
TELSTRA CORPORATION LIMITED

Submission to the Commission's Draft Report on the Final Access Determination for the Domestic Transmission Capacity Service

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[CIC begins] = information not to be released without a confidentiality undertaking

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EXECUTIVE SUMMARY

Telstra welcomes the opportunity to respond to the Australian Competition and Consumer Commission's (**the Commission**) draft decision on the final access determination (**Draft FAD**) for the Domestic Transmission Capacity Service (**DTCS**) published on 4 September 2015. In its draft decision, the Commission has proposed a substantial reduction to average transmission prices by 22.2 per cent. Telstra recognises that, in part, this reduction comes as result of intense competition in the transmission market. However, Telstra considers that this reduction also comes partly as a result of shortcomings in the way that the regression analysis has been applied by the Commission.

Customers have benefitted from competition and investment

The data transmission market is intensely dynamic and competitive. Customers continue to benefit from competitive prices and ongoing investment and innovation in transmission services.

Telstra recognises that the proposed price reduction, in part, appropriately reflects the intense price competition occurring in the transmission market.

However, Telstra considers that, in part, these substantial price reductions also come as a result of certain shortcomings contained in the way that the Commission has applied its consultant Economic Insights' (**EI**) regression analysis. Specifically, the Commission's rationale for adopting Model 2 is flawed and demonstrably inconsistent with EI's analysis. Rather than adjusting for the diseconomies of scale that characterise exempt routes, the Commission's adoption of Model 2 appears to accentuate these. This means the price reductions resulting from the associated price formula are larger than those attributable to price competition in the transmission market, and no adjustment is made for the effect of scale diseconomies.

By diminishing the incentive to invest – particularly in regional services – these shortcomings pose a risk to the customer experience, particularly the availability of bandwidth in a market characterised by ongoing growth in demand.

Benchmark analysis

The Commission's decision to retain benchmarking as its preferred pricing methodology is appropriate as this approach captures the benefits of price competition on exempt routes and passes them through to declared routes, so that these customers also receive the benefits of competition. Using actual observed pricing on competitive routes is also consistent with a key objective of access regulation, namely, to make essential facilities available under conditions which replicate a competitive market. In this way, benchmark pricing is the best approach to pricing transmission.

Economic Insights' Regression Analysis

Telstra considers that the EI final report is a significant improvement upon its earlier (June 2015) draft version. However, we have concerns about the Commission's inclusion of two throughput variables in the empirical specification associated with Model 2, which do not reflect market conditions. The principal concern is that the Commission assigns an interpretation to these variables – that they reflect economies of scale – when EI's empirical results clearly contradict this position.

Telstra believes there is a strong case for replacing Model 2 with Model 3, which can be demonstrated to fit the data as well as Model 2, and offers additional benefits in terms of clearer economic logic and improved transparency. Also, in contrast to Model 2's unsatisfactory treatment of the regional routes diseconomies of scale issue, the outcomes from Model 3 are more consistent in providing for this issue and the views expressed by the Commission expressed in this area.

Special linkage charges

Telstra supports the Commission's draft decision not to set price terms for special linkage charges (**SLCs**) in the FAD. However, the Commission's proposal to require itemisation is potentially problematic. In response to customer feedback for faster quotations, Telstra Wholesale rolled out its new Site Enablement Pricing Framework (**SEP**) in December 2014. This has now been adopted by the majority of wholesale customers within only a few months. The SEP framework delivers most quotations within 2 days and aims to eventually deliver the majority within hours. Providing customers with this level of responsiveness, however, requires trading off some level of detail and granularity. Only very few customers have requested this level of detail whilst the vast majority have expressed their preference for responsive quotations. The Commission should not be prescriptive about itemisation as the commercial process takes into account the benefits to (and acceptance by) a broader range of customers and is delivering significantly improved outcomes and customer experiences.

Another record keeping rule would add to the regulatory burden

The introduction of a further Record Keeping Rule (**RKR**) is unnecessary. The purpose of the RKR is unclear, especially as a mid-term review is not considered necessary. Moreover, the introduction of a further RKR in addition to the five (5) RKRs to which Telstra is already subject would add to the regulatory burden placed upon the industry. This burden would also be inconsistent with the policy objectives of the Government's red tape reduction agenda.

Duration

Telstra welcomes the Commission's proposal to effect the FAD until 31 December 2019 without a mid-term review. The certainty and stability this proposed period offers is critical to the industry's planning and its ability to bring innovations to market to fulfil customer needs.

Data Rate (Capacity)

Given the paucity of benchmark data at bandwidths exceeding 1 Gbps, Telstra supports the proposal to set prices to an upper limit of 1Gbps as it avoids the risk of pricing higher bandwidth services below the cost of supply. Pricing services up to 1 Gbps also ensures that the newer technologies used to deliver the higher bandwidth services are allowed to develop.

