



Regulatory impact statement

Amendments to Parts 7 and 8 of the *Telecommunications Act 1997* and Part XIC of the *Competition and Consumer Act 2010*

This Regulation Impact Statement (RIS) looks at the options for responding to the recommendations of the independent cost benefit analysis of broadband and review of regulation chaired by Dr Michael Vertigan, AC (the Vertigan panel) in so far as they relate to Parts 7 and 8 of the *Telecommunications Act 1997* (the Tel Act).

In 2011, the Parliament enacted Parts 7 and 8 of the Tel Act, and associated provisions in the *Competition and Consumer Act 2010* (CCA). In essence, Part 7 and associated CCA provisions provide that non-NBN networks that are built, upgraded or extended after 1 January 2011 and supply superfast carriage services to residential and small business customers must supply a wholesale Layer 2 bitstream service to access seekers on request on an open access and non-discriminatory basis. Part 8 provides that such networks must operate on a wholesale-only (i.e. structurally separated) basis. There are statutory exemptions that, for example, allow pre-2011 networks to be extended by up to one kilometre, and there are also powers for the Minister to grant exemptions.

The Vertigan panel recommended that the Government repeal Part 7 of the Tel Act, arguing that it provided an unnecessary constraint on competition. The panel also recommended that Part 8 should be amended to tighten its operation so that there is a baseline of structural separation of superfast broadband networks, but also to implement a process under which the ACCC can authorise providers operating on a functionally separate, rather than structurally separate, basis where this promotes the long-term interests of end-users.

This RIS:

- provides background to this problem;
- explains the Government objectives;
- considers the options available, and the strengths and weaknesses of those options;
- assesses the impact of those options on stakeholders;
- recommends a preferred course of action; and
- assesses the costs of the options.

The options are:

1. status quo—retain Parts 7 and 8 in their current form;
2. amend Parts 7 and 8, broadly in line with recommendations made by the Vertigan panel; and
3. repeal Parts 7 and 8.

This RIS recommends option 2 as it is expected to deliver a net economic benefit by promoting investment and competition while ensuring adequate safeguards are in place to preclude discrimination in the supply of wholesale broadband service, which could otherwise impact retail level competition to the detriment of consumers.

Context

Parts 7 and 8 contain rules applying to a local access line that forms part of a local access network:

- used, or proposed to be used, to provide a fixed-line carriage service where the download transmission speed is normally more than 25 Mbps to residential or small business users; and
- that was built, upgraded, altered or extended on or after 1 January 2011 so that it is capable of being used to supply broadband services with of a download transmission speed normally more than 25 Mbps.

Part 7 requires operators of such networks to provide a Layer 2 bitstream service.¹ Part XIC of the CCA sets out associated obligations in relation to the supply of high-speed carriage services to residential or small business users using these networks. In particular, network relevant operators are required to supply a Layer 2 bitstream service declared by the ACCC and comply with non-discrimination obligations in relation to the supply of the service.

There are a number of exemptions to Parts 7 and 8; for example, extensions of up to 1 kilometre of superfast broadband networks that were built prior to 2011 (the 1 kilometre exemption) and exemptions granted by the Minister (ministerial exemptions).

Parts 7 and 8 were established as part of the previous Government's changes to the Australian telecommunications regulatory regime. Parts 7 and 8 complemented the establishment of NBN Co and its construction and operation of the NBN as a new high-speed wholesale-only open access, non-discriminatory network, as well as the structural separation of Telstra.

The Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network—Access Arrangements) Bill, which introduced Parts 7 and 8 into Parliament, noted the scope for competing providers to target highly profitable areas and “operate as vertically-integrated providers and advantage themselves over independent retail service providers.”²

Parts 7 and 8 were intended to ensure that where such networks are built and operated that they provide consumers with a choice of competing retail service providers and the benefits of that competition, in terms of service innovation and lower retail prices. As such, they seek to provide consumers with the same types of outcomes that they should enjoy on the NBN. They also meant that retail providers in the residential and small business markets would have limited opportunities to operate their own access networks going forward, advantaging their retail businesses as a result.

Parts 7 and 8 would also create a more level regulatory playing field for NBN Co, enabling it to compete in the provision of infrastructure. As a result of this, NBN Co would also be better able to cross-subsidise loss-making services, as required by the previous Government's operational model for NBN Co.

Vertigan Review and Government Policy Statement of 11 December 2014

In 2014, the Vertigan panel conducted a review of telecommunications regulation. As part of this review, the panel considered whether Parts 7 and 8 were operating effectively and if amendments should be made to promote competition, innovation and investment.

¹ 'Layer 2' is a commonly-used term in the industry and refers to a particular layer in the network. It is formally described in the Open Systems Interconnection (OSI) model. A layer 2 service will not have the characteristics of a retail service but forms a 'raw' foundation on which a wholesale customer can build advanced retail services.

² Revised Explanatory Memorandum (Senate), p.13

The Vertigan panel recommended that the Government repeal Part 7 of the Tel Act and amend Part 8 to repeal the statutory and ministerial exemptions and implement a process under which the ACCC could authorise integration of operators that would otherwise be required to structurally separate, where this promotes the long-term interests of end-users, subject to appropriate access, equivalence and non-discrimination regulation.³

The Government accepted the recommendations in large part. In its December 2014 policy statement, *Telecommunications Regulatory and Structural Reform*, the Government announced that it would introduce legislation to:

- repeal Part 7 with intended effect from 1 July 2017 and from this time, access to services would be dealt with under Part XIC of the CCA, by the ACCC deciding whether to declare access to, and regulate, wholesale services;
- require new networks offering high-speed broadband to be structurally separated as a default and offer non-discriminatory access;
- remove small business customers from the scope of Part 8, leaving it to apply to networks servicing residential customers;
- remove the statutory exemptions, such as the 1 kilometre exemption, and the power for the Minister to grant exemptions from Part 8;
- provide for the ACCC to authorise functional separation arrangements (subject to undertakings from carriers detailing satisfactory arrangements for access and equivalence to minimise anti-competitive effects); and
- include appropriate grandfathering measures for pre-existing high-speed broadband networks.

