

REGULATION IMPACT STATEMENT FOR EARLY ASSESSMENT

Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014

Overview and Introduction

Since the early 2000s and the rapid rise of the Internet and broadband as platforms for the digital economy and online society, successive Australian Governments have grappled with the issue of how to achieve investment in next generation broadband networks capable of supporting future user needs. In parallel with this question, they have had to grapple with how this can be done in a manner that maximises competition recognising that much of the telecommunications customer access network, the last mile connection to individual customers which needed to be upgraded, has strong monopoly characteristics. This means that the firm controlling that network has significant market power, in terms of denying access to would-be competitors and potentially favouring its downstream operations over those of would-be competitors who gained access but had to compete with it. In Australia this meant Telstra, which owns the majority of access infrastructure. These issues would be compounded in the rollout of next generation broadband because if the logical upgrade path was followed, to fibre-to-the-node (FTTN), Telstra's market power would be further enhanced. This is because if FTTN is to operate at optimal levels it eliminates the ability of competitors to operate their own DSLAM equipment from Telstra's exchanges and it would generally not be cost-effective to install competing equipment in suburban nodes. This issue has been further compounded by the introduction of vectored VDSL2 for use with FTTN networks as optimal performance from vectoring can only be achieved if the lines servicing customers are operated by a single provider, who can manage interference problems.

To address these dual problems – of investment in next generation broadband and maximising competition – competitive proposals were initiated by the Howard and Rudd Governments. In September 2007, then Minister for Communications, Helen Coonan, sought proposals for the rollout of an FTTN network, supported by appropriate regulatory change. This process was terminated following the 2007 election. In April 2008, then Minister for Communications, Stephen Conroy, sought proposals for an FTTN or FTTP network, supported by funding of up to \$4.7 billion and appropriate regulatory change. This process was terminated in April 2009 after the assessment panel found that none of the proposals received offered value for money.

In light of these outcomes, in April 2009 the then Rudd Government announced it would establish a company, NBN Co, to build and operate a new National Broadband Network (NBN). The NBN would address the issue of investment in next generation broadband by being a predominantly FTTP network. It would address competition issues by operating on an open access, wholesale-only and non-discriminatory basis. To address long-standing concerns about Telstra's ability and incentive to favour its own downstream operations over those of other access seekers, the then Government had the Parliament pass legislation that

would require Telstra to functionally separate unless it chose to voluntarily structurally separate. Telstra chose to structurally separate by migrating its business to the NBN.

In this environment, in March 2011 the Parliament also enacted legislation (Parts 7 and 8 of the *Telecommunications Act 1997* – ‘the Act’) to require new networks that were to provide download speeds on more than 25 Mbps (‘superfast networks’) to residential and small business customers to operate on an open access, wholesale-only and non-discriminatory basis. The networks were also required to offer a Layer 2 [bitstream] wholesale service. These requirements were very similar to those applying to NBN Co and were designed to ensure that, having made the significant structural changes to the industry inherent in the construction of the NBN and the structural separation of Telstra, they were not undone by other new networks operating in the same way that had previously given rise to concerns (i.e. closed, vertically integrated, discriminatory, conflicted, self-preferring). As such the rules can and should be seen as seeking to pre-empt the kinds of structural problems that have plagued the wholesale customer access market in the past.

In reality the Part 7 and 8 rules support competition in two ways. First, they mean that wholesale-only network operators are not unfairly disadvantaged in offering their services by having to compete with vertically integrated providers. Second, they mean service providers who do not (or cannot, in the case of Telstra) own certain network assets are not disadvantaged by having to compete with other operators who own their own networks and can advantage themselves over their competitors.

While Parts 7 and 8 do not apply to ‘superfast networks’ existing before the rules took effect on 1 January 2011, their general policy objective is to apply NBN-consistent disciplines to new superfast networks. ‘New’ networks here included certain extensions and upgrades to networks that existed before 1 January 2011. However, Parts 7 and 8 included certain exemptions to minimise disruption to existing investments. Networks that were already capable of supplying superfast carriage services could, for example, be extended by less than 1km.

The Part 7 and 8 rules also had the effect of creating for NBN Co a more level playing field with which it could compete with any other comparable networks. This would have helped it in maximising its revenue, helping it to cross-subsidise services which it was required to provide in high-cost regional, rural and remote areas at a nationally uniform wholesale price. However, this was a secondary consideration and the provisions would not necessarily be sufficient to achieve this outcome. As noted in the Explanatory Memorandum to the provisions, if strong competition emerged, consideration would need to be given to a levy arrangement to fund those services on a competitively neutral basis.

