



Dark Fibre and NBN Wholesale Aggregation – Proposed Record Keeping Rules

Consultation Paper

18 February 2019



Australian Competition and Consumer Commission

© Commonwealth of Australia 2018

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attribution 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logo
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, ACCC, GPO Box 3131, Canberra ACT 2601, or publishing.unit@accc.gov.au

www.accc.gov.au

Contents

Glossary.....	3
1. Introduction	5
1.1. Background and purpose	5
1.2. Legislative framework	6
1.3. Submission process.....	6
2. Dark Fibre	8
2.1. Assessment of competition in the market.....	9
2.2. Aims of collecting the RKR data.....	11
3. NBN wholesale aggregation services	12
3.1. Assessment of competition in the market.....	13
3.2. Aims of collecting the RKR data.....	15
4. Specifics of the draft RKR's	16
4.1. Parties subject to the proposed RKR's.....	16
4.2. Proposed frequency of RKR returns	17
4.3. Information to be collected in the proposed RKR's.....	17
5. Next steps.....	19

Glossary

3G	3 rd generation mobile communications technology
4G	4 th generation mobile communications technology
5G	5 th generation mobile communications technology
ACCC	Australian Competition and Consumer Commission
Access seekers	Telecommunications companies that seek access to declared services (that is, the right to use the declared service)
AVC	Access Virtual Circuit
CCA	<i>Competition and Consumer Act 2010 (Cth)</i>
CVC	Connectivity Virtual Circuit
DTCS	Domestic transmission capacity service
Gbps	Gigabits per second
IP	Internet Protocol
Layer 2	The Data Link Layer of the open systems interconnection model. The data link layer provides a connection between two fixed end points in a network to facilitate the transmission of data traffic.
Layer 3	The Network Layer of the open systems interconnection model. The network layer provides a switching function that enables the routing of traffic to its destination address.
Mbps	Megabits per second
NBN	National Broadband Network
NBN Co	NBN Co Limited
NNI	Network to Network Interface
POI	Point of Interconnection
POP	Point of Presence
RKR	Record keeping rule—under section 151BU of the CCA, the ACCC has the power to make an RKR and require that carriers and carriage service providers comply with it. The rules may specify what records are kept, how reports are prepared and when these reports are provided to the ACCC.
RSP	Retail Service Provider
Tier 1 service provider	Large service providers who are vertically integrated and supply wholesale and retail services which make use of the NBN access

network

Tier 2 service provider

Service providers that intend to directly connect to the NBN and are using NBN wholesale aggregation services prior to reaching the scale at which this is commercially viable

Tier 3 service provider

Service providers that do not intend to directly connect to the NBN and will use NBN wholesale aggregation services on an ongoing basis

1. Introduction

1.1. Background and purpose

The Australian Competition and Consumer Commission (ACCC) released the *Communications sector market study final report* in April 2018, following extensive consultation with industry to examine any existing and emerging competition and consumer issues in the sector.¹ As part of this report, we considered the current state of availability and competition of dark fibre and NBN wholesale aggregation services and resolved to consult with industry on proposed record-keeping rules (RKR) for suppliers of these services. We considered that this information may help determine whether any subsequent regulatory intervention is required to promote the long term interest of end-users.

The ACCC has not yet made a final decision to implement these proposed RKR. Rather, we are proceeding to consult in more detail to determine if and how such rules are implemented. We understand that the proposed reporting requirements impose a regulatory burden on service providers. Any benefits of an RKR must be weighed against additional regulatory costs.

The ACCC also notes that nearly a year has passed since the publication of the market study final report. A number of market developments have occurred which may negate the need for ongoing information collection. We welcome stakeholder feedback on whether the markets (and thus the need for RKR or other measures) have changed.

Following its considerations of submissions to the Consultation Paper, the ACCC will make a final decision on whether to implement these proposed RKR. If the ACCC decides to proceed with these RKR, we will aim to release the final versions as early as possible during 2019.

The market study noted the potential importance of dark fibre services in promoting competition in the supply of fixed line broadband services. It identified several stakeholder concerns regarding the availability of competitive supply of dark fibre to access NBN POIs. As a result, the market study recommended consultation on an RKR that could allow the ACCC to better understand the market in which dark fibre is being supplied to NBN POIs.

Communication sector market study final report, Action 8

We will consult with industry on a proposed record keeping rule to monitor the supply of dark fibre services to determine whether any regulatory intervention is required.