As an interim measure, in December 2014, the Government also made the *Carrier Licence Conditions (Networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014* (superfast carrier licence conditions) requiring affected providers of superfast broadband networks providing services to residential customers to operate on a functionally separated basis.

Assessing the problem

The fundamental problem in this area is whether Parts 7 and 8 operated as best they can and whether their operation could be improved to promote investment and competition while still supporting effective retail level competition (in the same manner envisaged on the NBN). A further consideration is how any changes to the arrangements will impact on the operation of NBN Co and its ability to deliver on the Government's objective that it provide better broadband and an improved platform for retail competition and at less cost across Australia as soon as possible.

If the provision of infrastructure is left to the market, further investment in new broadband infrastructure would be expected to occur over time. Such investment is occurring already in some instances, for example, there is competing infrastructure in the inner cities of several capital cities. However, such investment has been slow in occurring and is highly targeted, generally leaving the bulk of premises untouched. In response to this, the previous Government established NBN Co to deliver better broadband within a fixed timeframe.

Telecommunications infrastructure generally requires significant capital and it is often not economically efficient for competing providers to duplicate infrastructure. For this reason, many networks are 'bottlenecks' and the network owner controls access by competitors to the consumers that are connected to it. This is particularly the case if it is the only access network in a locality; but it can also be

³ Independent cost-benefit analysis and review of regulation (2014), *Volume 1—National Broadband Network Market and Regulatory report*, p. 85.

an issue if there are competing networks in a locality, because both carriers and consumers may be reluctant to meet the cost of additional new connections and there may be a general inertia on the part of consumers to churn from one access provider to another. As a result, there may be only one network servicing any individual premises.

Bottleneck control over access networks can limit retail competition in two key ways. First, the network owner may not allow competitors to access the network at all. In this case, customers that are connected to the network will not have any choice of retail provider. Second, the network owner may supply its competitors on terms that do not enable them to compete effectively with the network operator's own retail arm, for example, it could charge prices that are close to or higher than its retail prices. In this case, competitors would need to charge higher retail prices than the network operator in order to turn a profit.

Recognising the bottleneck control of access providers, the established remedy has been for the ACCC to be able to declare access to such networks. Once the ACCC declares access to a service, infrastructure owners must give access to competing providers to make use of their network. In this way, declaration is designed to enhance retail competition. Following declaration, the ACCC can set regulated terms and conditions, including price, that a network owner must comply with in the absence of commercial negotiation. In 2010, however, the ACCC had not looked at the issue of access to new superfast access networks. Moreover, the Part XIC regime cannot readily deal with preferential self-treatment by integrated providers.

In this context, the then Government decided to legislate to deal with these issues. Subsequent to that, as required by statute, the ACCC declared access to services on new superfast networks that compete with NBN Co in 2012 through the Local Bitstream Access Service. In September 2014 it also announced that it would look at declaring access to new VDSL2 networks, such as TPG's proposed fibre to the basement network.⁴ In July 2016 the ACCC declared a superfast broadband access service.

The issues of access and preferential self-treatment have been accepted by Government and Parliament as key issues. In recognition of this, there has been support for the structural separation of Telstra and the establishment of NBN Co as a wholesale-only, non-discriminatory operator to address the problem. Parts 7 and 8 of the Tel Act were also enacted to deal with the issues more effectively on an ongoing basis.

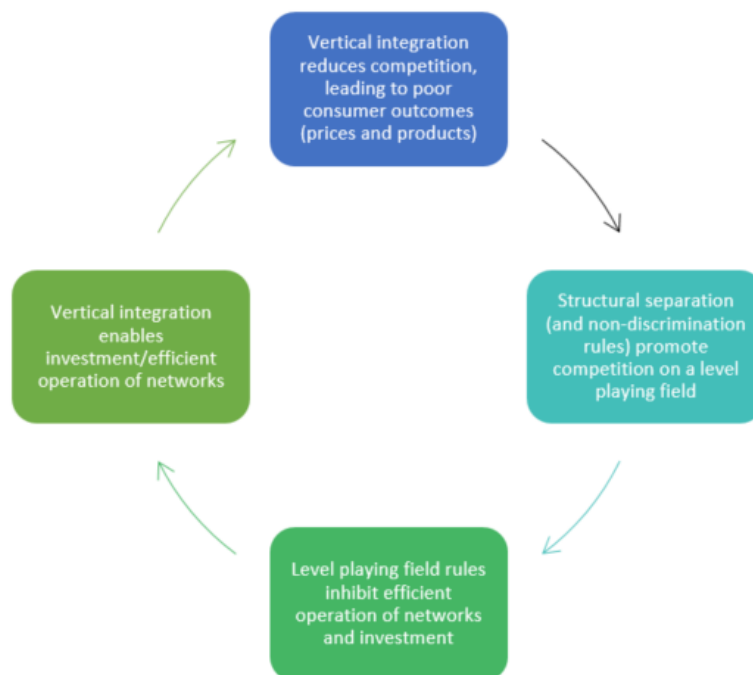
While it is important for regulation to tackle the ability of network operators to favour their own retail operations over wholesale customers, strict structural separation rules may have a negative effect on incentives to invest in infrastructure.

There are three key ways in which Parts 7 and 8 may discourage investment and competition. First and foremost, such rules force a particular operational structure onto investors rather than leaving this to their commercial judgement. Second, they confine investors in networks to funding their investments from revenues from the network and prevent them accessing revenues from retail operation. Third, the separation of network and retail businesses can dampen retail market feedback to the network operation which is important to network investment and upgrades.

The diagram below shows that the tension between the rules in Parts 7 and 8 and the promotion of investment is cyclical in nature.

⁴ www.accc.gov.au/regulated-infrastructure/communications/superfast-broadband-access-service-declaration-inquiry.

Figure 1: Impact of vertical integration and structural separation on competition and investment



A balance must therefore be struck between promotion of innovation and investment and the desire to avoid the potentially negative implications of vertical integration, particularly in the retail market. This was of particular concern to the Vertigan review.