Additional pricing information should not be included retrospectively

The Commission is consulting on a request it has received to include a significant quantity of additional pricing data provided by Optus and Vodafone Hutchison Australia (**VHA**) in the Commission's regression analysis. Telstra opposes this request as it is not transparent that the data is relevant to the benchmarking exercise. In particular, it is not clear whether the additional data relates to just one part of a broader deal between Optus and Vodafone and so distorts the regression results.

1. INTRODUCTION

Telstra welcomes the opportunity to respond to the Australian Competition and Consumer Commission's (**the Commission**) Draft Final Access Determination for the Domestic Transmission Capacity Service (**DTCS**) (**Draft FAD**).

The submission is structured as follows:

- Chapter 2 sets out Telstra's views on the Commission's draft decision on price terms for the DTCS.
- Chapter 3 sets out Telstra's views on the Commission's draft decision on non-price terms for the DTCS.

Telstra may make further submissions to the Commission once it has had an opportunity to review industry responses to the Draft FAD.

2. DRAFT PRICE TERMS

The data transmission market is an intensely dynamic, competitive market. Customers continue to benefit from competitive prices and ongoing investment and innovation in transmission.

Telstra recognises that the proposed price reduction, in part, appropriately reflects the intense price competition occurring in the transmission market.

However, Telstra considers that, in part, these substantial price reductions also come as a result of certain shortcomings contained in the way that the Commission has applied its consultant EI's regression analysis. Specifically, the Commission's rationale for adopting Model 2 is flawed and demonstrably inconsistent with EI's analysis. Rather than adjusting for the diseconomies of scale that characterise exempt routes, the Commission's adoption of Model 2 appears to accentuate these. This means the price reductions resulting from the associated price formula are larger than those attributable to price competition in the transmission market, and no adjustment is made for the effect of scale diseconomies. By diminishing the incentive to invest – particularly in regional services – these shortcomings pose a risk to the customer experience, particularly the availability of bandwidth in a market characterised by ongoing growth in demand.

It is also important to note that the draft average price reduction would have an asymmetric impact on Telstra. That is, the average impact is higher on Telstra than that based on the distribution of total services in operation (**SIOs**). This is because – despite serving only 30 per cent of SIOs in competitive areas (from where the benchmarking pricing data is taken) – Telstra has the majority of services in declared areas, which are typically higher cost routes. The Commission should recognise this asymmetry and strike the appropriate balance between access prices that are reflective of the efficient costs incurred by the access provider and that provide the incentive for further increases in infrastructure investment where this is efficient, rather than deterring such investment through access prices that are too low and promote reliance on reselling existing providers' services.

In recent years, demand for transmission has grown rapidly as customers have demanded higher bandwidth performance in order to enjoy improved experiences downloading data, entertainment and communications, such as video streaming.¹ Network applications and the digitisation of information, entertainment, videos and photos, continue to grow at extraordinary rates and this is likely to continue in future. Telstra's transmission network, and its ongoing investment in it, allows this unprecedented connectivity to continue to grow among Australian consumers and businesses.

Customers have benefited from growing investment throughout the transmission market. Vocus reports that it has increased its Australian fibre network by almost 400 per cent between June 2012 and December 2014.² In June 2014, TPG reported to have increased its metropolitan and inter-capital fibre network to more than 17,000 kilometres³ and, on 30

¹ The Australian Bureau of Statistics, *Internet Activity, Australia*, December 2014, Cat. 8153.0 reports a 33 per cent increase in data downloaded in the 12 months to December 2014.

² Vocus (2015) *Half Yearly Results Presentation*, 20 February, <http://www.asx.com.au/asxpdf/20150220/pdf/42wqzv9dm6sn3s.pdf> (accessed 30 September 2015)

³ TPG (2014) *Annual Report*, <https://www.tpg.com.au/about/pdfs/FY14%20Annual%20Report.pdf>, (accessed 30 September 2015): page 11.

September 2015, TPG announced its intention to extend its fibre network by a further 4,000 kilometres.⁴ Amcom too has reported additional fibre network investment of \$11.3 million in financial 2013.⁵ Added to these is Nextgen Networks' construction of the \$250 million Regional Backbone Blackspots Program. In addition to the increasing levels of investment, innovation continues to occur in the range of substitutes available to optic fibre transmission such as copper bonding, microwave and satellite technologies.

Competition among suppliers continues to intensify as demonstrated by the additional 112 ESAs the Commission found to be competitive in the 2014 DTCS Declaration Review, even when applying a more stringent competition assessment.