Following its election in September 2013, the Abbott Government confirmed its commitment to the structural separation of Telstra and the rollout of the NBN, although it has directed NBN Co to adopt a faster and more efficient multi-technology mix (MTM) in rolling out the network. Again, the Government is seeking to achieve the twin objectives of providing access to better broadband and maximising competition.

On 17 September 2013 TPG Telecom announced plans to deploy a fibre-to-the-basement (FTTB) broadband network to an initial tranche of 500,000 residential and small business premises in five mainland capital cities (Brisbane, Sydney, Melbourne, Adelaide and Perth). It plans to do so by using the PIPE fixed-line fibre network which it acquired in November 2009. The network will offer very high-speed digital subscriber line (VDSL) services that can support download transmission speeds of more than 25 mbps. In this case the network will offer a newer version of VDSL, known as vectored VDSL2. The premises to be connected will mostly be within multi-dwelling units or multi-premises business centres, which will currently have in-building cabling and existing services supplied over Telstra's copper network. TPG's rollout would, in effect, replace Telstra's network at the basement of the building (if the building owner agrees) and then connect to existing in-building cabling.

TPG commenced supplying retail services over this network in September 2014. It is offering a service that is clearly a superfast carriage service, with a download transmission speed of between 50 Mbps and 100Mbps service over the network.¹ TPG has said it will provide a wholesale service over its network, but has not provided further details. It is not operating on a wholesale-only basis.

The ACCC has examined the compliance of the TPG network with the requirements of Parts 7 and 8. The ACCC has concluded that the network is not captured by the rules because its network was already capable of being used to supply superfast carriage services to small business customers before 1 January 2011 and is not being extended at any point by more than 1km.

While the immediate issue arises with TPG's proposed network rollout, there is the possibility that other carriers may propose networks such as that proposed by TPG.

On 11 September 2014 the ACCC announced that it would commence a declaration inquiry into whether a superfast broadband access service like the type to be provided by TPG over its fibre-to-the-basement networks should be the subject of access regulation. The inquiry will consider whether regulation is necessary to ensure that consumers in TPG-connected buildings can benefit from competitive retail markets for high-speed broadband services.

In light of the decision by the ACCC, the Government is concerned that the competition objectives that Parts 7 and 8 were designed to achieve will not be achieved. Declaration by the ACCC of services on the network and comparable networks may address issues of access. However, the declaration process is long and uncertain. Moreover, it will not address the fundamental issue Part 8 is intended to address, namely the operator of a new superfast network having the incentive and ability to favour its own downstream retail activity over those of other competitors.

In this context on 11 September 2014, the Minister for Communications announced that he was proposing to consult industry on a new telecommunications licence condition, which would apply to all carriers. The licence condition would require owners of high-speed

¹ <http://www.tpg.com.au/fttb>.

networks affected by the ACCC's declaration process to functionally separate their wholesale operations, and to provide access to competing service providers on the same terms as it is provided to their own retail operations. This licence condition would remain in place for two years. Effectively, the licence condition would seek to close the gaps in Parts 7 and 8 that have been identified by TPG's actions and the ACCC's decisions, while the Government considers longer-term options.

This regulatory impact statement addresses the Minister's proposal to consider a new licence condition.

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Problem definition and the case for action

Defining the problem

In making Parts 7 and 8 of the Act, the Parliament has set out a clear statement of policy on superfast broadband. Parts 7 and 8 were inserted into the Act in the context of wide-ranging changes to the Australian telecommunications sector, which included significant changes to telecommunications legislation. The then Government had decided to roll out a national broadband network (NBN) as a wholesale-only network, operated by NBN Co, which was required under legislation to offer open and non-discriminatory access to all retail service providers. Strict regulatory limits were therefore placed on how NBN Co could operate. At the same time Telstra agreed to structurally separate its operations by migrating its customers onto the NBN.

These twin outcomes reflected concerns that, in the past, the fixed-line local access network could be the focus of conduct to stifle the development of competition. The majority of Australia's local access networks were owned by one carrier, Telstra, which used its networks to supply retail services. However, it used the same networks to supply wholesale services to its competitors. Those competitors did not generally have access to alternative fixed-line networks. The network owner had the incentive and ability to favour its own downstream operations over those of its competitors.²

Vertical integration can supply the owner of a monopoly network with strong incentives to undermine retail-level competition.

