

8 October 2015

Ms Clare O'Reilly
General Manager
Infrastructure Regulation Division
Australian Competition and Consumer Commission
GPO Box 3648
Sydney NSW 2001

By email: DTCS@acc.gov.au

Re: Nextgen Response to the ACCC Public Inquiry to make a FINAL Access Determination for the Domestic Transmission Capacity Service Draft Decision

Dear Ms O'Reilly,

1. Summary of Nextgen Response and Key Concerns

Nextgen acknowledges the large body of important work that has been performed by the ACCC and market participants in arriving at the current version of the regression model released as part of the draft DTCS FAD.

It is noted that consideration of the DTCS FAD coincides with a period of significant change and uncertainty in the sector. Within this context, the ACCC has already acknowledged the cumulative impact of industry consolidation around a small number of vertically integrated market participants:

'The ACCC took into account the important role of non-vertically integrated suppliers of wholesale transmission services. These suppliers assist in promoting a more competitive wholesale transmission market, and can also help to facilitate competition in the supply of retail broadband services.'

DTCS inputs represent a critical component of the business models for non-vertically integrated suppliers of wholesale transmission services like Nextgen.

Following a review of the outputs of the regression model, Nextgen has concluded that the pricing for services in metro and tail end services are not representative of the market price for access to fibre on competitive routes. On this basis, it is proposed that the ACCC consider widening the scope of the data being captured and analyses by the regression model so that is more representative of the actual use of fibre in 2015.

Nextgen highlights several anomalies in the outputs of the pricing tool that simply do not concur with its understanding of the market;

- a. the increase in lower capacity services under 5km in metropolitan areas;
- b. the reversal from 2012 findings between the 2012 FAD and the draft 2014 FAD, that metropolitan and regional routes are on average more expensive than an equivalent inert-capital route; and
- c. the level of price decline in metropolitan areas is on average only 17.6% where there have been a number of new entrants yet the price decline is greater at 23.8% in regional markets where there have been no new entrants.

Nextgen argues that substantial substitution of services operating on fibre is now occurring away from the limited 'lit transmission services' that are captured by the ACCC for the purposes of the regression model, explaining the model anomalies. This substitution includes;

- a. the increase of IP Transit and peered Internet traffic as a percentage of fibre use when compared to pure transmission services,
- b. the use of Dark Fibre, and
- c. consolidation of specialised Retail Service Providers into wider vertically integrated organisations, where disaggregated input costs of transmission are no longer reported and captured by the model. If finalised in November 2015 the outputs of the regression model provide access seekers with only a small marginal benefit, while at the same time the input cost for these services to the vertically integrated incumbents remains substantially less. This will have the effect of limiting the growth of new entrants into declared markets over the FAD period.

Nextgen believes that an average 17.6% price reduction in metropolitan areas will have only a small marginal benefit for access seekers given its small size.

As such there will be little impact on the market if the decision is delayed and reworked. However, putting these prices in play for the next 5 years will foreclose on competitive services developing a number of areas where equivalent access to transmission is required as an input for downstream services.

In order to mitigate unintended consequences of the wider FAD, Nextgen suggests that the ACCC partition the FAD, where it finalises the determination on distances greater than 50km by November 2015 and seeks additional data that will better represent the market price for accessing metropolitan and short distance fibre.

2. The objective is to price access to 'fibre' rather than a narrow set of services that can be provided using fibre.

The ACCC assesses the level of competition in Australian transmission markets by the presence of three (3) fibre providers, however it uses a subset of the use of this fibre to determine prices.

In defining a practical method for third party access to fibre as “a high capacity (above 2Mbps), symmetrical, permanent, and uncontended service”, the ACCC has then limited itself to its own narrow definition in order to understand the pricing that the market sells access to fibre on competitive routes.

Nextgen sees an analogy in the regulation of access to fibre to regulating the price of empty bottles. The DTCS Service is representative of the glass bottle - a traditional product that has always been produced and at one stage represented the majority of production. But by 2015 factories have adapted and now also produce plastic bottles and in today’s market the majority of liquids are consumed out of plastic bottles.