Driven by this level of competition, prices have been declining substantially — and Telstra recognises that in part this has driven the significant price reductions contained in the Commission's Draft FAD. However, as discussed below, Telstra considers that in part these substantial price reductions have been driven by certain shortcomings in the Commission's regression modelling analysis, and that these shortcomings can and should be resolved in the interests of the customer experience.

Benchmarking analysis & pricing

Telstra agrees with the Commission's decision to retain benchmarking as its preferred pricing methodology as this approach captures the benefits of the price competition evident on exempt services and passes them through to declared services, so that these customers also receive the benefits of competition. Using actual observed pricing on competitive routes is also consistent with a key objective of access regulation, namely, to make essential facilities available under conditions which replicate a competitive market. In this way, benchmark pricing is the best approach to pricing transmission.

In order to support the application of domestic benchmarking, the Commission requested commercial pricing information from DTCS providers, implemented a confidentiality regime around this data (Benchmarking dataset) and appointed a consultant (Economic Insights) to undertake econometric analysis on the pricing data collected for 'exempt' services and develop a regression model which could be translated to a price equation for setting regulated prices for 'declared' services.

Over the period February to August 2015, EI undertook detailed exploratory analysis of the industry provided dataset, appraised the regression model used in the 2012 FAD process, investigated a number of different empirical specifications (including random effects and quantile regression) and undertook various diagnostic tests. These efforts were directed towards the development of a preferred model for setting of regulated DTCS prices, and were the subject of feedback from industry participants and a number of industry-engaged expert advisers.

On 4 September 2015, the Commission released its draft decision on the DTCS FAD and EI's Final Report. EI's Final Report confirmed random effects as their preferred specification, and put forward three alternative regression models (based on this specification) as potential bases for DTCS pricing. These models were simply named models 1, 2 and 3 respectively, with

⁴ TPG Telecom, Vodafone (2015) "Vodafone and TPG announce \$1billion deals: Companies sign transmission and wholesale agreements", 30 September, <http://www.asx.com.au/asxpdf/20150930/pdf/431plzvbkjnfc0.pdf> (accessed 1 October 2015).

⁵ Amcom (2013) *Half Yearly Results*, <http://www.asx.com.au/asxpdf/20130429/pdf/42fjkny2g1pqkh.pdf> (accessed 1 April 2015)

models 2 and 3 identified as being joint preferred models (that is, EI did not nominate one as being preferable to the other). Accordingly, price equations based on models 2 and 3 were also included in EI's Final Report.

Development of the regression analysis and price equation

Telstra considers that the empirical framework — encompassing the regression analysis, empirical model and price equation — set out in EI's Final Report, and adopted by the Commission in its Draft Decision, has been helpfully refined following consultation on the Workshop Paper and Draft Decision. In particular, we welcome the random specification outlined in the Final Report as we consider this to be satisfactory in terms of fitting the raw data, able to appropriately account for unobservable features of the raw data and capable of being easily transformed to a price equation.

Other aspects of the empirical work which Telstra has previously commented on include the need to moderate ongoing exploratory analysis and diagnostic testing, noting that no model will ever be perfect and able to withstand all criticisms, the need to limit the application of economic intuition to what is inherently a complex market and the need to avoid embedding structural relationships which do not exist in practice. While the majority of these suggestions appear to have been taken on board by EI, some elements of economic intuition remain evident in EI's Final Report and have been carried through to the Commission's Draft Decision. A key area of concern for Telstra in this regard is the ongoing use of throughput measures, as discussed in detail below.

Given the Draft FAD includes a pricing model adopted from EI's Final Report, it is appropriate to revisit the key outcomes Telstra identified as being important for this model in its submission on EI's Draft Report:

"The future pricing model needs to balance robustness with practicality and transparency. This means the predicted prices which are generated for regulated routes need to be robust in terms of reasonably reflecting conditions in the supply of exempt services, but at the same time being transparent and capable of implementation in the FAD context."⁶

While the pricing model included in the Draft FAD Instrument can be considered to meet the practicality criterion on account of being implementable, and partially meet the transparency criterion given it is expressed in terms of observable distance and capacity attributes, questions exist about its robustness given the inclusion of two throughput measures in the underlying empirical model.

There are several issues with use of the throughput variables; namely, route throughput and ESA throughput. One of these is the way they are included in the empirical model, where they are used constructively (that is, set to their declared sample averages, separately for each route type, and then assigned empirical weighting). This detracts from transparency because the associated data is confidential, and also impacts robustness as they are predicated on intuition that is not particularly reflective of conditions pertaining to the supply of exempt services. A second issue arises from the empirical findings in relation to these variables – their coefficients – which seem to be overlooked in the Draft FAD. Collectively these issues go to

⁶ Telstra Corporation Limited, *Response to Economic Insights – DTCS Benchmarking Model – Draft Report*, 8 July 2015: page 1.

the key question of whether Model 3 is preferable to Model 2. Noting that the Commission is seeking stakeholders' views on the simplification of the pricing model and the proposed treatment of the route throughput, ESA throughput and provider variables, the issues here are elaborated upon below.

