the Napoleons did not meet the code of practice for telecommunications facilities in Victoria and one of the towers was rejected by council. The other eight were approved and as a consequence Mr Quigley said the company will provide residents with broadband eventually but it is most likely going to be a slower satellite service and not available for several years. I have advice from the council that there were other sites within the area that could have assisted the council in making a different decision on the approval of that tower, and that goes back to my questions around consultation.

Could you outline where this is at and your response to these comments.

Answer:

Approximately 50 per cent of NBN Co Wireless Sites are being deployed on existing facilities. As at 24 October 2012, Development Applications for 76 new towers have been submitted in Victoria.

On the question of community consultation with regard to the Napoleons site, the following points should be noted:

- Sites are selected based on a number of design and engineering criteria but at all times NBN Co considers the environmental and community sensitivities associated with any new proposal. In this specific example, NBN Co assessed the suitability of potential candidates during the initial scoping stages as well as further investigating other potential sites identified by Council during the planning phase. However, as the network is designed to deliver a service to a specified standard, there are a number of limitations on the range of changes that can be made to still deliver the service levels required. As such, the current proposal on balance provides the best overall site solution for the area.
- NBN Co identified three suitable alternative sites as part of its network design process, but was unable to proceed because two of the sites did not meet radio frequency requirements and we were unable to secure landowner's permission for the third site. NBN Co also identified a number of other sites that were deemed unsuitable, and this was communicated to council through the application process. After working with the community and council, and after the council has rejected NBN Co's application, the company has exhausted all reasonable options for location of this tower.
- The consultation process for the tower included council sending notices on NBN Co's behalf to adjoining landowners and occupiers within a one kilometre radius of the site; a sign was placed on the proposed site for 14 days; a notification was placed in the Ballarat Courier; numerous briefings and meetings were held with council and a mediation meeting organised in the Napoleons Hall to consider changes to address the visual concerns raised. Unfortunately the objections were maintained.

Question No: 326

Program No: NBN Co Limited Hansard Ref: 16/10/2012 Pg 123

Topic: Criteria for tribunal

Senator McKenzie asked:

Senator Conroy: We are consulting with the community all across Australia. We have had a number of towers in other jurisdictions knocked back. We are working on the basis that if communities say no, I do not think we have appealed any. I think we have indicated we might appeal one.

Mr McLaren: There may be some situations where we do take it to the next stage of the planning process which would be to a tribunal.

Senator McKENZIE: What are the criteria for you to decide to take it to a tribunal? Please take that on notice because I am conscious of other people wanting to ask questions.

Mr McLaren: I am happy to answer that question now.

Senator McKENZIE: It is okay, I will take it on notice. Thank you.

Answer:

NBN Co will not appeal any site that is rejected by a council, unless it is a wireless hub site that has broader dependencies for the Fixed Wireless Network.

Question No: 327

Program No: NBN Co Limited

Hansard Ref: Pg 123-124

Topic: ABG Customers moving to NBN Services

Senator Birmingham asked:

Have customers who were participants of the satellite services provided under the Australian Broadband Guarantee moved over to NBN services?

Senator BIRMINGHAM: How many ABG customers in total would qualify?

Mr Heazlett: I do not have that number with me.

Senator Conroy: We are happy to take that on notice.

Answer:

The ISS offers customers in regional and rural Australia who are unable to access metro-comparable services a significant improvement over the ABG. The government expects that all ABG customers who are seeking a superior broadband service and meet the eligibility criteria will take up the ISS.

Question No: 328

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

Please provide the exact number of end-users connected to the NBN ISS in each week since the week beginning 3 June 2012.

