

# Chapter 7

## Industry, market and regulatory characteristics of the NBN rollout

### Introduction

7.1 The committee received evidence about market, regulatory and industry characteristics as they relate to the efficient and cost-effective rollout of the NBN. The first section of this chapter presents evidence received about industry characteristics, specifically the subcontracting arrangements for the construction of the network. Evidence about the market and regulatory characteristics of the rollout, and particularly in relation to the pricing structures, are discussed in the second section.

### Industry characteristics

7.2 The construction of the NBN is carried out by nbn's 'Delivery Partners' –prime contractors.<sup>1</sup> Delivery Partners may then further subcontract the construction work. The committee received evidence on the nature of the subcontracting arrangements and the non-payment of subcontractors, as well as concerns about the workmanship by subcontractors.

### *Subcontracting arrangements*

7.3 A number of submissions and witnesses commented on the subcontracting of work for the construction of the NBN.<sup>2</sup> For example, in its submission, Regional Development Australia Midwest Gascoyne (RDA MidWest Gascoyne) questioned whether the subcontracting arrangements were delivering value for money:

We have also noted what would appear to be a wasteful practice of multi-layer subcontracting, which is unquestionably adding unnecessary costs to the nbn bill for taxpayers. In some cases, we've been advised of up to six layers of subcontracting between the worker on the street and nbn. This practice cannot be providing value for taxpayer money?<sup>3</sup>

7.4 At the public hearing in Redcliffe, Queensland, the committee heard evidence from subcontractors, who had been subcontracted to carry out work for another company which was, in turn, subcontracted by one of nbn's Delivery Partners, BSA. The workers explained that they had carried out work for the subcontractor, but had not been paid. The workers understood that BSA had paid the subcontractor for the work. The workers sought assistance from BSA and nbn to resolve the situation. The

---

1 See: nbn, *Annual Report 2015-16*, p. 149.

2 See, for example: Regional Development Australia Midwest Gascoyne, *Submission 25*, p. 2; Mr Peter Uzelac, *Committee Hansard*, 6 April 2017, p. 14; and Mr Keith Green, Arid Land Communications, *Proof Committee Hansard*, 26 June 2017, pp. 41-46.

3 Regional Development Australia Midwest Gascoyne, *Submission 25*, p. 2.

committee was informed that nbn had 'given no support'. The workers indicated that they were pursuing a claim through the Fair Work Australia Ombudsman.<sup>4</sup>

7.5 The Chief Executive Officer of BSA, Mr Nicholas Yates, responded to this evidence stating:

...we wish to confirm that BSA has acted in accordance with our agreement with nbn co in relation to all resourcing requirements and subcontracting arrangements. BSA engages with a number of contractors under Master Service Agreements (MSAs), which set out the obligations of both BSA and our contractors in detail.

Under this model we can confirm BSA has met all its financial obligations due and payable for the contracted works under investigation.

Furthermore, we wish to confirm and concur with the witness statements that, while not obligated to do so, BSA met with the workers involved, listened to their concerns and supplied them with evidence of our financial obligations having been met in relation to the contracted works.<sup>5</sup>

7.6 Committee members also pursued this matter with nbn at Budget estimates hearings. Mr Bill Morrow, Chief Executive Officer of nbn, made the following statement in relation to this particular case:

Again, for anybody that is working on the NBN we are very grateful for what it is that they do and they deserve to have a fair, safe environment that is safe for them to work and they should be compensated appropriately for their work. We want and expect our contractors to act ethically and morally in this regard and we have regular discussions with them about this. If there is a situation that sounds like you described then I, too, would be angry to hear if somebody was being mistreated. They really have a legal recourse to take and that should be their first and foremost avenue that they will pursue to make sure they are getting what is properly due to them.<sup>6</sup>

7.7 Mr Morrow continued:

To maybe give you a little bit more comfort, we have a standard clause in our contracts that requires the contractors to confirm payment of subcontractors, so it does not get hidden too far down underneath between contractors, subbie, subbie, subbie, all the way down. This was an issue, as you probably recall from years ago, that was a serious issue and hence, the reason we changed the contracts with language to offer some of these subbies some protection.<sup>7</sup>

---

4 Mr Leif Karlsson, *Committee Hansard*, 6 April 2017, pp. 12-13.

5 Correspondence from Mr Nicholas Yates, Chief Executive Officer of BSA, to the Chair of the Joint Standing Committee on the NBN, dated 26 May 2017.