The tension between these two countervailing policy issues is discussed in detail in section 7.4 and 7.5 of the Vertigan review's Market and Regulatory Report. Amongst other things, particularly pertinent to the current discussion, the review noted:

Both retail and wholesale competition can and should therefore be pursued. The former is guaranteed by Part XIC and the special access provisions relating to NBN Co. The latter can be promoted by removing disincentives to wholesale market entry while ensuring there is effective support for retail competition, potentially in the form of access, equivalence, and appropriate non-discrimination and/or separation regulation. Removing those disincentives is obviously all the more important if NBN Co remains as an integrated entity; in that event, the changes proposed by the panel should be treated as a matter of considerable urgency.⁵

Given these considerations, the panel rejects the unqualified imposition of any structural separation, wholesale access and/or equivalence, separation and/or non-discrimination rules. Attempts to impose arrangements of that kind are likely to worsen the artificiality of the current arrangements stifling competition while giving rise to perverse and unanticipated consequences. Moreover, it is difficult to see why those arrangements would be necessary, given the industry structure that could emerge under better policy settings.

That said, the panel recognises that situations may arise where imposing structural requirements would be in the LTIE [long term interests of end-users]. However, Part

⁵ Independent cost-benefit analysis and review of regulation (2014), Volume 1—National Broadband Network Market and Regulatory report, p. 79.

XIC provides only limited capacity to address vertical integration issues apart from the access declaration and determination process. The processes it establishes are likely to be too weak or slow to address any vertical integration issues promptly and effectively. The panel therefore does not favour the option of leaving those issues to Part XIC as currently drafted.

Instead, it would be preferable to adopt an intermediate position in which desirable levels of access can be ensured, and additional carrier-specific requirements relating to equivalence, non-discrimination and separation imposed as requirements of entry and/or ongoing service provision, where (and only where) they are clearly justified.⁶

As the above paragraphs and the Vertigan panel's report generally indicates, the appropriate balance between regulatory interventions is finely balanced, particularly noting that once a network is built and operational, it is extremely difficult to later impose structural or other separation requirements on it that apply retrospectively to address equivalence concerns, reducing the policy options for government. As such there are strong arguments for structural separation being the default or baseline position, even if it is a position from which there is movement over time.

In essence then, the issue is what is the optimal mix of Government interventions, if any, to promote infrastructure investment and competition, while at the same time ensuring there is access for access seekers to bottleneck facilities, and that the controllers of such facilities cannot advantage their own operations, so as to maximise retail level competition, and the benefits it delivers.

Objectives

The Government's key objective is to promote infrastructure investment and competition by letting the market operate freely to the extent possible, while at the same time ensuring there are appropriate protections in place to ensure that end-users have access to the same kinds of service outcomes available on the NBN, regardless of the network provider, and access seekers are able to access bottleneck facilities on non-discriminatory terms.

A further consideration is how any changes to the arrangements will impact on the operation of NBN Co and its ability to deliver on the Government's mandate that it provide better broadband and an improved platform for retail competition and at less cost across Australia as soon as possible.

This Regulation Impact Statement (RIS) considers options for implementing the recommendations made by the Vertigan panel in relation to Parts 7 and 8 of the Tel Act in the context of encouraging investment in infrastructure and infrastructure competition, while balancing the potential impact on NBN Co, in particular its ability to deliver on the Government's mandate.

[Attachment A](#) details the regulatory burden measurements and compliance costs for each option considered in this RIS.

Overview of options

This RIS considers three options:

1. status quo—retain Parts 7 and 8 in their current form;
2. amend Parts 7 and 8, broadly in line with recommendations made by the Vertigan panel; and

⁶ Independent cost-benefit analysis and review of regulation (2014), *Volume 1—National Broadband Network Market and Regulatory report*, p. 80.

3. repeal Parts 7 and 8.

Option 1: Status quo—Retain Parts 7 and 8 in their current form

Under this option, the level playing field rules in Parts 7 and 8 would remain unchanged. New networks targeting residential and small business customers and extensions of more than 1 kilometre to pre-existing networks would generally need to be wholesale-only and offer a Layer 2 bitstream service.

The existing exemptions would remain in place, providing carriers with a mechanism to extend networks built prior to 2011 by up to 1 kilometre and/or seek ministerial exemptions from the level playing field rules. If this option was adopted, the Government would need to consider whether to extend the superfast carrier licence conditions, which are scheduled to expire on 31 December 2016.

Part 7 and associated provisions in the CCA would also remain in place, limiting the ACCC's ability to develop more up-to-date service declarations because it cannot vary or revoke the Local Bitstream Access Service declaration.

Option 2: Repeal Part 7 of the Telecommunications Act and tighten up the operation of Part 8 while also creating a mechanism to allow the ACCC to allow functional separation

Under this option, the Government would amend Parts 7 and 8 broadly in line with the Vertigan panel recommendations.

Part 7 would be repealed and access to high-speed broadband networks would be dealt with by Part XIC of the CCA through the ACCC declaring access to bottleneck services. The wholesale-only rules in Part 8 would be amended to reset the basic requirement of structural separation of carriers' wholesale and retail operations and remove the current statutory exemptions and the Minister's ability to grant exemptions from Part 8. The structural separation obligation would be amended to only apply to local access lines used to supply residential customers, including home-based businesses rather than residential or small business customers, as is currently the case. This is because there is considered to be greater scope for competition in the supply of services to small businesses and competition concerns are less pressing as a result. This means that new networks targeting residential customers and extensions of any length to pre-existing networks targeting residential customers would need to be wholesale-only as the default.

Part 8 would be amended to set out a functional separation regime under which operators can seek authorisation from the ACCC to operate on a functionally separated basis, subject to the operator providing an undertaking detailing satisfactory arrangements for access and non-discrimination to minimise the anti-competitive effects of operating their network on an integrated basis.