Similarly, the telecommunications market is moving away from the traditional service class used in the regression model giving rise to the unexpected outputs of the model.

This movement is more marked at short distances and has a particular impact in metropolitan areas. The services that meet the DTCS service definition are now, for the purposes of the DTCS model, premium fibre services due to the large number of substitute products. The data gained by restricting it to the DTCS Service definition is therefore no longer representative of the market price of access to fibre infrastructure in competitive metropolitan markets.

2.1 IP Transit

IP Transit is now the dominant form of traffic carried over transmission networks. This fact is particularly relevant to tail-end services pricing as the data used in the regression model does not pick up tail end services that are used for Internet Access. This form of traffic being carried by fibre cannot be ignored by the regression model as it is the dominant traffic type operating on fibre networks.

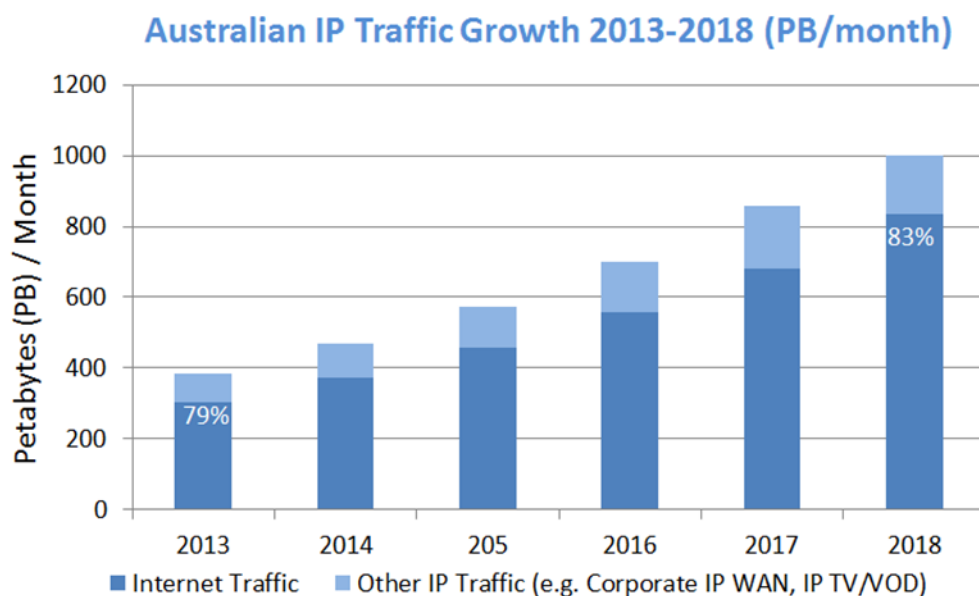


Figure 1¹: Internet Traffic is, in 2015, over 80% of all interconnected traffic. This is expected to increase to 83% by 2018

¹ Cisco VNI report March 2014

Nextgen understands that in some cases a DTCS Service will be purchased on the wholesale market and used as part of an Internet Service however where the Internet Service is bundled with the transmission service, it is no longer a 'clear channel' connection and therefore is not captured in the regression models data set.

2.2 Dark Fibre

Over the last ten years a number of companies have emerged selling Dark Fibre in metropolitan markets, these include: Pipe Networks², Amcom³, Vocus⁴, Superloop⁵, Fibre Vision Networks⁶ and FirstPath⁷. Many of the market participants who own older fibre networks also participate in this product area including Nextgen, AAPT, Primus and others.