6 Mr Bill Morrow, Chief Executive Officer, nbn, *Senate Environment and Communications Legislation Committee Estimates Hansard*, 25 May 2017, p. 123.

7 Mr Bill Morrow, Chief Executive Officer, nbn, *Senate Environment and Communications Legislation Committee Estimates Hansard*, 25 May 2017, p. 124.

---

### ***Workmanship by subcontractors***

7.8 A number of witnesses spoke to the committee about their concerns of the poor quality of installation work that was being done by subcontractors. At the hearing in Port Augusta, Mr Keith Green, Arid Land Communications, who has 38 years of experience in the communications industry, described some of the issues that he has seen with installations of NBN infrastructure:

...you have exposed cables, you have conduit doing really weird things, you have penetrations of asbestos and you have a cable box mounted at chest height with the cables exposed where they can just be grabbed by anybody.<sup>8</sup>

7.9 Mr Michael Schuman, Chief Information Officer at Townsville City Council, also referred to concerns that he had about the standard of work by subcontractors:

That last bit of connectivity from where it hits your premises to where it terminates at the box inside your home is all done by subcontractors. We have had reports that the quality of those subcontractors is shoddy...I can go to somebody else's house and see galvanised staples, where they have taken a piece of optical fibre and stapled it to the side of the house to get it in. Now, any time you are working with optical fibre, that is a delicate operation; stapling is not advised in the first instance, not to mention that it is very untidy and there are all kinds of opportunities for that to lead to quality issues.<sup>9</sup>

7.10 Ms Debbie Hart told the committee of the distress to her 79 year old mother as a result of the damage caused when NBN infrastructure was installed at a block of flats she owned:

She has a home and five units, so she is a self-funded retiree. In May 2016, NBN commenced work at her property. In September, a NBN agent told mum the main box had to be moved and cables had to be replaced. In November 2016, the work was semi-completed and some cabling had been relocated. As a result of the relocation, numerous holes were left in the brickwork. Mum put in a formal complaint with NBN...

NBN then sent a contractor out to repair the damage. He used silicon on the bricks to plug up the holes, which made the mess even bigger. Red and green plugs were also put in the holes.<sup>10</sup>

---

8 Mr Keith Green, Manager, Arid Land Communications, *Proof Committee Hansard*, 26 June 2017, p. 41.

9 Mr Michael Schuman, Chief Information Officer, Townsville City Council, *Committee Hansard*, 7 April 2017, p. 2. See also: Regional Development Australia Midwest Gascoyne, *Submission 25*, p. 2.

10 Ms Debbie Hart, *Committee Hansard*, 6 April 2017, p. 11.

7.11 Ms Hart described how a representative from nbn and the subcontractor met with her and her mother:

After inspecting the damage, all parties agreed that the damage that was done was unacceptable and that it would be repaired to mum's satisfaction. They then went on to explain the cabling and the box needed to be moved yet again, which meant there would be more damage and more holes to be repaired.<sup>11</sup>

7.12 Ms Hart noted that although a number of options were considered for repair of the damage, her mother would still be required to pay for part of the costs of the repair. Ms Hart summarised the result:

To date, the outcome of mum's association with NBN is as follows. She has damage to her property. She is faced with paying for something she does not want. Her health, mental and physical, has suffered. I have wasted an untold amount of time because NBN cannot get it right and are not willing to do what is fair and just. The job is still not finished, and NBN has now told my mother the boxes to the individual units have been installed in the wrong place and they will need to be moved, causing more damage.<sup>12</sup>

7.13 At the public hearing in Port Augusta, Mr Green also outlined concerns he had with the licencing of technicians, in particular that the 'quality has slipped':

The ACMA...the Australian Communications and Media Authority. We have what are called open registration cabling licences. To get them, you do a five-day training course, and you have to have 300 hours of appropriate supervised training. Anybody can falsify that. I have been to the refresher courses which we have to do on a regular basis et cetera, and a lot of the people there have no qualifications and no experience. We know that, but they will get the licence anyway.<sup>13</sup>

7.14 In response to a question on notice, the ACMA provided information about its cabling registration process. The ACMA regulates telecommunications customer cabling including the registration of cabling providers (persons that perform telecommunications customer cabling work). The ACMA advised:

