

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 84

Program No. 1.1

Hansard Ref: EC 100

Topic: NBN Funding

Senator Fisher asked:

In relation to the library note by the Parliamentary Library on NBN funding and released during the election campaign, which parts were inaccurate and which parts were incorrect, given that it forecast a \$6 billion hole?

Answer:

The Government's initial National Broadband Network (NBN) investment of \$4.7 billion, plus the contingency reserve provision of \$13.6 billion over the forward estimates (i.e. until 2013-14) is \$18.3 billion, which matches the Implementation Study funding recommendation for the forward estimates to 2013-14. As in the 2009-10 Budget, the 2010-11 Budget made direct provision for the Government's initial investment of \$4.7 billion.

The Parliamentary Library Background Note published on 16 August 2010:

- understated the Government's initial investment in the NBN of \$4.7 billion—the report only identified the funding taken from the Building Australia Fund (BAF) and funds sourced from Aussie Infrastructure Bonds in 2010-11— it overlooked funding of \$2 billion sourced from Consolidated Revenue;
- incorrectly compared four-year forward estimate figures, with five-year Implementation Study figures citing a total equity requirement of \$22.4 billion to 30 June 2014, when the Implementation Study estimated the requirement at \$18.3 billion; and
- included Public Debt Interest (PDI) payments in the funding from the BAF, whereas PDI should have been excluded as it is accounted for separately from the Government's equity payments and therefore was not relevant to the rollout costs identified in the Implementation Study.

The \$6 billion variation between the estimates in the Parliamentary Library's paper of the Budget provisions for the NBN and the Implementation Study can therefore be substantially attributed to the under estimation of \$2 billion in funding from Consolidated Revenue and timing of \$4 billion in equity requirements.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 85

Program No. 1.1

Hansard Ref: In Writing

Topic: Scope of NBN Co Activities

Senator Birmingham asked:

The Minister has spoken at length of the huge benefits of the NBN to schools and hospitals. Telstra CEO David Thodey stated to investors on June 21 that, and I quote, “We have got a degree of comfort that ... they [the NBN] will not be in the retail side”.

- (a) Does that mean the NBN itself will not actually provide retail services at all to any Government customers, like departments, agencies, schools or hospitals?
- (b) Whose responsibility will it be to make sure that every school and hospital in Australia is subscribed to a high-speed internet service?
- (c) The NBN Co plans to offer wholesale services providing bitstream access to households and businesses. Does the company also intend to provide wholesale services in the backhaul market?
- (d) Will any backhaul or transit services offered be competitive with existing backhaul services offered by other telecommunications carriers?
- (e) Can you describe the relationship between the NBN Co’s operations and the operation of the so-called backhaul blackspots communications backhaul capacity being constructed in several regions of Australia? Will NBN Co be a customer for some or all of this capacity? Or the operator of any of those assets?

Answer:

- (a) The Government has established NBN Co Limited (NBN Co) to build and operate the new high speed National Broadband Network. NBN Co will provide wholesale services to Retail Service Providers (RSPs), and those RSPs will provide retail services to end users, such as schools, hospitals, government departments and agencies using the NBN.
- (b) NBN Co will provide access to high speed broadband services for all schools and hospitals. It is expected that all schools and hospitals will subscribe to high speed internet services.
- (c) NBN Co will provide services from end user premises to a point of interconnect (POI), which may include backhaul in some circumstances depending on the POI location.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

The Australian Competition and Consumer Commission (ACCC) provided advice to the Government in November 2010—which is publicly available on the ACCC website—that a semi-distributed approach to POIs is likely to best meet the long-term interests of end-users. Based on the ACCC advice the Government has determined that a semi-distributed POI structure which extends the NBN Co network to meet with, but not overbuild competitive backhaul routes is the preferred outcome. With ACCC’s guidance, NBN Co developed a list of an initial 120 points of interconnection based on the long-term interests of end-users principle and planning rules which took into account the ACCC’s ‘competition criteria’ for the provision of backhaul transmission.

NBN Co may extend its connectivity service in those areas where it can demonstrate that to do so would lead to improved backhaul price outcomes, but each such proposal should be referred to Government for consideration.

On the transmission backhaul used to support the delivery of NBN services, the ACCC will:

- have the powers to regularly monitor and review transmission pricing and to set wholesale access charges for regulated transmission services, and
- regularly monitor the level of competition in transmission services by other wholesale providers to NBN Co POIs and its access determinations will effectively be benchmarks, as appropriate, for competitive transmission services.

(d) See (c) above.

(e) In line with the Regional Backbone Blackspots Program (RBBP) Request for Tender, Nextgen Networks is fully responsible for the operation and maintenance of the RBBP infrastructure for the first five years of its operation. During the first five years operation period, NBN Co may elect to purchase transmission services from Nextgen Networks.

Beyond the first five years operational period, the Commonwealth has the option to transfer its infrastructure, which has been deployed under the RBBP program, to NBN Co Limited to operate and maintain.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 86

Program No. 1.1

Hansard Ref: In Writing

Topic: Caretaker Provisions

Senator Birmingham asked:

- a) Has the Government reviewed the comments made by Mr Mike Quigley on 18 August 2010 as part of the 2010 Charles Todd Memorial Oration to assess whether there was a breach of the Guidance on Caretaker Principles document given Mr Quigley's explicit foray into comparing the election policies of the Government and the Opposition?
- b) If so, what were the findings of such a review?
- c) If not, would the Government please review the aforementioned comments and provide an assessment on whether the comments were consistent with the Caretaker Provisions?
- d) If the comments are not consistent with the Caretaker Provisions what steps have been taken in response to such a finding?

Answer:

a) – d) Comments made by Mr Mike Quigley on 18 August 2010 as part of the 2010 Charles Todd Memorial Oration drew on his extensive industry experience and matters raised in relation to the National Broadband Network were consistent with Government policy decisions made prior to the caretaker period.

NBN Co Limited was fully informed of its obligations under the caretaker conventions by the Department of Broadband, Communications and the Digital Economy prior to the federal election. NBN Co Limited was advised that it should defer where possible making major decisions that would commit an incoming Government and entering into major contracts.

During the caretaker period NBN Co Limited took explicit steps to comply with the conventions including taking actions to minimise operational expenditure and new capital expenditure, postponing industry consultations on significant policy issues, holding over the award of significant contracts, and freezing recruitment.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 87

Program No. 1.1

Hansard Ref: In Writing

Topic: Implementation Study

Senator Birmingham asked:

- a) The \$25 million McKinsey/KPMG Implementation Study for the NBN was commissioned by the Government. Does it accurately represent the Government's preferred approach to the implementation of the Government's broadband policy?
- b) Does the NBN Co agree with all of the 84 recommendations made in the Implementation Study and intend to conduct its roll-out in accordance with them?
- c) If not, what are the most important differences between the Study recommendations made to the Department, and the NBN Co's actual strategy?
- d) Please detail which recommendations of the Implementation Study the Government and NBN Co accept, conditionally accept, reject or are yet to make a determination about?
- e) As I understand it, the separation of the active and passive elements of the fibre network to enhance competition, as recommended in recommendations 76, 77 and 80, is a key part of the regulatory regime that has been adopted in Singapore. Is there any reason why Australia would take a different approach to maximising competition in the context of a monopoly fibre to the premises network? If so, what is it?
- f) Please outline the Government's understanding of the connection rates and retail take-up rates required under the Implementation Study for the NBN to deliver a commercial rate of return? Does the Government accept these as necessary targets for connection and retail take-up to ensure the Government's desired rate of return?
- g) What does the Government consider to be an appropriate rate of return required to be achieved prior to the privatisation of NBN Co?