The economics of these networks are well established. Between 2006 and 2008 Pipe Networks built fibre network in Melbourne, Sydney and Brisbane using architecture connecting Telstra exchanges, typically in series. The fibre was sold to ISPs including iiNet⁸, Internode, Netspace, Eftel and iPrimus⁹. Fibre between exchanges was priced to an ISP at around \$2,000 per month per pair (the comparative 2015 Draft FAD prices a 3.5km metro service at 2.5Gbps at \$3,585 per month), typically the ISPs would run between 1 and 10Gbps optics between exchanges. Based on this, the construction of fibre in Telstra duct at \$50 per meter and an average distance between exchanges of 3.5km, where three ISPs took the service, a payback on investment for the Dark Fibre Provider of around 2.5 years was possible.

Pipe Networks would regularly report on the sales of Dark Fibre in its annual report¹⁰;

“The fibre optic network has considerable capacity available to meet future revenue growth in Dark Fibre services with total capacity utilised at 22.5% of over 177.8 thousand kilometres of fibre available for lease. Utilisation rates have improved from 17.5% at June 2007. Total construction investment in the network resulted in a 26.1% increase in total capacity available for sale over the financial year.”

Pipe Network ASX/Media Release 8 August 2008 – Reporting the use of forty thousand kilometres of dark fibre sales.

The pricing for the use of Dark Fibre use, which is almost exclusively in metropolitan markets, is completely excluded from the regression model inputs.

It should be noted that the cost for the access seeker to use Dark Fibre in metropolitan areas versus an optical transmission service is in most cases the same. An optical line card is required by the access seeker for both the receipt of a lit service or to light short-haul Dark Fibre, in most cases the optics can do the same.

² <http://www.pipenetworks.com/pipefibre.php>

³ <http://www.amcom.com.au/data-networks/dark-fibre>

⁴ <http://www.vocus.com.au/product/dark-fibre>

⁵ <http://superloop.com/dark-fibre.html>

⁶ <http://www.fibervision.com.au/our-services/dark-fiber.aspx>

⁷ <http://www.firstpath.com.au/>

⁸ https://www.pipenetworks.com/docs/media/ASX_06_03_09_iiNet.pdf

⁹ https://en.wikipedia.org/wiki/PIPE_Networks

¹⁰ <http://www.pipenetworks.com/docs/media/626261.pdf>

New Dark Fibre networks continue to be established with start-ups such as First Path and Superloop Limited (2015) spearheading their market entry with Dark Fibre products connecting Data Centres. Superloop markets Dark Fibre pairs between data centres at well below \$1,000 per month. Superloop markets themselves as “a new and exciting, independent dark fibre infrastructure provider designing, constructing and operating networks throughout the Asia Pacific region.” Their websites states: “Our network footprint currently expands throughout the metropolitan areas of Brisbane, Sydney and Melbourne in Australia.”

Companies such as FirstPath focus on providing dark fibre to buildings across the metropolitan area and regularly provide updates on new buildings being connected.

On 30 October 2015, Vodafone Hutchison Australia announced a \$1 billion deal with TPG Telecom to use the latter's networks for carrying its mobile data across the country for the next 15 years. In the statement accompanying the announcement Vodafone Australia chief executive Inaki Berroeta said

"Dark Fibre is about preparing Vodafone for the future. Network data traffic will continue to grow through customers' appetite for mobile content and the emergence of technologies such as the Internet of Things, and a Dark Fibre network will allow us to cater for future growth."¹¹

It is clear that there is a large disparity between the prices that the market is providing access to fibre for and what the Draft DTCS FAD concludes is the price to access to fibre infrastructure under the proxy of the DTCS Service description.

2.3 Switched multi-point services

Switched multi-point services do not fit the DTCS Service definition of “clear channel, point-to-point”, yet switched multi-point services operating at Layer 2 and Layer 3 utilise considerable bandwidth being carried across fibre optic networks. These services offer bandwidth efficiency benefits for providers and are typically based on a core ring architecture connected to multiple end points. From a network provider perspective core bandwidth is better utilised and services are able to be priced lower due to better utilisation rates.

For Nextgen over 50% of traffic across its network falls into this traffic type and these services are not captured by the regression model.

