

Joint Committee on the National Broadband Network
Answers to Questions on Notice
Public Hearing 19 April 2013
Broadband, Communications and the Digital Economy Portfolio
NBN Co Limited

Question No: 7

Hansard Ref: In Writing

Topic: NBN Rollout – completion of the rollout

The Committee asked:

Is the NBN rollout on track?

Answer:

On 21 March 2013, Mr Quigley said:

“... this short-term issue will not affect the long-term delivery of the NBN or the overall cost of the project.

"NBN Co remains on track to deliver fast, affordable and reliable broadband to every Australian by 2021 as set out in our Corporate Plan.”

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Question No: 12

Hansard Ref: In Writing

Topic: Product Pricing

The Committee asked:

In the current NBN plan, is a premium to be paid for very high speed fixed line bandwidth?

Answer:

NBN Co pricing of the Access Virtual Circuit (AVC) sees higher prices for faster speeds. The pricing structure sees cost per Mbps decrease as a customer moves up the speed tiers.

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Question No: 51

Hansard Ref: In Writing

Topic: 1GBPS Services

The Committee asked:

An industry product roadmap released in April (p,13) shows that the 1gbps CVC product for Medium Business Services is set to be released in Q42013 – is this still the schedule for release?

Answer:

Yes.

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Question No: 52

Hansard Ref: In Writing

Topic: 1GBPS Services

The Committee asked:

Can all ONTs installed by NBN Co and NBN Tasmania at customer premises be used to access 1gbps services?

Answer:

Yes.

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Question No: 53

Hansard Ref: In Writing

Topic: ARPU

The Committee asked:

At the April 19 hearing Mr Quigley stated NBN Co's current ARPU was about \$38/month, and this was a more realistic measure for the starting point of any estimate of growth rates for ARPU over time. If the NBN Co latest reported breakdown of customers by speed tier is multiplied through by the current NBN wholesale AVC prices for these tiers, the result is an ARPU of about \$29. The network interconnect charge amortized across users accounts for a small additional cost. Is it correct, however, that most of the remainder is CVC charges?

Speed tier	AVC/month	% age breakdown of subscriber	Implied contribution to ARPU
100/40	38	31	11.78
50/20	34	5	1.7
25/10	30	1	0.3
25/5	27	24	6.48
12/1	24	39	9.36
Total			29.62

Answer:

Year to date (to 31 March 2013) monthly ARPU comprises approximately 73% AVC, 17% CVC and 10% NNI.

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Question No: 54

Hansard Ref: In Writing

Topic: ARPU – CVC

The Committee asked:

Is the CVC contributing about 25 per cent of revenue at this time in line with the forecasts in the Corporate Plan?

Answer:

Corporate Plan 2012-15 assumed \$nil revenue for CVC in FY2013 (refer pages 67 and 69 of Corporate Plan 2012-15 in relation to transitional CVC arrangements).

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Question No: 58

Hansard Ref: In Writing

Topic: Transit Network capex

The Committee asked:

In the hearings it was stated that capex for the transit network would total \$2.8 billion, in line with the Corporate Plan. In the Corporate Plan it is stated that the transit network will be completed by the end of FY2015. Does this mean all of the \$2.8 billion capex will have been spent by that time?

Answer:

Corporate Plan 2012-15 forecasts total capital expenditure to FY2021 of \$37.4 billion, of which \$2.8 billion relates to the Transit Network.

The Transit Network comprises all the Fibre Access Node (FAN) sites, Points of Interconnect (POIs), the active and passive equipment in those FANs and POIs and the fibre that interconnects them.

Corporate Plan 2012-15 assumes that capital expenditure of \$1.5 billion will have been spent by the end of FY2015 on the Transit Network. Whilst the core Transit Network is expected to be completed by FY2015, NBN Co will continue to need to install additional active GPON equipment and DWDM equipment as more Fibre Serving Area Modules (FSAMs) are completed and additional Transit capacity is required over time. A number of FAN sites will also only be fully completed once NBN Co is rolling out FTTP in that region. The costs of this additional capacity are included in Transit Network capex to FY2021.