After all, if there is a profit to be made at the retail level, the network owner would like to keep that profit for itself. If it is unable to do this by raising the network access fee to a monopoly level, then it will be tempted to undermine its retail competitors by reducing the quality of access services. As Australia's recent experience of telecommunications regulation shows, it is difficult, if not impossible, for a regulator to prevent such discrimination by an integrated network operator.³

The rollout of the NBN was intended to address vertical integration by delivering a level playing field for retail providers, with NBN Co being required to offer services on a wholesale-only, non-discriminatory basis.

Any rollout by a carrier of vectored VDSL2 re-opens the competition concerns that the NBN and the structural separation of Telstra were intended to address. The particular issue of

² By contrast, the general access regime in part IIIA of the *Competition and Consumer Act 2010* prohibits access price structures which allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher: see paragraph 44ZZCA(b).

³ J. S. Gans and S. P. King (2010), 'Big Bang' Telecommunications Reform. *The Australian Economic Review* 43(2), p.182. The Competition Policy Review (*Draft Report September 2014*, p.118) has also made the point that the absence of structural separation in telecommunications, and reliance on third-party access to a vertically integrated provider's network, 'has seen less fixed-line retail competition in telecommunications than might have been expected'.

concern is whether, when vectored VDSL2 rollouts are in place, the normal operation of the market would ensure benefits for consumers. End-users are more likely to receive benefits – such as lower prices and innovation – where there is the competitive supply of services. Such services can be delivered through separate access networks connecting to the same premises, or through services supplied by more than provider over a single access network. Generally speaking, where separate networks connect to the same premises, this will promote competition.

Technical and financial issues, however, will mean that only one fixed-line vectored VDSL2 network is likely to be connected to multi-dwelling units and business centres. In a submission to the Independent Cost-Benefit Analysis and Review of Regulation in March 2014, the industry representative body, Communications Alliance, pointed out that any local access network supplying services using vectored VDSL2 will only function at its maximum capacity if there is a single operator:

To reap the maximum performance benefits of vectoring and prevent service instability (e.g. dropouts) no more than one provider can offer vectored services within each cable sheath. This effectively means that there can only be one provider of VDSL2 network services in a node serving area or within a multiple dwelling unit or business centre development. This could be a wholesale-level provider, giving the opportunity for open access to enable other providers to offer services through the node.⁴

The technical performance of a vectored VDSL2 network is optimised if only a single carrier connects fixed-lines from a node to premises and then accesses internal cabling in those premises. There will be a clear advantage for any carrier that is the first to connect vectored VDSL2 to a multi-dwelling unit or business centre. That carrier would have first access to the internal cabling. Although a second carrier could conceivably seek to deploy vectored VDSL2 from the same node and use the same cable sheath, this would lead to a significant reduction in technical performance for all vectored VDSL2 networks running from that node. Building owners are unlikely to agree to allow a second carrier to connect equipment on this basis, because tenants are unlikely to want premises offering inferior quality services.

A carrier could connect its own fixed-line network to a building to which another carrier already supplies vectored VDSL2 by deploying an alternative technology, such as HFC or FTTP. However, in this case it would face significant additional costs. The costs of deploying new fibre cabling within apartment buildings are between \$450 and \$500 more per apartment than deploying fibre to the basement and using the existing in-building cabling.⁵ Any carrier deploying alternative network technologies may, therefore, be unable to recover its costs and compete with the vectored VDSL2 provider on price.

⁴ Communications Alliance (2014), 'Industry Paper on FTTN and VDSL2 Regulation.' Submission to the Independent Cost-Benefit Analysis and Review of Regulatory Arrangements for the NBN *Regulatory Issues Framing Paper*, p3.

⁵ NBN Co (2013), *Strategic Review December 2013*, p.87.

Given these issues, in a separate submission to the Independent Cost-Benefit Analysis and Review of Regulation, the ACCC noted that ‘the effective use of *vectoring*, and the accompanying higher data rates, requires a sole (monopoly) supplier. There may therefore be a need to reconcile technical difficulties with the objective of promoting competitive outcomes’.⁶

A carrier that has connected a vectored VDSL2 network to premises does not have a statutory monopoly on access to those premises. However, the technical issues outlined above, and the resulting extra costs, mean that other service providers will be unlikely to duplicate the carrier’s network. In practice, therefore, where a carrier is the first provider to roll out a vectored VDSL2 network to a building it may enjoy an effective monopoly on the supply of fixed-line infrastructure to that building.

Tenants in the building would still have access to alternative technologies such as wireless or mobile broadband. Those technologies are adequate for many consumer needs, but wireless and mobile technologies may not provide sufficient speed or bandwidth for business uses, and residential users may also consider that the low download limits (and corresponding high cost of usage over the download limit) of mobile technologies is less attractive than fixed-line technologies (which currently include unlimited download plans).