NBN wholesale aggregation services refers to the supply by a service provider of NBN wholesale access services in conjunction with a service provider's wholesale transmission services. Other service provider wholesale services such as voice, video and internet interconnection services may be included. An observation of the market study was the relatively high level of concentration in the market for the supply of NBN wholesale aggregation services, with the majority of services supplied by four vertically integrated service providers.²

¹ ACCC, Communications sector market study, final report, April 2018.

² Ibid, p. 56. Also includes further information on the NBN aggregation market including the Herfindahl-Hirschman Index (HHI).

Communications sector market study final report, Action 5

We will consult with industry on a proposed record keeping rule to monitor the supply of wholesale aggregation services directed at determining whether subsequent regulatory intervention is required. To the extent the market does not evolve, and the information we collect points to a lack of competition, we will consider (following further consultation) the publication of competitive benchmarking information.

Following consideration of these issues and submissions made to the market study, the ACCC is seeking industry and the public's views on two proposed RKR to monitor the supply of dark fibre and NBN wholesale aggregation services.

Collection of data under RKRs would enable the ACCC to receive information about the demand and supply of the dark fibre and NBN wholesale aggregation markets. This information is critical in enabling the ACCC to determine whether the market is functioning effectively or if there is any potential market failure that requires regulatory intervention.³

1.2. Legislative framework

The ACCC has the power to collect information from industry to undertake its telecommunications regulatory functions under the *Competition and Consumer Act 2010* (CCA) and relevant telecommunications legislation.

Section 151BU of the CCA provides that the ACCC may make RKRs that require carriers and carriage service providers to keep records and provide reports of information in those records to the ACCC.

The ACCC cannot require records to be kept unless they contain information relevant to the operation of certain parts of the CCA or certain other legislation such as the *National Broadband Network Companies Act 2011* (Cth). The ACCC is consulting on a collection of information about dark fibre and NBN wholesale aggregation services in Australia to assist the ACCC's monitoring, analysis and reporting functions in the telecommunications industry, specifically subsection 151CL(1) and paragraph 151CM(1)(a) of the CCA. In addition, the ACCC may use the information and data to better inform access negotiations and regulatory decisions made pursuant to Part XIC of the CCA.

1.3. Submission process

The ACCC seeks comment from interested parties on the specific questions raised in this consultation paper, but also invites comments on any other matters relating to the introduction of dark fibre and NBN wholesale aggregation services RKRs.

Submissions should be provided by **COB 29 March 2019**.

Submission of commercial-in-confidence material

All submissions will be considered by the ACCC as public submissions and will be posted on the ACCC website. Interested parties wishing to submit commercial-in-confidence material to the ACCC should submit both a public version and commercial-in-confidence version of their submission. The ACCC has issued a guideline setting out the process parties should follow

³ ACCC, Communications sector market study final report, April 2018, p. 116.

when submitting confidential information to communications inquiries commenced by the ACCC. The guideline is available on the ACCC website at:

<https://www.accc.gov.au/publications/communications-inquiries-submitting-confidential-material>

Contact officer and submission lodgement details

Inquiries in the first instance should be directed to *Mr Andrew Hunt* at (02) 6243 1075.

Please email submissions to:

DarkFibreAggregationServices@acc.gov.au

2. Dark Fibre

Dark fibre refers to uncontended, unlit optical cable available for use in the supply of transmission services. Transmission services enable large volumes of aggregated communications traffic (e.g. voice, data, video) to be carried from one point to another.

Dark fibre is used by some service providers as an input to the supply of retail voice and broadband services as an alternative to transmission services such as the domestic transmission capacity service (DTCS).⁴ A client will lease unlit strands of fibre optic cable to create their own privately-operated optical fibre network rather than just leasing bandwidth. The dark fibre is controlled by the client rather than the network provider.

Unlike transmission services such as DTCS, dark fibre requires an access seeker to connect their own equipment and management system in order to supply a transmission service.⁵ Dark fibre offers service providers a scalable solution, with the flexibility to upgrade to higher bandwidths at low additional cost. Dark fibre also provides access seekers with significant flexibility in how they configure their network, equipment and transmission services used to provide retail products to consumers and businesses. Dark fibre is generally utilised in metropolitan areas where the shorter distances suit its technical capabilities.⁶

Dark fibre and transmission services generally involve high capacity data links and are acquired by service providers as a wholesale input to the supply of voice and broadband services (fixed line and mobile) to end users. There is significant use of these capabilities by tier 1 and 2 service providers in the supply of services over the NBN, particularly in connecting NBN POIs to the service provider's own point-of-presence (POP). They are also used by tier 1 service providers to supply mobile services.

