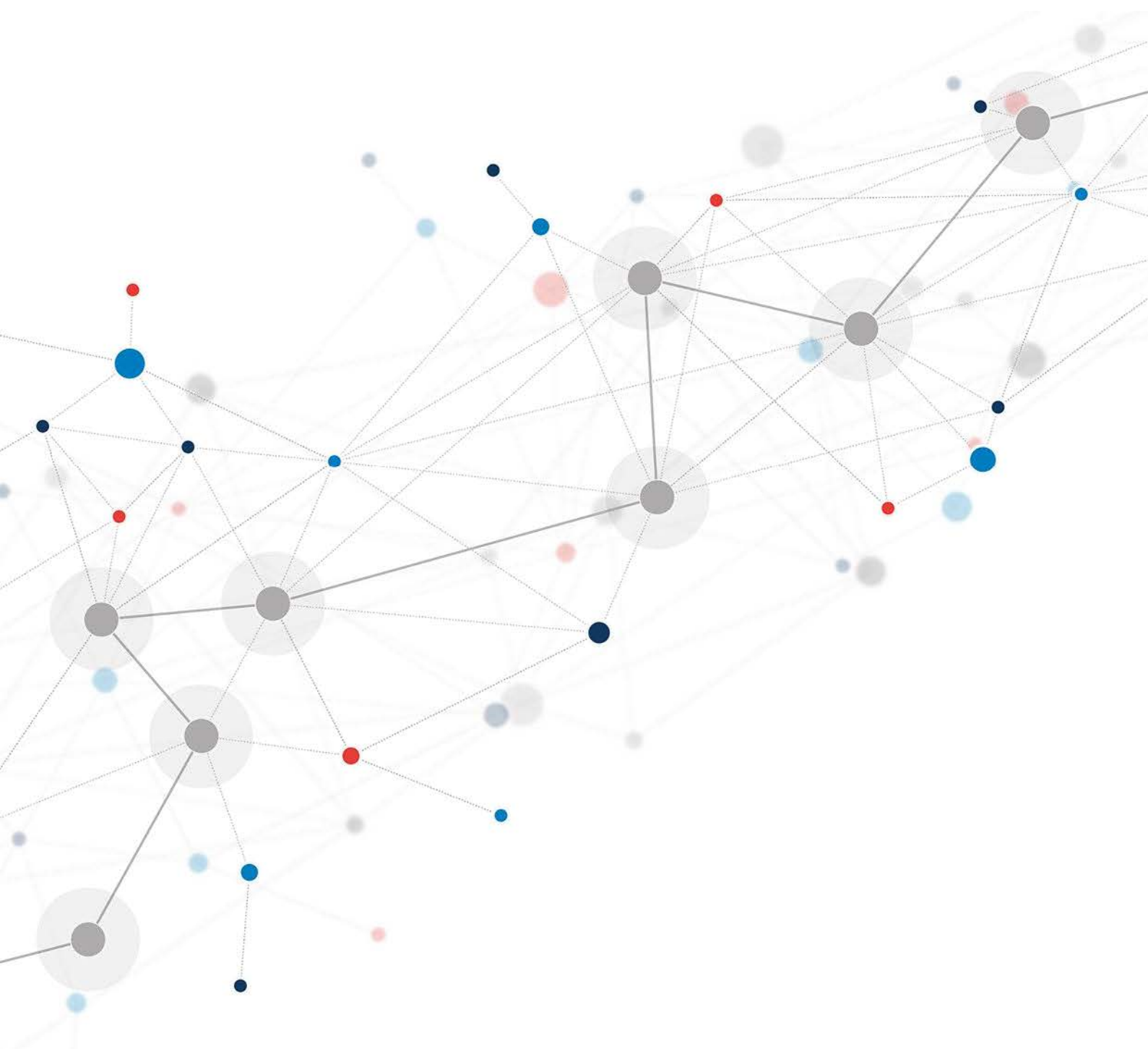

REPORT ON BEHALF OF TPG REPLY TO FURTHER REPORTS FOR OPTUS

Third Expert Report of Dr Jorge Padilla

17 November 2022

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Public Version



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1 Introduction

Credentials

- 1.1 My name is Jorge Padilla. I am a Senior Managing Director and the Head of Compass Lexecon EMEA. Compass Lexecon is a global economic consultancy, part of FTI Consulting, Inc.
- 1.2 I am the same Jorge Padilla who made the expert report of 26 July 2022 (**'my First Report'**) and of 2 November 2022 (**'my Second Report'**)
- 1.3 Unless otherwise stated, capitalised terms in this report have the same meaning as those defined in my First and Second Reports.

Instructions

- 1.4 Corrs Chambers Westgarth have provided me with public versions of four expert reports, being:
 - a. a report prepared by Mr Matt Hunt (**Mr Hunt's Report**);¹
 - b. the reports by Analysys Mason (collectively **the Analysys Mason Reports**)² on network cost analysis (results analysis) and network cost analysis (model overview); and
 - c. a supplementary report prepared by Mr Houston (**Mr Houston's Supplementary Report**).³
- 1.5 As set out in Exhibit A, I have been instructed by Corrs Chambers Westgarth on behalf of TPG Telecom Limited (TPG) to provide an independent expert report setting out my response to the reports above, insofar as they relate to the questions asked of me in the Engagement Letter, Letter of Instruction and Further Letter of Instruction.

Preparation of this report and acknowledgement of my duties as an expert

- 1.6 For the purpose of this opinion, I have been provided with, reviewed and relied on the documents listed in Exhibit B.
- 1.7 In preparing this opinion, I have made reference to and relied on various other documents, reference materials and other authorities. I have identified those documents, reference materials and authorities at relevant points in this opinion and they are listed in Exhibit C.

¹ Expert economic Report of Matt Hunt prepared at the request of Optus, "*Assessment of the application for merger authorisation by Telstra and TPG*," dated 25 October 2022.

² Analysys Mason, "*Network cost analysis of the Telstra-TPG agreement – Model overview*," dated 24 October 2022 and Analysys Mason (**The Analysys Mason Model Overview**), "*Network cost analysis of the Telstra-TPG agreement – Results analysis*," dated 24 October 2022 (**The Analysys Mason Results Analysis**).

³ Supplementary expert report of Greg Houston, "*Competitive effects of the proposed Telstra-TPG arrangement*," dated 26 October 2022.

- 1.8 In the preparation of this report, I have been assisted by a number of my colleagues at Compass Lexecon including Paul Reynolds, Ciara Kalmus and Hamid Aghadadashli. The opinions expressed in this report are my own.
- 1.9 I confirm that I have read the Federal Court's Expert Evidence Practice Note and the Harmonised Expert Witness Code of Conduct and agree to be bound by them.

2 Summary

2.1 I have been instructed to provide my response to the matters raised in Mr Hunt's Report, the Analysys Mason reports and Mr Houston's Supplementary Report. Given the limited time available for my response, I have focused on what I consider are the key differences between my views and those presented in the reports of relevance to the ACCC's decision. Where I have not commented on a point raised in the reports, it should not be taken as implying that I agree with the point.