The ACMA does not issue 'ACMA licences' for cabling providers nor does it directly register them. The registration process is facilitated by five registrars who have been accredited by the ACMA. Registrars are industry associations which issue cabling registrations and administer the registration process on a cost recovery basis.<sup>14</sup>

7.15 Prior to being registered, cablers must undertake appropriate training at a Registered Training Organisation (RTO), complete a mandatory written test, as well

---

11 Ms Debbie Hart, *Committee Hansard*, 6 April 2017, p. 11.

12 Ms Debbie Hart, *Committee Hansard*, 6 April 2017, p. 11.

13 Mr Keith Green, Arid Land Communications, *Proof Committee Hansard*, 26 June 2017, p. 44.

14 Australian Communications and Media Authority, answers to questions on notice, 1 August 2017 (received 23 August 2017), Question no. 11, p. 1.

---

as provide evidence of having completed the required minimum hours of practical on-the-job cabling experience. The training provided by the RTO also requires students to undertake some practical cabling work in the classroom environment.<sup>15</sup>

7.16 Further to this, the ACMA advised:

The cabling training requirements have been endorsed by the telecommunications industry and, in the absence of compelling evidence to the contrary, the ACMA has accepted to date that this training is fit for purpose. Any person successfully completing this training should have acquired the necessary skills in order to undertake the type of cabling work required for the cabling registration type they are seeking.<sup>16</sup>

7.17 The ACMA went on to advise:

The ACMA does not have jurisdiction to regulate carrier network telecommunications cabling, that is, telecommunications cabling on the carrier side of the network boundary point (NBP). Requirements for cabling that occurs on the carrier side of the NBP is specified and controlled by the relevant individual carrier.

In the NBN environment, the NBP is the network termination device (NTD) which is located within the end-user's premises. This means that the Cabling Provider Rules only regulate the cabling that occurs beyond the NTD. In practice this is the telecommunications cabling within the end-user's premises.<sup>17</sup>

7.18 In contrast, Ms Rosalie Nelson, Head of Insight for Chorus NZ, provided the following information about the customer experience in relation to subcontractors in New Zealand:

There has been a lot of work that has been done around the training programs, and we can definitely see when you have had an influx of new subs come in and then what that looks like. I do not have the detail of what we are doing with all of the subcontractors, but the one thing that I actually would note is that for a lot of the households the technician is something of a hero because they come along, they front up and they explain all of this complex stuff. So many people do not know anything about what is really happening, and we typically find that the technician satisfaction rates, when we ask them a number of things like were they well presented, did they communicate, did they do what they said they would—all of those sorts of

---

15 Australian Communications and Media Authority, answers to questions on notice, 1 August 2017 (received 28 August 2017), Question No. 2, p. 1.

16 Australian Communications and Media Authority, answers to questions on notice, 1 August 2017 (received 28 August 2017), Question No. 2, p. 2.

17 Australian Communications and Media Authority, answers to questions on notice, 1 August 2017 (received 28 August 2017), Question No. 11, p.2.

things—are often up in the eights. They score eight out of 10, so they actually do score pretty well.<sup>18</sup>

7.19 Further, Mr Kurt Rodgers, also representing Chorus NZ, noted the work that the company had done in relation to providing training for subcontractors:

I would like to add that, from an engineering perspective, in my area we have active co-development programs where our engineering team produce the deployment standards and the collateral videos and documents. We have moved really to try to simplify, for the technology solution, all the complexities inside it. So it has become a very low craft, sensitive job to do the installation. We provide all this collateral and training and we regularly work with the service company leadership teams, and we have people going out mentoring people as well. So, while we self-contract, we are hand in hand at the engineering level with our subcontractors to ensure that we are delivering the collateral they need to do a simple but good-quality job.<sup>19</sup>

### *Committee view*

7.20 The NBN is, among other things, an extraordinarily large and complex construction project. It was always likely that the kinds of risks which exist in the construction industry more widely would be present in the rollout of the NBN.

7.21 The committee understands the view put forward by nbn that responsibility for subcontracting arrangements lies between the delivery partner and the subcontractor. However, the evidence presented to the committee in relation to this issue is serious and concerning. While the matter of non-payment of contractors appears, at this stage, to be uncommon, the evidence in relation to the poor workmanship of subcontractors was widespread.

7.22 The committee believes it is particularly invidious for low-quality workmanship and unfair contracting arrangements to occur within a project that is, in effect, funded, managed, and supervised by the Commonwealth.