Enterprise and government entities additionally contract dark fibre to directly connect offices to offices, data centres to data centres or offices to data centres. Dark fibre is often desirable for network users that require high performance, as dark fibre offers a fixed and known cost for a relatively long time and virtually unlimited growth capacity, with comparable costs whether a firm intends to use 1Gbps, 10Gbps, or 100Gbps. A firm may also wish to operate their own network for other reasons, such as for security and privacy, control over costs or services, or for other commercial reasons.

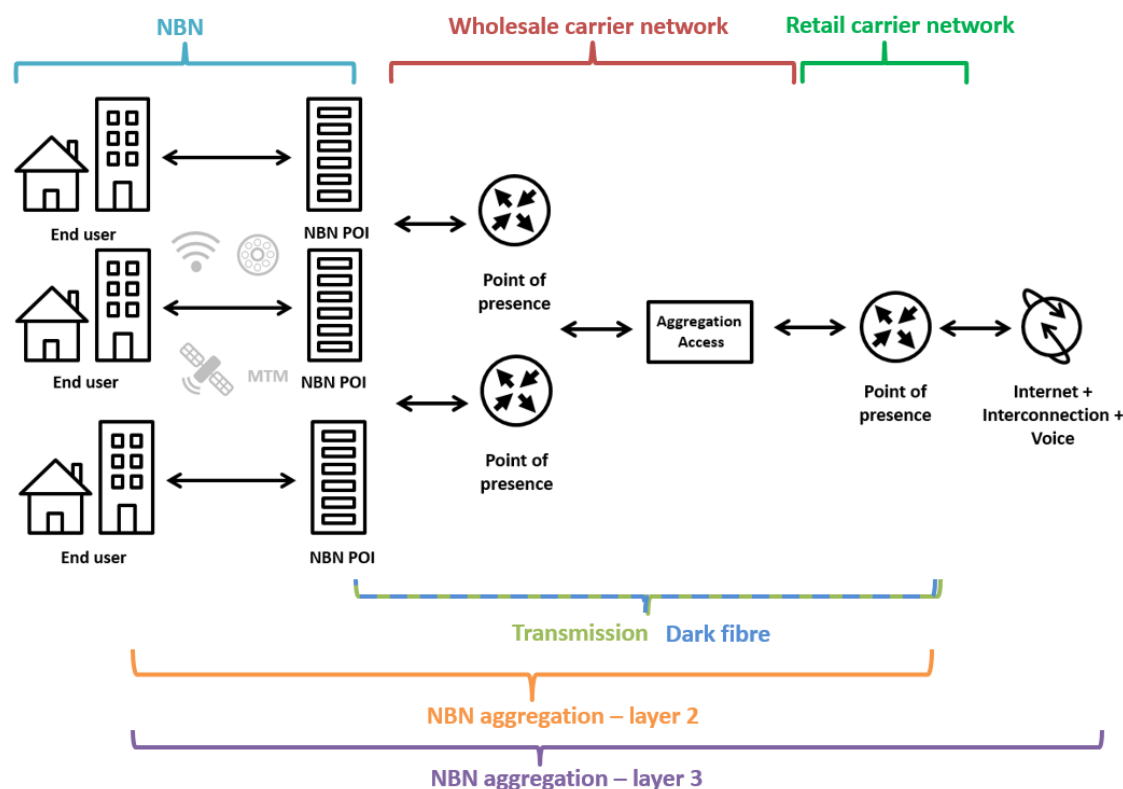
Figure 2.1 illustrates the role of dark fibre and transmission services in the supply of retail broadband over the NBN. Both separately acquired access by a service provider and transmission or dark fibre to the service provider's own POP are required for direct connection to the NBN. This contrasts with wholesale aggregation services (discussed further in section 2.2), which rely on the wholesale bundling and provisioning of these services in order to provide downstream voice and broadband services.

⁴ Note that the March 2014 Final Report on the declaration for the DTCS considered dark fibre was not a transmission service and was not a direct substitute. See ACCC, Domestic Transmission Capacity Service, An ACCC Final Report on the review of the declaration for the Domestic Transmission Capacity Service, March 2014, p. 29.

⁵ Further information on differences between dark fibre and broader transmission services can be found in ACCC, Communications sector market study final report, April 2018, p. 64.

⁶ Ibid.

Figure 2.1: Transmission, dark fibre and aggregation services used in the supply of broadband over the NBN.