Answer:

Week Beginning	Installs Reported by Optus
3 June 2012	355
10 June 2012	325
17 June 2012	346
24 June 2012	507
1 July 2012	344
8 July 2012	619
15 July 2012	385
22 July 2012	573
29 July 2012	629
5 August 2012	689
12 August 2012	540
19 August 2012	556
26 August 2012	861
2 September 2012	446
9 September 2012	631
16 September 2012	572
23 September 2012	694
30 September 2012	314
7 October 2012	613
14 October 2012	387
21 October 2012	507
28 October 2012	265

Question No: 329

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

- 1. What is the average total cost of labour for an installation of equipment at a customer premise (ie, installation of a satellite dish, cables, pole, modem, etc) through the NBN Interim Satellite Service?
- 2. What is the average total cost of the hardware (satellite dish, cables, modem, pole, etc) needed to connect an end-user to the NBN Interim Satellite Service?
- 3. What is the average total cost to NBN CO to connect a customer to the NBN Interim Satellite Service?

Answer:

Identical questions were asked at the October JCNBN hearing. Please see answers to QoNs 61-63.

Question No: 330

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

- 1. Does every customer who connects to the NBN Interim Satellite Service receive a new satellite dish, modem, cables, and associated hardware?
- 2. What is the expected life-span of each piece of hardware mentioned in (1)?
- 3. Will the hardware mentioned in (1) need to be completely replaced in order for a customer to access the NBN Long Term Satellite Solution?

Answer:

- 1. Yes
- 2. The equipment specifications nominate an expected life span of at least 10 years
- 3. The Long Term Satellite Service is being designed to deliver double the wholesale speed and up to 10 times the capacity per end-user of the Interim Satellite Service and to ensure those who live in the most geographically isolated parts of the country are able to take advantage of the opportunities of the digital economy. To deliver this superior service from a technology point of view requires different frequencies, different cable feeds, different VSAT dishes and different modems (to support the higher speeds and provide 4 Ethernet ports, etc.).

Question No: 331

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

- 1. Which company manufactures the satellite dishes installed through the NBN Interim Satellite Service?
- 2. Which company manufactures the modems installed through the NBN Interim Satellite Service?

Answer:

- 1. Gilat is the supplier of the satellite dishes as a sub-contractor to Optus. The manufacturer is subject to arrangements for which Gilat is responsible.
- 2. Gilat is the supplier of the modems as a sub-contractor to Optus. The manufacturer of different components of the modems is subject to arrangements for which Gilat is responsible.

Question No: 332

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

Does Optus receive an incentive payment, or any other payment, in respect of each new customer connecting to the NBN Interim Satellite Service?

Answer:

On top of a monthly service management fee, payments regarding activations are paid on a per-activation basis.

Question No: 333

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

How many customers on the NBN Interim Satellite Service were previously connected to a satellite broadband service that was provided through the Australian Broadband Guarantee?

Answer:

The ISS offers customers in regional and rural Australia who are unable to access metro-comparable services a significant improvement over the ABG. The government expects that all ABG customers who are seeking a superior broadband service and meet the eligibility criteria will take up the ISS.

Question No: 334

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

- 1. Please provide a list of Retail Service Providers delivering services to customers through the NBN Interim Satellite Service.
- 2. Are there any locations in Australia not served by at least one RSP selling NBN Interim Satellite Services?

Answer:

- 1. Skymesh, Harbour IT, BorderNet, ClearNetworks, OrionSat, APN, ANT, IPStar, iiNet, Indigo, Bluemaxx.
- 2. No. All locations in the defined footprint are serviced by at least one RSP.

Question No: 335

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

Please detail each fee, charge, and cost (including AVC, CVC, etc) an RSP must pay to NBN Co per month in respect of a customer connected to the NBN Interim Satellite Service on a basic plan with 3GB of downloads per month?

Please note whether each figure includes GST.

Answer:

All services are provided at the NBNCo Wholesale Price List, detailed on the NBN Co web site. NBN does not set retail prices and packages including the download (GB) monthly allowance, these are determined by RSPs. RSP plans are available on their respective web sites.

Question No: 336

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

What is the required maximum timeframe for a customer to be connected to the NBN Interim Satellite Service?

What percentages of customers are being connected within the required timeframe?