7.23 The committee has been unable to discern any particular systems that were in place on a project of this scale to ensure that workmanship would be carried out to an acceptable standard, and that subcontracting arrangements would be fair and effective

7.24 The committee intends to pursue this matter through the next year of the inquiry.

### **Recommendation 22**

**7.25 The committee requests that nbn review and provide advice to the committee on its processes and conduct with regard to the engagement, training, coordination and dispute resolution with subcontractors, in accordance with global best-practice.**

---

18 Ms Rosalie Nelson, Head of Insights, Chorus NZ, *Proof Committee Hansard*, 23 June 2017, p. 8.

19 Mr Kurt Rodgers, Network Strategy Manager, Chorus NZ, *Proof Committee Hansard*, 23 June 2017, p. 8.

## Market and regulatory characteristics

7.26 As outlined in the *Corporate Plan 2017*:

...nbn has been structured as a wholesale-only, open-access broadband network available on equivalent terms to all access seekers. This is intended to level the playing field in Australian telecommunications, creating real and vibrant competition within the industry.<sup>20</sup>

7.27 The committee heard evidence that the establishment of nbn as a wholesaler and the regulatory framework which sets out the pricing structure for NBN services for RSPs is impacting on the operation of the network and impeding the take up of higher speed plans.

### *NBN pricing structure*

7.28 On its website, nbn lists a number of objectives that underpin pricing of their products including: to deliver a wholesale service that will provide an appropriate return to Government, maintaining uniform national wholesale access pricing, fostering competition, innovation and flexibility in the market.<sup>21</sup>

7.29 nbn sells wholesale access to its network to RSPs who then sell internet and phone services to customers.

7.30 There are two prices charged by nbn to RSPs to access the network: the Access Virtual Circuit (AVC) and the Connectivity Virtual Circuit (CVC).

7.31 The AVC is a fixed monthly fee for each RSP end-user. The AVC charge is determined by the maximum bit rate requested by the RSP. Currently, the most common bit rate requested is 25Mbps down and 5Mbps up and costs the RSP \$27/month.<sup>22</sup>

7.32 The CVC charge paid by the RSP depends on the capacity that the RSP wants to flow between the RSP's network and the nbn's network at the point that the two networks connect (the Point of Interconnection). One description often used when explaining the amount of CVC purchased by RSPs is the 'thickness of the pipe that determines the maximum amount of water flowing through'.<sup>23</sup>

7.33 The maximum prices that nbn can charge RSPs for AVC and CVC are regulated under a Special Access Undertaking (SAU). The SAU is assessed and approved by the ACCC. The current SAU was approved by the ACCC in 2013.

---

20 nbn, *Corporate Plan 2017*, p. 7.

21 nbn, *Our pricing approach*, <http://www.nbnco.com.au/sell-nbn-services/products-services-pricing/our-pricing-approach.html>.

22 Mr Bill Morrow, Chief Executive Officer of nbn, *Why are data speeds sometimes lower than what consumers were expecting? Is nbn to blame with its infamous CVC charge?*, Position Paper, 1 August 2017, p. 2.

23 Mr Bill Morrow, Chief Executive Officer of nbn, *Why are data speeds sometimes lower than what consumers were expecting? Is nbn to blame with its infamous CVC charge?*, Position Paper, 1 August 2017, p. 2.

7.34 In accordance with Part XIC of the *Competition and Consumer Act 2010*, the ACCC is required to assess the SAU against a number of principles. Fundamentally, customers should not be worse off when migrating to the NBN from legacy copper and HFC networks.

7.35 At the public hearing in Melbourne, Mr Michael Cosgrave, Executive General Manager, Infrastructure Regulation Division, ACCC, explained that a key driver of the AVC-CVC construct was to ensure that 'consumers not be subject to price shock'.<sup>24</sup> Specifically, 'prices for entry level NBN services should be broadly comparable to functionally equivalent legacy services'.<sup>25</sup>

7.36 Another consideration for the ACCC to assess the AVC and CVC charges relates to the capacity for nbn to generate revenue:

The ACCC also considers that NBN Co has incentives to price its products to encourage uptake of higher value services and increase revenue. End-users who value higher value services that cannot be provided by legacy infrastructure are likely to pay higher prices for those services.<sup>26</sup>

### ***How does CVC affect the customer experience?***

7.37 In a position paper published on 1 August 2017, Mr Morrow explained the CVC charge in more detail, noting that the practical impact of RSPs not purchasing enough CVC is constraints to the speed available to customers during peak times:

While the amount of CVC purchased limits the total volume of data being passed between the two networks, the more practical impact of not purchasing enough will constrain the observed speed during busy traffic times.<sup>27</sup>

7.38 In a situation where more customers are added to an RSP's network, or the average speed or consumption changes, without an increase in CVC capacity, service quality will be affected.