Mr Hunt's report

2.2 Mr Hunt concludes that *"the Proposed Transaction is likely to have similar short-to-medium run effects on competition at the retail level as the counterfactual. However, as the Proposed Transaction would lead to substantial adverse effects on competition at the network level in the RCZ [Regional Coverage Zone], which would commence immediately and increase over time, this would lead to a substantial lessening of wholesale and retail competition over time, including on price."*⁴

2.3 In contrast to Mr Hunt, I consider that:

- a. the direct effect of the Proposed Transaction on quality and prices will be significantly more beneficial to competition and consumers than the counterfactual posited by the ACCC in the SOPV as having a real commercial likelihood, being a combination of a TPG targeted build together with a roaming and/or sharing agreement with Optus (**the SOPV Counterfactual**); and
- b. both Optus and Telstra can be expected to continue to substantially invest in regional areas under the Proposed Transaction and there is no sound basis to conclude that they would invest less under the Proposed Transaction than in the SOPV Counterfactual.

2.4 Mr Hunt's view that the direct effects of the Proposed Transaction are likely to be similar to the direct effects of the SOPV Counterfactual appears to be based on two key assumptions which I consider are unfounded:

- a. the assumption that Optus would offer TPG as good terms for sharing as TPG would receive under the Proposed Transaction with Telstra; and
- b. the assumption that competition from TPG is of less significance than competition from Optus because of TPG's smaller size.

2.5 Mr Hunt appears to share my view that it would be uneconomic for TPG to undertake the large investments required to deploy its own network in the RCZ. Accordingly, if TPG is to achieve competitive coverage, it must rely on an arrangement with either Telstra or Optus. Effectively, the ACCC is being called upon to either allow the Proposed Transaction to proceed or, by blocking the Proposed Transaction, to leave TPG to seek an arrangement with Optus. This is a choice between two alternative sharing arrangements.

⁴ Mr Hunt's Report, para. 311.

- 2.6 If the ACCC blocks the Proposed Transaction, TPG would depend on Optus as the effective monopoly supplier of wholesale access to achieve reasonable regional coverage. Optus would have strong incentives to impose high access charges on TPG and limit its coverage below even Optus' current coverage to stymie TPG's ability to provide offers to win customers from Optus. As such, I consider that an ACCC decision to block the Proposed Transaction would result in significantly inferior outcomes for price and quality competition.
- 2.7 Mr Hunt also argues that TPG's small size makes its less important for price competition than Optus. I consider that Mr Hunt overlooks what I expect to be a key source of competitive benefit from the Proposed Transaction. In particular, consistent with established economic theory, TPG's small size increases its incentive to price aggressively to seek to grow its share although its current competitive impact is limited by its substantially inferior coverage. When TPG offers coverage better than Optus and much closer to Telstra's coverage than TPG's current coverage, I consider that TPG will continue to undercut its rivals' quality-adjusted prices to grow its share and that Telstra and Optus will be forced to reduce their prices to seek to limit the loss of their customers.
- 2.8 Mr Hunt argues that network competition would be less under the Proposed Transaction because Optus would invest less and this would reduce the competitive pressure on Telstra to invest. Mr Hunt's view that Optus would invest less appears to be based on the Proposed Transaction leading to Optus having smaller scale economies than Telstra with the potential for Telstra to price in a way that undercuts Optus' ability to earn a reasonable return on investment. I consider that Mr Hunt's view is refuted by the market facts:
- a. Optus already has much fewer regional subscribers than Telstra;
 - b. Telstra does not price at a level which Optus cannot match – it prices at a significant premium to Optus; and
 - c. Optus' smaller scale has not deterred Optus from investing in regional areas – it has been investing heavily to seek to reduce its coverage gap with Telstra.
- 2.9 I consider that the market evidence shows that the competitive pressure to limit coverage differences is a major driver of Optus' investment and this is the case even though Optus does not expect to have better coverage or greater scale economies than Telstra. Optus currently supports a base of customers who do not demand the best coverage in the market but who accept the reasonably competitive coverage which Optus offers. Furthermore, Optus will have the incentive to invest to escape the increased competitive constraint imposed by TPG and, in addition to avoid the risk of being leapfrogged by TPG in terms of network quality. If Optus were to cease investing in the RCZ, it would risk over time slipping to the current market position of TPG in which a significant share of customers would not consider it as a credible provider for their needs.

The Analysys Mason reports

- 2.10 The Analysys Mason reports are heavily redacted which limits my ability to comment on them. On the basis of the unredacted parts of the reports, I understand that Analysys Mason has estimated a measure of average costs in the RCZ for Telstra, Optus, the Telstra-TPG MOCN and an Optus-TPG MOCN based on dividing certain costs of providing services in the RCZ by estimated traffic in the RCZ. Analysys Mason appear to draw a conclusion that where Telstra would enjoy the greatest scale advantages under the Proposed Transaction, it will be able to offer the lowest prices in the

market. Analysys Mason then consider that because Telstra would be the only operator able to gain such scale advantages this would decrease competition in the RCZ.⁵

2.11 I consider that the Analysys Mason reports do not provide a sufficient basis on which to draw conclusions on the competitive effects of the Proposed Transaction.

2.12 As regards competition, Analysys Mason do not appear to assess the likelihood of Optus investing further in the RCZ following the Proposed Transaction. As the ACCC notes: “...coverage in regional and remote areas is valued not only by consumers who live and work in those areas, but also by metropolitan consumers. In many cases, consumers place value on remote coverage in areas they may not travel too frequently or at all.”⁶ In line with the ACCC’s observation, the business case for investment in the RCZ will depend not only on the revenues earned in the RCZ but also on the additional profits earned in metro areas because of customers’ valuation of coverage. To the extent that Analysys Mason has not considered the impact of investment in the RCZ on revenues earned elsewhere, Analysys Mason’s conclusion regarding network competition are unsubstantiated.

2.13 With respect to price competition, as the ACCC’s merger guidelines note, the most relevant cost measure is marginal costs.⁷ Price competition will also depend on the closeness of the parties, i.e. customers’ willingness to switch between them.⁸

a. Analysys Mason comment that additional spectrum will lower Telstra’s cost of supplying additional traffic. Economic theory shows that a substantial part of a firm-specific reduction in marginal costs can be expected to be passed through into lower prices.⁹ Even a monopolist (with linear demand) can be expected to pass-through 50% of a marginal cost saving and the rate of pass-through of firm-specific marginal cost reductions generally increases with competition.

b. There are reasons to expect that the marginal cost reduction for Optus in the SOPV Counterfactual will be lower than for Telstra under the Proposed Transaction because (i) Optus already has large amounts of spectrum per SIO in the RCZ¹⁰; and (ii) [REDACTED]
[REDACTED]
[REDACTED].¹¹

c. I expect that TPG will face lower access prices under the Proposed Transaction than it would if the ACCC blocked the Proposed Transaction, with the likely consequence that TPG would be offered uncompetitive access prices from Optus. Analysys Mason do not appear to have made this comparison. [REDACTED]
[REDACTED]
[REDACTED]¹²

d. I expect that there would be greater competition between the three operators under the Proposed Transaction than under the SOPV Counterfactual given that TPG would have

⁵ Analysys Mason Results Overview, page 3.
⁶ SOPV, para. 3.15.
⁷ ACCC Merger Guidelines 2008, paras 7.63 and 7.65.
⁸ ACCC Merger Guidelines 2008, para. 5.12.
⁹ See, for example, RBB Economics, *Cost pass-through: theory, measurement and potential policy implications – A report for the Office of Fair Trading* (2014), Section 4.12 and 4.2.2.1.
¹⁰ See, my First Report, para. 5.21.
¹¹ Telstra TPG MOCN – Authorisation Application, para. 55.
¹² [REDACTED]

coverage between that of Telstra and Optus (rather than having less coverage than Optus), that TPG would be likely to benefit from more competitive access terms, and that being smaller its incentive to compete aggressively is greater.