The advantages that a vertically integrated provider has would be reduced if it chooses to, or is required to, supply wholesale services so that other providers can access its network and supply competitive services to end-users. It is possible that the ACCC’s declaration inquiry could result in the ACCC determining that it would be in the long-term interests of end-users for carriers with vectored VDSL2 networks to supply a wholesale service to other retail providers. However, the declaration process can take up to one year to complete, and the result is uncertain.⁷ Moreover, the declaration process cannot ensure that vectored VDSL2 providers operate on a wholesale-only basis or supply wholesale services on a non-discriminatory basis.

Should the ACCC declare access to a service, the network operator (‘the access provider’) must supply that service to other carriers (‘access seekers’) in accordance with Standard Access Obligations (SAOs) set out in Part XIC of the *Competition and Consumer Act 2010* (CCA).

The SAOs require an access provider to supply a service and provide interconnection to an access seeker. In complying with the SAOs the access provider must ‘take all reasonable steps to ensure that the technical and operational quality of the [service] is equivalent to that which the access provider provides to itself’.⁸ This has generally been interpreted narrowly –

⁶ ACCC (2014), *ACCC Submission to the Independent Cost Benefit Analysis Review of Regulation Telecommunications Regulatory Arrangements Paper (s.152EOA Review)*, p.21 (emphasis in original).

⁷ Under Part XIC the ACCC must first conduct an inquiry to determine whether or not to declare a service (section 152AL); this process can take up to six months. If the ACCC decides to declare a service, it may make an access determination in relation to the service. It must make the access determination within six months after it commences a public inquiry into making the determination (section 152BCK).

⁸ Paragraphs 152AR(3)(b) and 152AR(5)(d) of the *Competition and Consumer Act 2010*.

for example, ‘technical and operational quality’ may not cover many aspects of non-price terms such as timing of supply and provision of information. Furthermore, ‘equivalent’ in this section of the CCA does not mean ‘same’. Access providers are able to offer their own downstream operations quite different terms and conditions from those they offer to access seekers. The CCA therefore allows non-NBN Co providers to discriminate in favour of their own operations.

In passing Parts 7 and 8 of the Act the Parliament reached a clear decision that non-NBN local access networks used to supply superfast carriage services to residential or small business customers should replicate the NBN outcomes. That is, they should operate on a wholesale-only, non-discriminatory basis. The limited exemptions were primarily for established, pre-existing networks that were capable of supplying superfast carriage services, or for minor extensions of those networks. However, the purpose of the law does not appear to be achieved if carriers ‘repurpose’ a network that was previously capable of supplying superfast carriage services and extend it by less than 1km to target residential or small business customers.

Some industry members are concerned that a vertically integrated provider should not enjoy an effective monopoly over access to multi-dwelling units and business centres. iiNet argued that such networks should be wholesale-only and open access.⁹ Macquarie Telecom and Optus likewise argued that the 1km exemption under Parts 7 and 8 of the Act should be scrapped.¹⁰

The crux of the issue, therefore, is what action needs to be taken to ensure that carriers who were not previously supplying a large number of superfast carriage services to residential and small business customers, but who are now proposing to do so, and who are not subject to Parts 7 and 8 of the Act, supply wholesale services over their networks, and do not favour their own retail operations over those of their wholesale customers.

The case for action

TPG’s proposal is not for a limited rollout. It is for an initial rollout affecting up to 500,000 premises, which indicates that it may extend its network further (the Department estimates that TPG’s networks are within 1km of about 1.8 million premises, of which about 1 million are multi-dwelling units or business centres). The rollout is of such a scale that a significant proportion of premises in Australia will be affected. There are currently about 10 million fixed-line services in operation in Australia, and TPG’s rollout could therefore have an impact on at least five per cent of those services. Should other carriers elect to make use of the statutory 1km exemption, a substantial percentage of the population could then be covered.

⁹ iiNet (2014) *Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network. Telecommunications Regulatory Arrangements. Consultation Paper for the Purposes of Section 152EOA of the Competition and Consumer Act 2010. Submission by iiNet*, p.10.

¹⁰ Macquarie Telecom (2014), *NBN Regulatory Review*, p.4; Optus (2014), *Submission in response to Review of Regulatory Arrangements for the National Broadband Network. Telecommunications Regulatory Arrangements*, p.21.