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Question No: 59

Hansard Ref: In Writing

Topic: Transit Network capex

The Committee asked:

In the Corporate Plan it is stated that the 'bulk' of the transit network will be completed by the end of FY2014. How much of the \$2.8 billion capex is projected to have been spent by that time?

Answer:

In Corporate Plan 2012-15 \$1.2 billion capex is projected to have been spent on the Transit Network by the end of FY2014.

Refer also to the answer to QoN 58

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Question No: 60

Hansard Ref: In Writing

Topic: Transit Network – nominal dollar cost to NBN Co

The Committee asked:

Approximately 35 per cent of the ISA agreement with Telstra also relates to transit network needs - largely leases over dark fibre and exchange space. This value of this commitment to Telstra is \$1.75 billion in post-tax June 2010 dollars. What will be the nominal dollar cost to NBN Co of this part of overall transit network expenditure in the period covered by the contiguous detailed financial projections in the Corporate Plan? (i.e. up to and including FY2021.)

Answer:

Information about payments to be made to Telstra under the Infrastructure Services Agreement is commercial-in-confidence. Questions regarding payments to Telstra would reveal commercially sensitive information for Telstra and NBN Co and could cause commercial harm to both parties.

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Question No: 61

Hansard Ref: In Writing

Topic: Transit Network – nominal dollar cost of transit-related ISA leases

The Committee asked:

What will be the nominal dollar cost of transit-related ISA leases in the period up to and including FY2015?

Answer:

Information about payments to be made to Telstra under the Infrastructure Services Agreement is commercial-in-confidence. Questions regarding payments to Telstra would reveal commercially sensitive information for Telstra and NBN Co and could cause commercial harm to both parties.

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Question No: 64

Hansard Ref: In Writing

Topic: Transit Network – forecast progress

The Committee asked:

What proportion of the transit infrastructure covered by ISA leases is forecast to be operational by June 2013?

Answer:

Information about payments to be made to Telstra under the Infrastructure Services Agreement are commercial-in-confidence. Questions regarding payments to Telstra would reveal commercially sensitive information for Telstra and NBN Co and could cause commercial harm to both parties.

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Question No: 65

Hansard Ref: In Writing

Topic: Transit Network – cost of the network

The Committee asked:

In calculating the cost of the transit network on a cost per premise basis, is it appropriate to include both FTTP and fixed wireless/satellite premises, or just the former?

Answer:

The Transit Network carries traffic for each of the three Access Networks – FTTP, Fixed Wireless and Satellite. It is therefore appropriate to amortise the cost of the Transit Network across all three Access Networks in proportion to the traffic each network generates.

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Question No: 66

Hansard Ref: In Writing

Topic: Transit Network – cost of the ISA transit leases

The Committee asked:

In calculating the cost of the transit network on a cost per premise basis, account needs to be taken of both the \$2.8 billion in capex and the opex incurred in relation to leases over transit infrastructure owned by Telstra (given these represent avoided capex). However, the \$5 billion value to Telstra in June 2010 post-tax dollars of the ISA arrangements (or about \$1.75 billion for the proportion of this value related to transit) is not an accurate representation of the cost of these leases to NBN Co, since NBN Co is also responsible for the taxable component of these payments. What is NBN Co's estimate of the present cost of the ISA transit leases expressed so that it is consistent with the \$2.8 billion?

Answer:

Information about payments to be made to Telstra under the Infrastructure Services Agreement is commercial-in-confidence. Questions regarding payments to Telstra would reveal commercially sensitive information for Telstra and NBN Co and could cause commercial harm to both parties.

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Question No: 70

Hansard Ref: In Writing

Topic: Contractors – aerial deployments

The Committee asked:

Is the target for aerial deployments of 25% of all fixed line deployments, as set out in the corporate plan, still current?

Answer:

The aerial deployment targets only apply to the local network. Refer to Corporate Plan 2012-15 Exhibit 1-4 on page 15. The percentage aerial deployment projections for the FTTP network are:

- Local Network 25%
- Distribution Network 0%
- Transit Network 0%

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Question No: 76

Hansard Ref: In Writing

Topic: In House Cabling – NBN installations

The Committee asked:

If there's power point within 3 metres of the Network Terminating Unit who pays for the power point?