Model 3 performs better than Model 2

The difference between Model 2 and Model 3 is that Model 2 includes route throughput and ESA throughput while Model 3 does not. Telstra has previously expressed reservations about the inclusion of these variables in the empirical analysis, and in our consideration of the Draft FAD and EI's Final Report many of these reservations persist.

The Commission explain their preference for Model 2 in the Draft Decision by stating:

*"The ACCC considers (the formula derived from EI's model 2) the most appropriate model for setting regulated prices as it recognises that regulated routes typically have lower throughput than competitive routes. The model accounts for the different economies of scale in regulated routes through the route throughput and ESA throughput variables."*⁷

The first part of the above explanation appears to suggest that regulated prices should reflect the fact that regulated routes have lower throughput than competitive (exempt) routes. Intuitively this would be some type of price uplift, on account of the thinner markets observed in regional areas. Such an interpretation would also seem consistent with the Commission's statement that:

*"The ACCC expects that lower prices in the DTCS FAD that, after adjusting for lower demand, mimic the cost efficiency achieved on competitive routes ..."*⁸

In principle Telstra agrees with the view that there is lower demand on regulated routes, and as a result it is appropriate to make provision for this (in the form of an upwards adjustment) when applying prices based on competitive route efficiencies to routes with lower demand which do not have the same efficiencies, due to diseconomies of scale. We do recognise, however, that it is very difficult to capture economies/diseconomies of scale in a complicated and broad market such as that for DTCS services.

The second part of the explanation in the paragraph above (in which the Commission asserts that both route throughput and ESA throughput reflect economics of scale) is, in light of this agreed objective, of concern to Telstra. This is because in EI's regression results these variables have different coefficients — in particular, route throughput has a negative coefficient while ESA throughput has a positive coefficient. Noting that economies of scale generally refers to a situation of decreasing costs with increasing levels of output, it is — as Professor Breusch observes — "impossible to sustain the interpretation that these throughput variables both reflect economies of scale when in EI's regression results the two variables have contradictory effects".⁹

The Commission's explanation is also inconsistent with EI's description of the two throughput variables. In relation to route throughput, EI state in their Final Report that:

⁷ Ibid, page 30

⁸ Ibid, page 14

⁹ Professor Trevor Breusch *Report on: Economic Insights Final Report and 2015 DTCS Draft FAD* (October 2015), page 8

“Route throughput could be related to economies of scale to the extent that DTCS providers supply services using shared facilities. This would imply an expected negative sign.”¹⁰

In relation to ESA throughput, EI state that:

“The ESA throughput measure may indicate demand pressure or capacity constraints, if exchanges within ESAs that have higher traffic density are also those which require more frequent capacity augmentation. To the extent that high ESA throughput reflects either demand pressure or capacity constraints it would be expected to have a positive effect on DTCS prices.”¹¹

Thus, on the above, it appears that EI do not ascribe the same interpretation to the ESA throughput measure as the Commission does. This observation draws into question the Commission’s interpretation of the ESA throughput variable, and by extension the Commission’s choice of Model 2 as opposed to Model 3.

Before considering this issue in more detail, it is noted that Telstra also has some concerns about the economic intuition EI has attached to each of the throughput variables.

In relation to route throughput, Telstra reiterates its earlier comments that there are significant volumes of non-DTCS transmission traffic on many routes, and this traffic is not captured in the analysis. We also note that no explanations have been offered for what is meant by ‘shared facilities’ and/or the way in which these might lower costs of supply. Our understanding is that there are numerous instances of (DTCS) providers operating their own facilities, so the idea that facilities are shared has limited value.

In relation to ESA throughput, the implications of EI’s reasoning are that all (or a majority of) traffic is routed through an exchange facility owned by Telstra and that where this facility approaches capacity, some type of congestion or scarcity pricing is adopted to help manage demand. This thinking is flawed for the following reasons:

- DTCS traffic is not solely reliant on Telstra facilities alone as there are a significant number of non-Telstra facilities, within ESAs, which support transmission sector activity.
- The capacity of any given exchange facility is not publicly known, so the basis for EI’s intuition is not clear. In practice, where Telstra has an exchange facility which is approaching capacity, we plan and then effect augmentation. However, such augmentations (or indeed the presence of a constraint in the first place) do not have a discernible influence on price. EI also seem to be conflating capacity and utilisation, which is problematic because utilisation is not an ‘always on’ concept — that is, transmission traffic can come in bursts, with exchanges appropriately provisioned for managing peak demand.