There is therefore a risk that, in the absence of action, carriers could roll out vectored VDSL2 networks on a vertically integrated basis and re-open the competition issues that led in part to the decision to deploy the NBN and seek the structural separation of Telstra. In this context, it is worth emphasising that policy in this area does not start from a clean slate. The Government made an election commitment to complete the NBN as quickly and inexpensively as possible, and determined to retain the structural separation of Telstra and requirements on NBN Co to operate as a wholesale-only provider offering non-discriminatory access to services. With these settings in place, Government action needs to be targeted to ensuring that they continue to operate effectively.

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Overview of options

Five possible options have been identified to respond to the problem identified, although they would not all address the issues posed by the rollout of superfast local access networks targeting residential and small business customers that are not subject to sections 141 and 143 of the Act.

Option 1. Do nothing. End-users will have access to superfast carriage services, whether delivered by NBN Co or by another carrier over a vectored VDSL2 network (as explained above, it is unlikely that end-users will be offered competing fixed-line networks, given the costs and technical issues involved). Where the NBN is rolled out, retail providers will have access to a wholesale-only network supplying services on non-discriminatory terms. Where another carrier has rolled out a vectored VDSL2 network, that carrier could either supply wholesale services by choice or as a result of any declaration by the ACCC.

Option 2. Repeal Parts 7 and 8 of the Act. This would allow open competition for the provision of infrastructure to all types of customer bases. Different providers would be free to roll out local access networks in different areas of the country, on a vertically integrated or wholesale-only basis. NBN Co could compete with these providers. Part XIC of the CCA would apply, so the ACCC could declare services if it considered doing so would be in the long-term interests of end-users.

A variation to this option would be to retain Part 8 of the Act (but remove the 1km exemption), and establish a process whereby carriers could seek authorisation from the ACCC to operate on a vertically integrated basis. For example, carriers could submit undertakings to the ACCC, which could set out how a carrier proposes to ameliorate any competition issues. If accepted by the ACCC, the undertaking would effectively replace the Part 8 obligations.

Option 3. Apply the Act as intended. Amend the Act to remove the 1km exemption and references to a line that is ‘capable of being used to supply’ a superfast carriage service. New networks or local access lines were generally expected to be subject to Parts 7 and 8, and the Act should therefore be revised to capture the original intention of the legislation. A new date of effect would need to be set out (e.g. 1 January 2017). Part XIC would also continue to apply.

Option 4. The Minister could make a carrier licence condition (CLC). The CLC would apply to carriers that are not subject to sections 141 and 143 of the Act but supplying superfast carriage services to residential or small business customers (or residential customers alone). The CLC would require those carriers to establish legally- or functionally-separated retail and wholesale units, with the wholesale unit required to offer the same services to the retail unit, other carriers and service providers on the same terms and conditions. The CLC could also require carriers to offer a specific wholesale service. The CLC could be in place for a long or short period of time. It could be the mechanism of choice, or a transitional step to more permanent arrangements.

Option 5. Combine option 4 and another approach – a CLC could be an interim step while the Government considers longer-term arrangements.

A further option could include the addition of a levy mechanism as canvassed in the original Explanatory Memorandum for Parts 7 and 8 and proposed in recommendation 11 of the *NBN Market and Regulatory Report* prepared by the Vertigan panel. While the Government considers this option needs to be examined further, it has not been examined in detail as part of this process because the Government needs to take prompt action to resolve the issue at hand and such a levy mechanism would require significant analytical and developmental work.

Regulatory impacts of options

The following criteria have generally been considered in assessing the costs and benefits of the different options:

- Does the option address incentives for a vertically integrated operator to favour its own retail operations?
- Does the option impose divestment costs on a carrier?
- Does the option impose ongoing or one-off compliance costs on a carrier?
- Does the option promote the early rollout of infrastructure?
- Does the option promote longer-term competition, and thereby create opportunities for greater operational and organisational efficiency, innovation and price reductions?
- Does the option create regulatory distortions because carriers would not be subject to the same regulatory obligations?

Option 1 – Do nothing

Option 1 has the following advantages:

- Carriers will be free to make investment decisions based on the current legal framework, rather than risk having investments overturned by changes to the law.
- It allows the independent regulator to determine whether and what access services should be supplied over vectored VDSL2 networks.
- End-users may gain access to superfast broadband services more quickly, either because a carrier connects a vectored VDSL2 network before the NBN, or NBN Co re-prioritises its rollout.
- There are no ongoing or one-off divestment or separation costs.