Mr Houston's supplementary report

- 2.14 Mr Houston concludes in Section 6 of his Supplementary Report that:
- a. he is not able to draw a conclusion as to the overall effect of the Proposed Transaction on price competition in the short-to-medium term; and
 - b. Optus would (based on the information available to him) invest less in network quality under the Proposed Transaction while Telstra would have a better ability to invest in quality but less incentive to invest.
- 2.15 Mr Houston's ambivalence over the short-to-medium term effects on price competition reflects his inability to decide: (i) whether TPG's network quality will be closer to Telstra's under the Proposed Transaction or under a Counterfactual involving an Optus/TPG arrangement; (ii) whether TPG's network quality will be closer to Optus under the Proposed Transaction or under an Optus/TPG counterfactual; and (iii) the effect of charges for network sharing on the incentive and ability of the parties to compete under the Proposed Transaction and under an Optus/TPG counterfactual.
- a. I consider that TPG's network quality is likely to be much closer to Telstra's under the Proposed Transaction given that TPG's coverage will be greater than Optus' current coverage and that, if the ACCC blocks the Proposed Transaction, Optus will be effective monopoly supplier of wholesale access and therefore face no competitive pressure to offer TPG even Optus' current level of coverage.
 - b. I consider that TPG's higher coverage under the Proposed Transaction will benefit customers both directly and by significantly increasing competitive pressure on Telstra and Optus to reduce their prices.
 - c. As set out in my Second Report, I consider that the TPG would face a significantly lower variable cost in providing data in the RCZ and, over time, a lower cost of acquiring additional subscribers under the Proposed Transaction than under the SOPV Counterfactual. This would be even more the case given Optus' monopoly power as a wholesale supplier to TPG that would result from the ACCC blocking the Proposed Transaction.
 - d. As also set out in my Second Report, I consider that Telstra and Optus would face stronger pressure to reduce their prices under the Proposed Transaction than under the SOPV Counterfactual as a result of TPG's greater competitiveness from offering better coverage. This is the case even taking into account TPG's wholesale payments to Telstra and noting that the wholesale payments to Telstra are likely to be on more competitive terms than what TPG would receive in the SOPV Counterfactual.
- 2.16 I understand that Mr Houston considers that the effect on Optus' investment will depend on the differentiation in quality between Optus, Telstra and TPG as well as the extent to which costs and benefits are shared between Optus and TPG in the SOPV Counterfactual. Mr Houston finds himself unable to judge the short to medium effects of the Proposed Transaction and yet, has no problem deciding its much more speculative long-term implications. While Mr Houston's conclusions are not fully clear to me, I understand that he considers that the dominant effect will be that TPG's better

coverage under the Proposed Transaction will deter Optus from investing to increase its coverage.¹³ However, Optus' business case for investing will depend on its profits from investing versus its profits if it does not invest. While the Proposed Transaction is likely to reduce Optus' profits from investing (because TPG will be a more effective competitor), it will also raise the cost to Optus of not investing and thereby ending up with much worse coverage than TPG. I consider that this will lead Optus to continue to invest to upgrade its regional coverage under the Proposed Transaction. I have set out my modelling of this in my Second Report.

My overall conclusion

2.17 I consider that the Proposed Transaction will directly and significantly increase price and quality competition and to a greater extent than under the SOPV Counterfactual. This is because the Proposed Transaction would substantially increase TPG's coverage, thereby reducing TPG's quality-adjusted prices and making TPG a much more effective competitor. Under the SOPV Counterfactual, TPG's coverage would be lower and TPG would likely face uncompetitive terms for roaming or (if it were to become feasible) network sharing with Optus.

2.18 With respect to effects on investment, I consider that:

- a. TPG's ability to offer much better coverage will increase the competitive pressure on Optus and Telstra to invest to improve their services;
- b. Optus will continue to invest to improve its regional network because I estimate that Optus would face a higher cost if it does not do so in terms of losing its customers for whom regional coverage is important; and
- c. while the Proposed Transaction can be expected to negatively impact Optus financially compared with a counterfactual network sharing arrangement with Optus, Optus is likely to remain an effective competitor with incentives to invest in the RCZ.

2.19 If it were economic for TPG to provide coverage across the RCZ, I expect that the ACCC would welcome such investment as promoting competition and delivering better consumer outcomes. While the low population density of the RCZ makes a third network uneconomic, the Proposed Transaction offers much of the competitive and consumer benefits of having a third operator with high national coverage. The ACCC has raised whether there might be some offsetting effects which would need to be weighed against the benefits to assess the overall effect of the Proposed Transaction. I consider that these effects are likely to have only a small offsetting effect to the extent that they would arise at all.

- a. The ACCC has questioned whether the Proposed Transaction would increase TPG's costs of serving additional customers. As set out in my Second Report: [REDACTED]
- b. The ACCC has raised whether TPG's payments to Telstra would make it profitable for Telstra to raise its prices. As set out in my Second Report, I calculate that the increased willingness of

¹³ Mr Houston's view that operators will always seek to differentiate their quality from rivals is also inconsistent with the fact that TPG is seeking a network sharing agreement to achieve much more comparable coverage to Telstra and Optus.

customers to switch from Telstra to TPG will dominate the effect of the wholesale payments such that Telstra's prices (and Optus' prices) can be expected to fall significantly under the Proposed Transaction.

- c. The ACCC noted that the Proposed Transaction might either incentivise Optus to accelerate or decelerate its infrastructure investment in response to the better service of Telstra and TPG and depending on the how its revenues and costs of investing would be affected. The Proposed Transaction might lower Optus' overall profitability if it resulted in a customer loss to TPG and the need to lower its prices to limit the loss of customers. However, this does not imply that Optus would no longer find it economic to invest further in its network in the RCZ. Indeed, as set out in my Second Report, the cost for Optus of not investing could be greater if more of Optus' customers would be willing to leave when TPG offers better coverage (rather than only Telstra offering better coverage albeit at a high premium).
- d. The ACCC raised whether the direct competitive benefits of the Proposed Transaction might be lost when the terms of the agreements were renegotiated after 10 to 20 years. Such a concern would seem to require TPG to be behaving myopically. In any case, I consider it is unfounded given that: (i) the Proposed Transaction would give TPG a significant regional customer base (increasing its attractiveness as a partner to Telstra and Optus and potentially improving the economics of a future expansion of its own network); (ii) TPG's small current number of regional sites (which are all located on third party towers) is unlikely to significantly improve its current bargaining position; and (iii) the high uncertainty over future technology such as whether regional coverage might in future be supplied by low earth orbit satellite technology. I also understand that TPG has offered to retain up to 300 sites in the RCZ for 8 years so that the ACCC can review the effects of the Proposed Transaction in practice to determine whether to allow it to continue. It would be perverse if the Proposed Transaction were blocked because of a concern about a risk to TPG's future bargaining power when the effect of blocking the Proposed Transaction would be to immediately reduce TPG's bargaining power.