3. Do DTCS Service’s respond to presence of dark fibre services being offered in competitive markets?

It could be argued that market prices for DTCS Services on competitive routes respond to being undercut by substitute products such as Dark Fibre thereby taking into account the price impact of alternative fibre products being offered in the market.

Either

¹¹ <http://www.theage.com.au/business/markets/vodafone-hutchison-australia-announces-1-billion-15year-deal-with-tpg-telecom-20150929-gjxs3c.html#ixzz3nCKWXAyP>

- i. the market views Dark Fibre as non-interchangeable with DTCS Services because of its unique service qualities therefore DTCS prices will have no impact on the sale of Dark Fibre making it a unique market. If this is the case then DTCS services prices do not respond to the presence of dark fibre, or
- ii. DTCS Services are interchangeable with Dark Fibre services so that when a Dark Fibre service is offered in the market then DTCS Services will respond in competition with Dark Fibre price signals.

If it is (i), then the ACCC should include Dark Fibre services sold in a competitive market as part of its regression analysis.

If it is (ii) then the ACCC must question whether areas that it has removed from declaration are truly competitive as the market continues to see new entrants roll out network in competitive areas because a value gap exists in the market.

This suggests that the DTCS Service is not Dark Fibre competitive in these areas undermining the very basis of the current market pricing approach therefore accepting data from these areas into the regression model is fundamentally flawed.

Nextgen's experience is that DTCS services prices have little impact on the sale of Dark Fibre and for many buyers it is preferred where it is available, accordingly the regression model needs to account for the pricing data from the sale of Dark Fibre service in competitive areas into its regression model. The fact that companies such as Superloop have recently rolled out networks predominately in exchange areas that have been removed from DTCS pricing regulations demonstrates this fact.

If DTCS Services respond to Superloop's DarkFibre services the company will be unable to meet its prospectus forecast. Superloop's recent prospectus listed a key business risk as "Action of competitors - Superloop will operate in a competitive landscape alongside a number of other network owners and operators of telecommunications infrastructure with competing offerings and a geographically diverse presence." The market clearly does not believe that DTCS services will have an impact on the company's dark fibre sales prospects. Superloop listed on the ASX in June 2015 at \$2.00 as of 1 October 2015 is priced at \$2.45, in a falling stock market, and has a market capitalisation of \$140 million.

The market sees a distinction between the two services; they have different applications and different pricing structures, but they are both fibre based.

4. Vertical Integration and self-use of fibre is removing services from the visibility of the regression model.

In the DTCS public inquiry into making a final access determination, the Position Statement on pricing methodology released in November 2014 the ACCC noted that VHA and Optus submitted that self-supply of transmission by vertically-integrated providers on the routes that the ACCC has determined to be competitive leads to prices higher than would be observed in an effectively competitive market of non-integrated suppliers. Optus stated that the self-supply removes a source of buyer power that would be able to drive down observed market prices and the ACCC considered that this may have some validity.

Nextgen notes that the ACCC did not act on the VHA and Optus argument because it believed that vertically integrated providers have an incentive to sell transmission services where they can make a margin and that this is enhanced by improving scale economies by supplying its competitors.

This incentive is becoming less relevant in a market characterised by dramatically diminished demand for independent transmission services.

The ACCC argument also assumes that the margin that is made on selling transmission services is greater than the margin that is made by the vertically integrated provider on the downstream retail services. In reality vertically integrated providers have both the ability and the incentive to engage in discrimination against downstream competitors. The incentive is therefore equal to the cross product impact that the provider faces by selling transmission to a retail competitor that depends on that transmission for its retail services.

Transmission represents only a small fraction of the cost of delivering a broadband service on competitive routes. This is effectively demonstrated in iiNet's 1H15 results where it reported that its margin on an On-net customer (where it buys backhaul on competitive routes as part of its cost) is \$37 vs. \$6 for an Off-net customer where it resells a broadband service. If the supplier of the Off-Net service supplies the backhaul at a competitive price the margin erosion will be greater than that made in selling the transmission service.