The option has the following disadvantages:

- The option cannot ensure that a vertically integrated operator will not favour its downstream operations. The degree to which any provider favours its own operations could limit the degree to which competition provides benefits to consumers.

- For example, a vertically integrated access provider may have incentives to limit access seekers' access to information and innovative services, and to supply services at prices that favour its own operations.
- If NBN Co is to compete with vectored VDSL2 suppliers it will need to re-prioritise its existing rollout plans. It currently operates under a general direction from the Government that, where feasible, it should prioritise areas of greatest need in its rollout. The need to compete with vectored VDSL2 operators could mean that it needs to re-prioritise areas which have a less clear need for superfast carriage services, and that areas of greater need therefore must wait longer for these services.
- The option does not close a gap in the legislation that creates an artificial advantage for carriers over Telstra and other retail-only providers. Telstra is currently moving away from the supply of fixed-line services on a vertically integrated basis as required under its structural separation undertaking. However, while other providers operate on this basis, the same restrictions do not apply to other carriers, which will have incentives to create new effective monopolies where they have existing network assets.

Option 1 would not lead to any increase in compliance costs for industry on its own. An ACCC declaration inquiry could lead to changes in the nature of operations currently envisaged by carriers such as TPG, but this is an independent process.

Given the potential impacts of this option on competition and the artificial advantages created for carriers over Telstra and other retail-only providers, option 1's benefits appear to be less than its costs.

Option 2 – Repeal Parts 7 and 8 of the Act

Option 2 has the following advantages:

- It removes restrictions on carriers that make those carriers' investment decisions more complex. Carriers could be free to operate their own networks on a vertically integrated or wholesale-only basis as they saw fit. This is likely to restore incentives for investment in competitive local access networks targeting residential and small business customers.
- Such investments would allow carriers to compete more effectively with NBN Co, which would provide NBN Co with greater incentives to operate efficiently, innovate and provide services promptly.
- The option would also allow any efficiency benefits from vertical integration to be captured. In particular, vertically-integrated carriers may develop services and prices that reflect end-users' needs because they will have a more fundamental connection with end-users than a wholesale-only operator would have. There is a risk that wholesale-only entities can experience problems with the coordination of investment decisions with end-users' needs. That said, coordination problems can be addressed through ongoing mechanisms for consultation between the wholesale-only provider and access seekers who do have direct relationships with end-users, and through

flexible contracting arrangements that permit access seekers to request new products. (Such mechanisms also mean the competitive risks of vertical integration can be addressed.)

- Option 3 does not confer any significant regulatory costs on industry. There may be some one-off costs as industry adjusts its business and operational systems to reflect the change in law, for example where carriers are currently complying with Parts 7 and 8 and then wish to change their business models, but these are unlikely to be significant. In any event, under this option, it would be a commercial decision for a carrier to change its business model.
- There are no ongoing or one-off divestment or separation costs.

The disadvantages of option 2 are similar to those under option 1, but the option would also mean that, where carriers currently comply with part 8 of the Act, those carriers would no longer need to operate on a wholesale-only basis. This option could therefore encourage more network operators to re-integrate, because they may consider that they are more likely to achieve a higher return on their investments through operating on a vertically integrated basis. This option therefore could have the perverse result of ensuring that only NBN Co and Telstra are truly structurally separated, which therefore magnifies the fundamental policy concern that unequal obligations are imposed on a small subset of carriers.

If the variation to this option (based on carriers submitting undertakings to the ACCC) were to be adopted, an additional layer of regulatory complexity and uncertainty would be set in place over and above the current arrangements. Carriers are likely to seek a more straightforward process, in which their operational choices are more clearly established and not subject to the whim of the regulator. That said, the variation to the option does provide a mechanism for any competition issues to be addressed up-front while allowing a carrier to retain any efficiency benefits of vertical integration and reduce the costs of divestment and separation.

At present option 2 would allow a vertically integrated provider to favour its own retail operations and create an unequal set of obligations on different carriers seeking to invest in infrastructure and market retail services. The option may therefore limit the development of infrastructure competition, and this would indicate that its costs, over the long term, are likely to be outweighed by its benefits. Option 2 might be more attractive once the NBN is built, because a wholesale-only, non-discriminatory platform will then be available Australia-wide, and vertically integrated providers would therefore be unlikely to establish effective local access monopolies on any more than a very limited scale. Such carriers are unlikely to have incentives to roll out competitive infrastructure other than in new developments.

Option 3 – Apply the Act as intended

Option 3 has the following advantages:

- The fundamental policy issues would be addressed – there would be no incentive for a carrier to seek to create an effective monopoly on local access where it has network

assets, and no 'dual' system in which one set of obligations applies to Telstra but not to other carriers who may create effective monopolies.