As more end-users are added, or as the average speed and consumption increases, the network carrier will need to spend more money to add capacity OR accept the speed offered to the enduser will degrade during the busy period of the day. This trade-off has existed since the industry was established and is not specific to nbn's or the RSPs' networks...If RSPs don't dimension their own network with enough capacity, if they don't purchase enough CVC flow through at peak time, or if nbn has not

---

24 Mr Michael Cosgrave, Executive General Manager, Infrastructure Regulation Division, Australian Competition and Consumer Commission, *Committee Hansard*, 19 April 2017, p. 58.

25 Australian Competition and Consumer Commission, answers to questions on notice, 24 March 2017, (received 9 June 2017), p. 3.

26 Australian Competition and Consumer Commission, answers to questions on notice, 24 March 2017, (received 9 June 2017), pp. 3–4.

27 Mr Bill Morrow, Chief Executive Officer of nbn, *Why are data speeds sometimes lower than what consumers were expecting? Is nbn to blame with its infamous CVC charge?*, Position Paper, 1 August 2017, p. 2.



---

dimensioned its network with enough capacity, service will degrade at peak time.<sup>28</sup>

7.39 At the public hearing in Sydney, Mr Morrow argued that, because there is so much competition in the market, from both incumbent RSPs as well as new entrants to the market who are all selling essentially the same service, RSPs must compete aggressively on price if they are going to increase market share. This situation means that RSPs are being forced to cut costs:

When you have that kind of price competitiveness in the market, there is no choice if you want market share—meaning a higher percentage of customers from the homes that we open up in an RFS area—but to continue down this path of price competition. That squeezes their margins, because the consumers, at the same time, are increasing their usage over time, which means it costs more for networks to be built, and cost recovery is required there. When you have this margin squeeze that occurs, they're left with either cutting their labour costs, cutting their building costs, cutting their advertising expenses or cutting the CVC expense, which they can actually manipulate with NBN and control on a day-to-day basis.<sup>29</sup>

7.40 Mr Morrow explained that despite a 25 per cent reduction in the CVC charge over the last two years, RSPs are still under pressure because of the over-competitive market:

Every one of these retailers understands our pricing structure, and we have had a massive reduction in the price over the last couple of years, from a [CVC] price of \$20 per unit to an average of about \$14.50—a reduction of more than 25 per cent over that period of time—but they are under greater pressure because of this phenomenon associated with an overheated, over competitive market.<sup>30</sup>

7.41 Mr Morrow was of the view that the over-competitive market is becoming destructive. Further to this, Mr Morrow explained that the CVC price reduction may result in some of the smaller RSPs leaving the market:

Because, quite frankly, the price reduction will force the little guys that can't make the money and don't have the scale and lower cost structure out. They won't make any money and will have to leave the market, so that 100 [current RSPs] shrinks down to a reasonable level. Similarly, if it goes down to one or two, the profit margins get big, and that attracts other people to come in, and that's why that equilibrium occurs.<sup>31</sup>

---

28 Mr Bill Morrow, Chief Executive Officer of nbn, *Why are data speeds sometimes lower than what consumers were expecting? Is nbn to blame with its infamous CVC charge?*, Position Paper, 1 August 2017, p. 2.

29 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 41.

30 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 41.

31 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 63.

7.42 Mr Morrow explained that some of these issues will balance out once the rollout is complete:

There is a market dynamic, a free-market issue, that I will elaborate on... With this price war phenomena and the 100,000 new homes of inventory every week, with 100 providers that can resell this service, with this need for market share because of the economy of scale and business, you've got this very unique phenomenon that says: 'I've just got to run and I've got to offer the most competitive price, because that's what's going to pull me on board. I'll think about whether they're on the right plan later.' That is in some cases. Once we stop introducing 100,000 new homes of inventory every week and we balance out and are near at the end of the rollout, you are going to say, 'All right, fine. Two things are going to happen. One is that there is not much new inventory, and now I just want to go after my competitors' customers and see if I can't pull them over to me. Now I've got to differentiate in different ways, with perhaps more quality.' Can we wait until 2019 or 2020 for this to start to ramp down for that to occur? I don't think so, and I don't think we have to.<sup>32</sup>