On balance, Telstra agrees with Professor Breusch’s view that EI’s inclusion of throughput measures in their analysis appears to be “an ex-post rationalisation of an empirical finding,

¹⁰ Economic Insights (EI) *Final Report on the Domestic Transmission Capacity Services (DTCS) Benchmarking Model* (September 2015), page 38.

¹¹ Ibid.

being made ad hoc with no theoretical foundation”.¹² As outlined above, there are also numerous practical weaknesses in EI’s reasoning.

Based on the above, it seems that the Commission may need to revisit its draft decision in relation to the empirical model which is used as the basis for the price equation in the Final FAD. Two empirical observations relevant to this suggestion are Professor Breusch’s finding that when ESA throughput is dropped from Model 2 it results in route throughput losing its significance¹³ and EI’s observation that the removal of the throughput measures “had little effect in reducing the goodness of fit of the model”.¹⁴ On this latter point, and noting that marginally different R squared figures are reported for models 2 and 3 (0.682 and 0.678 respectively), Professor Breusch has observed that “Model 2 of necessity has the larger R-squared, because it includes the extra two variables relative to Model 3”.¹⁵ Referencing the standard calculation for adjusting raw goodness-of-fit in R-squared due to extra parameters — the BIC criterion (reported in table 5.1 of EI’s Final Report) — Professor Breusch observes “on that criterion, the two models fit identically well”.¹⁶

Returning to the criteria Telstra has earlier identified for assessing the future pricing model, it is clear that a shift from Model 2 to Model 3 (without the throughput measures) would improve the robustness of the pricing equation, as it would no longer include variables which are neither reflective of conditions pertaining to the supply of exempt services (as discussed above) or the meaning ascribed to them. Such a change would also improve the transparency of the pricing model, as it would then be based on observable variables known to all market participants alone.

Collectively there is a strong case for the adoption of Model 3 in preference to model 2 — model 3 is more credible on account of excluding the contentious throughput variables, is statistically as good as Model 2, and performs better overall in terms of practicality, transparency and robustness. Furthermore, in contrast to Model 2’s unsatisfactory treatment of the regional routes diseconomies of scale issue, the outcomes from Model 3 are more consistent in providing for this issue and the views which the Commission has expressed in this area.

Additional pricing information should not be included retrospectively

The Commission is consulting on a request it has received to include a significant quantity of additional pricing information provided by Optus and VHA in the Commission’s regression analysis. Telstra strongly disagrees with any proposal for this information to be included in the Commission’s regression analysis as:

- The inclusion of the additional pricing information would not be consistent with the fundamental purpose of the competitive benchmarking exercise as there may be

¹² Professor Trevor Breusch *Report on: Economic Insights Final Report and 2015 DTCS Draft FAD* (October 2015), page 9.

¹³ Breusch (2015): page 10.

¹⁴ Economic Insights (EI) *Final Report on the Domestic Transmission Capacity Services (DTCS) Benchmarking Model* (September 2015), page 46.

¹⁵ Professor Trevor Breusch *Report on Economic Insights Final Report and 2015 DTCS Draft FAD* (October 2015), page 9.

¹⁶ Breusch (2015): page 8.

questions concerning the extent to which it reflects competitive market prices,¹⁷ and it is unlikely to align with the structure of the pricing formula within in the Draft FAD.

- It is not transparent that the data is relevant to the benchmarking exercise. In particular, it is not clear whether the additional data relates to just one part of a broader deal between Optus and Vodafone and so distorts the regression results.
- It is also not possible to compare the additional pricing information with the Commission's dataset.

Inclusion of the data would therefore require a substantial revisit of the empirical work, and associated stakeholder engagement, undertaken to date.

Telstra is also concerned that the additional pricing information was not provided within the time period requested by the Commission. Telstra and other stakeholders have therefore not been provided with a proper opportunity to consider potential impacts on the regression model and pricing formula and to respond to the Commission's initial views. It is a minimum requirement for procedural fairness that this occurs before the Commission proceeds to any final decision.

Tail-End Services

Telstra notes that the Commission's draft decision is to maintain the current approach, established in the 2012 FAD, to setting prices for stand-alone tail-end services from the benchmarking model. Under this approach tail-end prices will be set on a notional 2km average distance for both metropolitan and regional tail-end routes.

Telstra continues to be of the view that this approach is reasonable, however, there are some shortcomings in EI's analysis of this issue, noting the Commission appears to have drawn upon this analysis in support of its position. These shortcomings relate to EI's assumption that ESAs are circular and the resultant calculations about the average length of tails in both metropolitan and regional areas.¹⁸ This issue is discussed in section 5 of Professor Breusch's report at Appendix 1.