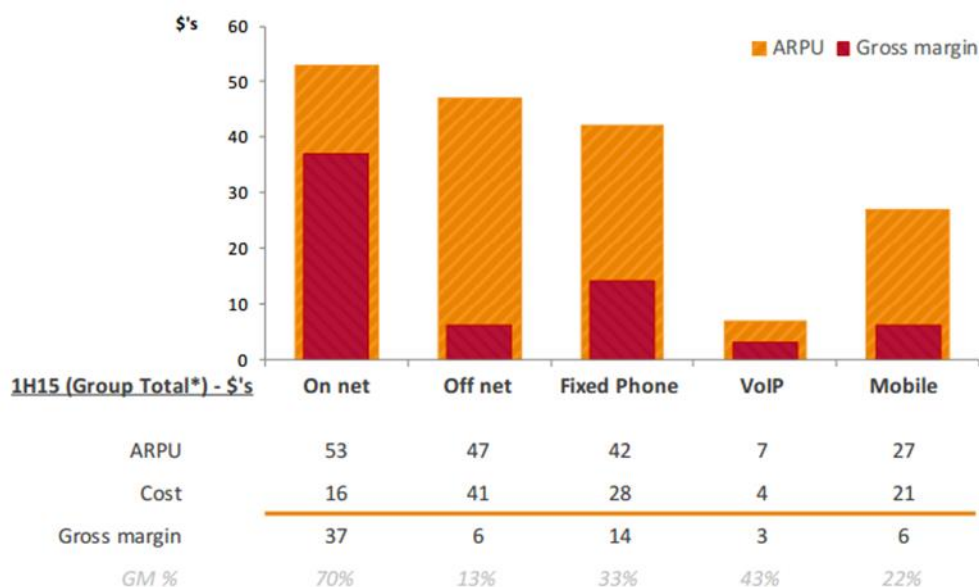


Figure 2: iiNet reported H12015 ADSL broadband On-net and Off-net margins

Nextgen submits the ACCC has made an oversight in its assessment of this area and should examine the downstream incentives of vertical integration more closely. Where margin incentive in downstream markets is greater than the margin in transmission markets then the vertically integrated provider has the incentive to restrict supply or increase prices to at least match downstream market losses.

The economic incentives make it highly likely that the prices used in the regression model, derived from competitive routes where the three transmission

providers are vertically integrated, contain margins that reflect cross product impact assessments of losses in downstream retail services.

Given the sheer volume of traffic that is now subject to vertical integration this represents a major oversight and defect in the regression model data. Nextgen notes vertical integration is increasing following the TPG acquisition of iiNet and may be further compressed with the proposed merger between M2 and Vocus. M2 and Vocus will remove around 0.5 million subscribers or more than 10 percent from the 'Other' category in the following table.

Service Provider	Subscribers (million)	Market Share
Telstra	2.9	54%
Optus	1.0	19%
TPG	0.7	14%
Other	0.7	13%
Total	5.3	

Figure 3: Summary of the level of vertical integration of Australia's residential broadband market

4. Disconnect between model findings and the current market reality.

The findings suggest that level of price decline in metropolitan areas is on average only 17.6% lower in metropolitan markets yet the price decline is higher at 23.8% in regional markets.

However, over the past 5 years there have been numerous new market entrants building fibre in metropolitan markets yet no new entrants in regional markets. Market evidence would seem to suggest that the economic incentives clearly exist to overbuild fibre in metropolitan markets rather than acquire services from the DTCS yet the regression model has concluded the opposite.

There are significant consequences in this conclusion for the future of competitive telecommunications services in Australia.

Nextgen believes this dynamic is reflective of the product substitution outlined in this submission. The impact of dark fibre is less of a feature in the long distance regional market as it is generally not sold, therefore the pricing for this end of the regression model will be more reflective of the actual use of the assets.

Nextgen would welcome any questions from the ACCC regarding the information submitted in this response.

Yours sincerely



Michael Ackland,
Director Commercial and Strategy