Answer:

- a) The Implementation Study has been a highly important input assisting the Australian Government to determine its approach to broadband policy. The Government released its response to the Implementation Study in the form of a Statement of Expectations to NBN Co Limited (NBN Co) on 20 December 2010. This document sets out the Government's expectations of NBN Co in implementing the Government's broadband policy. Given the complexity and magnitude of implementing the National Broadband Network (NBN)

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

consistent with the views in the Implementation Study the Government intends to maintain a flexible and pragmatic approach to the implementation of the NBN, which may require adaptation over time.

- b) - d) Since its release on 6 May 2010, the Government and NBN Co have responded to the Implementation Study recommendations as appropriate. For example, NBN Co has implemented a key element, the extension of the fibre rollout to 93 per cent of premises within its planning for the rollout of the NBN. The remaining Implementation Study recommendations and related policy matters are addressed in the release of the NBN Co Corporate Plan and the Government's Statement of Expectations on 20 December 2010, which sets out the Government's expectations of NBN Co as it rolls out the NBN. The Government is satisfied that the NBN Co Corporate Plan reflects the Government's response to the Implementation Study.
- e) The Implementation Study advised that the integration of passive and active infrastructure in the NBN would facilitate rollout and industry transition. However, it also recommended that the Government set in place measures to facilitate the future separation of passive and active infrastructure. The National Broadband Network Companies Bill 2010 includes provisions to require functional separation of NBN corporations' business units, and also to require NBN corporations to divest or transfer assets. These powers could be used in the future to promote greater transparency in NBN corporations' operations and equivalence of treatment, and address competition or other concerns that may arise from the integration of passive and active businesses. In anticipation of possible future separation, the Government has asked NBN Co to establish and maintain separate asset registers for its passive, active and backhaul infrastructure.
- f) The NBN Implementation Study confirms that the NBN business model ensures that taxpayers are paid back their investment with a modest return. The Study indicates that under the most reasonable estimates, returns of 6-7 per cent will be earned. The NBN Co Corporate Plan released on 20 December 2010 estimates that 13.2 million premises will be passed or covered by NBN Co by the end of financial year 2021 with over 8.5 million premises connected – an overall take up rate of 65 per cent across all platforms. While both the Implementation Study and the NBN Co Corporate Plan are based on different assumptions regarding take up and connections both analysis conclude that an internal rate of return of around 7 per cent will be achieved, which fully covers Government's costs and deliver a modest return to taxpayers.

The Government understands that its NBN policy objectives, including coverage for all Australians no matter where they live and a national uniform wholesale price, would not achieve the level of commercial return expected by private investors. That is why the Government decided to take the lead in implementing the NBN. And as outlined in both the Implementation Study and in the NBN Co Corporate Plan, the Government can expect a return on its equity investment sufficient to fully cover its cost of funds (including interest costs) and earn a modest return.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

- g) The NBN Co Corporate Plan forecasts an internal rate of return of 7.04 per cent per annum over the life of the project. The Corporate Plan indicates that under most reasonable scenarios, returns of 7.04 per cent will be earned. As stated above, the Government can expect a return on its equity investment sufficient to fully cover its cost of funds (including interest costs) and earn a modest return.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy
Question No: 88

Program No. 1.1

Hansard Ref: In Writing

Topic: Take-up Rates & NBN Tasmania

Senator Birmingham asked:

- a. The TasCOLT fibre roll-out to several thousand households in Tasmania three years saw a subscriber rate of 25 per cent. Are you familiar with that trial? Why will your roll-out achieve higher rates?
- b. According to press reports, Aurora Energy previously modelled that a fibre roll-out in Tasmania would attract a subscriber rate of between 16 and 25 per cent. Is this similar to the NBN Co's economic modelling? If not, what is the reason for the difference?
- c. What is the current connection rate in Tasmania?
- d. What is the current subscriber rate – that is, what proportion of households are actually paying for services?
- e. What data is NBN Co collecting on the type of retail services subscribers are taking out? Please provide a summary of that data for areas covered to date.
- f. Do you forecast lower or higher subscriber rates in Tasmania than the rest of Australia?
- g. The Australian Bureau of Statistics' latest Household Use of Information Technology, Australia, 2008-09, released last December shows that only 71 per cent of households in Tasmania own computers. In that light, do you concede that a target take-up rate of between 70 and 90 per cent of households is pretty ambitious for Tasmania?
- h. Given the Australian average for computer ownership is 78 per cent of households and Tasmania comes last among all states and territories on this measure, do you concede that beginning the roll-out in Tasmania may have adversely affected the profitability of the NBN?
- i. When will the NBN start charging wholesale access prices in Tasmania?
- j. What impact will that have on retail prices?
- k. Have you modelled what impact that price adjustment will have on subscriber rates?
- l. Are you including information about future price adjustments in educational campaigns about the NBN roll-out in Tasmania?

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

- m. What do you estimate the increase in take-up rates to be given the adoption of the opt-out model by the Tasmanian Government? How did you model that increase?
- n. Given that the McKinsey study advises that “It would involve significant additional costs to connect users who do not want a service”, why does the NBN Co. support the opt-out model? What is the cost per household of a connection to a household which will not use a service? How can you be certain that a customer wants a service in the opt-out model?
- o. If there are benefits to the opt-out model, are you concerned by public statements by the NSW and Victorian Governments that they will not support an opt-out model?
- p. What percentage of cabling for the roll-out will be underground and what percentage above ground?
- q. Has the NBN Co conducted an audit of Telstra infrastructure in Tasmania to determine what per cent is fit-for-use?
- r. If not, do you anticipate that there may be a need for extra construction? What modelling have you done to ascertain how much this will cost?
- s. Will local authorities – councils and the State Government – have any power to set regulations on how the fibre must be installed?
- t. If I am a resident of Tasmania, exactly how do I opt-out of the NBN? How long do I have to decide whether I would like to opt-out and what is the process?
- u. If I am not at home when the technician comes to install the ONT, is it simply installed without my consent? Where are connection facilities installed if the homeowner does not 'opt-out' but also does not specify where they would like the service connected to?
- v. If I opt out and Telstra’s copper network is subsequently decommissioned, and I am at that point forced to connect to the NBN, how do I then opt-in?
- w. How much will this cost me?
- x. What is the estimated time that it takes to install an ONT and connect the fibre on someone’s property?
- y. Will the cable connecting the ONT to the fibre cable be installed above or below ground?
- z. If I am a resident of Tasmania and don’t opt-out of the NBN, can I choose where the ONT is installed on my house?
- aa. Can I choose when the ONT is installed, or will workmen simply show up when it is my turn, or can I choose a time when I can be at home?