Some telecommunications providers consider dark fibre to be vital to a robust downstream market, regarding dark fibre as a prerequisite for managing the exponential growth of consumer demand for data.⁷ These providers consider that dark fibre has additional flexibility and scalability advantages in supplying downstream services compared to other transmission services.⁸

Other stakeholders consider that other wholesale services are substitutes for dark fibre,⁹ noting that Ethernet and wavelength services also provide a similar wholesale input to allow a service provider to supply voice and broadband services to an end-user.¹⁰

2.1. Assessment of competition in the market

The ACCC understands that dark fibre is provided commercially by only a small subset of providers, with TPG, Vocus and Superloop¹¹ the only active larger suppliers having commercial offers. We also understand there are a small number of other providers that have developed niche services (including Nexium & Wideband), such as connectivity between data centres or on a geographic basis and generally in metropolitan areas.¹²

⁷ ACCC, Communications sector market study final report, April 2018, p. 64-65.

⁸ Vodafone, ACCC Communications sector market study draft report, submission by Vodafone Hutchinson Australia, December 2017, pp.19-20; MNF Group, Submission in response to the ACCC Communications sector market study draft report October 2017, December 2017, p. 3 and responses to ACCC survey in relation to transmission and dark fibre, undertaken as part of the Communications sector market study.

⁹ ACCC, Communications sector market study final report. See p.117 summary of Submissions to the ACCC Communications sector market study draft report, particularly Optus' submission.

¹⁰ Optus, December 2017 submission in response to Communications sector market study draft report, p. 24.

¹¹ BigAir Group Ltd, [First Court Hearing and Scheme Booklet](#), October 2016, p.51.

¹² ACCC, Communications sector market study final report, April 2018, p. 64.

A key observation of the market study was that not all owners of fibre are supplying dark fibre services to the market. Both Telstra and Optus own dark fibre, but Telstra noted in its submission to the market study that it only provides dark fibre for specific use cases where there is a business case to do so.¹³ The ACCC's understanding is that Optus does not supply dark fibre.¹⁴

The proposed RKR focuses on dark fibre services to NBN POIs, as dark fibre connectivity between data centres and other metropolitan areas appear to be available on competitive terms from multiple suppliers. One submitter to the market study draft report observed that dark fibre between data centres and other fibred buildings in metropolitan areas were available on competitive terms from up to three suppliers.¹⁵

Submissions to the market study noted a lack of competition to access NBN POIs as a key concern,¹⁶ particularly regarding regional POIs.¹⁷ One service provider noted that there is only one significant supplier of dark fibre to NBN POIs, which has in turn enabled that supplier to dictate prices.¹⁸ Limited availability of dark fibre across NBN POIs was also identified as a concern, as it was noted that at the time of the market study one provider was only supplying to around 40 out of the 121 NBN POIs.¹⁹

The current main providers for dark fibre (TPG, Vocus and Superloop) and main potential providers (Telstra and Optus) are all vertically integrated, supplying wholesale services as well as downstream retail voice and broadband services.²⁰ Some stakeholders expressed a concern that the providers of dark fibre services would likely have incentives to restrict supply. They also submitted that those who did secure access would benefit from technology choice, cost control and certainty.²¹

The ACCC has limited information in relation to the prices of dark fibre and whether providers are actively competing based on price. An ACCC survey asked service providers whether they had any concerns in relation to price and non-price terms and conditions that limit their ability to compete.²² However, none of the twelve service providers surveyed raised concerns in relation to the price and non-price terms and conditions²³, suggesting that there are no pricing concerns from those providers that have been able to negotiate supply. Several respondents identified limited coverage across NBN POIs as a barrier when considering purchasing dark fibre.

There is limited information about any non-price differentiation that exists in relation to dark fibre. However, as dark fibre services are an unlit fibre service, we do not expect a large degree of non-price differentiation, other than perhaps the option of path diversity for resiliency. Geographic coverage may be a point of differentiation when negotiating agreements.

¹³ Responses to ACCC survey in relation to transmission and dark fibre, undertaken as part of the Communications sector market study. This includes Telstra's supply to NBN Co under the Definitive Agreements.

¹⁴ Ibid.

¹⁵ MNF Group, Submission in response to ACCC Communications sector market study draft report, December 2017, p. 3.

¹⁶ Responses to ACCC survey in relation to transmission and dark fibre services, undertaken as part of the Communications sector market study.

¹⁷ ACCC, Communications sector market study, final report, April 2018, p. 68.

¹⁸ Ibid, p. 70. See also p. 3 of MNF's submission in response to the Draft Report.

¹⁹ Responses to ACCC survey in relation to transmission and dark fibre, undertaken as part of the Communications sector market study.

²⁰ ACCC, Communications sector market study final report, April 2018, p. 64.