Answer:

Please see answer to QoN 72 from 30 October 2012 JCNBN Hearing.

92% of end customers are being connected within the targeted timeframes.

Question No: 337

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

What is the nature of the relationship between NBN Co and Gilat with respect to the NBN Interim Satellite Service? Is Gilat remunerated directly by NBN CO, or by Optus, or some other party?

Answer

There is no contractual relationship between NBN Co and Gilat. Gilat is sub-contracted to Optus and is paid by Optus.

Question No: 338

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

What restrictions, if any, have been placed on Optus and/or Gilat with regard to entering into exclusive arrangements with installation companies to install customer equipment for the NBN Interim Satellite Service?

Answer:

NBN Co has placed no restrictions on Optus, NBN Co's prime and exclusive installation service provider, other than NBN Co must approve any new major sub-contract that Optus desires to enter into if that sub-contract has a value greater than \$10 million.

NBN Co has no visibility of the contractual arrangements between Optus and their sub-contractors Gilat.

Question No: 339

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Interim Satellite Service

Senator Birmingham asked:

Has NBN Co completed any modelling or research about the likely impact on satellite RSPs of the move from the Australian Broadband Guarantee industry business model to the NBN Interim Satellite Service model?

If so, what were the findings of that modelling/research?

Answer:

NBN Co consulted with RSPs regarding the application of NBN Co's Uniform National Wholesale Prices. The majority of ABG service providers have subsequently contracted to deliver NBN Co Interim Satellite Services, with consistent demand.

Question No: 340, 341

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Question No: 340

Senator Birmingham asked:

What progress has been made with mobile phone carriers with regard to co-locating mobile network equipment with NBN wireless towers?

Question No: 341

Senator Birmingham asked:

Has any mobile carrier entered into any form of agreement with NBN Co to co-locate mobile network equipment at one or more NBN wireless tower sites?

Answer to 340 and 341:

Please see answer to QoN 66 from the October 2012 JCNBN hearing, which states:

Yes. Telstra and Optus have entered in tower sharing agreements with NBN Co.

These agreements are reciprocal and grant access to Telstra and Optus to access NBN Co built and owned towers, subject to the terms and conditions of those agreements and the Facilities Access Code.

Question No: 342

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

Has NBN Co developed guidelines with regard to co-location of mobile network equipment on NBN Wireless sites?

If so, please provide the guidelines to the committee.

Answer:

This question is identical to QoN 67 from the October 2012 JCNBN hearing.

Question No: 343

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

What is the total number of wireless sites NBN expects to deploy?

Please provide the locations of all NBN wireless towers currently being planned, constructed, in operation.

Answer:

NBN Co is carrying out detail designs on over 1,400 fixed wireless sites and compiling a full list would be a significant diversion of resources.

Please see QoN 347 for list of operational sites.

Question No: 344

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

What financial consideration will mobile carriers be required to pay in order to co-locate mobile network equipment with an NBN wireless site?

Answer:

This question is identical to QoN 68 from the October 2012 JCNBN hearing.

Question No: 345

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

If a mobile carrier enters into an agreement with NBN Co to co-locate mobile network equipment on an NBN wireless site, will the mobile carrier be required to operate the site on an open-access basis?

Or, will more than one mobile carrier be able to co-locate on any single NBN wireless site?

Answer:

NBN Co provides access to wireless site infrastructure in a manner consistent with the requirements of Telecommunications Act 1997, Schedule 1 and the Code of access to telecommunications transmission towers, sites of towers and underground facilities (October 1999).

Accordingly NBN Co does not stipulate that a mobile operator that is a tenant on an NBN Co Wireless tower provide open access to its network in that location. All mobile carriers are entitled to request access to an NBN Wireless site. NBN Co envisages that more than one mobile carrier may co-locate on a NBN Wireless site in the future.

Question No: 346

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

What impact will co-location have on the economics of the NBN wireless rollout?