- Any vectored VDSL2 networks would be wholesale-only and supply services on a non-discriminatory basis, because Part 8 of the Act would clearly apply as intended. Access seekers would have a level playing field and access to a sufficiently 'raw' wholesale service (a Layer 2 bitstream service) to develop innovative products for end-users.
- End-users would have access to a choice of retail providers, encouraging greater competition amongst service providers.

Option 3 has the following disadvantages:

- If carriers do not currently operate on a wholesale-only basis, option 3 would mean that they would have to structurally separate their operations in order to supply superfast carriage services to residential and small business customers. Carriers could face significant costs in divesting assets or business units, especially if the market were to take the view that any divestment was forced and therefore had the character of a fire sale. That said, the option provides a suitably long lead time (1 January 2017) for companies to adjust their operations.
- Separation costs could be significant. These would include establishing separate business, operational and IT systems, separating staff members and assets between the different businesses, negotiating supply contracts between the two businesses, establishing a new compliance regime to ensure that functions remain separate and establishing a new reporting framework.
- To the extent that a requirement to operate on wholesale-only and non-discriminatory basis encourages carriers not to roll out networks in competition with NBN Co, this would deter carriers from seeking to roll out vectored VDSL2 networks before NBN Co (or as an alternative to NBN Co, for example in new developments). As a result, some end-users may not receive the benefits of high-speed broadband as quickly as otherwise (for example, because their premises are further down NBN Co's schedule).
- Legislation can take a long time to pass through the Parliament and there can be no certainty for industry about future regulatory arrangements until it sees the final form of the legislation. The option therefore does not provide short-term certainty for industry.
- The option does not address coordination problems caused by wholesale-only operators being cut off from end-users' needs, though as noted above this issue can be addressed through consultation and contractual mechanisms.

Overall, the costs of option 3 could be quite significant but it should be emphasised that they are discretionary costs. Businesses will have a choice how to structure their operations. In other words, the regulatory costs of option 3 are only imposed if a carrier decides that it wishes to supply superfast carriage services to residential (and/or small business customers) on a vertically integrated basis.

Against these costs must be placed the benefits from ensuring that competition can develop adequately and that vertically integrated providers do not favour their own retail operations. Although those benefits are gained by access seekers, it should be noted that access providers who are required to operate on a non-discriminatory basis can continue to achieve profits from investments in network infrastructure. The benefits are difficult to quantify, but over the long term it could be argued that the benefits of imposing equitable arrangements that promote competition would include providing incentives for promoting innovation and lower overall prices for end-users. Over the long term, these benefits are more likely to outweigh the one-off adjustment costs of structural separation.

Option 4 – Carrier Licence Condition

Option 4 has the following advantages:

- The fundamental policy issues would be addressed – there would be no incentive for a carrier to seek to create an effective monopoly on local access where it has network assets, and no ‘dual’ system in which one set of obligations applies to Telstra but not to other carriers who may create effective monopolies.
- It is less intrusive than option 3. A vertically integrated provider could continue to operate on a vertically integrated basis, but would have to establish separate entities within its corporate structure along with strong ring-fencing arrangements to ensure that it did not favour its own operations. However, the carrier would not face divestment costs.
- The option addresses the issue of vertical integration and ensures that access seekers will have access, on a non-discriminatory basis, to services. It is therefore more likely to deliver benefits in the long term, through enhanced competition, than either option 1 or option 2.
- A CLC could be set in place fairly quickly, meaning that industry would gain legal certainty in a short period of time. By contrast, legislation can take some time to pass the Parliament and there is less certainty as to what its final shape may be.
- The option does not address coordination problems caused by wholesale-only operators being cut off from end-users’ needs, though as noted above this issue can be addressed through consultation and contractual mechanisms.

The disadvantages of option 4 are similar to those under option 3, in particular in relation to one-off separation costs, though these would be less significant because a carrier could continue to operate on a vertically integrated basis. Carriers may face initial costs in setting up legally separate retail and wholesale business entities and in establishing separate business, operational and IT systems for those entities so that the wholesale entity does not discriminate in favour of the retail entity. These costs are expected to be largely one-off in that, once adjusted, the systems should not need to be reset every year. It is not clear how great the costs might be; the overall quantum would depend upon the degree to which existing retail and wholesale systems are separated and the number and complexity of the systems. The costs would largely fall in the areas of differentiating business and operational

systems, and also in establishing new compliance and reporting frameworks to ensure that the functions, staff and management of the two business entities are clearly separated.