²¹ Vodafone Hutchinson Australia, ACCC Communications Sector Market Study Draft Report submission by Vodafone Hutchinson Australia, December 2017, pp. 23–24.

²² ACCC, Domestic Transmission Capacity Service, An ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service, March 2018, pp. 19–20.

²³ Ibid.

Question 1

Do you consider that there have been developments in the market for dark fibre since the ACCC market study in 2017-18 that have changed the competitive dynamics of the market?

2.2. Aims of collecting the RKR data

The ACCC is considering the introduction of an RKR to receive information on the competitiveness of the supply of dark fibre, including the availability and suppliers of services at NBN POIs, the customers being supplied, the NBN POIs at which dark fibre is acquired and price terms regarding such supply and potential supply.²⁴

The proposed RKR for the supply of dark fibre will enable the ACCC to receive information about the demand and supply of dark fibre. We noted in our market study that, without this information, it is difficult to determine whether the market is functioning effectively or if there is any potential market failure.²⁵

At present, we do not have a source for authoritative information on the prices and terms of current and potential suppliers of dark fibre to NBN POIs. Pricing information on the offer of dark fibre does not appear to be publicly available.

In some jurisdictions, dark fibre is regulated for open access by service providers. In both the Netherlands and Sweden, dark fibre backhaul are made available at regulated prices.²⁶ Some EU states such as France and Spain, as well as Singapore, also provide passive remedies for dark fibre in limited cases.²⁷ Both the UK²⁸ and New Zealand²⁹ are considering dark fibre remedies as part of their telecommunications market review.

The ACCC is also aware of the level of investment that has been made in dark fibre, in particular by Vocus and TPG³⁰ and the ACCC has made no decision regarding regulation of dark fibre.

Question 2

Do you consider that there is a need for an RKR for dark fibre?

²⁴ ACCC, Domestic Transmission Capacity Service, An ACCC Discussion Paper reviewing the declaration for the Domestic Transmission Capacity Service, March 2018, pp. 19–20.

²⁵ ACCC, Communications sector market study final report, April 2018, p. 116.

²⁶ WIK-Consult, Regulatory approaches to risky bottleneck assets: International case studies, February 2016 and BEREC, Annex to the BEREC Report Next Generation Access—Implementation Issues and Wholesale Products, 2010.

²⁷ Allen, J. & Tinine, C. International case studies – Final report for Ofcom, July 2015, p. 24

²⁸ Ofcom, Statement on adding dark fibre to the temporary remedies for business connectivity markets, April 2018, p.4.

²⁹ Allen, J. & Tinine, C. International case studies – Final report for Ofcom, July 2015, p.32.

³⁰ ACCC, Communications sector market study final report, April 2018, p. 117.

3. NBN wholesale aggregation services

NBN wholesale aggregation services involve the supply by a service provider of NBN wholesale access services in conjunction with a service provider’s wholesale transmission services. Other service provider wholesale services such as voice, video and internet interconnection services may be included. NBN wholesale aggregation services can be used as inputs to provide downstream fixed line and fixed wireless voice and broadband services, as shown in Figure 2.1 above.

Larger service providers, which are vertically-integrated and have their own infrastructure, will typically acquire wholesale NBN services directly from NBN Co to all 121 POIs and then combine them with other communication services such as transmission, interconnection and internet services to supply retail NBN broadband services to end-users.

Some smaller RSPs do not have the scale to make direct connection to NBN services at all 121 POIs and may find it more cost effective to acquire NBN aggregation services from a larger service provider, rather than establishing a direct relationship with NBN Co. In this case, the larger service provider will supply an aggregation service that provides wholesale access to the entire NBN (including AVC and CVC) in a bundled product with other wholesale products such as transmission, interconnection and internet services. The smaller RSPs then use these services to supply retail NBN broadband services to end-users.

In some cases, RSPs may adopt a hybrid approach and directly acquire wholesale NBN services from NBN Co at some NBN POIs, but also acquire NBN aggregation services from other wholesale service providers at additional NBN POIs (where they may not have the scale in terms of number of end-users to directly connect to those NBN POIs).

The characteristics and major providers of NBN wholesale aggregation services on offer are set out in Table 2.1.