7.43 In terms of consumers being willing to pay higher prices, Mr Morrow, stated:

We have conducted our own research. We have third-party companies that specialise in this area to be able to advise us as to what consumers would be willing to pay. No-one wants to pay more than they have to, so that's just normal consumer behaviour, but the fact is that, if consumers knew what they were getting and the options available to them, we see a propensity that they would be willing to pay more.<sup>33</sup>

7.44 Mr Morrow emphasised that customers are willing to pay for quality, especially if they have a good understanding of the service being offered:

... people are willing to pay for quality, and if you explain that quality to them they will come on board and buy this service. But it is difficult in a competitively intense environment like what we have right now.<sup>34</sup>

7.45 Mr Morrow provided examples of RSPs who are now providing more information to customers about the speeds that may be available at different times of the day.

...there are a couple of RSPs out there...that have recently changed their comms [communications] plans and are now talking ranges with their consumers. That's exactly the conversation that needs to happen because, in some way, we—and I'm going to say NBN Co is at fault here too—have put out this view that you can buy 25, 50 or 100 megabits per second without saying, 'That's a peak information rate, not a guaranteed 24-hour-a-day,

---

32 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 63.

33 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 42.

34 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 42.

every-minute-of-the-day rate that you're going to be observing.' Hence the reason why these retailers...are starting to change that conversation out there and saying: 'It will range. You'll peak at 25 megabits per second, but you may drop down to 15 megabits per second or maybe to 10 megabits per second. Is that good enough for you at this price point? If not, maybe I have an upgraded product where I can give you more certainty—call it the bottom end of my speed delivery—that that will be increased because you're going to pay \$5 more a month, \$10 more a month or whatever it is I have on offer'.<sup>35</sup>

7.46 On the question of whether the market will respond by itself or will action by the ACCC be required, Mr Morrow stated:

I think it is multi-tier. First of all, I think our [RSPs] are realising that this is creating more of a problem than just getting the market share, so they want to do more. You see TPG saying, 'I'm going to start talking about range'; [of speed on a plan] you see Aussie Broadband saying, 'I've have provisioned a massive amount of CVC because I want your busy hour of the day to have this minimum service level.' You're seeing Telstra and Optus start to think about this as well. By doing so, the market may actually respond on its own. When you hear the ACCC saying, 'I want to put some speed monitoring devices out there', that catches a lot of people's attention as to whether or not they need to be clear in how they're advertising this product and, therefore, clear in the options that they give to the consumers.<sup>36</sup>

### ***Stakeholder views on the NBN pricing structure***

7.47 The majority of the evidence received about pricing related to the CVC, with particular reference to the amount charged for CVC and the impact this is having on competition and the customer experience.

7.48 In their submission, Macquarie Telecom Group (Macquarie Telecom) expressed concern that there is not an effective wholesale market for NBN services. The wholesale challenges are exacerbated by the CVC pricing model:

It is not until an RSP has a significant number of connections that it can economically purchase CVC in that area and directly connect to the PoI. Through this period of attaining scale, the RSP is reliant on a wholesale aggregation service which, in turn, makes customer acquisition highly problematic and uneconomical.<sup>37</sup>

7.49 The Queensland Government is concerned that increases in the wholesale charges to retail service providers are increasing costs to consumers and business without a commensurate increase in service performance.<sup>38</sup>

---

35 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 62.

36 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 64.

37 Macquarie Telecom Group, *Submission 10*, p. 2.

38 Queensland Government, *Submission 21*, p. 9.

7.50 In its submission, Vodafone Hutchison Australia (Vodafone), stated:

NBN's wholesale pricing arrangements discourage RSPs from offering their customers the faster speeds that the NBN is capable of delivering...The amount of CVC an RSP purchases is one of the most significant influences on the quality of the service experienced by that RSP's customers. The current structure of this CVC pricing penalises RSPs for provisioning higher guaranteed capacity and therefore more consistent guaranteed performance for their customers.

The fixed AVC monthly charge increases steeply for higher speed plans. This, combined with higher CVCs to guarantee the higher throughput customers would expect on higher speed plans, means that the pricing model discourages RSPs from offering higher speed data plans.