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

- bb. Will the technicians installing the connections require access to the inside of my property?
- cc. Will connection require digging up of my property/garden? If so, am I compensated for any damage to my property? If damage is done such as chipped paint or broken panelling, who is responsible and will I be compensated? Do I have to sign a waiver?
- dd. If I live in an apartment block, does one ONT cater for the entire set of units?
- ee. Do all people who live in a block of apartments have to consent before the ONT is installed? What if one person opts out?
- ff. Once an ONT is installed on a property, how long is it until Telstra's network is disconnected and the householder is forced to connect to the NBN?
- gg. Will there be any overlap in the billing and payment periods of people's current service providers and the switch over to the NBN, or any unnecessary financial costs?
- hh. Will there be any interruption of people's current internet and phone service while the ONT is installed on their property or when they switch over to the NBN?
- ii. If I am a resident of Tasmania and don't require an internet connection but still wish to have the use of a telephone, what happens? What does it cost me?
- jj. Is there currently a retail service provider in Tasmania offering phone-only service? If so, what does this service cost?
- kk. Will I still be able to use my telephone line regardless of whether the AC power is connected or not?
- ll. Will the Medical Alert functions currently operating on phone services continue to function in the same way they currently do?
- mm. Regarding the cost to connect a house to the NBN: what costs is the homeowner liable for, what costs does NBN Co pay, and what costs are the responsibility of the retailer?
- nn. Does the ONT need to be connected to the homeowner's power supply?
- oo. What are the rights of tenants should the owner of their home choose to opt-out of the NBN scheme – thereby potentially leaving the tenant with no way to have telephone or internet service once the Telstra network is decommissioned?
- pp. Regarding emergency services calls, how will people who have no access to alternative means of communication be able to contact 000 in an emergency?
- qq. Will NBN Co. be liable in any circumstances for a person being unable to contact emergency services, once the Telstra network is decommissioned? If not, why not?

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

- rr. It was stated last week at the CommsDay Congress that 3 per cent of Tasmanian customers have changed their internal wiring and 0.5 per cent have requested additional wiring. Does that reflect demand for 100 megabit per second speeds?

Answer:

This question has multiple parts and a number of the questions go to details that are being tested as part of the rollout of the first and second release sites. The answers provided below are based on the information available to date. There may be adjustments over time to this information to reflect actual experience. Further, the responses to some of these questions represent the answer for the majority of situations. There will be individual cases or special circumstances which arise during the rollout which give rise to a different outcome than that described below.

- a. The TasCOLT trial was conducted by CEOS Pty Ltd, in partnership with the Tasmanian Government, Tasmanian Electronic Commerce Centre, Aurora Energy and local retailer TasTel. The TasCOLT trial was a commercial pilot of a low cost fibre to the premises (FTTP) network aimed to pass 1250 premises in Tasmania and was scheduled to be completed by the end of 2006.

NBN Co's Corporate Plan is predicting connection take up rates of 65 per cent which is based on a number of assumptions including that Telstra has announced that it will be progressively migrating its customers to the NBN and decommissioning its ageing copper network.

- b. Aurora Energy's original modelling assumed that its FTTP network would be competing with existing copper based broadband services. The NBN can expect a higher take-up rate than this over time because Telstra has announced that it will be progressively decommissioning its ageing copper network as customers move to the NBN.
- c. As of November 2010, approximately 50 per cent of residents have agreed to NBN Co connecting a lead-in cable to their premises.
- d. As of 17 December 2010, 537 premises or 13.4 per cent of total premises in the three pre-release towns have signed up for a total of 657 services. Of course some premises order more than one 'service'. The number of eligible customers signing up for NBN services is expected to increase as their existing contracts for copper based broadband services expire.
- e. NBN Co does not control what Retail Service Providers (RSP) are offering as retail services. As a wholesale only provider, NBN Co only knows if the provider has ordered a voice or data port and at what speed. Services that RSPs offer are available on their web site but NBN Co is not informed about services that an end user has ordered.
- f. NBN Co has released take-up rates for all of Australia as an average but has not broken these down into take-up rates by individual area as is appropriate for a nationwide project.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings October 2010

Broadband, Communications and the Digital Economy Portfolio

Department of Broadband, Communications and the Digital Economy

It is expected that there will be variations by area as a result of, amongst other things, different demographics and socio-economic circumstances.

- g. See above.
- h. No.
- i. Pricing assumptions are set out in the NBN Co Corporate Plan. NBN Co is planning to start charging wholesale access pricing on 1 July 2011.
- j. Retail prices are a matter for retail service providers. The NBN is expected to generate substantial competition amongst retail service providers, as NBN service become available, leading to improved products and pricing.
- k. There is no evidence to suggest that there will be price adjustment once NBN Co starts charging wholesale prices. As a result, there is no impact expected on subscriber rates.
- l. Refer answer (i) above.
- m. The presence absence of an opt-in or opt-out regime is not expected to impact the long term take-up rate of NBN services.
- n. NBN Co is able to progress the network rollout under either an opt-out or opt-in regime.

As Mike Quigley noted in his answers to questions at Senate Estimates on 19 October, NBN Co is not taking account of any opt-out system at this point in time.

NBN Co will only know that an end user wants a service once a retail service provider requests a service for that premise.

- o. An opt-out model is fundamentally a matter for Government. NBN Co's approach to the rollout is set out in its Corporate Plan.

The Australian Government has indicated that it will work with State and Territory governments to examine measures that would support the NBN rollout. The Commonwealth is happy to discuss a range of approaches.

- p. As outlined in the Business Plan released on 20 December 2010, NBN Co expects that aerial infrastructure will be available for 25 per cent of premises. The final percentage of underground versus aerial deployment will be determined by the outcome of the final agreement with Telstra and the Final Access Agreements with energy utilities.
- q. As part of the finalisation of the Heads of Agreement, Telstra and NBN Co will determine what infrastructure is fit for use. The final percentage of fit for purpose infrastructure will be

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings October 2010

Broadband, Communications and the Digital Economy Portfolio

Department of Broadband, Communications and the Digital Economy

determined by the outcome of the final agreement, discussions of which are commercial in confidence.

- r. The original planning for the NBN rollout in Tasmania assumed that NBN Co would not have access to any of Telstra's infrastructure. The Heads of Agreement brings forward the use of suitable Telstra infrastructure where available, improving the overall NBN Co business case.
- s. The Government expects the rollout of the NBN to be as unobtrusive as possible. The Financial Heads of Agreement between NBN Co and Telstra provides for the re-use of existing underground ducts, minimising duplication and allowing a greater percentage of fibre to be laid underground. The need for aerial deployment of cabling will depend on the availability of underground facilities. Where ducting is not available, there is usually existing above ground infrastructure. In all instances, NBN Co has indicated it intends to work constructively with councils and communities in rolling out the network.

In consultation with the NBN Co, industry and community, the Government will explore practical legislative options that support the NBN rollout and give adequate weight to industry and community sensitivities and that consider 'on the ground' experience. The Government will also present to the Council of Australian Governments a proposal for state and territory Governments to streamline their planning and development processes to implement a nationally consistent approach.

- t. How the proposed Tasmanian 'opt-out' legislation works in practice is a matter for the Tasmanian Government. The legislation passed the Tasmanian House of Assembly on 18 November 2010.
- u. Residents will be consulted about the Network Termination Unit location before it is installed. A Network Termination Unit will only be installed when the customer takes up a service.
- v. No one will be forced to connect to the NBN, even when the Telstra copper network is decommissioned. When a customer chooses to connect to the NBN all they need to do is contact a retail service provider that is offering services in their area.
- w. If a premise owner does not choose to connect to the NBN initially, there may be a cost associated with a future request to connect to the network. The NBN Co charge would be to the retail service provider and it will be a matter for retail service providers whether that charge is passed directly to the end user or recovered through usage charges over time.
- x. Installing a Network Termination Unit and connecting a fibre to a property is expected to take 2-3 hours to complete.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings October 2010

Broadband, Communications and the Digital Economy Portfolio

Department of Broadband, Communications and the Digital Economy

- y. The decision to install overhead or underground lead-in cables will be determined on a case-by-case basis. As a general rule, if premises are connected with overhead services (i.e. electricity and phone) then the NBN lead-in cable is likely to be overhead, if premises are connected with below ground services then the NBN lead-in cable is likely to be below ground.
- z. Residents will be consulted about the Network Termination Unit location before it is installed.
- aa. Residents are able to arrange a suitable time for contractors to come and install the Network Termination Unit.
- bb. Connecting the fibre lead-in cable to the home will not require access to the inside of a property. Installing the Network Termination Unit and other Customer Premises Equipment (CPE) may require access to the inside of a property.
- cc. Connecting premises to the NBN may involve the installation of an underground lead-in cable. However, the preference is to either use the existing Telstra underground lead-in or to install an aerial lead-in cable.