The amendments would include mandatory considerations for the ACCC in assessing whether a functional separation undertaking promotes the long-term interests of end-users, while giving the ACCC the flexibility to tailor the level of separation required for an operator, depending on the size and scale of the business. For example, larger network operators may be required to operate separate wholesale and retail companies whereas smaller operators may be required to operate separate business units.

The ACCC would also be able to make a legislative instrument establishing a deemed functional separation undertaking that providers can elect to be bound by.

Where the ACCC has authorised functional separation, all of the operator's local access lines serving residential customers, not merely *new* local access lines serving residential customers, would be operated on a functionally separated basis, thereby streamlining and simplifying the current regulatory

landscape for operators that have networks, or parts of networks, that are subject to different regulatory regimes.

As the assessment of functional separation undertakings will involve regulatory assessment by the ACCC, Part 8 would also be amended to allow the ACCC to set a fee for the consideration of functional separation undertakings.

Conceptually, this approach can be seen as setting structural separation as the baseline for new superfast networks but allowing alternative separation rules, as appropriate to the circumstances.

Option 3: Repeal Parts 7 and 8

Under this option, Part 7 would be repealed on the basis that access to networks can be regulated as required by the ACCC under Part XIC. Part 8 would be repealed on the basis that, notwithstanding the arguments for it, it inhibits infrastructure investment, and to the extent that there was strong infrastructure investment and competition between competing networks, there would be an incentive for operators to provide access to their networks and on fair and reasonable terms. Moreover, to the extent that there is an argument for Part 8 to provide a level playing field for operators that operate on a wholesale-only or a retail-only basis, that decision is generally a decision of the operator concerned, and/or the investors in it, for commercial and other reasons.

Analysis of options

This section discusses the relative costs and benefits of the three options and their impacts on stakeholders, particularly end-users, access seekers, NBN Co, and alternative providers.

The criteria used in the assessment relate to the Government's combined objectives:

1. Does the option promote competition in the supply of high-speed broadband services?
2. Does the option promote the efficient use of and investment in infrastructure?
3. Does the option provide regulatory symmetry between competing networks, including NBN Co?
4. Does the option give regulatory certainty to operators of high-speed broadband networks, including in relation to structural separation?
5. Is the option operationally practicable and administratively simple?
6. Does the option support the Government's policy of delivering faster broadband sooner and at less cost?

Option 1: Status quo—Retain Parts 7 and 8 in their current form

Competition

Advantages:

- Access seekers would generally continue to have access to bottleneck infrastructure on non-discriminatory terms, which would promote their ability to offer competitive services and thereby accelerate benefits for Australians.
- End-users should be able to receive service outcomes comparable to, or better than, those available on the NBN, regardless of which infrastructure provider services their premises.

Disadvantages:

- To the extent the arrangements discourage network investment, they discourage infrastructure competition.
- Under the current framework, it is possible for some network operators (absent other constraints) to use statutory exemptions to build and operate substantial networks servicing residential customers, favouring their own retail operators and not necessarily providing access to

competitors. While this is addressed in part by the December 2014 Carrier Licence Conditions, this situation may inhibit wholesale and retail level competition, in that those providers can be advantaged over others.

- The current rules apply to networks servicing both residential and small business customers. This appears to create additional burdens on the supply of service to small business customers, even though there is often greater competition in this market⁷.

Investment

Advantages:

- Alternative infrastructure providers are able to invest in infrastructure under the level playing field rules.
- To the extent that some operators can invest and compete under the existing statutory exemptions, this also provides scope for infrastructure competition, albeit on an asymmetrical basis.

Disadvantages:

- The rules may discourage infrastructure investment to the extent that investors are not prepared to operate on a wholesale-only basis.
- Lack of competing infrastructure may lead to poorer outcomes for customers, as there would be limited competitive pressure on NBN Co to deliver tailored solutions in a timely manner.

Regulatory symmetry

Advantages:

- Similar regulation would continue to apply to networks and providers that are comparable, including NBN Co. That is, networks supplying superfast services to residential and small business customers and retailer providers on such networks.

Disadvantages:

- Networks are subject to different regulation depending on when they were built and the statutory exemptions can advantage providers that had large network footprints prior to 2011, as these providers (absent other constraints) can service a broader customer base on a vertically integrated basis than providers with smaller network footprints.
- Carriers are subject to greater regulation in operating networks servicing small business customers than those servicing other business.

Regulatory certainty, including in relation to structural separation

Advantages:

- The industry has planned its investments on the basis of the existing rules, which have been in place for five years.
- To the extent the rules are in place and working, they set structural separation as the baseline for all affected networks rather than this having to be imposed at a later date.

Disadvantages:

- The arrangements provide statutory exemptions that can benefit some carriers over others.
- Ministerial exemption powers are exercised at the Minister's discretion and allow different providers to be dealt with in different ways.

⁷ This is particularly the case where small businesses are located in CBDs and other higher density business areas serviced by competing infrastructure, often also used to service larger business and government customers.

Operational practicability and administrative simplicity

Advantages:

- While some issues have arisen and exemptions are resource intensive to process, the current rules have been in place five years and are familiar to stakeholders.

Disadvantages:

- The rules are administratively complex, more so as they apply differently depending on when a network was built.
- Several exemptions have been granted and others have been sought indicating the rules raise practical operational issues.
- The rules impose strict regulatory obligations on affected parties, limiting their commercial flexibility.
- Processing of exemptions is resource intensive and time consuming for all parties.

NBN rollout:

Advantages:

- There would be minimal disruption to the rollout and NBN Co's network planning. This would enable NBN Co to continue focusing on the supplying high speed broadband to as many customers as possible, as soon as possible.

Disadvantages:

- To the extent the existing arrangements provide for asymmetrical treatment of pre-existing networks and scope for exemption, this could create asymmetries in the competitive framework that could potentially disadvantage NBN Co and affect its operation, although the magnitude of any impact would depend on the extent of the asymmetries

Option 2: Repeal Part 7 of the Telecommunications Act and create a mechanism in Part 8 to allow the ACCC to allow functional separation

Competition

Advantages:

- Maintaining structural separation as the default requirement and allowing effective functional separation solutions would promote competition as it allows providers to operate in the retail market while preventing network operators favouring downstream operations.
- Allowing carriers to operate on a functionally separated basis would increase scope for competition, subject to appropriate disciplines.
- Removing networks servicing small businesses from the application of Part 8 would likely enhance competition between high-speed broadband networks and between retail providers as it would give operators greater scope to service businesses of all sizes.
- The proposed exemption for networks with up to 2,000⁸ end users could also facilitate new market entry.