Answer:

NBN Co has a policy of using existing sites before deploying a Greenfield alternative. Using existing wireless sites, where they are appropriately located, with the terms and conditions negotiated by NBN Co reduces peak capital demand and provides a stock of sites for NBN Co to deploy on a more timely basis.

Where NBN Co elects to build a Greenfield site, NBN Co will support co-location by other carriers to install and operate RF equipment. NBN Co provides this access on commercial terms consistent with other industry participants. This commercial recovery represents compensation for lost capacity on the structure that NBN Co may otherwise have to replace should NBN Co itself be required to install more equipment.

Greenfields sites also result in positive externalities for regional and rural Australian through opportunities for improved mobile coverage.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Estimates Hearings October 2012

Broadband, Communications and the Digital Economy Portfolio NBN Co Limited

Question No: 347

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

Please provide a list of all operational NBN wireless sites, as at 24 October 2012, and the total number of customers connected to each site.

Answer:

As at 24 October, there are 670 active premises on the fixed wireless network across 52 sites (including 5 relay sites):

UNE	38
Kellys Ridge	45
Ballarat North	13
Withcott	17
Alfredton	9
Mitchell Park	25
Creswick	43
Mt Callender	10
Ross Creek	40
Snake Valley	11
Toowoomba South	7
Duri	15
Hallsville	12
Kootingal	16
Somerton	18
Sugarloaf Mountain	9
Smythesdale	30
Winton	21
Haddon	34
Haddon West	28
Cabarlah	15
Geraldton Airport	0
Attunga	9
Calala Lane	3
Bendemeer	3

Woolomin	28
Kingswood Reservoir	7
Moresby Range	4
Warrenheip	12
Tamworth Country Rd	5
Kingsthorpe	16
Southbrook	10
Glenvale	13
Mt Warrenheip	11
Greenmount	9
Oakey	2
Pittsworth	8
Brookstead	7
Bloodwood Hill	3
Invermay	11
Daruka	22
Enfield	15
Gordon	5
Nundle	1
Mt Buninyong	4
Lal Lal	5
Mt Egerton	1

Question No: 348

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

How many NBN wireless sites are currently under construction, as at 24 October 2012?

Answer:

It is important to note that approximately 50 per cent of NBN Co Wireless Sites are being deployed on existing facilities. As at 24 October 2012 construction had commenced or was completed in 63 new wireless sites.

Question No: 349

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

How many NBN wireless sites have received approval from the relevant authorities but have yet to commence construction, as at 24 October 2012?

Answer:

It is important to note that approximately 50 per cent of NBN Co Wireless Sites are being deployed on existing facilities. With regard to new towers, there are 85 sites that have received approval and are yet to commence construction as at 24 October 2012.

There are a number of additional processes that occur after a tower has been a approved and before construction can commence. This includes leasing and tenure arrangements, construction designs, backhaul and microwave link arrangements and finalisation of upstream towers. Construction on individual towers does not normally commence until these arrangements are in place.

Question No: 350

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

How many NBN wireless sites are currently in the planning stage, as at 24 October, 2012?

Answer:

It is important to note that approximately 50 per cent of NBN Co Wireless Sites are being deployed on existing facilities.

In regard to new towers, 162 Development Applications have been submitted and are in progress.

Question No: 351

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Fixed Wireless

Senator Birmingham asked:

How many planned NBN wireless sites have been cancelled sometime after the commencement of consultation with communities and local governments?

Answer:

NBN Co may change plans for a proposed wireless site based on a number of considerations including community and council feedback as well as environmental, technical and operational issues. Given this, it would be an unreasonable diversion of resources for NBN Co to re-examine the selection of each tower site and determine at what stage of the process any changes were made.

NBN Co Limited

Question No: 352

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Rollout

Senator Birmingham asked:

- 1. Why are combined wireless and satellite financial and rollout figures reported in the NBN Co Corporate Plan, instead of reporting on the wireless and satellite rollouts separately?
- 2. How does NBN Co determine whether fibre will be rolled out underground or overhead in a particular area?
- 3. The NBN Co Corporate Plan notes that about 25% of the fibre rollout will use overhead cables. How did NBN Co arrive at this 25% figure?
- 4. In areas outside the fibre footprint where the Telstra copper network will be maintained, is Telstra required to offer ADSL services where they are technically viable?