3 Response to the Report of Mr Hunt

- 3.1 In this section, I set out my responses to the views of Mr Hunt in relation to:
- a. the direct impact of the Proposed Transaction on quality and price competition;
 - b. the potential longer term impact of the Proposed Transaction on network investment;
 - c. the relevance of the modelling of Professor Piccolo and the papers of Noh and Moschini and Lutz; and
 - d. spectrum efficiencies.

Direct impact of the Proposed Transaction on quality and price competition

- 3.2 In my First and Second reports, I set out the reasons for my view that the Proposed Transaction would substantially increase the coverage and quality offered by TPG and, by reducing TPG's quality-adjusted prices and by increasing customers' willingness to switch to TPG, increase price competition in the market. I also showed why the downward pressure on quality-adjusted prices can be expected to substantially outweigh the impact on TPG's and Telstra's prices of the wholesale payments that TPG makes to Telstra.
- 3.3 Mr Hunt acknowledges the intuition for the direct impact of the Proposed Transaction benefitting consumers compared with an Optus/TPG network sharing counterfactual in commenting on Professor Piccolo's model: "*The main result of the model, i.e. that consumer welfare is most increased by network sharing between the lowest quality firm and the highest quality firm is entirely unsurprising. Of course, if the lowest quality firm can costlessly improve its quality, it will be more beneficial for consumers if it can choose a higher level of quality.*"¹⁴
- 3.4 Mr Hunt's comments raises the need to consider the charges TPG would pay for regional network access. More generally, Mr Hunt's conclusion that the direct effects of the Proposed Transaction are likely to be similar to the direct effects of a Optus/TPG counterfactual appear to be based on two key assumptions which I consider are unfounded:
- a. the assumption that Optus would offer TPG as good terms for sharing as TPG would receive under the Proposed Transaction with Telstra; and
 - b. the assumption that competition from TPG is of less significance than competition from Optus because of TPG's smaller size.
- 3.5 Mr Hunt considers that Optus and TPG have strong incentives to reach a network sharing agreement that would include 5G absent the Proposed Transaction with perhaps a transitional 5G roaming arrangement.¹⁵ However, Mr Hunt is vague on the terms of such an agreement. He states that he does "*not consider it prudent to reach definitive conclusions as to the precise terms of a counterfactual agreement between TPG and Optus*".¹⁶ He then argues that if TPG were to pay a

¹⁴ Mr Hunt's Report, para. 115e.

¹⁵ Mr Hunt's Report, para. 39.

¹⁶ Mr Hunt's Report, para. 294.

higher variable charge to Optus in a network sharing counterfactual that this could help Optus to fund network investment.¹⁷ Next he states that smaller firms have natural incentives to set lower prices to steal business from rivals and that Optus is likely to value TPG's additional revenues more than Telstra.¹⁸

- 3.6 My view is that if the Proposed Transaction is blocked, then any agreement between TPG and Optus would be on worse terms for TPG than the Proposed Transaction and would not compensate for Optus' inability to offer TPG as good coverage as TPG would receive under the Proposed Transaction.¹⁹ Both Telstra and Optus can be expected to be negatively impacted by TPG becoming a more effective competitor. However, where there is the potential for wholesale competition between Telstra and Optus to supply TPG, such competition can lead to TPG receiving competitive terms for network services in the RCZ. This is because with wholesale competition, Telstra and Optus cannot individually prevent TPG from gaining wholesale access so that they might as well try to get TPG to use their network and thereby gain the wholesale revenues.
- 3.7 An ACCC decision to block the Proposed Transaction would instead turn Optus into the effective monopoly potential supplier of access to TPG. Optus would then have both competitive and financial reasons to require TPG to pay relatively high access charges and limit its coverage which would stymie TPG's ability to provide competitive offers to win customers from Optus.²⁰ The less credible TPG is as a competitor, then the less that Optus (and Telstra) would need to reduce their prices to limit customers switching to TPG. Optus' existing 3G roaming arrangement with TPG has limited TPG's competitiveness, including because of the flat per GB pricing model it uses, the more limited coverage it provides and the fact that it is a technology generation behind that offered by Optus in the same coverage areas. This arrangement has enabled Optus to charge a significant premium over TPG, and I expect that any possible agreement with Optus should the ACCC block the Proposed Transaction would be on terms which also limit TPG's competitiveness. For these reasons, I consider that the outcomes for competition and consumers in the SOPV Counterfactual would be significantly inferior to the outcomes, resulting from wholesale competition between Telstra and Optus, under the Proposed Transaction.
- 3.8 Mr Hunt does not appear to have considered the effect of the ACCC blocking the Proposed Transaction although he argues that TPG's bargaining power will be limited if its outside options are poor.²¹ He makes this point with respect to TPG renegotiating future access terms with Telstra. In my Second Report, I set out why I consider that, if the Proposed Transaction proceeds, TPG's future bargaining position will be at least as good as its current bargaining position.²²
- 3.9 Mr Hunt appears to share my view that it would be uneconomic for TPG to significantly expand its own network in the RCZ if the Proposed Transaction does not proceed. As such, the ACCC is effectively being required to choose between two alternative access arrangements: the TPG/Telstra Proposed Transaction or a potential TPG/Optus agreement. I consider that the Proposed Transaction would deliver better outcomes for competition and consumers because:

¹⁷ Mr. Hunt's Report, para. 295.

¹⁸ Mr. Hunt's Report, para. 296.

¹⁹ For example, under the Proposed Transaction, TPG will gain access to 3,700 sites in the RCZ whereas Optus has only 2,500 sites in the RCZ and Optus will have an incentive, if the Proposed Transaction is blocked, to limit TPG's ability to compete on equal terms.

²⁰ There is no reason to consider that the SOPV Counterfactual would result in any better competitive outcomes than the current market structure in which TPG is not considered a credible alternative for many customers and in which TPG has a negligible share of regional customers.

²¹ Mr. Hunt's Report, para. 45c.

²² My Second Report, paras. 5.46-5.49.

- a. it would enable TPG to offer higher coverage and thereby make TPG a more effective competitor; and
- b. the terms of the Proposed Transaction were offered by Telstra under the competitive risk that TPG could otherwise reach an agreement with Optus, whereas if the Proposed Transaction is blocked, any agreement with Optus is likely to be on terms which limit TPG's competitiveness.

3.10 I also consider that a MOCN agreement between TPG and Optus would not generate the same gains from spectrum use as the Proposed Transaction for at least the next three to five years. ■■■■■

■■■■■ This makes it unlikely that the improvement in service quality (network speed and capacity) offered by a TPG/Optus arrangement will match that of the Proposed Transaction. A MOCN agreement with Optus would also require longer time to implement. ■■■■■

■■■■■ TPG estimates that Optus will not be able to upgrade sufficient number of its sites to 5G in the 80%+ area before ■■■■■ for a MOCN arrangement to become viable.²⁴

3.11 Mr Hunt also argues that even if TPG's competitiveness improves under the Proposed Transaction, it is less important for price competition because it is a smaller rival nationally than Optus.²⁵ I have the opposite view to Mr Hunt. The Proposed Transaction would enable TPG to offer competitive coverage and, precisely because of TPG's small current market share, it would have the incentive to price aggressively to seek to grow its share. Mr Hunt observes that smaller firms have natural incentives to set lower prices to steal business from rivals,²⁶ but Mr Hunt fails to apply this to his analysis of TPG's likely competitive impact. When TPG offers coverage better than Optus and much closer to Telstra's coverage than TPG's current coverage, I consider that Telstra and Optus will be forced to reduce their prices to seek to limit the loss of their customers to TPG.