As set out in the Statement of Expectations, the Government expects that, as part of the network construction, NBN Co will cause as little detriment and inconvenience and do as little damage as is practicable and that work sites will be restored, within reasonable timeframes, to a condition consistent with that before work commenced.

These requirements are underpinned by provisions within the *Telecommunications Act 1997* and the Telecommunications Code of Practice.

- dd. Individual premises within an apartment block will each have their own Network Termination Unit.
- ee. NBN Co will require approval from the body corporate before connecting the NBN to an apartment block. It is up to the each body corporate to decide if the apartment block is to be connected to the NBN and in the event of difficulties gaining access, NBN Co can list such premises as 'frustrated' in its coverage register.
- ff. No end user will be forced to connect to the NBN. However, if an end user wishes to have access to fixed-line voice and/or broadband service following the decommissioning of the Telstra copper line at their premises, they will require an NBN connection.

Residents will be provided with sufficient notice to ensure continuity of their telecommunications services before the Telstra copper line to their premises is decommissioned.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings October 2010

Broadband, Communications and the Digital Economy Portfolio

Department of Broadband, Communications and the Digital Economy

- gg. Retail service providers will be responsible for the transition of customers to the NBN including financial arrangements.
- hh. There is likely to be a minimal disruption as a service is cutover from the copper network to the NBN.
- ii. Voice only services will be offered over the NBN. The Government is committed to the continued availability of voice-only services for those who need them, at no greater price than they pay now.
- In Tasmania at present, end users can continue to choose a voice only service over the Telstra copper network.
- jj. Yes, iPrimus offers a voice only option for \$24.95 per month. More detail is available from **www.iprimus.com.au**.
- kk. Provided the consumer is using a non-powered telephone (i.e. wireless handsets generally require mains power to function) and not accessing voice services using VoIP, an end user will still be able to use their telephone line if AC power is not present. All fibre Network Termination Units are to be fitted with a battery backup capability and an initial battery. It should be noted that it will be the responsibility of end users and RSPs to maintain the batteries after the initial installation.
- ll. Provided the Network Termination Unit is fitted with a functioning battery backup device and the Medical Alert device is plugged into the analogue telephone adapter, medical alert functions will continue to operate.
- mm. NBN Co will be responsible for the network up to the Network Termination Unit, including cost and installation in most circumstances. The retail provider and homeowner will be responsible for additional wiring or CPE required. It is up to the retail provider to determine how much of this cost is passed onto the homeowner.
- nn. Yes.
- oo. The Government remains committed to the universal service obligation (USO). In responding to a request for a service under the USO, the Primary Universal Service Provider generally seeks the agreement of the landowner prior to carrying out any activities on the land. In the future, if a property owner has objected to the installation of an NBN fibre connection despite the preference of the tenants residing in the property, the tenants will continue to be able to utilise the Telstra fixed line connection to access a voice service until such time as the network is decommissioned. A tenant may also have options to resolve issues with the property owner under relevant State and Territory Residential Tenancies Acts.

Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings October 2010

Broadband, Communications and the Digital Economy Portfolio

Department of Broadband, Communications and the Digital Economy

- pp. Access to emergency call services will not be diminished due to the rollout of the NBN. The USO is the obligation placed on universal service providers to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business. The USO applies now, will apply during the NBN rollout and will continue to apply once the network is complete.
- qq. All carriers and carriage service providers have an obligation to carry emergency calls. This means NBN Co and Telstra, like other carriers and carriage service providers, need to comply with the Emergency Call Service Determination. Depending on the circumstances, carriers and carriage service providers may be liable to the extent that their networks are directly responsible for a person being unable to contact emergency services.
- rr. The requests for changes to internal wiring and additional wiring reflects end users' requirements for how they use their NBN connection.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 89

Program No. 1.1

Hansard Ref: In Writing

Topic: Economic value of the NBN

Senator Birmingham asked:

- a. Are there essential productivity-enhancing applications that will not be available to Australians in the last 7 per cent of premises that will not receive fibre to the home? If so, what are they?
- b. The speeds that the NBN will make available to 93 per cent of Australians have been available in Japan and South Korea for most of this decade. Can you tell us what applications use most of the available bandwidth in those countries? Are they business and productivity applications, or entertainment?
- c. Are there empirical studies which have quantified the direct economic productivity gains achieved in Japan and South Korea from the rollout of fibre?
- d. How large have the gains been, and what kinds of business applications have emerged in those economies that were not previously available due to lower connection speeds?
- e. If clear and quantifiable evidence of productivity gains have not emerged in Japan and South Korea after five to ten years of near-universal access to very fast broadband, when would you expect them to?
- f. What empirical evidence is there that end consumers are willing to pay a large premium for additional broadband speed?
- g. The chairman of the ACCC last week indicated in a press interview that he believed it wasn't possible to conduct a cost-benefit analysis on the National Broadband Network, because no-one could assess its benefits even five or ten years out, let alone over the 40 or 50-year lifespan envisaged for the NBN. Does the Department agree that it is impossible to quantify these costs and benefits?
- h. If it does, then on what basis does the Department assume that the costs will be outweighed by the benefits?

Answer:

- a. The NBN will allow for all Australians to experience increased reliability and speeds while using online applications. A broadband connection providing 12 megabits per second

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

downstream and 1 megabit per second upstream will enable most current household broadband applications. Productivity gains associated with increased bandwidth speeds, which the NBN will deliver to 100 per cent of Australian premises, will see end users being able to do more in less time.

- b. It is difficult to obtain internet data usage research from South Korea or Japan due to language barriers. However, we have been able to find research conducted by Sandvine that investigates such activities across the whole Asia-Pacific region– [See: *Sandvine, Fall 2010 Global Internet Phenomena Report*, www.sandvine.com/downloads/documents/2010%20Global%20Internet%20Phenomena%20Report.pdf].
- c. This research reveals that internet applications that utilise the most bandwidth during peak hours in the Asia Pacific region include:
- real-time communication (web conferencing etc)
 - video-based applications.
 - P2P file distribution
 - web browsing
 -

The Department is unaware of any empirical studies that quantify direct economic productivity gains from the rollout of fibre in Japan and South Korea. However, we note that language constraints may have restricted our results.

- d. Although the Department is unaware of empirical studies directly linking the productivity gains from the rollout of fibre in Japan and South Korea, studies completed by the International Telecommunications Union show a high correlation between the Gross National Income and ICT development in the Asia Pacific, particularly in Korea, Japan and Hong Kong. [See: *ITU, 2009-2010, 'Information Society Statistical Profiles 2009, Asia and the Pacific'* www.itu.int/dms_pub/itu-d/opb/ind/D-IND-RPM.AP-2009-R1-PDF-E.pdf]

Japan and South Korea lead the region in broadband deployment and adoption. At the same time both countries are providing significantly higher speeds (100-200 megabits per second) through fibre to the home with the lowest average monthly prices of \$US2 per megabits per second (\$US at purchase power parity-PPP) in the Asia Pacific region [See: *KPMG International, 2010, 'The rollout of next generation networks'*]. This compares with nearly \$12 per megabits per second in Australia.