Answer:

- 1. In the October 2012 JCNBN hearing, Mr Quigley said: "the reason we have combined [the satellite and wireless figures] is that we are finding that where we are not able to put up a cell site a tower we obviously have to use a satellite solution, and we have made that very public. The reason we have then combined them is that we want to have that flexibility in case we cannot get a site approved. We are not certain of the break-up, so we thought it best to say this is the total of those two technologies."
- 2. Local fibre and the connections to individual premises are being rolled out based on best use of existing infrastructure either underground or on existing power poles. Following the successful finalisation of a deal with Telstra, NBN Co has access to a much wider range of existing telecommunications infrastructure including fit-for-use pits, pipes and conduits. This means that there will be less need for aerial deployment and less disruption to communities generally.
- 3. The figure of 25% is the projected average at the end of the fibre construction period (June 2021) across the fibre footprint for the proportion of premises that will be passed by aerial deployment down the street. This proportion is projected to vary across the Fibre Serving Area Modules and differ during the rollout depending on:
 - the amount of Telstra infrastructure available. This is the underground duct that NBN Co will use; this information is supplied to NBN Co by Telstra at the time of the design work;
 - the amount of aerial infrastructure available to NBN Co from various utilities; and
 - the amount of new underground duct NBN Co builds.

NBN Co has calculated the 25% national average for aerial deployment based on estimates of the availability of the above infrastructure across all rollout regions.

4. Internet and telephone service providers, including Telstra, are private companies. Therefore it is a commercial decision for them as to where and how they choose to offer broadband services. A number of major providers, including Telstra, are still upgrading ADSL infrastructure to provide broadband in areas which are outside the NBN fibre footprint.

Telstra remains subject to the universal service obligation (USO) and must ensure that all people in Australia have reasonable access to standard telephone services on request. Under an agreement reached between Telstra and the Commonwealth, as administered by the Telecommunications Universal Service Management Agency (TUSMA), Telstra now has a contractual obligation to provide reasonable access to standard telephone services nationally and to maintain the existing copper network in locations outside the fibre footprint for a period of 20 years from 1 July 2012.

Question No: 353

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: Brad Orgill & Transparency

Senator Birmingham asked:

- 1. Does NBN Co agree with comments by newly appointed director Mr Brad Orgill that programs such as the NBN must incorporate vastly increased transparency if they are to be widely supported?
- 2. What discussions have directors and senior executives had with Mr Orgill on how NBN Co can increase transparency? Has Mr Orgill made specific suggestions and what actions have been undertaken as a result?
- 3. Does NBN Co agree with Mr Orgill that Australians in urban areas are well served by private broadband providers and the public is unconvinced by the economics of the NBN?

Answer:

(1-3). NBN Co Board members are entitled to express their own personal views on a range of issues and it is neither the company's nor the Board's policy to publicly comment on such matters.

Question No: 354

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout - Address Data

Senator Birmingham asked:

- 1. At Senate Estimates in May Mr Quigley said a key factor behind missed rollout milestones was inadequate address and geospatial data from NBN Co's supplier, PSMA. He said: "We had assumed that the address database we could get would be considerably more accurate." Is it NBN Co's understanding that Telstra confronts the same difficulties?
- 2. If not, what efforts were made by NBN Co to obtain access to Telstra's geospatial data?
- 3. Would this data have been available to NBN Co on commercial terms, and if so why was this option not chosen?

Answer:

To clarify, Mr Quigley did not say that inaccuracies in the dataset was 'a key factor behind missed rollout milestones". He referred to this as a challenge that NBN Co would overcome.