Disadvantages:

- The ACCC will have the ability to exempt operators with fewer than 2,000⁹ retail customers, meaning there could be "islands" where operators can build and operate networks servicing residential customers, favouring their own retail operators and not providing access to competitors.

⁸ Or a higher number up to 20,000 if prescribed regulations.

⁹ Or a higher number up to 20,000 if prescribed regulations.

- Functionally separated operators could be competitively advantaged relative to providers like NBN Co and Telstra subject to separation obligations.

Investment

Advantages:

- Allowing functional separation would promote the economically efficient use of and investment in infrastructure, as network operators would be able to supply retail services over their networks.
- Implementing a functional separation model whereby the ACCC is required to assess applications for authorisation against specific criteria would provide a means for addressing concerns about access and discrimination without requiring full structural separation.

Disadvantages:

- Carriers would still be required to functionally separate all fixed-line networks if they wanted to expand their superfast networks, which they may see as burdensome and a disincentive.

Regulatory symmetry

Advantages:

- Maintaining structural separation as the default and removing the statutory exemption going forward would mean that all future extensions of non-NBN networks are subject to the same baseline rules (though grandfathering arrangements apply to pre-2011 networks that are extended by 1 kilometre before 1 July 2017).
- Removing the 1 kilometre statutory exemption would close loopholes, providing greater certainty for industry and greater regulatory symmetry for operators of non-NBN high-speed broadband networks.

Disadvantages:

- Allowing functional separation and removing networks servicing small businesses from the structural separation obligation would lead to less regulatory symmetry between networks and service providers, including Co.

Regulatory certainty, including in relation to structural separation; operational practicability and administrative simplicity

Advantages:

- The model draws heavily on existing arrangements, with which industry is familiar and on the basis of which industry has made investments.
- Maintaining structural separation as the default would provide greater certainty for industry as it would know the default requirement going forward and would have planned its investments on the basis of the existing rules.
- Maintaining structural separation as a default would minimise issues in seeking to impose new structural requirements if warranted in future.
- The rules would provide greater operational flexibility than the current rules. For example, there would be more scope to service small business customers and carriers could seek ACCC authorisation to operate on an integrated but functionally separated basis.

Disadvantages:

- Structural separation will remain the regulatory baseline.
- The changes are a departure from the current regime but there remain many similarities and changes have been foreshadowed since December 2014.

- The assessment of functional separation undertakings by the ACCC may take time, which may cause delays to network owners' planned infrastructure deployments.
- Decisions would be a matter for the ACCC, thus there is a degree of uncertainty.

NBN rollout

Advantages:

- To the extent this approach increased competitive pressure on NBN Co, it would be expected to further promote NBN Co's efficient operation.
- NBN Co would operate in a regulatory framework broadly comparable to that currently applying, however, it would need to continue to operate on a structurally separated basis, while other carriers could be more integrated.
- To the extent it is impacted by greater competition, NBN Co's ability to continue to provide fixed wireless and satellite services in regional, rural and remote areas will be further supported by the proposed non-commercial services funding mechanism.

Disadvantages:

- To the extent that this option increases competition to NBN Co, NBN Co would need to be able to respond. (This is now possible given the move away from uniform national prices to price capping.)
- Increased competition could affect NBN Co's financial performance and its ability to deliver on the Government's broadband rollout objectives (though some of the objectives may be met by competing investments).
- Any impact on NBN Co's ability to deliver non-commercial services should be offset by the proposed scheme to which its competitors will need to contribute.

Option 3: Repeal Parts 7 and 8

Competition and investment

Advantages:

- Option 3 is similar to Option 2 in that there would be greater scope for network operators to operate in retail markets.
- Operators would be able to operate in both network and retail markets, free of regulatory constraints. (However, there was limited investment in high-speed broadband infrastructure prior to Parts 7 and 8 being introduced.)
- Investors would be able to choose their preferred corporate structure and mode of operation.
- Additional competition may lead to better outcomes for customers, as there may be more competitive pressure on NBN Co to deliver tailored solutions in a timely manner.

Disadvantages:

- While the ACCC could require carriers to provide access to services on non-NBN networks, there would be no clear mechanism to deal with the issues of such networks becoming significant players in the marketplace and favouring their downstream retail operations over those of access seekers. This could have an impact on long term competition, especially at the retail level.

Regulatory symmetry

Advantages:

- There would be regulatory symmetry between providers other than NBN Co and Telstra, which are subject to specific structural rules.

Disadvantages:

- There would be greater regulatory certainty for most carriers. However, new operators would have a competitive advantage relative to carriers like Telstra and NBN Co, which are more heavily regulated and have less commercial flexibility.

Regulatory certainty, including on structural separation; operational practicability and administrative simplicity**Advantages:**

- Repealing Parts 7 and 8 would simplify compliance and enforcement processes relating to high-speed broadband networks. There would not be any exemptions, as now, or functional separation undertakings as proposed under option 2.
- Market participants other than NBN Co, Telstra and those with 'Adequately Served' obligations¹⁰ could choose their preferred mode of operation, subject to general regulation.