3.12 I also consider that price competition will be greater under the Proposed Transaction because the three operators will be closer competitors than in the SOPV Counterfactual.

- a. The Proposed Transaction would give TPG's coverage between that of Optus and Telstra. As I explain in the next sub-section, I also expect that Optus will continue to invest strongly in regional areas.
- b. If the Proposed Transaction is blocked by the ACCC, I expect that Optus would offer TPG not only worse coverage than TPG would have under the Proposed Transaction but worse coverage than Optus' coverage.²⁷ As noted above, I also expect that TPG would be offered uncompetitive terms by Optus. Accordingly, TPG would be a much weaker competitor to both Telstra and Optus and Telstra would face less of an overall competitive constraint.

3.13 Finally, I note Mr Hunt's view that the ACCC should place weight on the potential effect on infrastructure investments by Optus rather than what he describes as short-term price effects.²⁸ I consider that there is no sound basis for such a view. I consider that the direct benefits of the

²³ Telstra TPG MOCN Authorisation Application, para. 55.

²⁴ Telstra TPG MOCN Authorisation Application, para. 56-58.

²⁵ Mr Hunt's Report, para. 44.

²⁶ Mr Hunt's Report, para. 296a.

²⁷ This also appears to be the view of Mr Houston (see Figure 4.1 of Expert Report of Greg Houston, "Competitive effects of the proposed Telstra-TPG arrangement," dated 28 June 2022 (Mr Houston's First Report)).

²⁸ Mr Hunt's Report, para. 41.

Proposed Transaction over its 10 to 20 years for price and quality competition are likely to be substantial for the reasons set out above and in my earlier reports. As I set out next, I consider that Optus can be expected to continue to invest around the same or more and that TPG and Telstra can be expected to make additional quality-enhancing investments²⁹ under the Proposed Transaction than under the SOPV Counterfactual.

Potential longer-term effects on investment

- 3.14 Mr Hunt argues that:
- a. Optus would invest less under the Proposed Transaction than in a network sharing counterfactual because it would realise lower scale economies, it would not receive payments from TPG and because Telstra could competitively respond to Optus' investments at lower costs; and
 - b. Telstra would invest less if it faces less network competition from Optus.
- 3.15 I agree with Mr Hunt that an operator's investment decisions can be expected to be impacted by both direct financial impacts of the investment as well as the competitive constraints it faces. However, Mr Hunt seems to consider that only the first factor is relevant to Optus' investment decisions and only the second factor is relevant to Telstra's investment decisions.
- 3.16 Under the Proposed Transaction, Optus would need to compete with TPG's high level of coverage. In my Second Report, I estimated that the cost to Optus of deploying 5G in the RCZ would be less than the cost to Optus of failing to make the investment with the likely gradual loss of customers who value high coverage to Telstra and TPG.
- 3.17 The discussion of Optus' investment decisions by Mr Hunt and Mr White is heavily redacted which limits my ability to assess it. However, the unredacted parts of Mr Hunt's report appear to emphasise that Optus would have smaller scale economies than Telstra and that this might allow Telstra to price in a way that prevents Optus from recovering its investment. I note the following in response.
- a. Telstra already has a much higher regional market share (and presumably greater scale economies) than Optus and this has not deterred Optus from investing. As noted in my First Report, Optus has expanded its coverage in inner and outer regional areas by 8.9%-27.8% over the period 2018 to 2021.³⁰ This suggests to me that the competitive pressure to limit coverage differences is a major driver of investment even when Optus does not expect to have better coverage or greater scale economies than Telstra.
 - b. Telstra does not price aggressively in the hope of forcing Optus out of the market. The unredacted parts of Mr Hunt's report do not show that such a strategy would be profitable for Telstra. It would be costly for Telstra, particularly as the business case for investments in regional areas is also based on the additional customers and margins in metro areas supported by such investments. Moreover, any price cut would be made at a national level and so be poorly targeted against regional customers. Despite many mobile markets featuring operators of varying scale, I am unaware of any case in which a larger operator has attempted an aggressive

²⁹ While in the SOPV Counterfactual, I consider that TPG would undertake a targeted build, I do not consider that this would enhance the quality offered to customers compared with the coverage and quality that TPG would offer under the Proposed Transaction.

³⁰ My First Report, para. 5.36b.

pricing strategy aimed at forcing a smaller operator to exit. Such a strategy may also raise competition concerns for the regulators.

- c. As Mr Hunt notes, TPG has only a [REDACTED] share of subscribers in the RCZ.³¹ While some of TPG's customers in metro areas would also use mobile services in regional areas, these volumes would also be limited because customers who visit regional areas more frequently would be expected to be Telstra and Optus subscribers. As such, the direct impact on scale economies of TPG joining Telstra rather than Optus would be limited.³² I expect that TPG would over time take some customers from Optus under the Proposed Transaction – indeed, this is part of the reason for the Proposed Transaction leading to competition and consumer benefits as customers will switch where they are offered better value. I expect that Optus would reduce its prices to limit the loss of customers to TPG. I do not consider that these competitive benefits would reduce longer term competition because I expect Optus to continue to upgrade its regional network under the Proposed Transaction including because of the increased competition Optus would face from TPG.³³

3.18 After the Proposed Transaction, the quality of TPG and Telstra's network coverage in the RCZ will improve relative to that of Optus. However, in contrast to Mr Hunt, I do not consider that this improvement in relative quality will deter Optus from investing.