- 1. This is a question for Telstra.
- 2. Discussions with Telstra relating to the provision of address information occurred both during the Infrastructure Services Agreement (ISA) formulation and post that agreement being executed.
- 3. Telstra has a commercial product referred to as Sensis Data Solutions, that is responsible for delivering commercial solutions to businesses, government and not for profit organisations based on Sensis' comprehensive data sources including a combination of postal address file and White Pages data. The PSMA GNAF data product includes data sources that are in addition to these data sources, and a confidence indicator providing details of the level of matching that occurs. NBN Co required the most accurate register of premises in Australia. The PSMA GNAF Product description states: "G-NAF (Geocoded National Address File) is the authoritative address index for Australia. It contains the State, Suburb, Street, Number and coordinate reference or Geocode for street addresses in Australia". NBN Co utilises the GNAF data as one of the various inputs required for the provision of the planning and design information for the access network, and is working closely with PSMA to improve both the accuracy and the timeliness of the data, which will be updated in a manner synchronised with the NBN Co access fibre network rollout.

Question No: 355

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout - Original Corporate Plan

Senator Birmingham asked:

- 1. In hindsight how realistic was the NBN Co 2011-2013 Corporate Plan? Why did a very experienced CEO and executive team provide forecasts to NBN Co Directors and Shareholder Ministers for the number of premises passed by fibre and premises with active service over fibre that were, literally, an order of magnitude more optimistic than will be actually achieved by the end of the time period covered by that Plan?
- 2. On 23 June 2011 NBN Co issued a media release which stated: "NBN Co and Telstra have negotiated interim arrangements for immediate access to Telstra infrastructure." Telstra's statement to the Australian Stock Exchange regarding the NBN Co/Telstra agreements signed on that date states: "Telstra will provide information and infrastructure services for NBN Co to continue its rollout prior to all CPs being satisfied or waived (that is, on an interim basis)..." Why then has NBN Co repeatedly stated a key reason for rollout delays is the Telstra agreements did not become definitive until March 2012?
- 3. The revised Corporate Plan shows huge shortfalls compared to the original on every metric by 2015 deployment, customers, revenue. Yet it projects the lost ground can be almost entirely recovered by 2021. If NBN Co is not able to achieve its original December 2010 forecasts now, what will change to enable it to repeatedly exceed them from 2016 onward?
- 4. Is there any previous FTTP rollout in the world which has achieved premises passed per day volumes as high as those in the NBN Co Corporate Plan using primarily underground deployment for most premises (understanding that the FTTP rollouts by Verizon in the US and NTT in Japan were both primarily aerial)?

Answer:

1. Mr Quigley has addressed this question on a number of occasions; for example at the May 2012 Estimates he said:

I occasionally see commentary in the press that says we face setbacks and delays. Most of this commentary is based on the metrics we set out in our inaugural corporate plan, which was released some 17 months ago and which was prepared barely one year after the company came into existence. So it is not surprising that the assumptions that we made in that first corporate plan have changed. They include, for example, the assumptions about when the Telstra deal would be completed; how we would implement the ACCC's POI decision, the point of interconnect decision; how we would execute the government's greenfield policy, which, by the way, was not finalised at the time of the corporate plan; and a number of other fundamental policy matters.

- 2. Please see October 2012 JCNBN Hansard p. 22 where Mr Quigley explains the role played in the delays by NBN Co not having access to Telstra's national duct data.
- 3. Please see answer to question 1 above.
- 4. Please see p. 38 of the 2012-15 Corporate Plan where there is a comparison of 12 countries with the NBN Co targets.