Table 2.1: Characteristics and providers of NBN wholesale aggregation services.³¹

Service	Characteristics of the service	Providers
NBN wholesale aggregation— Layer 2	NBN access network from the customer premise to the NBN POI and transmission service to a service provider’s POP. Aggregation and transmission service from the service provider’s POP to the access seeker’s POP (generally in a capital city).	Optus TPG (AAPT, Pipe) Vocus (Nextgen) MyNetFone Group Aussie Broadband
NBN wholesale aggregation— Layer 3	Resale service. Purchased over the top of a Layer 2 service. Internet, voice, interconnection services and potentially other value add services. May or may not connect to an access seeker’s network (which would likely provide an application server, for content, as well as having a billing system).	Telstra Optus TPG (AAPT, Pipe) Vocus (Nextgen)

³¹ Company websites, viewed November 2018.

NBN wholesale aggregation services are generally purchased in different ways by two distinct categories of RSP. If RSPs intend to directly acquire access services from NBN Co in the future, then prior to reaching the scale at which this is commercially viable they are likely to acquire NBN wholesale aggregation services. These service providers have been characterised as tier 2 service providers³² and include Skymesh, Exetel, Australian Private Networks, Harbor ISP and My Republic.

RSPs that do not intend to directly acquire access services from NBN Co have been characterised as tier 3 service providers. There are currently a large number of these providers, although they serve a relatively small number of subscribers. They may be a pure retail broadband service provider, a wholesale reseller or part of a small business that sells NBN broadband (to both residential and business customers) in conjunction with other services, such as IT services and equipment.

The competitive supply of NBN wholesale aggregation services is vital to a robust downstream market as it facilitates entry of RSPs who do not have the scale to connect directly to the NBN³³ and are a key input for service providers supplying NBN retail services.³⁴ This creates more choice for consumers through greater competition in the supply of retail fixed line and fixed wireless services.

3.1. Assessment of competition in the market

There has been consolidation in the provision of NBN aggregation services by service providers over the last few years. Following several mergers and acquisitions, NBN wholesale aggregation services are now largely supplied by four vertically integrated providers (Telstra, Optus, TPG, and Vocus) as well as MyNetFone (iBoss). Aussie Broadband has also started to supply NBN wholesale aggregation services. During the market study, there was concern from downstream service providers that these vertically integrated service providers may have incentives to maximise their own retail market share at the expense of their wholesale market share³⁵, which would impact competition in the supply of downstream retail broadband services.

There was also a number of concerns identified by industry about the nature of the wholesale services on offer and the implications for downstream competition.³⁶ From an ACCC survey of service providers acquiring NBN wholesale aggregation services³⁷, 11 out of 12 identified concerns related to the price and non-price terms on offer including:

- there may be a delay in NBN wholesale access price discounts being passed through to the purchasers of wholesale aggregation services³⁸
- the limited extent of differentiation between NBN aggregation services and the ability to use them to provide differentiated downstream products³⁹
- NBN wholesale aggregation services are coming to the market more slowly than equivalent retail services.⁴⁰

³² Tier 1 providers are the large providers who are vertically integrated.

³³ For further information on the structure of the NBN wholesale aggregation market, see ACCC Communications sector market study final report, section 4.3.1: Market structure and service providers, pp. 54-55, and figure 4.25: Aggregation services used in the supply of broadband over the NBN, p. 53.

³⁴ Responses to ACCC survey in relation to NBN wholesale aggregation services for the ACCC Communications sector market study. Of the 12 service providers surveyed, two said that the costs represented less than 50 per cent of the costs to supply a fixed line broadband service; three said the costs represented 50–75 per cent and six said the costs are greater than 75 per cent of the costs.

³⁵ ACCC, Communications sector market study final report, April 2018, p. 62, and p. 108.

³⁶ James Fernyhough, [Telstra, Vocus failing to deliver NBN's cheaper internet plans to retailers](#), Australian Financial Review, 21 November 2018.

³⁷ Responses to ACCC survey in relation to NBN wholesale aggregation services, undertaken as part of the Communications sector market study.

³⁸ ACCC, Communications sector market study final report, April 2018, p. 108.

³⁹ Ibid.

Since the start of 2016, the number of NBN Layer 2/3 wholesale aggregation services supplied by Telstra, Optus, TPG and Vocus have been steadily rising and, as at 30 June 2017, accounted for around 5 per cent of all NBN services provided.⁴¹

As part of the market study, the ACCC observed that NBN wholesale aggregation providers are targeting service providers with distinct characteristics (either tier 2 or tier 3 service providers), meaning that the aggregation providers are not necessarily competing for the same customers.⁴² Given that tier 2 service providers are planning to use NBN wholesale aggregation services as a temporary measure prior to achieving the scale needed to directly acquire NBN access and transmission services, the prices charged by NBN wholesale aggregation services will influence such plans.⁴³ The tension remains that as tier 2 service providers move away from acquiring NBN wholesale aggregation services, and may instead provide them, this reduces the demand for such services and may also undermine the business case for development and innovation of such services.⁴⁴