Connection Charges

Telstra is perplexed by the Commission's draft decision to reduce connection charges by up to 74 per cent. This is of particular concern given that the costs of labour and material involved with the connection of new services have risen substantially since the 2012 FAD. The Commission's methodology in reaching the conclusion that connection charges should be reduced across the range of capacities is unclear. At a minimum, Telstra considers that the Commission should clarify the evidence used to inform its deliberations as well as the rationale and methodology applied to reaching its draft decision.

¹⁷ See for example Optus, (2012) "Optus accelerates 3G and 4G expansion via extended site sharing arrangement" <https://media.optus.com.au/media-releases/2012/optus-accelerates-3g-and-4g-expansion-via-extended-site-sharing-arrangement/> (3 May) (accessed 6 October 2015) and Vodafone (2013) "Vodafone's momentum building with regional expansion" <https://www.vodafone.com.au/doc/VodafoneExtendsRegionalCoverage.pdf> (30 May) (accessed 6 October 2015).

¹⁸ Professor Trevor Breusch *Report on: Economic Insights Final Report and 2015 DTCS Draft FAD* (October 2015), page 7.

Further, if connection charges are to be set on averages, the Commission should take the average using only connection charges for agreements of 12 months duration and for which the data set contains a charge of greater than zero. To calculate averages otherwise risks error, as connection charges from other data may be reduced on account of greater recurring charges or a longer contract term.

Telstra agrees with the Commission's proposal to set connection charges for services of up to 12 months in contract, allowing services longer than 12 month contracts to be negotiated commercially. Services contracted for longer than 12 months generally receive discounts on connection charges.

With respect to capacity, Telstra considers that connection charges should be limited to the regulated service maximum capacity of 1 Gbps and not, as proposed, extend to 10 Gbps services, so as to align with the regulated service.

Table 1: 2012 FAD prices for connection charges

Data	SDH	Ethernet
2 Mbps	\$3 100	\$2 500
10 Mbps	\$6 500	\$2 500
34/45 Mbps	\$19 000	-
100 Mbps	-	\$5 000
155 Mbps	\$36 000	-
62 Mbps	\$40 000	-
1 Gbps	-	\$5 000

Table 2: Draft 2015 FAD prices for connection charges using SDH

Data	SDH
2 Mbps*	\$1 500
3-8 Mbps	\$2 000
9-34 Mbps	\$5 000
35-45 Mbps	\$5 000
46-155 Mbps	\$10 000
156-622 Mbps	\$21 500
623-2 500 Mbps	\$25 000
2 501-10 000 Mbps	\$25 000

*The 2Mbps band includes services provided at speeds of 2.048Mbps

Table 3: Draft 2015 FAD prices for connection charges using Ethernet

Data	Ethernet
2-10 Mbps	\$1,000
11-100 Mbps	\$1 500
101-1 000 Mbps	\$5 000
1 001-10 000 Mbps	\$13 500

Protection should continue to command a premium

EI's analysis found there to be an inconsistent relationship between protection and route prices. EI suggested that "one interpretation of these results was that protection tends to be available on routes where it can more easily be provided"¹⁹. EI therefore decided not to include protection as a variable in the final model. Consequently, the Commission's proposed pricing approach does not distinguish between protected and unprotected services.

Telstra understands EI's analysis to suggest that protection tends to be provided on routes where it can be provided at least cost. Protection is an important and key differentiator for DTCS and therefore needs to be clearly defined to ensure that pricing properly accounts for the higher levels of protection afforded by services which have substantial but incomplete geographic path diversity. Telstra strongly disagrees with EI's interpretation as the evidence demonstrates that providing protection is substantially more expensive than unprotected services. Consequently, Telstra is of the view that a premium should continue to apply to protected services to continue encouraging investment in high quality network design and architecture, and encourages the Commission to reconsider the effect of removing the premium for a protected service.

¹⁹ Australian Competition & Consumer Commission (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): page 27.

3. DRAFT NON-PRICE TERMS

Duration

Telstra welcomes the Commission's proposal to effect the FAD until 31 December 2019 without the need for a mid-term review. The Australian telecommunications industry is undergoing a period of great change with the transition to the National Broadband Network. The certainty and stability this proposed period offers is critical to the industry's planning and its ability to bring innovations to market to fulfil customer needs. Telstra considers that it is therefore appropriate that prices should be set generally aligned with the expiry date for the service declarations for ULLS, LSS, WLR, LCS, FOAS and FTAS (31 July 2019).

Telstra also considers it necessary to seek a staggered starting date as it will be necessary to update the relevant rate card and secure the Commission's approval under the Structural Separation Undertaking (**SSU**).