7.51 At the public hearing in Sydney, Mr Dan Lloyd, Chief Strategy Officer and Corporate Affairs Director, Vodafone spoke about the CVC charge in more detail:

We fully understand NBN's need to deliver a rate of return to government, and we've put forward in NBN's current consultation on the CVC what we think is a very practical way forward, which is to substantially reduce the CVC—we have proposed halving the CVC rates—but to balance that with an increase in the AVC so that NBN still gets the wholesale revenue that it needs. It said \$44 a month, currently, rising to \$52 a month in 2020. We believe that can be achieved through a model that has a higher fixed access charge and a lower variable component, so RSPs aren't facing such a massive risk in buying more capacity at the most congested times of the network.<sup>39</sup>

7.52 Mr Lloyd explained that there is a fear amongst RSPs about purchasing more CVC. Part of this fear relates to the difficulty to communicate to consumers, in an environment where there is a high number of RSPs selling the same product, that an increase in cost is due to a higher quality product/experience.<sup>40</sup>

7.53 Mr Lloyd went on to suggest that a readjustment of the pricing model is required to 'maximise the potential of nbn to provide higher and higher services':

If we look at New Zealand, for example, which has a fixed monthly charge—and so it's entirely AVC, to use that terminology—we see in areas where fibre is available people are overwhelmingly—about 80 per cent of people—purchasing 100 megabits per second, whereas with NBN 80 per cent of customers are on 25, five or below. We think there is some evidence that that a more stable charging model that doesn't bring that fear of

---

39 Mr Dan Lloyd, Chief Strategy Officer and Corporate Affairs Director, Vodafone Hutchison Australia, *Proof Committee Hansard*, 1 August 2017, p. 1.

40 Mr Dan Lloyd, Chief Strategy Officer and Corporate Affairs Director, Vodafone Hutchison Australia, *Proof Committee Hansard*, 1 August 2017, p. 4.

purchasing more capacity is the best way for the industry to move forward.<sup>41</sup>

### ***Changes to pricing announced in 2017***

7.54 On 17 February 2017, nbn announced that it would change CVC pricing to a 'new discount model', which would take effect from 1 June 2017:

The new model...calculates the discount based on individual retailer averages, as opposed to an industry average. It automatically reduces the price of CVC as the average amount of CVC per end user increases.<sup>42</sup>

7.55 nbn explained that the new model will 'further enhance RSPs ability to manage service quality provided to their end users':

This model enables RSPs, both small and large, to have greater control over their service experience and the cost related to that experience. It's up to each individual RSP to make a judgement call on how much CVC at a Point of Interconnect it should buy to service its users in that area.<sup>43</sup>

7.56 Under the industry average model retailers had been paying \$15.25/Mbps per CVC unit but under the new model they will be able to achieve discounts based on how much CVC they purchase per end-user. According to nbn:

The new model enables retailers to differentiate their offerings to consumers, which will help promote competition and a wider choice of broadband plans.<sup>44</sup>

7.57 As noted earlier there has been a reduction in the CVC charge over time from \$20 in June 2015 to the current average of \$14.40Mbps per end user. Mr Morrow explained the reductions to the CVC charge in more detail:

It's entirely up to each of the nation's 45 RSPs as to how much of that bandwidth they choose to allocate among their end-users. With the recently

---

41 Mr Dan Lloyd, Chief Strategy Officer and Corporate Affairs Director, Vodafone Hutchison Australia, *Proof Committee Hansard*, 1 August 2017, p. 4, See also Mr Kurt Rodgers, Network Strategy Manager, Chorus NZ, *Proof Committee Hansard*, 23 June 2017, p. 8 who explained that NZ telecommunications carriers decided that the AVC-CVC pricing model was overcomplicated and would create barriers to drive bandwidth usage.

42 nbn, 'New CVC pricing model to drive enhanced broadband service', *Media Release*, 17 February 2017, available at: <http://www.nbnco.com.au/corporate-information/media-centre/media-releases/New-CVC-pricing-model-to-drive-enhanced-broadband-service.html>.

43 nbn, 'nbn's new CVC pricing model set to help improve consumer experience', *Blog post*, 5 July 2017, <http://www.nbnco.com.au/blog/the-nbn-project/nbns-new-cvc-pricing-model.html>.