This concern was also evidenced in issues raised during the market study about the lack of operational information available for service providers to effectively compete⁴⁵, plus the lack of control service providers have over the services provided to them by NBN wholesale aggregation providers.⁴⁶

Prices for Layer 2/3 wholesale aggregation services are commercially negotiated between industry participants. Based on available information, the ACCC understands that there is some differentiation between price structures and prices offered for aggregation services, although most appear to have connection and capacity charges as well as transmission charges.⁴⁷ The ACCC received responses to its survey of service providers acquiring these services indicating that prices for such services appeared similar to the prices offered by their wholesale provider in the retail market.⁴⁸

A recent development in the wholesale aggregation market has been NBN making available its Network to Network Interface (NNI) Link product.

The NNI Link product allows RSPs to access wholesale services in part from NBN Co and part from a wholesale aggregator. Specifically, RSPs can acquire AVC and CVC directly from NBN Co without needing a physical connection to the NBN Co's POIs.⁴⁹ The RSP can purchase backhaul services from wholesale providers with which it is sharing the NNI.⁵⁰ NBN Co considers that the NNI Link offers an additional means for aggregators to offer wholesale services over the NBN and help address concerns from service providers about the absence of competitive wholesale aggregation products.⁵¹

⁴⁰ Ibid, p. 54, and p. 108.

⁴¹ Australian Communications and Media Authority, NBN consumer experience industry information-gathering exercise 2017.

⁴² ACCC, Communications sector market study final report, April 2018, p. 56.

⁴³ Ibid, p. 108.

⁴⁴ Ibid, p. 60.

⁴⁵ Ibid, p. 60, and p. 109.

⁴⁶ Ibid.

⁴⁷ Responses to ACCC survey in relation to NBN wholesale aggregation services, undertaken as part of the Communications sector market study.

⁴⁸ ACCC, Communications sector market study final report, p. 109.

⁴⁹ <https://www.nbnco.com.au/corporate-information/media-centre/media-statements/launch-of-NNI-link>

⁵⁰ NBN Co, nbn submission to the ACCC in response to the Communications sector market study draft report, December 2017, p. 15.

⁵¹ Ibid.

Question 3

Do you consider that the NNI Link product from NBN Co or other developments since the ACCC market study in 2017-18 have changed the competitive dynamics of the market for wholesale aggregation services?

3.2. Aims of collecting the RKR data

The NBN wholesale aggregation services RKR would enable the ACCC to receive information about the demand and supply of NBN wholesale aggregation services, including the RSPs who are purchasing wholesale aggregation services, their services in operation, and the wholesale list prices for different NBN speed tier services.

The RKR could provide information about wholesale and retail products and prices that may limit the ability of service providers to compete effectively in downstream markets. The information is intended to enable us to determine whether the aggregation market is sufficiently competitive.

The ACCC does not have an ongoing comprehensive source of authoritative information about the NBN wholesale aggregation services market. The ACCC has previously sought submissions from industry on the supply of aggregation services as part of the DTCS inquiry but this has not produced the data that the ACCC is proposing to seek under an RKR.

To the extent the market for NBN wholesale aggregation services does not evolve and the information collected points to a lack of competition, the ACCC would consider (following further consultation) whether there is a need for declaration of the service and the publication of competitive benchmarking information.

Question 4

Do you consider that there is a need for an RKR for NBN wholesale aggregation services?

4. Specifics of the draft RKR

To assist with the creation and content of the potential RKR, the ACCC is seeking views from interested parties on the following matters by reference to the draft RKR at Attachments A & B. Please consider these issues even if you have submitted that you do not support the implementation of the RKR above.

4.1. Parties subject to the proposed RKR

Dark fibre

The ACCC is aware that TPG, Vocus and Superloop have commercial offers for the supply of dark fibre services to NBN POIs and that there is also a small number of other providers supplying more niche services.⁵²

With regard to providers capable of but not currently supplying dark fibre services to NBN POIs, from our survey in relation to transmission and dark fibre services we understand that Telstra and Optus have provided service providers with quotes but that no supply agreements were subsequently entered into.⁵³

The ACCC is considering collecting information from the service providers listed below that supply or are capable of, but not currently supplying dark fibre to NBN POIs. The service providers subject to the dark fibre RKR may change in the future, subject to market and other developments.