Special linkage charges

Telstra supports the Commission's draft decision not to set price terms for special linkage charges (**SLCs**) in the FAD. However, the Commission's proposal to require itemisation is potentially problematic. In response to customer feedback for faster quotations, Telstra Wholesale rolled out its new Site Enablement Pricing Framework (**SEP**) in December 2014. This has now been adopted by the majority of wholesale customers within only a few months. The SEP framework delivers most quotations within 2 days and aims to eventually deliver the majority within hours. Providing customers with this level of responsiveness, however, requires trading off some level of detail and granularity. Only very few customers have requested this level of detail whilst the vast majority have expressed their preference for responsive quotations. The Commission should not be prescriptive about itemisation as the commercial process takes into account the benefits to (and acceptance by) a broader range of customers and is delivering significantly improved outcomes and customer experiences.

Telstra is also concerned that clause 2A.2 of the draft instrument suggests that Billing Disputes in relation to network extension Charges will be dealt with under the Non-Billing Disputes procedures in Schedule 5. This is not the correct procedure for Billing Disputes and we believe may be an unintentional error. Even if the Commission insists on including clause 2A.1 of the draft instrument in the final instrument, clause 2A.2 of the draft instrument should nonetheless be deleted. This would make it clear that Billing Disputes are resolved under the Billing Dispute Procedures and that Non-Billing Disputes (including a failure to of an Access Provider to discharge its obligations under clause 2A.1) are resolved under the Non-Billing Disputes procedures in Schedule 5.

Another record keeping rule would add to the regulatory burden

The Commission is seeking views on an option to address some potential data limitations by introducing a Record Keeping Rule (**RKR**) under section 151BU of the CCA or collecting data via its mandatory information gathering powers, under section 155 of the CCA. The Commission notes that both options would increase the regulatory burden on transmission

service providers and that the Commission at this stage does not favour this option but seeks stakeholder feedback on such a proposal.²⁰

Telstra considers that the introduction of a further Record Keeping Rule (**RKR**) is unnecessary. The purpose of the RKR is unclear, especially as a mid-term review is not considered necessary. Moreover, the introduction of a further RKR in addition to the five (5) RKRs to which Telstra is already subject would add to the regulatory burden placed upon the industry. This burden would also be inconsistent with the policy objectives of the Government's red tape reduction agenda. The Commission retains the option of conducting a variation inquiry at any time under the CCA should the evidence demonstrate that such an inquiry is warranted, and it can request the relevant data at that time.

Data Rate (Capacity)

The current DTCS declaration specifies a minimum capacity of 2 Mbps. There was general agreement among stakeholders during the 2012 DTCS FAD Inquiry that the Commission should only set prices for the capacities that are commonly available for transmission services. Given the paucity of benchmark data at bandwidths exceeding 1 Gbps, Telstra supports the proposal to set prices to an upper limit of 1Gbps as it avoids the risk of pricing higher bandwidth services below the cost of supply and the lack of data points makes any price points that could potentially be determined unreliable. Pricing services up to 1 Gbps also ensures that the newer technologies used to deliver the higher bandwidth services are allowed to develop.

However, the fact that the Commission's DTCS calculator can calculate regulated monthly prices for services up to 2.5 Gbps could lead to potential confusion. Also potentially confusing is the fact that draft connection charges extend to services up to 10 Gbps in capacity.²¹ Telstra recommends that for the sake of clarity these services should all be aligned to 1 Gbps in maximum capacity.

Facilities access should not be included in the DTCS FAD

Telstra welcomes the Commission's draft decision not to set price terms and conditions for ancillary facilities access services. The Commission notes that it has not received any submissions on facilities access services necessary for accessing the DTCS (that is, ancillary to the DTCS), and which should be regulated through the DTCS FAD.²² Telstra believes that facilities access – including Telstra Equipment Building Access (**TEBA**), ducts access and external interconnect cables (**EIC**) – is already regulated through long established and well understood mechanisms, specifically:

- Parts 3 and 5 of Schedule 1 of the *Telecommunications Act 1997* (Cth) (**Telco Act**). Part 3 of the Telco Act sets out the regime for access to supplementary facilities, which includes exchange buildings. Part 5 of the Telco Act sets out the regime for access to telecommunications towers and underground facilities, which includes ducts access.
- The Facilities Access Code (**the Code**), which was established in 1999 to govern how access to certain telecommunications facilities owned by telecommunications carriers

²⁰ Australian Competition & Consumer Commission (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): page 28.

²¹ Australian Competition & Consumer Commission (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): page 43.

²² Australian Competition & Consumer Commission (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): page 46.

(including mobile towers and underground ducts) is provided to other carriers seeking to install their equipment on or in those facilities. The Code was updated – after consultation with industry – in 2013 and its provisions do generally form the basis for negotiations around access to the relevant facilities.

- Telstra's Structural Separation Undertaking (**SSU**) imposes further equivalence requirements upon Telstra with respect to exchange capping and the management of queues to access exchanges, overarching equivalence obligations, and strong incentives for self-reporting potential equivalence issues.