In the past, the costs of introducing functional separation elsewhere in the world have been quite significant. For example, the functional separation of British Telecom was estimated to have cost that carrier £153 million, largely through establishing Openreach as a separate entity and setting up new equivalence systems. Similarly, the functional separation of Telecom New Zealand was estimated to have cost that carrier NZ\$200 million.¹¹ However, in both of those cases the entity being separated was a highly integrated incumbent provider with national networks and many integrated lines of business developed over decades, with a wide mix of business and IT systems. The costs of imposing functional separation on a carrier with a much more limited scale and network are unlikely to be anywhere near these figures.

Against these costs must be placed the benefits from ensuring equitable competition through a level playing field for retail providers. As noted under option 3, the benefits are also likely to be significant, and could involve fewer barriers to innovation and lower prices overall for end-users. Over the long term, the total benefits from option 4 could exceed the costs.

Option 5 – Combine option 4 (short term) with long term legislative amendments

Option 5 simply recognises that the Government could choose to adopt a staged approach to the problems posed by the rollout of vectored VDSL2 networks on a vertically integrated basis. A CLC could set short-term arrangements while the Government develops the optimal long term solution. The CLC, in other words, would provide short-term certainty that a vertically integrated provider would not favour its own operations, while the Government determines its longer-term approach. That could be to repeal Parts 7 and 8 of the Act once the NBN is built and fully operational, or to retain Parts 7 and 8 but close down the 1km exemption or adopt the model proposed in recommendations 3 and 4 and/or 11 of the *NBN Market and Regulatory Report* by the Vertigan panel.

The compliance costs of this option would effectively be the same as those under option 4 – there would be one-off costs of establishing functionally separate businesses, and introducing systems to ensure non-discrimination. Extra costs would not be incurred if the law is later changed to permit carriers to submit ‘vertical integration’ undertakings under Part 8 of the Act (as suggested under option 2). However, if option 4 is adopted in the short term and option 3 is adopted in the long term, then the overall level of cost for a carrier could be higher, because it may be required to undertake functional separation in the short term and potentially structural separation in the long term. Although the costs of this could be significant, against them must be placed the benefits from enhancing competition. Over the long term, those benefits are likely to outweigh the costs. However, these are matters that would be considered fully in moving to the long term solution.

¹¹ *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010. Explanatory Memorandum*, pp.30-31.

Consultation

There was extensive consultation in advance of the enactment of Parts 7 and 8.

As noted above, submissions in early 2014 to the Vertigan review generally supported a monopoly provider of vectored VDSL2 networks, but also supported that provider operating on a wholesale-only, non-discriminatory basis.

Under section 64 of the Act, before the Minister makes a CLC the Minister must provide a draft of the CLC to an affected carrier and invite the carrier to make a submission on the draft. The timeframe for the submission is 30 calendar days from the date the Minister provides the draft to the carrier. As a draft CLC on superfast carriage services could affect a number of carriers, the Minister will write to all licenced carriers in Australia, inviting submissions on the draft CLC. The Minister will also issue a media release and the Department of Communications will place a copy of the draft CLC and this Regulatory Impact Statement on the Department's website.

Further consultation will be undertaken in accordance with the Implementation section below.

Selecting the best option

The best option in the short-term is option 5. A CLC could be made in the short term and this addresses the fundamental policy issues and recognises the significant investments already made by the Government in the NBN and the structural separation of Telstra. The Government has announced that a CLC could apply for a two-year period. This would give it time to consider the optimal long term approach. In the longer term, when the NBN is built and fully operational, the issues posed by vertically integrated providers rolling out local access networks that are effective monopolies are less likely to be as significant. Access seekers would have the NBN as an open access fallback in areas where a vertically integrated provider overbuilds the NBN.

Implementation and evaluation

Option 5 would be implemented through the following steps:

1. The Minister releases a draft CLC and calls for submissions on the draft.
2. The Minister considers those submissions. If the Minister decides, having considered the submissions, to make the CLC, any changes identified through the consultation process could be incorporated into the draft.
3. The Minister makes the CLC, which takes effect from the day after it is registered on the Federal Register of Legislative Instruments. The CLC would be a disallowable instrument.

The CLC could be imposed for a limited period of time (two years) while the Government considers the optimal long term approach and develops appropriate legislation.

The Government would evaluate the effectiveness of the CLC, including the nature of any impacts on carriers and on end-users, through its regular monitoring of industry circumstances and liaison with carriers and regulators.

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