Record-keeper/ Australian Business Number (ABN)

Telstra Corporation Limited 33 051 775 556
AAPT Limited 22 052 082 416
TPG Telecom Limited 46 093 058 069
Nextgen Pty Ltd 52 143 407 621
Vocus Group Limited 96 084 115 499
Singtel Optus Pty Limited 90 052 833 208
Superloop (Australia) Pty Limited 86 602 286 608

NBN wholesale aggregation services

The ACCC is considering collecting information from the service providers listed below that supply NBN wholesale aggregation services. The service providers subject to the NBN wholesale aggregation services RKR may change in the future subject to market and other developments.

⁵² ACCC, Communications sector market study final report, April 2018, p. 64.

⁵³ Ibid, p. 117.

Record-keeper/ Australian Business Number (ABN)

Telstra Corporation Limited 33 051 775 556

AAPT Limited 22 052 082 416

TPG Telecom Limited 46 093 058 069

Vocus Group Limited 96 084 115 499

Nextgen Pty Ltd 52 143 407 621

Singtel Optus Pty Limited 90 052 833 208

Symbio Wholesale Pty Limited 75 136 972 355

Aussie Broadband Pty Limited 29 132 090 192

Question 5

Are there any other service providers that should be considered for inclusion in the scope of the proposed RKR (see Section 6.1)? Alternatively, should any listed above not be included?

4.2. Proposed frequency of RKR returns

We are also considering the appropriate frequency of potential RKR returns, with a similar reporting structure for both the dark fibre and NBN wholesale aggregation services. This would include:

- collection of quarterly supply information
- collection of information up to 30 June 2021, with a review of ongoing information needs leading up to this date (following the completion of the NBN rollout).

The ACCC proposes a two-month window for submission of data from providers. For instance, for a June quarter reporting period (ending 30 June), the due date for data submission would be 31 August.

Question 6

Is a submission due date of two months following the reporting period sufficient to collate and submit all necessary data items requested as part of the proposed RKR? If not, please explain why.

Question 7

Do you support the proposed quarterly reporting frequency until 30 June 2021 with the RKR being reviewed leading up to this date (following the completion of the NBN rollout)?

4.3. Information to be collected in the proposed RKR

Dark fibre

Subject to consultation, the information contained within [Attachment A](#) would be required from each service provider selected for the RKR, where relevant:

From each provider *supplying* dark fibre to customers at NBN POIs:

- the specific NBN POIs at which dark fibre is available
- the customers being supplied

- the number of Links supplied to each customer, the distance of each Link, and the NBN POI at which the Links are terminated
- wholesale list prices for dark fibre as well as the wholesale prices for each Link supplied to customers.

From each provider *capable of, but not currently supplying* dark fibre to customers at NBN POIs:

- the specific NBN POIs at which dark fibre is available
- for each NBN POI, the number of Links owned, the distance of each Link, and the NBN POI at which the Links are terminated.
- wholesale list prices for dark fibre

Question 8

Do you consider the information proposed to be collected for dark fibre services would provide an appropriate insight into the market?

NBN wholesale aggregation services

Subject to consultation, the information contained within Attachment B would be required from each service provider selected for the RKR, where relevant:

- the customers being supplied and the traffic class supplied, the numbers of NBN POI locations served and the number of services in operation for each customer
- details on whether the service acquired by each customer is a Layer 2 or Layer 3 service, with any services supplied via NBN Co's NNI Link product being identified
- the wholesale prices for plans across the various speeds supplied e.g. 12/1, 25/5, 50/20 and 100/40 Mbps
- the amount of CVC capacity contracted monthly by each customer in Mbps, for each state and territory
- the prices for its own retail plans across the various speeds e.g. 12/1, 25/5, 50/20 and 100/40 Mbps
- the amount of CVC capacity contracted monthly for its own retail plans in Mbps, for each state and territory.

Question 9

Do you consider the information proposed to be collected for NBN wholesale aggregation services would provide an appropriate insight into the market?

General questions

Question 10

Are the definitions and concepts outlined within the proposed RKR documents (Attachments A and B) easy to understand, accurate and relevant? If not, what changes would you suggest?

Question 11

For wholesale providers - are the proposed data requirements, as outlined in Attachments A and B, feasible and reasonable? If no, what changes would you suggest?

Question 12

What additional costs do service providers expect to incur in complying with the data requirements outlined in Attachments A and B?

Question 13

Do you think there are any refinements that could be made to further reduce compliance costs, whilst also ensuring that the requirements are fit for purpose and meet the objectives outlined in sections 2.2 and 3.2?

5. Next steps

The ACCC will take into consideration all submissions to the Consultation Paper. If the ACCC decides to proceed with these RKR, we will aim to release the final versions as soon as possible during 2019.