Disadvantages:

- There would be no clear mechanism to introduce structural or functional separation in future if required to deal with any future competition issue that could emerge.
- Repealing Parts 7 and 8 would be a significant change in the direction of policy as it has stood since 2011, which has focused on the establishment of the NBN as the primary fixed-line network, operating on a wholesale-only non-discriminatory basis.
- Many investors have made significant investments on the basis of this policy direction and their business plans reflect this. This includes moving towards a retail-based model based on operating on the NBN.
- Significant changes to regulation following the changes made in 2011, may affect investor confidence in the stability of the market.
- Submissions to the Vertigan panel's consultation broadly supported the continuation of the current approach to regulating NBN Co and similar networks. Industry may be concerned if there is a significant departure from the regulatory model.
- Given the fundamental issues that can arise from vertical integration, there would be a risk that further regulation may need to be implemented in future; creating some degree of uncertainty. For example, there may need to be some new mechanism to deal with future vertical integration issues
- There appear to be no particular operational or administrative issues with Option 3, although there may need to be greater use of other regulatory mechanisms such as Part XIB, and Part XIC of the CCA and general competition law.

NBN rollout**Advantages:**

- To the extent this approach increased competitive pressure on NBN Co, it would be expected to further promote NBN Co's efficient operation.

Disadvantages:

- NBN Co's regulatory disadvantage could affect its financial performance and its ability to deliver on the Government broadband rollout objectives.
- Any competing investment is likely to target high value areas, leaving NBN Co to focus on lower value areas, which may impact on its ability to supply affordable broadband at the lowest cost to taxpayers.

¹⁰ Carrier with 'Adequately Served' obligations like Opticomm and Pivit are obliged to offer wholesale services at a minimum.

- To the extent it is impacted by greater competition, NBN Co's ability to continue to provide fixed wireless and satellite services in regional, rural and remote areas would be affected and there would be ongoing need for the proposed non-commercial services funding mechanism.

Preferred option

As discussed above, there are many competing factors in relation to these policy issues, which means consideration is finely balanced and there is no clear or simple answer.

Option 2 provides flexibility in terms of corporate structure (in that it allows functional separation, where it is in the long term interests of end-users), thereby creating greater potential for infrastructure investment and competition and the benefits it can deliver, while safeguarding retail competition, by providing ongoing access and equivalence mechanisms.

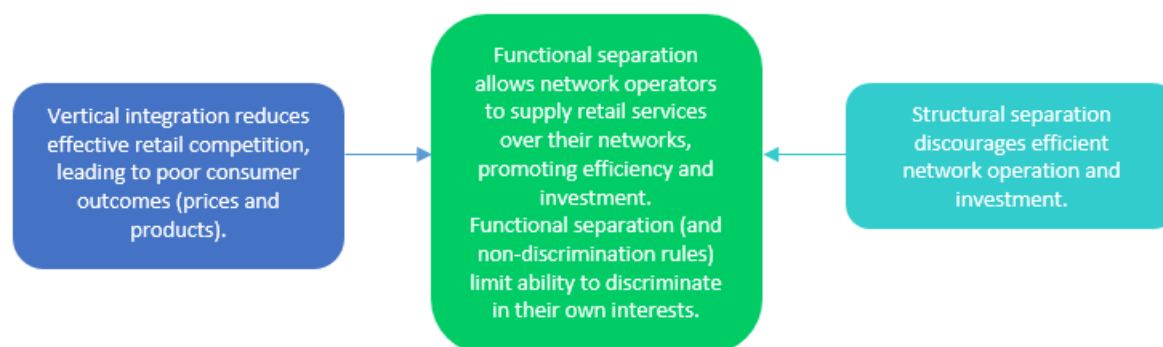
Option 2 is expected to deliver a net economic benefit, because it best balances the Government's objectives (promoting investment and competition while ensuring adequate safeguards are in place to preclude discrimination in the supply of wholesale broadband service (which promotes retail level competition) and allows NBN Co is able to complete its network in accordance with the Government's mandate.

Option 2 also satisfies each of the criteria used to assess against the Government's objectives. In particular, Option 2 has the advantages of:

- regulatory certainty as it is consistent with the current policy direction and the business planning that has been done on that basis, including by NBN Co;
- enabling concerns about preferential treatment of a carrier's downstream retail business to be pre-empted and addressed, while maintaining structural separation as the default on all affected networks going forward, minimising issues in applying this later, if required; and
- providing more regulatory symmetry for operators of non-NBN high-speed broadband networks.

The figure below shows how functional separation encourages investment while also promoting competition.

Figure 2: Impact of functional and structural separation on competition and investment



Accordingly, option 2 is considered to deliver the greatest net benefit.

Option 1 does not address all of the Government's objectives, though it does at least provide certainty to industry that the current regulation would continue as expected. However, the concerns identified by the Vertigan panel in relation to investment in infrastructure and the regulatory asymmetry caused by the current exemptions would continue.

Option 3 does not address all of the Government's objectives either. Under this option, investment in infrastructure would likely be enhanced as network owners could operate on a vertically-integrated basis. However, as noted above, infrastructure-based competition has been historically limited to lower cost, higher revenue markets, meaning issues relating to integrated monopolies could re-occur in future. Moreover, network owners would be incentivised to discriminate in favour of their own retail business. This could limit retail competition, particularly noting the bottleneck characteristics of local telecommunications access networks. However, there would be no ready means to address any such issues under Option 3. The option is therefore less likely to deliver a net benefit than option 2.

Consultation

There was extensive consultation in 2014 as part of the Vertigan review. For the Regulatory Report, the panel released a Regulatory Framing Paper in February 2014 to take soundings from industry and the public on key factors that should be considered. The panel received 43 submissions.

The Government published its *Telecommunications Structural and Regulatory Reform* policy in December 2014, which set out its reform plans for the sector. There has been ongoing engagement with industry since that time.

Stakeholder comment on this RIS and the associated legislation is invited during the consultation process. Any input will be reflected in the final RIS.

The Department always welcomes input on its policy development activities.

Implementation and Evaluation

Option 2 would be implemented by legislation. Legislation is expected to be introduced into the Parliament early in 2017. Should the Parliament pass the legislation as proposed, the aim is to have the amendments in place for 1 July 2017, but a later date may need to be considered depending on when the Bill is passed. A later date may help the Government, ACCC and industry undertake necessary preparation.