The European Union has examined the value added services that arise through fibre adoption [See: EU, 2008, *'The impact of Broadband on Growth and Productivity'*, http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/broadband_impact_2008.pdf]. The report indicates that broadband use enhances productivity through increasing efficiency and processes in businesses, public service and consumers. Using efficient broadband based technologies to exchange information between companies and the public service, increases efficiencies and reduces administrative burdens. These mechanisms are likely to increase productivity gains and could lead to 176 billion Euros a year in savings.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

E-health services enabled by high speed broadband ease the exchange of information between the health service providers, patients and health organisations providing savings of up to \$20.1 billion Euros a year across Europe.

E-business technologies through high speed broadband can have a positive impact on a firm's productivity. They improve supply chain integration and online customer services and can provide productivity gains of 5 to 10 per cent for an average European firm. With a three per cent a year adoption of e-business, an annual productivity improvement of 0.25 per cent is seen on a macroeconomic level across Europe.

With increased broadband adoption higher productivity gains are expected. Additional gains are estimated through entertainment, online content and generation of other value added broadband enabled services.

- e. The Japanese and South Korean Governments see ICT and broadband adoption as an important driver of their economies. Both countries have policies in place to continue to drive the adoption of both fibre to the premises and mobile broadband services.
- f. The demand for higher bandwidths continues to grow. A recent Cisco report found that the increase in video demand will be a significant driver for internet usage in the future [See: Cisco Visual Networking Index: Usage Study 25 October 2010].

The latest ABS statistics -- Internet Activity, Australia, June 2010 -- show that despite Australia's poor international broadband standings, Australians continue to access increasingly faster download speeds with 71 per cent of access connections offering a download speed of 1.5 megabits per second or greater. There is no evidence to suggest this trend will stop.

- g. The NBN Co Limited Corporate Plan confirms that the NBN will be built on a financially viable basis, with affordable prices for consumers. It also confirms that NBN Co will provide a rate of return higher than the long term bond rate, which means the NBN is a sound investment, even before taking into account any productivity, economic or social benefits that would be determined in a cost benefit analysis.
- h. The broader economy-wide benefits of investment in high speed broadband are well understood and accepted globally. A number of reports demonstrate that high speed broadband will be the foundation of future productivity growth and international competitiveness. Among a series of examples, the UN Broadband Commission report (2010), *Broadband: A platform for progress*, reported that a 10 per cent increase in broadband penetration can deliver an increase in national GDP of up to 1.4 per cent. The report is available at **www.broadbandcommission.org/report2.pdf**

The OECD report (2007), *Broadband and the Economy*, examines economic benefits of broadband globally and is available at **www.oecd.org/dataoecd/62/7/40781696.pdf**

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

The Access Economics report (2009), Impacts of a national high-speed broadband network, economic benefits of broadband in Australia and is available at
www.accesseconomics.com.au/publicationsreports/getreport.php?report=201&id=257

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 90

Program No. 1.1

Hansard Ref: In writing

Topic: Heads of Agreement with Telstra

Senator Fisher asked:

1. As part of the Heads of Agreement with Telstra, \$100 million was provided to Telstra to retain its workers for building the NBN.
 - a. Who will oversee this training and what standard will Telstra have to meet as part of the training?
 - b. What economic modelling was done to get to that \$100 million figure?
 - c. Was that conducted on a cost-per-employee basis?
 - d. If so, how many employees will be retrained and what is the cost of retraining per employee?
2. Does the Department foresee that NBN Co will require Telstra technicians and engineers and other staff to help during the construction phase?
3. Was any agreement secured on hiring these staff as part of the Heads of Agreement? If not, how will NBN Co recruit skilled workers during the construction phase?
4. Will Telstra have to go through a competitive tender process to secure construction contracts? What if it refuses? Will that put any strain on NBN Co to recruit workers?

Answer:

1. (a)-(d) Funding of up to \$100 million will be provided under a formal agreement between the Department of Broadband, Communications and the Digital Economy and Telstra Corporation Limited (Telstra) and will be subject to appropriate acquittal and governance arrangements. On 10 February 2011, the Minister announced that the government and Telstra have reach in-principle agreement for the package of measures announced by the government in June 2010 to facilitate the transition to the NBN, including assistance to retrain Telstra's workforce to deploy the NBN. The final terms of the agreement including standards are the subject of current negotiations.
2. The Telstra Retraining Agreement is designed to assist Telstra in retraining relevant employees that will be affected by proposed reforms to the structure of the telecommunications industry. The funding will ensure Telstra's workforce, including technicians and engineers, is appropriately skilled. This will contribute to the level of skilled and experienced workers being available for the rollout of the NBN.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

3. No agreement was secured on hiring these staff as part of the Financial Heads of Agreement. NBN Co is procuring services for the construction of the network through a Request for Proposal covering the Design and Construction of the Access Network.
4. NBN Co has released a Request for Proposal for the Design and Construction of the Access Network. Telstra and other contractors, have had the opportunity to tender for work through this process. The outcome of the tender process has not yet been finalised.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 91

Program No. 1.1

Hansard Ref: In Writing

Topic: Recruitment of Skilled Workers

Senator Fisher asked:

Is the Department aware of economic forecasts that there will be a shortfall of 36,000 resource sector jobs over the next five years, centred on the resource rich states of Western Australia and Queensland?

- a. How will this affect NBN Co's ability to recruit skilled workers?
- b. Will NBN Co negotiate uniform wage agreements across Australia or will scarcity of labour in local labour markets be taken into consideration?
- c. With 31 simultaneous worksites installing the NBN throughout Australia, how does the Government plan to address the vital issue of skills shortages?

Answer:

- a. NBN Co Limited (NBN Co) is evaluating the demand and supply workforce requirements across the 31 geographic areas where it will construct the fibre and wireless networks. NBN Co has released a Request for Proposal for the Design and Construction of the Access Network and will rely upon the contractors engaged to undertake construction. The outcome of the tender process has not yet been finalised.
- b. NBN Co has four enterprise agreements with national application that cover some classes of NBN Co's direct staff. These enterprise agreements set wages and conditions for those employees in the next four or so years. With respect to subcontractors, under the National Code of Practice for the Construction Industry 2009 guidelines, NBN Co cannot require or attempt to unduly influence (either through the tendering process or otherwise) subcontractors or suppliers to have particular workplace arrangements in place. Wage and conditions of employment are a matter for respective employers, employees and their representatives.
- c. A key objective of NBN Co's workforce development strategy is to ensure there is access to the right skills at the right time in the right place. NBN Co is working with its partners, contracting companies, vendors and the training institutions and private companies about future training needs, with its requirements to be refined by the learnings from work on the first release sites.