The cost-based approach is not suited to cross-check benchmarking

Telstra agrees with the Commission's draft decision that the Fixed Line Service (FLSM) and the Telstra Economic Model (TEM) are not suited to cross-checking the price of transmission. As the Commission notes²³, the major limitation is that these models do not allocate costs in a manner which helpfully identifies the costs that can be appropriately attributed to transmission services. For instance, the TEM includes wholesale transmission services in addition to the DTCS that are not captured by the declared service description and cannot be meaningfully compared with the DTCS data set.

Telstra's Managed Lease Line is an averaged price commercial service

The Commission notes²⁴ that following the 2012 DTCS FAD Telstra implemented a new product suite for wholesale data services including the declared DTCS service. The components of this product suite most relevant to DTCS are the Managed Leased Line Service (**MLLS**) and the Data Carriage Service (**DCS**). The other two components are the Wholesale Transmission (**WTx**) and Carrier Grade Ethernet (**CGE**) services which were available under Telstra's previous data services suite.

The DCS is a service that reflects Telstra's implementation of the existing DTCS FAD price formula to set rate card prices directly based on the radial distance, capacity (rate), and protection status of the transmission service purchased. Telstra introduced MLLS in response to wholesale customer demand for a service incorporating a product equivalent to the DCS accompanied by a simplified pricing structure and additional value-added features, such as proactive monitoring.

The development and provision of the MLLS by Telstra is indicative of the way the market has responded in offering customers new and innovative products, and highlights how competitive pressures and appropriate regulatory settings have incentivised service providers to develop and offer additional features or functionality that go beyond the scope of the regulated DTCS. Due to the MLLS averaged pricing construct, [CIC begins]...[CIC ends].

Telstra's wholesale customers can acquire either DCS or MLLS services under the new Telstra Wholesale Agreement (**TWA**). As Telstra has noted as part of the separate Non-Price FAD Consultation process, the TWA is a commercial agreement for the supply of a range of both regulated and non-regulated services which was developed to simplify our terms for our customers, after consultation with a group of customers and in response to customer concerns. [CIC begins]...[CIC ends].

²³ ACCC (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): pages 51-52.

²⁴ Australian Competition & Consumer Commission (2015) *Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service: Draft Decision* (4 September): page 46.

National Broadband Network Points of Interconnect

As noted by the Commission, NBN Points of Interconnect (**POI**) are likely to form an important location from which transmission investment and competition is likely to emerge. Present DTCS service providers will continue to invest in their networks to these POIs and will likely have the ability and incentives to extend services beyond their current network location to the regions served by a NBN POI. Telstra considers this will particularly be the case for NBN POIs that are located in regional centres (or regulated ESAs) as there is greater commercial incentive to locate transmission fibre to the POI and, consequently, it is likely to create contestability for supply of the service. Under the current 2014 DTCS declaration, 46 POIs will be subject to regulated pricing in the 2015 DTCS FAD. Telstra considers that backhaul to all NBN POIs should be exempt given that the Commission's original basis for selecting the location of all 121 POIs was the presence of at least two (2) competitive fibre providers²⁵, and that, in the course of only 3 years since then, almost 95 per cent of POIs already consist of at least three or more fibre providers²⁶. In fact, Telstra and Optus have signed NBN aggregation contracts demonstrating that competition is driving good market outcomes.²⁷ As such, provided that the DTCS pricing is not set at a level that undermines investment incentives, Telstra considers that the rollout of the NBN will act as sufficient incentive to invest in backhaul at competitive prices.

Conclusion

Telstra recognises that the proposed price reduction, in part, appropriately reflects the intense price competition occurring in the transmission market. However, Telstra considers that, in part, these substantial price reductions also come as a result of certain shortcomings contained in the way that the Commission has applied its consultant Economic Insights' (EI) regression analysis. Specifically, the Commission's rationale for adopting Model 2 is flawed and demonstrably inconsistent with EI's analysis. Telstra recommends that the modelling — and consequently the pricing equation — could be improved through the enhancements suggested in this submission.

²⁵ ACCC (2010) *Advice to Government: National Broadband Network Points of Interconnect*, November, page 4.

²⁶ ACCC (2013) *NBN Points of Interconnection: Review of policies and procedures relating to the identification of listed points of interconnection to the NBN* (July): page 23.

²⁷ Optus (2015) "Optus announces exclusive two year Exetel NBN aggregation deal"

<https://media.optus.com.au/media-releases/2015/optus-announces-exclusive-two-year-exetel-nbn-aggregation-deal/> (2 September) (accessed 8 October 2015)

APPENDIX 1: REPORT BY PROFESSOR TREVOR BREUSCH