Answer:

If there is a power point within 3 metres of the Network Terminating Unit, then that power point can be used and no additional power point is required.

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Question No: 79

Hansard Ref: In Writing

Topic: Cost Per Premises

The Committee asked:

In discussing the build drop, Mr Quigley stated:

We did a number of initial sites—several thousand—on a different model and the cost of those was \$2,400. We got some learnings from that, we changed the model and now we are proceeding into volume. That is, once again, several thousand. This is a blend, by the way, of SDUs and MDUs—single dwelling units and multi-dwelling units. The volume actuals we are getting are around \$1,100, which is in fact right on our corporate plan estimate of \$1,100. However, the graph handed to the committee explicitly stated that the cost of customer connect cited were only for single dwelling units and only for demand drops. Can the NBN provide a figure that takes account for both SDUs and MDUs and for all build drops currently completed?

Answer:

NBN Co only recently signed contracts with four delivery partners for MDUs. In the coming months, NBN Co expects to have more data on residential and commercial MDU sites that have reached completion.

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Question No: 81

Hansard Ref: In Writing

Topic: Cost Per Premises - contracts to deploy build drop

The Committee asked:

Do these contracts cover both SDUs and MDUs?

Answer:

The programs and contractual arrangements will cover SDU lead-ins. MDU lead-ins are covered within the MDU program under separate build agreements.

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Question No: 83

Hansard Ref: In Writing

Topic: Quality Inspections

The Committee asked:

Prior to being given Practical Completion (PC), the NBN Co previously had 10 days with which to undertake quality inspections of the network to check for major (or 'Major 1') defaults. Is it the NBN Co's responsibility or the delivery partner's responsibility to remediate major defects found in the quality inspection?

Answer:

It is the Delivery Partner's responsibility to remediate all Delivery Partner associated defects found in the quality inspection and NBN Co's responsibility to rectify any NBN Co related defects.

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Question No: 85

Hansard Ref: In Writing

Topic: Quality Inspections

The Committee asked:

If a major defect is identified after a site is given Practical Completion, whose liability is remediation?

Answer:

Within the 12 month Defect Liability Period it is the Delivery Partner's liability to remediate major defects identified after practical completion up to Final Completion being granted.

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Question No: 93

Hansard Ref: In Writing

Topic: Rollout Delays

The Committee asked:

On page 13 of the Briefing Notes, NBN Co notes that it has taken over from Syntheo in the NT, so Syntheo can focus on WA and SA. NBN Co says this move will create 200 jobs in NT, and will result in greater investment in staff training and equipment. But NBN Co also says it will still complete the NBN by 2021, and for the same cost.

How can this possibly be the case?

Answer:

NBN Co's approach to the NT deployment includes the development of a longer term strategic resourcing model, and we are working with the NT government to implement a range of initiatives to develop resource capability within NT for the skills needed for the NBN rollout and operation. Amongst other things, this avoids the expense of deploying field crews from interstate areas to fill resource gaps, a challenge faced by our contractor, whilst building local capability that will deliver productivity returns and cost savings.

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Question No: 94

Hansard Ref: In Writing

Topic: Rollout Delays

The Committee asked:

Has the value of NBN Co's contract with Syntheo been reduced as a result of NBN Co taking over work in NT?

Answer:

Yes.

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Question No: 96

Hansard Ref: In Writing

Topic: Rollout Delays

The Committee asked:

Who bears the contractual risk for rollout delays? NBN Co or the contractors?

Answer:

The risk is not solely borne by either NBN Co or the Contractor. The risks of delay are allocated separately to either NBN Co or the contractor depending upon the type of risk.

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Question No: 97

Hansard Ref: In Writing

Topic: Rollout delays - contractor working hours

The Committee asked:

NBN Co contractors have been observed working on Saturdays and Sundays, and outside normal business hours. Has NBN Co requested contractors to work on weekends and outside regular business hours to speed up the rollout? If so, are penalty rates being paid? By whom?