The Government recognises that the availability of an appropriately trained workforce will be fundamental to the successful rollout of the National Broadband Network and has committed up to \$100 million to assist Telstra ensure its workforce is retrained, thus contributing to the level of skilled and experienced workforce available for the rollout of the NBN.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 92

Program No. 1.1

Hansard Ref: In Writing

Topic: NBN Co and Telstra Deal

Senator Fisher asked:

1. Telstra CEO David Thodey has told investors: “Practically what will happen is the fibre will be put into an area and it will be switched on and then customers will be able to choose their retail service provider. They can choose Telstra or somebody else will knock on the door and they can choose a number of retail service providers. That's the concept of a structural wholesale separation – that’s open access and that's what it will be. There will be a period of time when customers can make that choice before we have to decommission the copper or for that matter the cable broadband customers”. Will the Government or NBN Co have any say over how long Telstra must keep its copper network operating?
2. It has been reported that Telstra will not be able to deliver broadband over its HFC cable in areas where the NBN is rolled out. Is this correct?
3. Is there a time-limit that Telstra can keep its wholesale HFC internet customers after the NBN is rolled out in a certain region? How long will that time period be?
4. Mr Quigley has said, and I quote: “Telstra is likely to become NBN Co’s largest customer as it progressively migrates its voice and broadband traffic to NBN Co’s wholesale-only, open-access network.” What percentage of retail customers does the Government expect Telstra to retain?
5. Will the domination of the retail market by a single player put downward pressure on wholesale prices?
6. Does Telstra get paid as a customer switches off from the copper network or when the customer is connected to the NBN? So for instance, if a customer terminates their connection on the Telstra network and then opts for a wireless connection, will Telstra still get paid?
7. What portion of the \$9 billion paid to Telstra is for leasing its infrastructure and what portion is for Telstra migrating its customers?
8. Will that \$9 billion figure vary, given that you don’t yet know how many of Telstra’s customers will migrate to the NBN?

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Answer:

1. The issue of how long Telstra must keep its copper network operating in areas where NBN Co Limited has rolled out fibre is being negotiated in the context of the Definitive Agreements being finalised between Telstra and NBN Co. Once the Definitive Agreements have been finalised, they will be put to Telstra's shareholders and the government for approval.
2. The Telstra and NBN Co Financial Heads of Agreement provide for the progressive migration of customers from Telstra's copper and pay-TV cable network to the NBN.
3. This issue is subject to negotiations between Telstra and NBN Co on the Definitive Agreements which are in progress.
4. The government has no expectations about the percentage of retail customers Telstra will retain.
5. The NBN Co and Telstra Financial Heads of Agreement will mean that Telstra and other retail service providers will have to compete on a single wholesale-only network offering services on open access and equivalent terms. The government has committed to ensuring uniform national wholesale prices for the same NBN services. The NBN will introduce competition to the telecommunications market opening up choice of services and competitive prices for consumers.
6. This issue is subject to negotiations between Telstra and NBN Co on the Definitive Agreements which are in progress.
7. The NBN Co Corporate Plan indicates that the Financial Heads of Agreement includes:
 - Progressive disconnection of copper services and decommissioning of Telstra's fixed line copper and HFC networks as the NBN Co fibre to the premises (FTTP) network is rolled out;
 - Utilisation of existing Telstra exchange space;
 - Utilisation of a significant portion of Telstra's existing ducts and conduits; and
 - Access to dark fibre and managed services for backhaul.
8. Telstra's announcement on 10 February 2011 re-iterated that the Definitive Agreements is expected to deliver approximately \$9 billion in post-tax net present value to Telstra.

Senate Standing Committee on Environment, Communications and the Arts
Answers to Senate Estimates Questions on Notice
Supplementary Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 93

Program No. 1.1

Hansard Ref: In Writing

Topic: Greenfield Sites

Senator Fisher asked:

According to the Department's website, at new residential developments, the NBN Co may subcontract the roll-out and operation of fibre networks providing that the networks are built to meet the technical specifications of the NBN and operated on an open access basis.

1. The website states, and I quote: "Ownership of these networks would transfer to NBN Co and form part of NBN Co's open access wholesale only network". Does this mean no rival telecommunications firm would be permitted to operate a fibre network in a new development?
2. Where have the technical specifications required by the NBN Co been set out?
3. How much will meeting these requirements add to the cost of a typical residential block?
4. Is it correct that Telstra will not be allowed to roll-out HFC cable to provide pay TV services in areas not adjacent to its existing HFC footprint?
5. Why is that? Does the NBN intend to seek to obtain a monopoly over the carriage of pay TV outside the existing HFC footprint? If so, where has that been expressed as an objective of Government policy?

Answer:

1. No. Networks may be built under subcontracts or build-operate-transfer arrangements for NBN Co. In these cases, it is envisaged that there would be a transfer of ownership to NBN Co. Developers can, however, engage other telecommunications firms to provide and operate fibre networks in new developments, and those firms will compete with NBN Co. This is also referred to in the policy statement on the website.
2. NBN Co has published its Technical Specifications for Fibre Access Services and Guidelines for Fibre to the Premises Underground Deployment. Other information is also available on its website. It is expected to release further technical specifications shortly.
3. Developers are expected to meet the cost of trenching and ducting. The Regulation Impact Statement estimated the cost as up to \$800 per lot, including the cost of trenching which is already incurred for the installation of other utilities such as electricity, water and sewerage. It is up to developers to decide whether to pass this on to the buyer of the residential block.

Senate Standing Committee on Environment, Communications and the Arts
Answers to Senate Estimates Questions on Notice
Supplementary Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

4. The statement relates to the circumstances in which Telstra will extend its existing HFC network into adjacent new developments when there is fibre in those areas.
5. The statement was intended to provide Telstra with clarity in relation to the circumstances in which it could extend its HFC network into fibre areas.

Senate Standing Committee on Environment, Communications and the Arts
Answers to Senate Estimates Questions on Notice
Supplementary Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 94

Program No. 1.1

Hansard Ref: In Writing

Topic: USO

Senator Fisher asked:

1. What will happen to the USO – the guarantee of basic communications services to all Australians – as the NBN is rolled out?
2. The Government has agreed to provide dedicated funding for USO service delivery of \$50 million p.a. for the years 2012/13 and 2013/14, and then \$100 million p.a. thereafter. Why will the USO Co only receive \$50 million during its first two years?
3. The last time the old Australian Communications Authority looked at the issue it estimated the cost of the USO to Telstra at \$548 million. The then minister, Richard Alston, set the payments at just over \$200 million. In 2007, Telstra received about \$171 million and in 2008 it received about \$145 million^[1]. How did the DCBDE arrive at the \$100 million per annum figure?
4. The DBCDE website says: “Once operational, USO Co will operate a 'consumer referral service' to advise consumers of the USO provider in their area.” Does this mean Telstra won't be the retailer of last resort for the USO?
5. If so, will the retailer of last resort have to pay for access to Telstra's CAN outside the fibre footprint?

Answer:

1. The Government is committed to ensuring continuity of basic universal service outcomes for consumers. As stated in the Government's policy statement of 20 June 2010, a new body, provisionally called USO Co, will be established with responsibility for delivery of universal service outcomes through service agreements with third parties. On 10 February 2011 the Government announced it had reached in-principle agreement with Telstra on measures to facilitate the transition to the NBN, including its commitment to ensure there is continuity of all basic universal service outcomes for consumers. Telstra's regulated obligation for the delivery of the USO will remain until the responsibility transfers to USO Co.
2. The Government's initial funding of \$50 million in 2012–13 and 2013–14 and \$100 million per annum thereafter is a significant contribution in the context that the cost of meeting regulated universal service responsibilities that have traditionally been met by industry alone.
3. This figure represents the Government's contribution to the overall cost to USO Co of delivering universal service outcomes. This is the first time the Australian Government has contributed to the cost of delivering universal service outcomes.