44 nbn, 'Discounting model set to help improve consumer experience', *Media Release*, 1 June 2017, available at: <http://www.nbnco.com.au/corporate-information/media-centre/media-releases/nbn-launches-new-cvc-pricing-model.html>.

introduced pricing scheme, the more CVC the RSP allocates per end user the more their price/unit decreases and can go as low as \$8/Mbps.<sup>45</sup>

7.58 nbn has reported that between February, when the new discounting model was first announced, and June, there was an 11 per cent increase in CVC purchased per end user on average on the network.<sup>46</sup>

7.59 Ms Caroline Lovell, Chief Regulatory Officer, nbn explained that there is scope within the current SAU for nbn to 'rebalance' the AVC and CVC pricing depending on the 'nature of the rebalance'. The price changes announced in February 2017 have been implemented within the scope of the existing SAU. Broader changes would require nbn to submit a variation to the SAU to the ACCC for assessment under the statutory framework.<sup>47</sup>

7.60 In relation to the changes to the CVC charge announced in February 2017, Vodafone submitted that whilst the changes did represent some improvement to CVC pricing, further consideration should be given to other charging models:

NBN Co. has recently announced some improvements to its CVC pricing which give RSPs some discount if that RSP purchases more CVC capacity and therefore guaranteed minimum performance per customer. However, the discount is relatively modest and is unlikely to provide a substantial incentive to migrate customers to the higher speed plans. As NBN Co. acknowledges there needs to be further consideration of either more substantial discounts or even a move to different charging models.<sup>48</sup>

7.61 At the public hearing in Sydney, Mr Morrow told the committee that the company is constantly reviewing the pricing structure in consultation with industry:

There is a perpetual one; it is always underway; we are always looking at new ways to do this. When this management took over a bit over three years ago, the price was set at \$20; it was fixed; there was no dimension, no scaling. We introduced a dimension based structure; that was an industry wide average. Subsequently we introduced a regional 'by RSP' dimension based structure. These things go through a very well spelled out agreed process and have a long cycle time. Even though it was only on 1 June that we had the newest pricing regime put in place, we immediately began

---

45 Mr Bill Morrow, Chief Executive Officer of nbn, *Why are data speeds sometimes lower than what consumers were expecting? Is nbn to blame with its infamous CVC charge?*, Position Paper, 1 August 2017, p. 2.

46 nbn, 'nbn's new CVC pricing model set to help improve consumer experience', *Blog post*, 5 July 2017.

47 Ms Caroline Lovell, Chief Regulatory Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 51. The committee notes that the ACCC is currently considering a variation to the SAU from nbn. This variation is not related to the CVC charge and the ACCC review process is ongoing.

48 Vodafone Hutchison Australia, *Submission 47*, pp. 3-4.

---

talking about what else we should be thinking about. So that has been underway since then.<sup>49</sup>

### ***Potential impact of further pricing changes***

7.62 nbn's *Corporate Plan 2017* forecasts a base case peak funding of \$49 billion (within a forecasted range of \$46 billion to \$54 billion) with an expected internal rate of return (IRR) of between 3.2 per cent and 3.7 per cent.<sup>50</sup>

7.63 The committee sought information from nbn about when information about the potential impact of pricing changes on the IRR, peaking funding and forward projections would be available, in the event that changes are made to the nbn pricing structure after the *Corporate Plan 2018* is published. Mr Morrow confirmed that these sorts of updates would be provided in the *Corporate Plan* the following year.<sup>51</sup>

### ***Committee view***

7.64 The committee recognises the importance of prices being set by nbn to generate revenue, and encourage competition in the market, and notes the evidence from nbn that they undertake pricing reviews on a perpetual basis to ensure that the pricing structure is appropriate.

7.65 The committee notes the different approach taken by Chorus NZ which applies a flat access charge, and where 90 per cent of new customers are taking 100 Mbps plans with unlimited data, and there are more 13,500 premises with gigabit connections.

7.66 The committee notes the concerns raised by witnesses and submitters about the wholesale market and in particular the CVC. The pricing changes implemented in June 2017 are already showing positive results with an 11 per cent increase in CVC purchased per end-user on average on the network between February and June 2017.

7.67 The committee notes that analysis and discussion about the nbn pricing structure will be ongoing, and believes it is one of the key topics that should be considered closely in the next annual report, along with careful consideration of the nbn business model as a whole.

---

49 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 42.

50 nbn, *Corporate Plan 2017*, p. 54.

51 Mr Bill Morrow, Chief Executive Officer, nbn, *Proof Committee Hansard*, 1 August 2017, p. 46.