Answer:

NBN Co has not instructed our Contractors in this respect. It is a matter for the contractor and their sub-contractors to determine the optimal working configuration.

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Question No: 100

Hansard Ref: In Writing

Topic: Rollout delays – Mobile Coverage - fixed wireless

The Committee asked:

Can you explain the recent arrangements in relation to co-location of NBN wireless towers with commercial mobile network operators?

Answer:

To assist in the governance of specific co-location requests and applications, NBN Co has established a number of framework agreements with third parties, including mobile network operators, which outline the process and procedures to co-locate on NBN Co's network infrastructure sites. These agreements address operational, commercial and technical requirements for all incoming site share requests.

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Question No: 103

Hansard Ref: In Writing

Topic: Network Extensions

The Committee asked:

Are any network extensions being constructed at the moment?

Answer:

One extension has been constructed and eight are currently under commercial discussions.

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Question No: 105

Hansard Ref: In Writing

Topic: Demand – Downloaded and uploaded data

The Committee asked:

What was the ratio between downloaded and uploaded data assumed in the original Corporate Plan? What was this assumed ratio in the revised Corporate Plan, and how does this compare to the empirical data from current users?

Answer:

No assumption has been made regarding upstream volumes in either the original or revised Corporate Plan. NBN Co's product specifications for the CVC provide symmetrical capacity. A Retail Service Provider that purchases 100Mbps of CVC in a Customer Serving Area will be provisioned 100Mbps both upstream and downstream. Therefore the dimensioning assumptions in the Corporate Plan need only account for the larger of the downstream or upstream aggregates. There is no potential driver that will result in aggregate upstream capacity exceeding downstream.

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Question No: 106

Hansard Ref: In Writing

Topic: Demand – bandwidth usage

The Committee asked:

Does NBN Co have any means of determining what proportion of current bandwidth usage is related to streamed video, asynchronously provided video, or IPTV? If so, what proportion of download traffic does video account for?

Answer:

No. NBN Co does not monitor end-user traffic types except with regard to meeting the lawful intercept obligations of the *Telecommunications (Interception and Access) Act*. As a layer 2 operator NBN Co does not interrogate traffic controlled at higher levels in the OSI stack.