^[1] Bartholomeusz, S., (2007), “Universal Service Obligation Review May Offer Solution to Regulation Impasse”, in *The Age*, p.10

4. As stated in the Government's policy statement of 20 June 2010, USO Co's focus will be on contracting with third parties for the delivery of the USO and public interest services. This will initially involve contracts with Telstra for delivery of services for the short to medium term. Over time USO Co will have the capacity to undertake competitive tendering processes to engage other providers to deliver services.
5. See answer to question 4 above.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 95

Program No. 1.1

Hansard Ref: In Writing

Topic: Marketing Costs

Senator Fisher asked:

The DBCDE website says: “At the time the new fibre optic network is being rolled out by NBN Co, the company in conjunction with the industry and in consultation with the Commonwealth will fund and undertake a public information and education campaign. The purpose of the campaign will be to inform telecommunication end users about the imminent migration of services from the copper based infrastructure to the fibre optic infrastructure”

1. How much will this campaign cost?
2. What are the marketing outlays for the NBN Co so far?
3. Will the campaign inform people about new wireless technologies, such as LTE and 4G, as well as the fibre rollout?

Answer:

1. The campaign cost has not been determined.
2. The marketing outlays for NBN Co are a matter for NBN Co to consider.
3. The purpose of the campaign will be to inform telecommunications end users about the imminent migration of services from the copper based infrastructure to the fibre optic infrastructure.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Program No. 1.1

Question No: 96

Hansard Ref: In Writing

Topic: Regional Backbone Blackspots Program

Senator Fisher asked:

- a. Can the Department provide an update concerning the progress of the backbone blackspots program and when it is scheduled for completion?
- b. Given that the Government has claimed the project will be complete in mid-2011 – less than nine months away - what costings have been completed on costs to the project if it exceeds this timeframe for expected completion?
- c. Does Government have assurance from Nextgen that the rollout will be complete in nine months?
- d. What kind of oversight is the Department providing with relation to the costs expended by Nextgen Networks to install the backhaul?
- e. Can the Department clarify which areas of the rollout currently are already served by Telstra's backhaul network?
- f. One of the stated reasons for the Government fast-tracking investment in regional backhaul is that in many of the targeted regions, Telstra has a monopoly on backhaul services and the lack of competition is pushing up the wholesale price to retailers. Given that the Government is forcing the structural separation of Telstra, is there still a need to provide competitive backhaul in those areas?
- g. Nextgen have stated that the network will provide ADSL2 services for ISPs who use the backhaul service. Given that NBN Co will now have a monopoly over wholesale services and that fibre will be rolled out to the home, why is there a need to fast-track ADSL services?
- h. What level of investment in retail ADSL services by ISP's using Nextgen's backhaul can be expected if that investment is going to be made obsolete by the NBN in a few years time? How can the Government guarantee that regional Australians will receive cheaper broadband services if the level of investment won't be forthcoming?
- i. What provisions have been made at the end of the five year contract with Nextgen? Will NBN Co take over maintenance of the project, or will it be tendered to a private contractor?

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Answer:

- a. Steady progress has been made in delivering the objectives of the Regional Backbone Blackspots Program (RBBP). As at 31 December 2010, Nextgen Networks is more than half way to completing the RBBP infrastructure, having deployed more than 3800 km of optical fibre cable across the five routes.

Nextgen Networks is on track to fully complete construction of the project, and have services available on the longer routes in the second half of 2011. However, services are expected to be available on the shorter routes in the first half of 2011.

A further update on progress of this program and other initiatives can be found on the Department's website: <http://data.dbcde.gov.au/map>

- b. The funding agreement between the Government and Nextgen Networks adopts a fixed-price model for the delivery of the new infrastructure and services. Accordingly, there will be no need to revise the existing costings associated with the project.
- c. The funding agreement between the Government and Nextgen Networks provides for time extensions in certain circumstances. Some extensions have been allowed in rain and flood affected areas. However, overall, the construction schedule is on track.
- d. The funding agreement between the Government and Nextgen Networks allows for the payment of legitimate claims following the completion of work items against an agreed set of project milestones. Accordingly, Nextgen Networks must demonstrate the legitimacy of each of its claims for payment against the milestones.

To assist the Department review the documentary evidence supplied by Nextgen Networks, the Department has engaged independent external advisers (Global Pacific Pty Ltd). The Department has also established a program of field audit work to provide further assurance with regards to the legitimacy of Nextgen Networks' claims against the milestones, and overall compliance with its funding agreement with the Government.

- e. Telstra is currently the sole provider of backhaul services to the majority of locations that will be able to access the competitive backhaul infrastructure being deployed under the RBBP.
- f. On 20 June 2010 Telstra and NBN Co announced that they entered into a Financial Heads of Agreement. The implementation of that Agreement will provide for the progressive migration of customer services from Telstra's copper and subscription television cable networks to the new wholesale-only fibre network to be built and operated by NBN Co, and will deliver structural reform of the telecommunications sector.

The Financial Heads of Agreement between Telstra and NBN Co also provided a framework for the NBN Co to obtain access to Telstra's backhaul assets that are suitable for its needs in delivering the National Broadband Network. However, the Government expects that its decision to invest in regional transmission services will:

- in the short to medium term, deliver an immediate economic stimulus and achieve better service outcomes for regional consumers, including reduced costs; and
- in the medium to long term, contribute to the roll-out of the National Broadband Network.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

The RBBP will start to generate these benefits before the National Broadband Network rollout is complete. Indeed a number of Internet Service Providers (ISPs), such as iiNet, have signalled their intentions to deploy their own infrastructure to support the provision of competitive DSL-based services utilising the RBBP infrastructure.

g. Under the RBBP funding agreement Nextgen must provide for the availability of a wholesale DSL service offering so that end users in areas served by RBBP infrastructure can gain access to improved broadband services ahead of the NBN rollout being completed. This service will be made available in more than 60 locations through an arrangement with the ISP Nextep, a subsidiary of NEC Australia, on a commercial basis. This service will be made available before the National Broadband Network is rolled out, and is in line with the investment in DSL infrastructure that other ISPs have indicated they will make following the rollout of the RBBP backbone infrastructure.

h. It is expected that the RBBP will result in significant investment in retail ADSL services. Under the RBBP funding agreement Nextgen must provide for the availability of a wholesale DSL service. This service will be made available in more than 60 locations through an arrangement with the ISP Nextep, a subsidiary of NEC Australia, on a commercial basis.

In addition, a number of ISPs such as iiNet have publically signalled their intentions to deploy their own infrastructure to support the provision of a competitive DSL-based service and utilising the RBBP infrastructure. The increased level of competition in the provision of 'last-mile' services is expected to lead to improved service outcomes for regional consumers, including reduced costs.

i. In line with the RBBP Request for Tender, Nextgen is fully responsible for the operation and maintenance (O&M) of the RBBP infrastructure for the first five years of its operation. Beyond the five years of Nextgen's O&M obligation, responsibility for O&M will depend on the users of the infrastructure. If Nextgen remains the only user of the infrastructure, then they will retain full responsibility for maintaining it. The RBBP funding agreement provides for shared responsibility for O&M costs if the RBBP infrastructure is being used by both Nextgen and the Government.