Question No: 356

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout - Cost Per Premise

Senator Birmingham asked:

- 1. What is the average capex cost of the 32,300 premises stated at Senate Estimates to have been passed with fibre as of October 2012? 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. How does this average cost equate to the average cost per FTTP premise forecast in the 2011-2013 Corporate Plan and in the 2012-2015 Corporate Plan?
- 3. What if any trends are apparent so far over time in the cost of the FTTP rollout per premise passed? What 'learning curve' gains are apparent, if any? How do these compare to any assumptions used in the 2011-2013 Corporate Plan and the 2012-2015 Corporate Plan?
- 4. How many premises at the most recent available date had been covered by the NBN fixed wireless rollout (and what was that date)?
- 5. What is the average capex cost per premise covered of the NBN fixed wireless rollout so far? Please be transparent and explicit about any/all assumptions made regarding the allocation of shared capex on backhaul.
- 6. How does this cost equate to the average cost per fixed wireless premise covered in the 2011-2013 Corporate Plan and in the 2012-2015 Corporate Plan?

Answer:

1.-3 & 5-6

NBN Co's Chief Financial Officer, Mr Robin Payne, provided information relating to cost per premises and cost trends at the JCNBN hearing on 30 October 2012 (Hansard pp.6-7).

Also, Mr Quigley has previously provided information about why cost-per-premises figures can be commercially sensitive, particularly when construction procurement processes are underway. Please see October 2011 JCNBN Hearing Hansard pp. 21-22.

4. Please see NBN Co media release of 29 January 2013: http://www.nbnco.com.au/news-and-events/news/rollout-update.html?rss=news

Question No: 357

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfield Estates

Senator Birmingham asked:

- 1. How many applications from developers of new estates had the NBN Co received for new connections as of October 2012, and how many premises or lots did they cover?
- 2. How many premises or lots covered by these applications listed a first required connection date prior to October 2012?

Answers

Mr Cooney provided this information in the Senate Estimates Hearing on 16 October 2012. Please see Hansard p. 107.

Question No: 358

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfields Estates

Senator Birmingham asked

In January 2011 NBN Co issued a press release stating: "NBN Co plans to pass 172,000 premises and provide and establish an active service to some 132,000 premises in Greenfield estates by June 2012." In May NBN Co stated it had applications covering 133,000 lots but explained: "These applications are submitted for individual stages of developments, but due to different construction timeframes and housing demand, fibre deployment will be spread over a period of up to three years."

Why did the January 2011 release not reflect the fact that developers place orders for connection prior to completion of construction?

Answer

The figures quoted in the January 2011 press release refer to the June 2012 deployment targets for premises passed and premises activated as set out in the 2010 Corporate Plan (see page 15).

The figures in the May 2011 press release refer to the number of lots covered by applications actually received from developers, not targets for premises passed or premises activated.

They reflect different measures at different points in time and are therefore not directly comparable.

Question No: 359

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout - Greenfield Estates

Senator Birmingham asked:

In June 2011 NBN Co responded to a question on notice by stating: "For this fiscal year [ending in June 2012] we expect to pass approximately 65,000 lots and connect approximately 40,000 premises." Yet in the revised Corporate Plan released in August 2012, the NBN Co states only 503 premises were connected in Greenfield estates by June 2012.

What is the explanation for this discrepancy?

Answer:

The next sentence in the response to the JCNBN Question on Notice mentioned was: "These numbers are of course subject to actual demand."

NBN Co has commented on the issues around Greenfields on many occasions. For example at the JCNBN Hearing on 16 April 2012, Mr Quigley said:

"...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..."

It is useful to note that according to the Australian Bureau of Statistics, there was a 24.5% annual decline in new home starts to March 2012.

And, at the October 2012 Estimates hearing Mr Cooney set out the steps NBN Co is undertaking to address the issues in Greenfields:

"...priority has been given to occupied estates with held orders, and cross-company teams, including construction, network operations and business operations, are working on reduced time frames for service deliveries into these particular developments. We can do this because, since the last time we met, the company has awarded contracts to Visionstream and Service Stream to provide additional rollout capacity in Greenfields. These contracts, finalised in June, are worth \$183 million over nine months. That has allowed us to increase exponentially the construction instructions, or CIs, that we submit. Just to give you a sense of that, in the last two months we have submitted as many CIs as we had in the previous 12. We have set up a construction task force to tackle the critical issues of backhaul and power in the regional estates."