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Question No: 110

Hansard Ref: In Writing

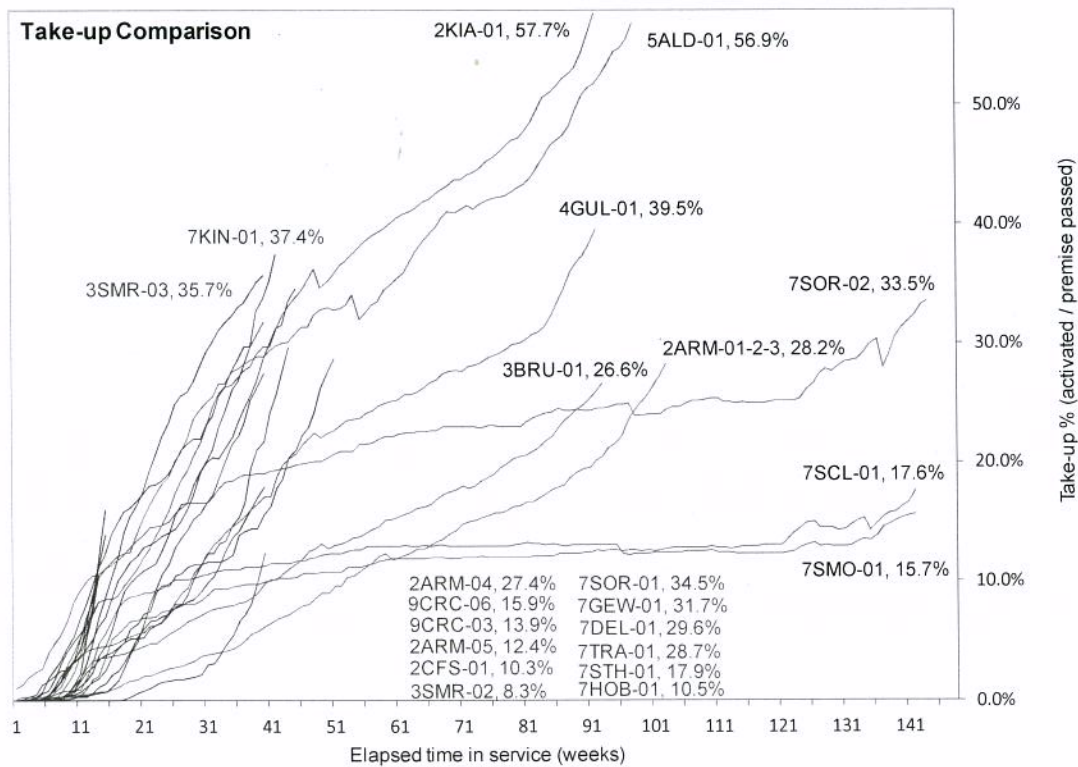
Topic: NBN take-up comparisons

The Committee asked:

The other question I want to ask is this. On page 15 of the document you gave us this morning, Mr Quigley, we have a great graph of take-up comparisons. This is a very easy question. I would just like an English translation of where these actually are, if you could get that across to us, because they are all in code at the moment.'

Answer:

Take-Up Comparison – FTTP Brownfields



Source: NBN Co
 Note: Actual information is based on information available at 31 March 2013.

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Brownfield Premises	Definition
2KIA-01, 57.7%	"Kiama" Fibre Serving Area; module "01"; 57.7% take-up
5ALD-01, 56.9%	"Aldinga" Fibre Serving Area; module "01"; 56.9% take-up
4GUL-01, 39.5%	"Gulliver" Fibre Serving Area; module "01"; 39.5% take-up
7KIN-01, 37.4	"Kingston" Fibre Serving Area; module "01"; 37.4 take-up
3SMR-03, 35.6%	"South Morang" Fibre Serving Area; module "03"; 35.6% take-up
7SOR-02, 33.5%	"Sorell" Fibre Serving Area; module "02"; 33.5% take-up
2ARM-01-02-03, 28.2%	"Armidale" Fibre Serving Area; modules "01- 03"; 28.2% take-up
3BRU-01, 26.6%	"Brunswick" Fibre Serving Area; module "01"; 26.6% take-up
7SCL-01, 17.6%	"Scottsdale" Fibre Serving Area; module "01"; 17.6% take-up
7SMO-01, 15.7%	"Smithton" Fibre Serving Area; module "01"; 15.7% take-up
2ARM-04, 27.4	"Armidale" Fibre Serving Area; module "04"; 27.4 take-up
9CRC-06, 15.9%	"Crace" Fibre Serving Area; module "06"; 15.9% take-up
9CRC-03, 13.9%	"Crace" Fibre Serving Area; module "03"; 13.9% take-up
2ARM-05, 12.4	"Armidale" Fibre Serving Area; module "05"; 12.4 take-up
2CSF-01, 10.3%	"Coffs Harbour" Fibre Serving Area; module "01"; 10.3% take-up
3SMR-02, 8.3%	"South Morang" Fibre Serving Area; module "02"; 8.3% take-up
7SOR-01, 34.5%	"Sorell" Fibre Serving Area; module "01"; 34.5% take-up
7GEW-01, 31.7%	"George Town" Fibre Serving Area; module "01"; 31.7% take-up
7DEL-01, 29.6%	"Deloraine" Fibre Serving Area; module "01"; 29.6% take-up
7TRA-01, 28.7	"Triabunna" Fibre Serving Area; module "01"; 28.7 take-up
7STH-01, 17.9%	"St Helens" Fibre Serving Area; module "01"; 17.9% take-up
7HOB-01, 10.5%	"Hobart" Fibre Serving Area; module "01"; 10.5% take-up

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Question No: 111

Hansard Ref: Page 32

Topic: Contractors and variability of build on an area by area basis

Mr Fletcher asked:

Within the numbers that come together to make up this average, what is the variance in percentage terms?

Mr Quigley: We would have to take that one on notice if you are talking about the absolute maximum to minimum. Are you talking about it on an FSAM basis or on a per-premise basis?