There are a number of options available to the Government to fulfil such responsibilities, including the subcontracting of such services.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 97

Program No. 1.1

Hansard Ref: In Writing

Topic: Rollout in Tasmania

Senator Fisher asked:

- a. Has the Department monitored media coverage of the NBN rollout in the three Tasmanian towns of Midway Point, Scottsdale and Smithton?
- b. What has been the extent of media coverage? Is it reasonable to suggest that the decision to rollout the NBN first to Midway Point, Scottsdale and Smithton was met with enthusiasm and parochialism in the towns?
- c. Despite enthusiasm for being the first towns chosen, only around 45 per cent of homes signed up for a free installation. How did NBN Co Tasmania market free installation installations – did it doorknock and make phone calls to the 5000 homes?
- d. Will this model of marketing be adopted in other regional areas? If so, is there any reason to believe that voluntary take-up rates would be higher in other areas?

Answer:

- a. The Department subscribes to a daily media clips service. Those clips have regularly included NBN rollout items, directly and indirectly, on the three Tasmanian communities of Midway Point, Scottsdale and Smithton.
- b. On balance, the Department considers the media coverage — of the first three communities to receive NBN fibre to the premises (FTTP) services — was positive.
- c. The Government considers the take-up rate of an NBN fibre drop to the premise by more than 50 per cent of premises in the first few months to be above expectations. By mid November 2010, the connection rates were: Scottsdale (62 per cent), Midway Point (46 per cent) and Smithton (48 per cent).

The Implementation Study estimated the annual take-up of connections would be between 6-12 per cent a year for premises covered. Within a few months the take-up of services in the three Stage 1 communities had already reached 11.2 per cent of premises, well ahead of expectations.

The marketing campaign for the Stage 1 rollout included community meetings, letterbox drops, media interviews, and a website that included: detailed background information, an FAQ page, a 1300 number and an email address for making inquiries.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

- d. A similar marketing model to that used in Tasmania has been adopted to encourage owners of premises to request an NBN connection in the First Release Sites. As at 14 February 2011, the number of owners of premises requesting an NBN connection was: 87.8 per cent in Armidale; 90.9 per cent in Willunga; 76.3 per cent in Minnamurra/Kiama Downs; 60.8 per cent in Townsville; and 50.4 per cent in Brunswick. The high proportion of leased properties in Brunswick means tenants may still be speaking with property owners or managing agents about signing up to prepare their properties for the NBN. For this reason, a letter from the Mayor of Brunswick was sent in December last year to all rate payers in the Brunswick First Release Site to ensure all landowners were aware of the consent process. This has resulted in a spike in the number of consents NBN Co received.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 98

Program No. 1.1

Hansard Ref: In Writing

Topic: Retail Costs and Regional Subscribers

Senator Fisher asked:

- a. How many premises comprise the 9 million retail subscribers that the McKinsey report suggests would access the NBN on page 123 of the implementation study?
- b. Is \$83 per month still the estimate of the average cost consumers will be required to pay to access services? What would the wholesale cost of the service be?
- c. Will the amount that consumers pay for broadband access increase in light of the agreement with the independents to provide a uniform wholesale price across Australia?
- d. Given that demand and connections are likely to be less in regional areas than metropolitan areas, and rates of return far less for retailers, can a guarantee that those living in regional areas will pay the same price for broadband services when compared to those living in the cities?
- e. Will providing a uniform wholesale price across Australia increase the retail cost for consumers living in metropolitan areas?

Answer:

- a. The 9 million figure is an estimate of residential premises at 2009. This estimate was provided by the Department of Families, Housing, Community Services and Indigenous Affairs 2009, *State of Supply Report 2008*, National Housing Supply Council, Canberra.
- b. NBN Co will deliver uniform national wholesale prices across its network. For a 12 Mbps service across fibre, wireless and satellite platforms, NBN Co will charge a wholesale access price of \$24 a month. It will be the strength of competition between Retail Service Providers that determines how that wholesale price translates into retail prices.
- c. See (b) above.
- d. See (b) above.
- e. The NBN Co Corporate Plan states the company has developed a rigorous process to ensure an attractive product set is offered to meet market demand, based on – among other considerations – the benchmarking of current market wholesale pricing, with the objective of

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

providing value to end users that is *equal or better* than what is currently available in the wholesale market today.

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2010
Broadband, Communications and the Digital Economy Portfolio
Department of Broadband, Communications and the Digital Economy

Question No: 99

Program No. 1.1

Hansard Ref: In Writing

Topic: Transition from Copper and Telephony Services

Senator Fisher asked:

1. What are the costs of providing a power supply unit (PSU) to all FTTP customers? Has this cost been included in the \$43 billion NBN Co budget?
2. Will consumers be made aware that they will be required to purchase, install and maintain the batteries of PSU units? Will they be provided with a risk assessment when they sign up for FTTP connection?
3. Who will be liable in the event where a consumer's PSU batteries fail during a life threatening emergency – will it be NBN Co or the consumer?
4. What will be the cost of the batteries required for telephony services? What will be the batteries life? How will the user know when the battery needs replacing?
5. Will payphones still be provided under the USO? If so, will payphones be connected to the NBN or retain connection to the copper network?
6. If payphones will continue to be provided under the USO, will the Government operate them, or will Telstra operate them at a retail level and be forced to purchase wholesale copper or fibre access from the Government after Telstra is structurally separated?
7. If Telstra continues to operate payphones, but is relieved of its USO obligations after giving up its wireless network, how will the Government ensure that payphones continue to be maintained in unprofitable areas, such as remote Australia?

Answer:

1. NBN Co is required to provide battery back-up for all premises in the fibre footprint. The NBN Co Corporate Plan has factored in the cost of providing that battery back-up.
2. NBN Co will provide the back-up battery with all network termination equipment deployed in the fibre footprint, ensuring continuation of telephone capability in the event of a power failure for standard, non powered home telephones.

A back-to-base alarm function will be included to indicate a battery approaching the end of its life. The Government expects that the initial battery will have a useful life of at least three years. End users would be responsible for the maintenance and replacement of batteries, with NBN Co advising the RSP of an address when the battery needs to be replaced. Retail Service Providers (RSPs) will be responsible for communicating this information to end users.

3. See (2) above.
4. A typical battery required for telephony services would cost approximately \$20. The batteries will have alarms that indicate when they need replacing [see (2) above].
5. Yes. The Government has an ongoing commitment to ensuring that payphone services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business. As set out in the Government's policy statement of 20 June 2010, a new body, USO Co, will be established with legislative responsibility for the delivery of the Universal Service Obligation for payphone services.

Payphones currently serviced by copper infrastructure within fibre areas are expected to be progressively migrated to alternate infrastructure as the National Broadband Network is rolled out and Telstra's copper exchanges are decommissioned. Accordingly, the Government's Statement of Expectations for NBN Co released on 20 December 2010 states that "the Government will require NBN Co, where requested, to provide the basic service offering to payphones delivered in accordance with the Universal Service Obligation".

USO Co will work closely with NBN Co, particularly during the transition period as the fibre network is rolled out.

6. As set out in the Government's policy statement of 20 June 2010, a new body, USO Co, will be established with legislative responsibility for the delivery of the Universal Service Obligation for payphone services. It is expected that the initial contract for the supply of Universal Service Obligation payphone services will be with Telstra.

The arrangements for the delivery of these payphone services are currently subject to negotiations between the Commonwealth and Telstra.

7. As set out in the Government's policy statement of 20 June 2010, a new body, USO Co, will be established with legislative responsibility for the delivery of the Universal Service Obligation for payphone services. It is expected that the initial contract for the supply of Universal Service Obligation payphone services will be with Telstra.

The arrangements for the delivery of these payphone services are currently subject to negotiations between the Commonwealth and Telstra.

The Australian Communications and Media Authority will continue to have responsibility for monitoring compliance with the current Universal Service Obligation.