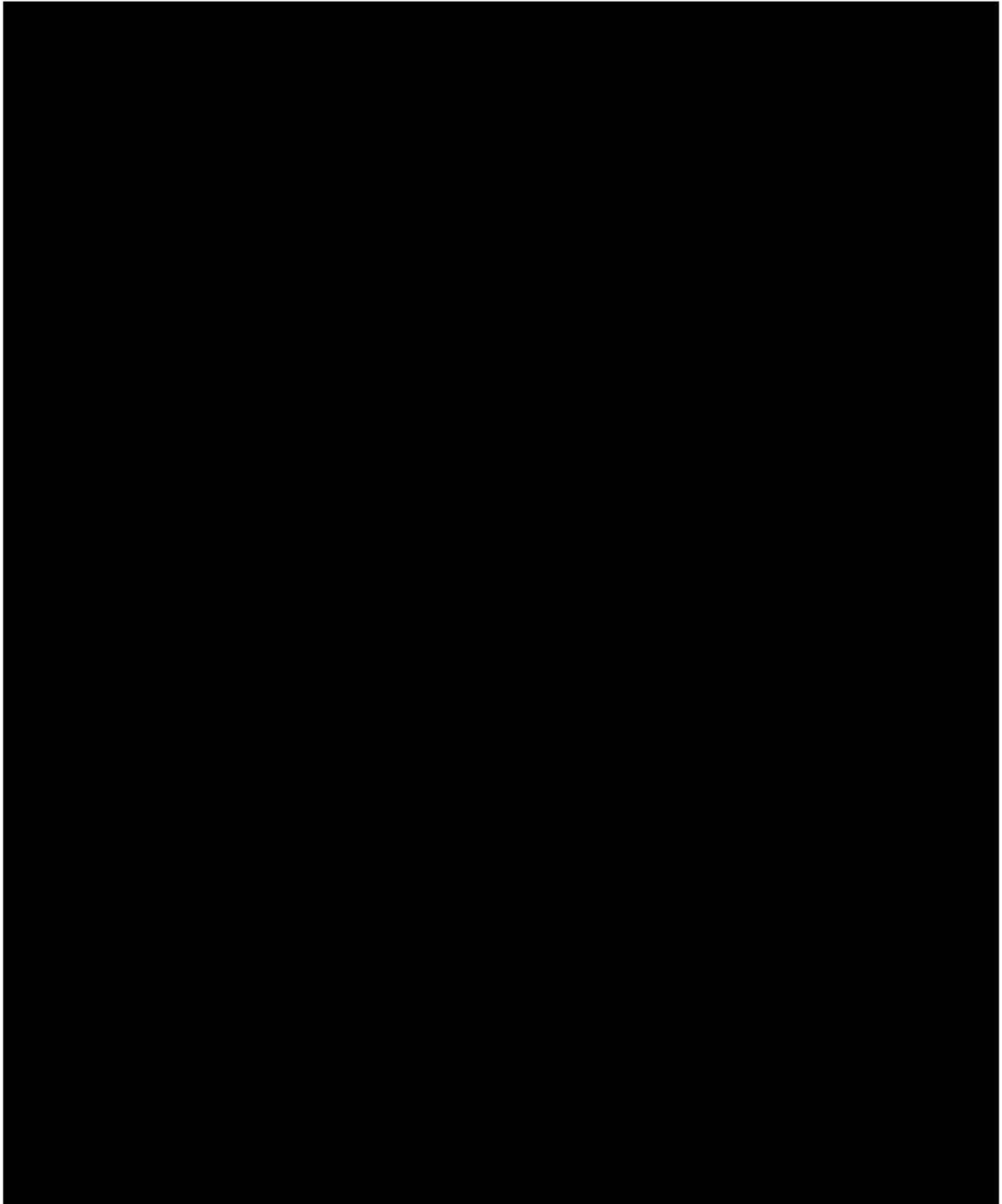
3.19 A key part of the calculation is how many customers who value regional coverage Optus would retain if it continued to invest under the Proposed Transaction. I am unable to view Mr Hunt's estimates, but I have reason to believe that if it continued to invest, Optus would retain a significant customer base in the RCZ. This is for the following reasons.

3.20 First, Optus does not need to match Telstra's quality in the RCZ in order to retain its customer base. Customers wanting the best coverage would be expected to be already with Telstra. [REDACTED]
[REDACTED]
[REDACTED] This suggests that Optus customers place relatively less importance on network coverage than Telstra customers and so are willing to accept "good enough" coverage, [REDACTED]. This is shown in Figure 1.

³¹ Mr Hunt's Report, para. 93.

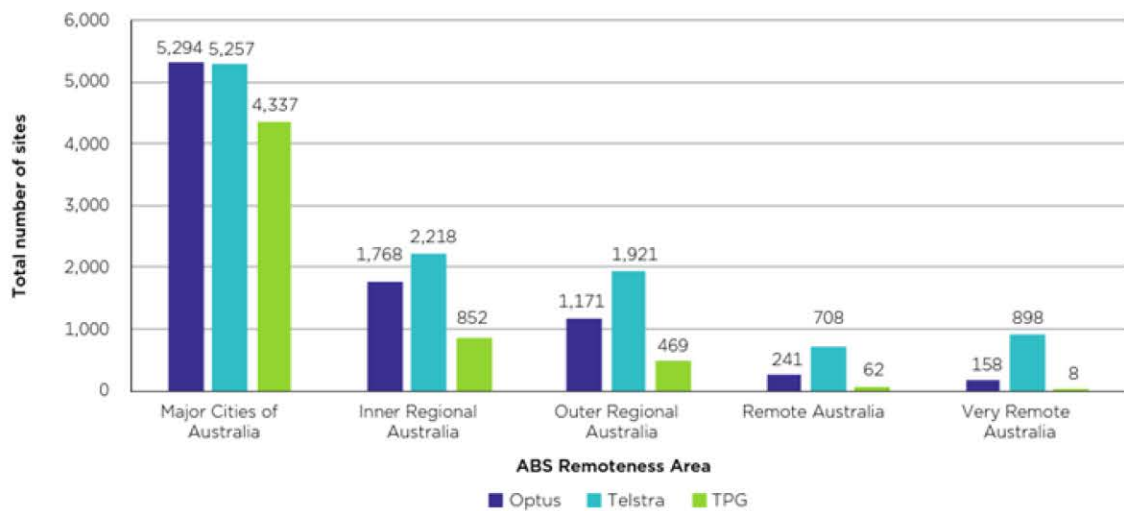
³² The lack of direct economies of scale from the Proposed Transaction is acknowledged in footnote 125 of Mr Hunt's Report.

³³ As shown in my Second Report, there would be a large cost to Optus if it does not maintain reasonably competitive coverage. This is the reason I expect Optus to continue to upgrade its regional network, notwithstanding that it would not receive wholesale payments from TPG under the Proposed Transaction.



3.21 Second, Optus will still retain a quality advantage over TPG in metro and other regional areas. When assessing the benefits of Optus' network coverage, most customers will take into account Optus' coverage in many areas, not just the RCZ. As Figure 2 below shows, Optus will retain a higher number of sites than Telstra in the major cities of Australia, and a much larger number of sites than TPG in the inner regional areas (Region 2a) which are not covered by the Proposed Transaction. Optus also has the fastest 5G speeds of Australia's operators.³⁴

³⁴ See, my First Report, Table 2.

Figure 2: Total number of sites by MNO & ABS Remoteness Area – 2022

Source: [ACCC Mobile Infrastructure Report 2022](#), Figure 4.1, page 6.

- 3.22 Conversely, if Optus fails to invest, then it is reasonable to assume that it would gradually lose the share of its existing customer base who value regional coverage. As data usage increases, and as 5G becomes standard, providing only 4G coverage will gradually become obsolete. This can be seen from the past examples of technology upgrades. Telstra launched the first 4G network in Australia in 2011³⁵, and by 2022, 95% of all mobile sites in Australia offered at least 4G coverage.³⁶ Assuming a similar trajectory for 5G, Optus's network in the RCZ will be obsolete by 2031 if it fails to upgrade to 5G.³⁷ This is consistent with the assumption in my Second Report that Optus would lose its customers in the RCZ and those customers who value regional coverage based in other areas by 2031 if it failed to invest in its regional network.³⁸
- 3.23 Mr Hunt argues in his view of a counterfactual 5G network-sharing agreement between TPG and Optus that Optus' investment incentives will necessarily increase. He asserts that this is the case as Optus would rollout 5G without the Proposed Transaction and that an agreement with TPG should improve the business case.³⁹
- 3.24 Mr Hunt, however, ignores the importance of competition. As Mr Hunt acknowledges in the case of Telstra, competition can be a key driver of investment.⁴⁰
- a. Under the Proposed Transaction, Optus would face stronger competitive pressure from TPG (and to smaller extent, Telstra) to improve its regional network or risk losing customers to rivals. By contrast, under Mr Hunt's view of the counterfactual, the competitive pressure that Optus would face would be reduced as (i) Optus would not face competition from TPG and (ii) Telstra's

³⁵ ACCC Telecommunications Report, 2020-11, page 19.