Mr FLETCHER: On a per-premise basis. In other words—

Mr Steffens: We contract on an FSAM basis and then divide it by the number of premises, so it is not a per-premise cost for the LNDN. Obviously there is a variation for the per-premise cost for lead-in and the in-house cabling but not for the LNDN.

Mr FLETCHER: There is a distribution that underlies this average number, and I am interested to understand the distribution to the level of granularity that you have. If you have it by FSAM then that is what I would like.

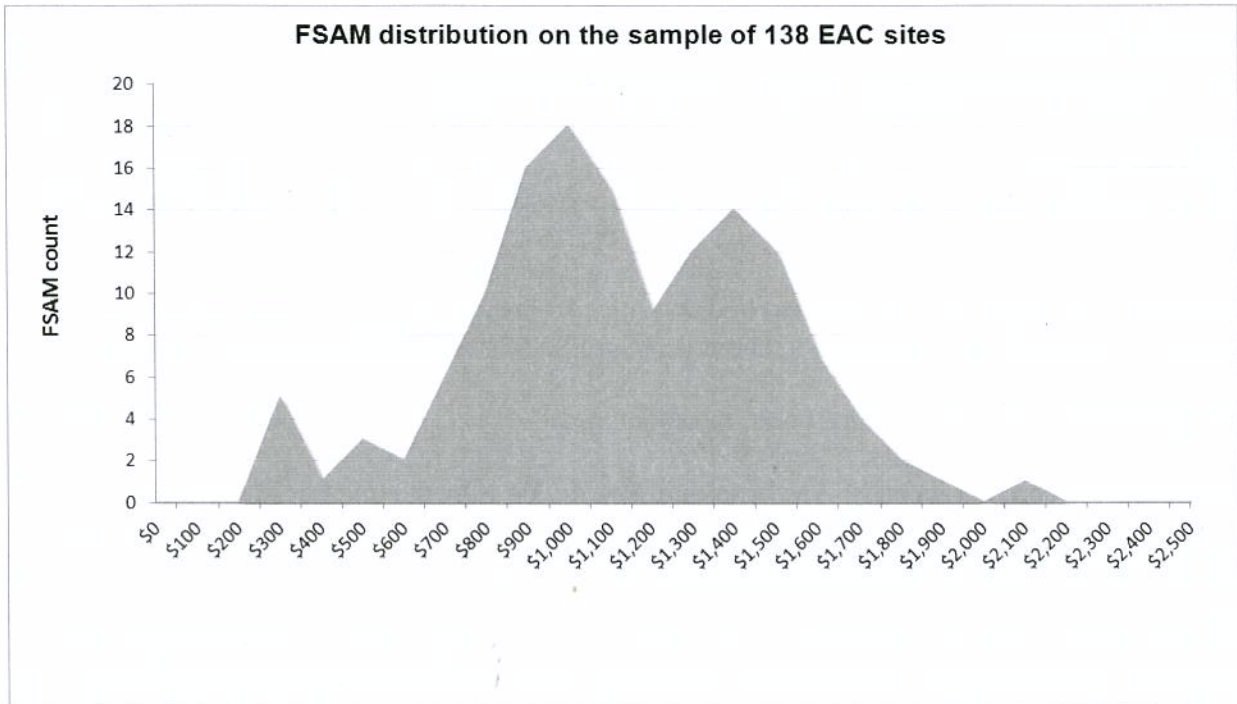
Mr Quigley: We will take that on notice and have a look at trying to make sure we get you some distributions.'

Answer:

The distribution of Estimated Cost at Completion (EAC) per Premises for the 138 "FSAMs Work Commenced EAC" shown in Exhibit 1-4 in the report presented to the JCNBN on 19 April 2013 is provided in Figure 1 below.

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Figure 1: Estimated Cost at Completion per Premises, by FSAM (\$ Nominal)



The EAC per Premises ranges from approximately \$300 at the low end to \$2,100 at the high end, with the majority of FSAMs falling in the range \$800 to \$1,600. On a weighted average basis NBN Co estimates that the overall final average cost per premises for these 138 FSAMs will fall between \$1,100 and \$1,400.