

Senate Standing Committee on Environment and Communications
Answers to Senate Estimates Questions on Notice
Supplementary Budget Estimates Hearings October 2016
Communications Portfolio
Department of Communications and the Arts

Question No: 31

Program 1.1

Hansard Ref: Written, 31/10/2016

Topic: NBN Strategic Review

Senator Urquhart, Anne asked:

1. Page 14 of the 2013 NBN Strategic Review contains the following segment:

“This radically redesigned FTTP deployment is estimated to cost [redacted] build Capital Expenditure per brownfield premises passed, presenting savings of [redacted] per premises versus the Revised outlook”

Given the passage of time can the redacted segments be provided? If the Department considers it cannot, please provide reasons.

2. Page 14 of the 2013 NBN Strategic Review contains the following segment:

“Construction costs for an FTTN network in Australia would be in the order of [redacted] per premises, including the proactive copper remediation of up to [redacted] percent of lines in the FTTN footprint.”

Given the passage of time can the redacted segments be provided? If the Department considers it cannot, please provide reasons.

3. Page 78 of the 2013 NBN Strategic Review contains the following segment:

“Use of 48 port FTTP within 200 metres of premises is estimated to cost [redacted] per premises passed and is proposed in dispersed residential areas where FTTN speeds are unsatisfactory and FTTP costs are higher”

Given the passage of time can the redacted segments please be provided? If the Department considers it cannot, please provide reasons.

4. Page 90 of the 2013 NBN Strategic Review contains the following segment:

“Total Capital Expenditure to configure the HFC network to deliver above 50Mbps or more in 2019, pass and connect the entire HFC footprint is [redacted]. This equates to [redacted] per premises based on Corporate Plan premises excluding OSS/BSS costs.”

Given the passage of time can the redacted segments please be provided? If the Department considers it cannot, please provide reasons.

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5. Page 100 of the 2013 NBN Strategic Review contains the following segment:

As an example, Exhibit 4-5 outlines how the NPV of savings from the upgrade approach is calculated for the upgrade of FTTN to FTTdp to achieve 100Mbps download speed across an entire area.

The cost of deploying FTTP now to 3.6 million premises is based on the 'Radically Redesigned FTTP' average unit cost, and equates to around \$8 billion in present value.

This is compared to the cost of deploying FTTN now to 3.6 million premises and later upgrading to FTTdp, which in aggregate equates to around \$7 billion in present value:

- The cost of deploying FTTN to 3.6m premises now is based on the average unit cost of FTTN, and equates to around \$2 billion in present value;
- The cost of upgrading these premises to FTTdp so that all have access to speeds of 100Mbps in CY20 is based on the average unit cost to deploy FTTdp, less the cost of infrastructure that can be reused (primarily, the distribution network);
- Additional incremental operating expenditure is included, where it is required to support FTTN and FTTdp (for example, electricity and copper maintenance) above and beyond the operating expenditure associated with FTTP.

The NPV saving of ~\$2 billion is based on a discount rate of 8 percent. If a discount rate of 10% or higher were used, as is common in the telecommunications industry, the NPV of an upgrade strategy (rather than deploying FTTP now) would be higher.

Exhibit 4-5: Illustrative example of deploying FTTN now and upgrading to FTTdp in CY20 rather than deploying FTTP now

NPV savings example	
	Present value (\$ billion)
Cost of deploying FTTP now to 3.6 million premises	~8
Cost of deploying FTTN now and upgrading FTTdp in CY20 comprised of:	
Cost of deploying FTTN to 3.6 million premises CY14	2
Cost of incremental FTTN operating costs (CY14 – CY20)	1
Cost of upgrading 3.6m premises from FTTN to FTTdp (CY20)	2
Cost of incremental FTTdp operating costs (CY21 – CY30)	1
Total Cost of deploying FTTN now and upgrading to FTTdp in CY20	~6
Net present Value (NPV) of the savings of an upgrade approach vs deploying FTTP now	~2

Please provide the underlying modelling and assumptions supporting these figures. This would include, but is not limited to, a breakdown of Cost Per Premise for each access network technology, profile of number of premises upgraded year-on-year over the modelled timeframe (noting the cumulative total of 3.6 million), operating cost assumptions (if used) for each access network technology, and any other assumptions relevant to the model.

- Could you please provide dates for each of the following:
 - (a) When the Department first became aware, either verbally, or in writing, that NBN was trialling skinny fibre?
 - (b) When the Department first became aware, either verbally, or in writing, that NBN was trialling FTTdp.
 - (c) When the Department first became aware, either verbally, or in writing, that NBN was considering no longer using the Optus HFC infrastructure?

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(d) When the Department became aware, in writing, that NBN had decided to abandon the Optus HFC infrastructure?

Answer:

1. No, the redacted segments cannot be provided because they are nbn's commercial-in-confidence information.
2. No, the redacted segments cannot be provided because they are nbn's commercial-in-confidence information.
3. No, the redacted segments cannot be provided because they are nbn's commercial-in-confidence information.
4. No, the redacted segments cannot be provided because they are nbn's commercial-in-confidence information.
5. NBN Co Ltd's (nbn's) Statement of Expectations directs nbn to roll out the National Broadband Network (the network) and also gives the nbn flexibility to use appropriate technologies to connect homes and businesses to the network.
 - (a) Under its Statement of Expectations, nbn has the flexibility and discretion in the design and planning of the network, including the technology type. This enables nbn to trial different deployment options consistent with the multi-technology mix.
 - (b) Refer answer a.
 - (c) Refer answer to question 19.
 - (d) Refer answer to question 19.