Question No: 360

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfields Estates

Senator Birmingham asked:

In May 2011, the NBN announced a contract with "the initial value estimated at over \$100M for the first 12 months". Exactly how much was paid to Fujitsu? What was this amount measured per premise with active service over the NBN achieved during the contract? What was this amount per premise or lot passed by fibre during the contract?

Answer:

The contract between NBN Co and Fujitsu is ongoing. NBN Co views information regarding sums paid to Fujitsu and other details to be commercially sensitive and disclosing them may cause harm to NBN Co's commercial interests.

Question No: 361

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfield Estates

Senator Birmingham asked:

Who was the executive responsible for negotiating the Fujitsu contract? Is he/she still employed by NBN Co?

Answer:

Contracts of this size and nature are developed and negotiated by teams, including the company's legal, procurement and commercial business areas.

Question No: 362

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfield Estates

Senator Birmingham asked:

Why was Fujitsu dropped as NBN Co's contractor managing Greenfields deployment and a new contract signed with Visionstream and Service Stream?

Answer:

Due to the immediate need to service Greenfield estates that had achieved Stage 5 approval from 1 January 2011, contract arrangements were put in place with Fujitsu [on the 12th May 2011] to provide telecommunications infrastructure to Greenfield developers. The solution involved special backhaul and Fibre Access Node arrangements to support Greenfield fibre services. Following finalisation of contract arrangements with Telstra, and the appointment of Brownfield contractors, it was deemed appropriate to align the construction to Greenfields as far as possible to leverage Brownfield construction activity & provide increased capacity.

Question No: 363

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfield Estates

Senator Birmingham asked:

- 1. On the NBN Co website there is a point of interconnect (POI) rollout plan. NBN Co states there are currently five active POIs out of 121. Are all Greenfield sites connected to an active POI?
- 2. If not, how does a Greenfields site connect to the NBN network? Have there been any delays in trying to connect specific sites to POIs that weren't active at the time a resident moved into a premise?

Answer:

All TFAN's or (Temporary Fibre Access Nodes) are connected to active POIs.

Question No: 364

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout – Greenfield Estates

Senator Birmingham asked:

Under the current construction plan, a fibre access node connects up to 3000 premises. Are temporary access nodes are being used to connect greenfields estates, and if they are, how will these be used in the longer term?

Or are access nodes similar to those in the brownfields build being deployed?

Answer:

Please see Corporate Plan p. 42 for an explanation of temporary infrastructure and how it will be re-used.

Question No: 365

Program No: NBN Co Limited

Hansard Ref: In Writing

Topic: NBN Rollout - Greenfield Estates

Senator Birmingham asked:

Recommendation 34 of the McKinsey implementation study proposed that the NBN offer an RF overlay on its network. Is this service currently being offered? If not, why?

Have any new housing estate developers asked for this RF service?

Answer

Recommendation 34 of the McKinsey implementation study and preceding paragraph states –

Where greenfield estates demand RFoG as part of their FTTP communications infrastructure, NBN Co should be permitted to enable single-operator RF. This will ensure NBN Co can compete for greenfield FTTP contracts. Over time the demand for RFoG capability from developers is expected to decline as video content providers transition to IP-based platforms.

Recommendation 34. That Government permit NBN Co to offer an RF overlay service on its FTTP network provided it meets these conditions:

- Except where necessary to compete for greenfield FTTP contracts, RF overlay supports multiple providers and the RF port on the household ONT is not exclusive to a single provider;
- The deployment of RF overlay capability is commercially viable for the Company as a standalone service.

NBN Co to date has not offered an RF solution as it is outside the scope of services it currently provides as part of its Greenfield and Brownfield fibre rollout. Of the almost 3,000 developer requests as of October 2012, NBN Co is aware of only one occasion where an RF solution has formally been requested. As stated above in the McKinsey implementation study the demand for RF capability is expected to decline as more content providers migrate to the IP environment.