³⁶ [ACCC Mobile Infrastructure Report 2022](#) gives 25,362 mobile sites across all operators, of which 24,067 offer 4G coverage.

³⁷ It is also likely that the Huawei equipment Optus uses will come to its end of life over this period which is another reason why Optus can be expected to upgrade its sites to 5G.

³⁸ Second Padilla Report, paras. 5.31 to 5.37.

³⁹ Mr Hunt's Report, para. 265.

⁴⁰ Mr Hunt's Report, para. 216.

regional network would be capacity constrained due to lack of spectrum. This would reduce the competitive pressure on Optus to improve its network quality.

- 3.25 I also do not share Mr Hunt's view that Telstra would invest less under the Proposed Transaction than in his view of the counterfactual. I expect Telstra would invest more because:
- a. Telstra would face the need to compete with TPG's higher coverage (a higher coverage level than what TPG could offer in a network sharing counterfactual);
 - b. Optus can be expected to continue to upgrade its regional network to better compete with Telstra and, post-transaction, TPG; and
 - c. wholesale payments from TPG would improve Telstra's economics of additional investment in the MOCN at the margin.

Mr Hunt's comments on the model of Professor Piccolo and alternative models

- 3.26 In my First Report, I presented modelling undertaken by Professor Piccolo to examine how price and quality competition and consumer welfare might vary in a three operator market in which the operator with the worse quality shares either with the operator with the best quality or the operator with the second best quality. The modelling included two main alternative assumptions: network quality is assumed to be exogenous (which may be particularly relevant to 4G services for which network infrastructure is already in place); and network quality is assumed endogenous. Mr Hunt commented on Professor Piccolo's modelling as well as referring to two alternative models which he considered relevant to the Proposed Transaction. I provide my response to Mr Hunt's comments next.

Professor Piccolo's Model

- 3.27 Professor Piccolo's model was a stylised model aimed at understanding the interaction of key competitive factors.
- 3.28 As noted earlier, Mr Hunt considers that the main result of the model with quality assumed to be exogenous, i.e. that consumer welfare is most increased by network sharing between the lowest quality and the higher quality firm is entirely unsurprising. Mr Hunt nonetheless considers that the model provides no insight into the competitive effects of the Proposed Transaction because it omits certain features.⁴¹
- a. Mr Hunt notes that the model omits payments between the network sharing firms and argues that the higher quality would thus have no incentive to enter the agreement. While the model does not including wholesale payments in each firm's profit function, Professor Piccolo tested whether joint profits would increase such that side transfer payments could be made to profitably implement the agreement.⁴² As shown in my Second Report, the competitive effects of changes in quality from the Proposed Transaction can be expected to be much more significant than the competitive effects of wholesale payments (noting that any such effect only arises to the extent that the payments are variable). As such, I do not consider that abstracting from wholesale payments implies that the model offers no insight into the competitive effects of the Proposed Transaction. Moreover, for wholesale payments to overturn the 'unsurprising' result of the model,

⁴¹ Mr Hunt's Report, para. 115.

⁴² See Exhibit F of My First Report, p.9.

I would expect that the level of variable wholesale payments to be substantial and much higher under the Proposed Transaction than under the SOPV Counterfactual. However, based on the instructions I was given, I found that TPG's variable cost per SIO would be **lower** in the Proposed Transaction than in the SOPV Counterfactual as data usage grows.⁴³ I consider that this is reasonable noting that, if the Proposed Transaction is blocked, Optus would have the incentive to impose uncompetitive terms on TPG.

- b. Mr Hunt notes that the model assuming quality is exogenous does not allow for changes in quality. Unsurprisingly, quality changes were assessed in the model assuming endogenous quality.
- c. Mr Hunt criticises the model for not considering economies of scale. I do not consider this significantly affects the relevance of the model because as discussed in the previous subsection, TPG has a small share of subscribers in the RCZ and I expect investment by Optus in the RCZ to continue to be economic under the Proposed Transaction.

3.29 Mr Hunt criticises Professor Piccolo's endogenous model for (i) considering pre-determined relative costs; and (ii) showing a possible negative impact of network sharing on competition and consumers. I address each of these points below.

- a. Professor Piccolo's model assumes that the relative cost of the higher quality firm to medium quality firm is predetermined to reflect the cost advantage of Telstra against Optus in the RCZ. Figure 2 of Piccolo's model shows how the results would change if the relative cost of the higher quality firm to that of the medium quality firm changes. The results show that a higher cost advantage of the higher quality firm leads to higher consumer surplus. I consider that the Proposed Transaction will lead to higher efficiencies compared to a TPG/Optus counterfactual.⁴⁴ This strengthens the conclusion that the Proposed Transaction is likely to significantly benefit consumers.
- b. Professor Piccolo's model does show that for some range of parameter values, network sharing could deter investment to the disadvantage of consumers. However, as set out in my First Report, I consider that the design of the Proposed Transaction makes it likely to benefit consumers, particularly in limiting sharing to the RCZ where Optus is present (which reduces any incentive of Telstra to reduce its investment) and by wholesale payments received by Telstra acting to offset any negative impact of sharing on investment.⁴⁵

Alternative economic models considered by Mr Hunt

3.30 Mr Hunt refers to two papers of entry deterrence in a dynamic setting that allows an incumbent firm (who has a first mover advantage) to engage in entry deterrence in markets with vertical differentiation.⁴⁶

3.31 The paper by Noh and Moschini (2006)⁴⁷ considers a model with one incumbent and one potential entrant selling vertically differentiated products. The incumbent selects its quality first, then in period 2 the potential entrant decides whether to enter and, if so, its quality. If the entrant chooses the same quality as the incumbent, then competition is assumed to eliminate all profits. Noh and

⁴³ See my Second Report, para. 3.42.

⁴⁴ See my First Report, paras 5.20 to 5.24.

⁴⁵ My First Report, paras. 6.56 to 6.59.

⁴⁶ Mr Hunt's Report, para. 120-127.

⁴⁷ Noh, Y.H. and Moschini G. (2006), Vertical product differentiation, entry deterrence strategies, and entry qualities, *Review of Industrial Organization*, 29(3), 277-252.

Moschini show that under certain assumptions, it is possible for an incumbent to deter entry of a smaller firm by investing in a high-quality network.

- 3.32 The paper by Lutz (1997)⁴⁸ also considers a sequential model with an incumbent and entrant. If the firms have identical costs, entry will always be deterred if possible. If the entrant has higher quality-dependent costs then the incumbent may prefer to accommodate entry. If the entrant has substantially lower quality-dependent costs then the incumbent may deter entry by setting a quality higher than the quality chosen in the absence of the threat of entry.
- 3.33 Mr Hunt has not sought to demonstrate that the assumptions of the models including the assumed nature of competition are relevant to the Australian mobile market. For example, Optus has been investing in regional areas to reduce its coverage gap with Telstra whereas the models suggest that Optus should instead be seeking to differentiate its quality. It is also highly questionable that a mobile market of two operators with similar quality would be unprofitable. Lutz finds that if the entrant has substantially higher quality-dependent costs than the incumbent then the incumbent may prefer to accommodate entry. It is not clear whether Mr Hunt considers Optus has higher or lower quality-dependent costs than Telstra.
- 3.34 Mr Hunt suggest that the models show that Telstra could have an incentive to gain a quality advantage through a network sharing arrangement to deter Optus from investing in higher quality. But Telstra already has a quality advantage over Optus and it has the ability to invest in quality, regardless of the Proposed Transaction. Indeed, the effect of the Proposed Transaction on Telstra's national quality is unlikely to be substantial although it would relieve congestion issues in regional areas. In my Second Report, I set out why I consider it would be economic for Optus to continue to invest in the RCZ including why Optus is likely to find the deployment of 5G in the RCZ to be economic.