The Government would evaluate the impacts of the legislation through its normal industry monitoring and consultation processes. Additionally, the Productivity Commission is required to conduct a thorough review of the NBN once the Minister for Communications determines that the NBN is built and fully operational. This review must consider a range of matters, including competition in telecommunications markets, structural features of those markets, equity of access to broadband services and bundling of services supplied by NBN Co.¹¹

¹¹ Section 49 of the *National Broadband Network Companies Act 2011*.

Attachment A

Regulatory Costings for amendments to Parts 7 and 8

This Regulation Impact Statement considers the Government's response to the recommendations made by the Vertigan Panel regarding future separation arrangements for the operation of superfast networks.

This measure is deregulatory in that while it continues a basic requirement for structural separation for such networks, it narrows it and provides flexibility by allowing for functional separation (a less restrictive form of separation). If operators do not have the benefit of exemptions, under the current arrangements, they face costs in implementing stringent structural separation requirements. Therefore, by giving flexibility to operators, this measure would reduce costs.

It should be noted that this costing relates to the compliance costs of regulation as opposed to the substantive costs and benefits of regulation in terms of economy-wide outcomes. In this context, while it is assessed that both Options 2 and 3 will generate savings relative to the current regulatory burden on industry, it does not assess the substantive economic benefits of greater investment, commercial flexibility and competition under the options, and the countervailing costs, for example, from less effective retail competition.

Summary of Options

Options	Preferred	Costs
1: Status quo—do nothing	No	Neutral
2: Repeal Part 7 and allow authorisation of functional separation under Part 8	Yes	Reduction in costs
3: Repeal Part 7 and Part 8 in their entirety—providers would be free to structure their businesses as they wish	No	Reduction in costs

Assumptions (option 1)—status quo

No change in regulation—neutral regulatory burden impact.

Average Annual Regulatory Costs (from Business as usual)

Change in costs (\$ million)	Business	Community organisations	Individuals	Total change in cost
Total by Sector	\$0	\$0	\$0	\$0

Assumptions—Option 2—Repeal Part 7 and amend Part 8 to tighten structural separation and allow the ACCC to consider functional separation—preferred

- It is assumed that five providers would benefit from functional separation which would become possible from the proposed changes to Part 8. This number is based on the number of superfast broadband providers who emerged in the decade prior to the NBN regulatory landscape. Under future arrangements a similar number could be expected to emerge.
- Using a weighted average separation formula (see [Appendix 1](#)), it is estimated these businesses would incur a cost of \$3.5 million to implement full separation under the current arrangements. Under the preferred option these costs would be reduced by a factor of 30% if the providers choose to functionally separate rather than structurally separate. These cost reductions account for reduced need for systems separation, legal separation and personnel separation. The cost reduction for implementing functional, rather than structural, separation is estimated to be approximately \$742,000 per carrier, or approximately \$3,710,000 for the five carriers that are likely to be affected. Including ongoing costs over ten years for all five carriers would result in savings of approximately \$10,388,000.¹²
- There would be savings to providers in avoiding having to submit requests to the Minister for exemptions from the level playing field rules, and consequentially there would be savings to the Department of Communications in not processing these requests, and to the ACCC and the ACMA in not having to advise on these requests.
- However, there would be an increase in costs that is likely to be commensurate to these savings for carriers in preparing and lodging functional separation undertakings with the ACCC for assessment.
- The ACCC will also incur cost in assessing undertakings. While the ACCC is yet to advise on the amount it will charge applicants, it may be assumed to be a similar amount to the fee it charges for conducting formal merger reviews - \$25,000.¹³ For the five providers that are considered likely to apply for functional separation undertakings, the cost impact would be \$125,000.
- The ACCC could offset some of these costs through preparing a legislative instrument establishing the deemed functional separation undertaking.

Regulatory Burden and Cost Offset Estimate Table—average annual regulatory costs (from business as usual)

Change in costs (\$ million)	Business	Community organisations	Individuals	Total change in cost
Total by Sector	(\$0.914 ¹⁴)	\$0	\$0	(\$0.914)

¹² See costing spreadsheet attached. The cost of structural separation per affected carrier is estimated to be \$2,473,437; the cost of functional separation is estimated as 70% of structural separation cost, or \$1,731,406 (a difference of \$742,031 per carrier); ongoing costs are estimated at 20% of implementation costs or \$494,687 for structural separation per carrier per year and \$346,281 for functional separation. The annualised average costs over 10 years for five carriers for structural separation is \$3,462,812.13 and for functional separation is \$2,423,968.49 (a difference of \$1,038,843.64)

¹³ www.accc.gov.au/system/files/Formal%20Merger%20Review%20Process%20Guidelines%202008.pdf p.11.

¹⁴ This is the annualised average of the cost saving of functional separation over structural separation for all five providers (that is, \$1,038,843.64, see above) less the \$125,000 assessment fee paid to the ACCC.

Assumptions—Option 3—repeal both Part 7 and Part 8

- The removal of Part 7 and 8 would theoretically reduce costs for firms because they would not need to meet the costs of structural separation, functional separation or seeking exemptions. That is, an assessment of the future with and without these amendments indicates that they would produce significant cost savings for future network deployments. However, they would not produce any cost savings for current networks or businesses.
- As per option 2, there are expected to be five operators who would benefit from not having to structurally separate.
- Therefore they would avoid the costs of implementing structural separation.

Average annual regulatory costs (from business as usual)

Change in costs (\$ million)	Business	Community organisations	Individuals	Total change in cost
Total by Sector	(\$3.463)	\$0	\$0	(\$3.463)

Appendix 1

Method Used to Estimate the Costs of Structural and Functional Separation

The costs of structural or functional separation depend on a range of variables and circumstances specific to the context of the business that is undergoing separation. These factors include:

- The size of the business
 - The larger the business the greater the cost to achieve separation. There are more products, systems, people and business processes to separate.
 - This should only account for the fixed-line portion of the business (either by assets or revenue). Information has been sourced from annual shareholder reports (prior to separation and indexed for inflation).
- How established the business is as a vertically integrated entity.
 - The degree of vertical integration and systems interdependence follows from the period of time a business has operated the more costly the process will be given business processes and systems are more integrated.
- Corporate Structure
 - Whether the business has any natural organisational separation between its retail and wholesale divisions.
- The complexity of legacy IT systems.
 - The older the IT systems the higher the cost of achieving functional separation of those operating and business systems. The financial sector is a perfect example of this.
- Complexity of network asset ownership post separation.
 - The more complex the asset ownership the greater costs in developing new systems to achieve the post separation regulatory outcomes.

Estimating costs impacts of structural and functional separation

The method outlined here uses available data about separation costs for British Telecom (BT) and Telecom New Zealand to develop an estimate of the costs incurred by five providers that are likely to implement the regulatory requirements proposed under the preferred option 2.

This estimate is developed by comparing the relative degree of size, complexity and vertical integration of Australian operators in comparison to BT and Telecom New Zealand and making proportional adjustments in costs to reflect differences. The two cost estimates are then averaged to produce the cost estimate used in the RBM calculations.

Key assumptions in comparing the costs of BT and Telecom NZ to the potential costs of Australian operators achieving functional separation:

- BT and Telecom NZ were long established vertically integrated providers operating since the early 1900s.
 - Affected Australian operators are likely to be relatively new and not to operate substantial local access networks.
 - A relative weight of 40 per cent was assigned to reflect comparative costs.
- BT and Telecom NZ had many legacy systems and complex IT arrangements. This is a highly significant driver of costs when logical and physical separation of IT systems is required.

- Affected providers operate simple business models with very few products and little complexity.
- A relative weight of 30 per cent was assigned to reflect comparative costs.
- In terms of size of business, the likely affected providers are much smaller than BT and Telecom New Zealand and therefore we expect the costs of separation to be proportionally smaller. For example, the five affected providers are likely to have fewer than 100,000 customers each, whereas BT has 25,302,000 physical lines¹⁵ and Chorus (Telecom NZ's infrastructure division) has 1,794,000.¹⁶
- It is assumed that an affected business would incur ongoing annual costs of 20 per cent of their one-off separation costs (primarily arising from wages relating to functions separation—for example, appointing a new director).
- It is assumed that functional separation would incur 70 per cent of the costs of full structural separation.

See below for snapshot of working spreadsheet.

¹⁵ BT annual report 2015, page 208

(www.btplc.com/Sharesandperformance/Annualreportandreview/pdf/2015_BT_Annual_Report.pdf)

¹⁶ Chorus (Telecom NZ infrastructure division) annual report 2015, page 2 (www.chorus.co.nz/file/65885/5.4-3348-CHO-Annual-Report-2015_WEB.pdf)

Table: costs of functional separation

RIS - Amendments to Parts 7 and 8 - functional separation											
Cost of BT Separation	\$ 372,170,763	AUD (2014)									
Factor	Factors contribution to separation costs	BT (index)	Carrier	% weights	Total						
Degree of vertical integration	30%	10	4	40.00%	\$ 44,660,492						
Corporate structure	20%	10	8	80.00%	\$ 59,547,322						
Complexity of IT systems	50%	10	3	30.00%	\$ 55,825,614						
Size of business	Adjustment factor	25302000	100000	0.40%							
Estimated costs for Carrier					\$ 632,493						
Cost of Telecom NZ Separation	\$ 180,000,000	AUD (2014)									
Factor	Factors contribution to separation costs	Telecom NZ (index)	Carrier	% weights	Total						
Degree of vertical integration	30%	10	4	40.00%	\$ 21,600,000						
Corporate structure	20%	10	8	80.00%	\$ 28,800,000						
Complexity of IT systems	50%	10	3	30.00%	\$ 27,000,000						
Size of business	Adjustment factor	1794000	100000	5.57%							
Estimated costs for Carrier					\$ 4,314,381						
Implementation Cost - structural separation (one off)					\$ 2,473,437						
Implementation Cost - functional separation (one off) - 30% discount to full structural separation					\$ 1,731,406						
Ongoing costs (20%)					\$ 346,281						
Number of businesses	5										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Functional separation costs	\$ 8,657,030.31	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 1,731,406	\$ 24,239,684.88
RBM (annualised average over 10 years)	\$ 2,423,968.49										
Average Annual Regulatory Costs (from Business as usual)											
Change in costs (\$million)	Business	Community Organisations	Individuals	Total change in cost							
Total by Sector	\$2,423,968	\$0	\$0	\$2,423,968							

Table: costs of structural separation

RIS - Amendments to Parts 7 and 8 - structural separation											
Cost of BT Separation	\$ 372,170,763	AUD (2014)									
Factor	Factors contribution to separation costs	BT (index)	Carrier	% weights	Total						
Degree of vertical integration	30%	10	4	40.00%	\$ 44,660,492						
Corporate structure	20%	10	8	80.00%	\$ 59,547,322						
Complexity of IT systems	50%	10	3	30.00%	\$ 55,825,614						
Size of business	Adjustment factor	25302000	100000	0.40%							
Estimated costs for Carrier					\$ 632,493						
Cost of Telecom NZ Separation	\$ 180,000,000	AUD (2014)									
Factor	Factors contribution to separation costs	Telecom NZ (index)	Carrier	% weights	Total						
Degree of vertical integration	30%	10	4	40.00%	\$ 21,600,000						
Corporate structure	20%	10	8	80.00%	\$ 28,800,000						
Complexity of IT systems	50%	10	3	30.00%	\$ 27,000,000						
Size of business	Adjustment factor	1794000	100000	5.57%							
Estimated costs for Carrier					\$ 4,314,381						
Implementation Cost (one off)					\$ 2,473,437						
Ongoing costs (20%)					\$ 494,687						
Number of businesses	5										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Structural separation costs	\$ 12,367,186.16	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 2,473,437	\$ 34,628,121.26
RBM (annualised average over 1	\$ 3,462,812.13										
Average Annual Regulatory Costs (from Business as usual)											
Change in costs (\$million)	Business	Community Organisations	Individuals	Total change in cost							
Total by Sector	\$3,462,812	\$0	\$0	\$3,462,812							