Spectrum efficiencies

- 3.35 Mr Hunt makes a number of comments setting out his views on the relevance of spectrum efficiencies.
- 3.36 He states that "*there is no dispute that there are productive efficiency benefits from spectrum sharing*"⁴⁹ but he states that it is also important to consider how spectrum sharing might impact competition.⁵⁰ I agree.
- 3.37 Mr Hunt states that at least some of the productive efficiency benefits of spectrum sharing could potentially be achieved by TPG leasing its spectrum to Telstra⁵¹ or to Optus.⁵²
- a. However, I understand that Telstra's need for additional spectrum is integral to Telstra agreeing to enter into the Proposed Transaction with TPG on competitive terms. If TPG were instead simply to lease the spectrum to Telstra, then TPG would not gain the additional coverage resulting from the Proposed Transaction and mobile customers would not gain the benefit of more effective competition in the mobile market.

⁴⁸ Lutz, S. (1997), Vertical product differentiation and entry deterrence, *Journal of Economics*, 65(1), 79-102.

⁴⁹ Mr Hunt's Report, para. 150.

⁵⁰ Mr Hunt's Report, paras. 146-147.

⁵¹ Mr Hunt's Report, paras. 262 and 305.

⁵² Mr Hunt's Report, para. 151.

b. Optus has 29% spectrum per SIO in the 17% Regional Coverage Zone than the MOCN would have.⁵³ This suggests that sharing TPG's spectrum with Optus would not deliver the productive efficiency benefits of the Proposed Transaction (i.e. of spectrum being allocated to where it is of most use) and nor would Optus be as willing to offer as good terms to TPG so as to access the spectrum.

3.38 Mr Hunt argues that the Proposed Transaction will have a negative impact on dynamic network competition and that this will mean that spectrum may not be efficiently utilised over time.⁵⁴ However, Mr Hunt's reasoning is circular and fails to consider how spectrum sharing under the Proposed Transaction can promote competition.

3.39 Mr Hunt notes that spectrum allocation could help ensure an operator remains a credible competitor.⁵⁵ Mr Hunt does not explain the relevance of this comment, particularly when Optus already has much more spectrum per SIO in the RCZ than the MOCN would have.

3.40 Mr Hunt notes that with additional spectrum, Telstra would incur lower costs to expand supply.⁵⁶ I agree and I consider that such savings in marginal costs can be expected to be passed through into lower mobile service prices to the benefit of customers.

3.41 Mr Hunt states that Optus could also enjoy cost savings in a network sharing counterfactual.⁵⁷ I agree but given that Optus already has much more spectrum per SIO in the RCZ, I would expect that there would be greater savings in marginal costs from Telstra gaining access to additional spectrum and hence a greater impact on mobile service prices.

3.42 Mr Hunt comments that "*congestion sends the right signals to operators to compete with each other.*"⁵⁸ I do not understand Mr Hunt's reasoning. If Telstra is congested, then it will have not capacity in that area to take additional customers from rivals. This would reduce its incentive to set low prices and it would give Telstra's rivals the ability to price higher without risking the loss of customers in that area to Telstra. As such, I consider that congestion acts to limit competition.

⁵³ Telstra TPG MOCN – Authorisation Application, Table 13.

⁵⁴ Mr Hunt's Report, para. 152.

⁵⁵ Mr Hunt's Report, paras. 153-154.

⁵⁶ Mr Hunt's Report, para. 159.

⁵⁷ Mr Hunt's Report, para. 161.

⁵⁸ Mr Hunt's Report, para. 307.

4 Response to the Analysys Mason Reports

- 4.1 In this section I provide my comments on the Analysys Mason reports. On the basis of the unredacted versions of the reports, I consider that the analysis makes unreasonable assumptions and so is of limited relevance to assessing the likely competitive effects of the Proposed Transaction.

The Analysys Mason Model

- 4.2 Analysys Mason have constructed a network cost model which compares the average costs per GB in the RCZ. This cost is calculated for Telstra and Optus before any agreement (the base case), under the Proposed Transaction and also under a hypothetical TPG/Optus MOCN arrangement.
- 4.3 Analysys Mason estimated the costs per GB by dividing the costs of providing services in the RCZ⁵⁹ by estimated traffic demand under each scenario.⁶⁰ The Analysys Mason model uses existing market shares, forecast data traffic and current spectrum holdings to calculate the number of sites and assets that each operator will require in the RCZ to meet their network traffic demand. Costs are estimated based on the capital costs of site upgrades and greenfield sites, active equipment costs and operating costs.⁶¹ The level of traffic is estimated based on a data snapshot provided by Optus for selected weeks and extrapolated to Telstra and TPG based on their market shares.⁶²
- 4.4 Analysys Mason conclude that under the Proposed Transaction, Telstra would enjoy the greatest scale advantages. They consider that this would allow Telstra to offer the lowest prices in the market. They conclude that as Telstra would be the only operator able to gain such scale advantages, it would be able to offer the lowest prices, and that this would negatively affect competition in the RCZ.⁶³
- 4.5 Analysys Mason progress from making a factual observation 'Telstra has the lowest costs' to making a prediction about Telstra's actions 'Telstra would offer the lowest prices in the RCZ'. They do not provide any reasoning as to why Telstra would find it profit-maximising to undercut the other operators. As noted in my First Report, mobile services are vertically differentiated so that providers who offer the highest quality coverage are able to charge the highest prices.⁶⁴ A simple observation of Telstra's existing market share in the RCZ (where it presumably has the lowest unit costs) and the price premium it charges over operators, is enough to show that the impact of higher prices on

⁵⁹ Network costs of providing capacity calculated based on the unit costs for sites and antenna (opex) and forecasted costs for the site upgrades and building coverage sites (capex). See, Analysys Mason Model Overview, Figure 1.

⁶⁰ Analysys Mason Model Overview, Figure 1.

⁶¹ Analysys Mason Model Overview, Section 3.4.

⁶² Analysys Mason Model Overview, Section 3.3.

⁶³ Analysys Mason Results Analysis, page 3.

⁶⁴ My First Report, para 5.26.

consumer's willingness to pay has a greater impact on pricing than the lower average costs from economies of scale.

- 4.6 Analysys Mason compare Telstra's average cost per GB with that of Optus under the different scenarios. They state that as data traffic grows, the MOCN will have significantly lower costs, which will make it challenging for Optus to compete on price.⁶⁵
- 4.7 I disagree. First, Telstra already has an estimated share of 71% in the RCZ and the Proposed Transaction will not materially affect its scale.
- 4.8 Second, contrary to what Analysys Mason claims, in spite of its scale advantages Telstra charges a premium to Optus' prices.
- 4.9 Third, Optus invests in regional areas despite Telstra's scale advantage. If operators declined to invest in the presence of a network with greater scale economies, there would not have been the growth in telecommunications competition over the last decades.
- 4.10 Moreover, to the extent that Analysys Mason appears to claim that Telstra's marginal costs would fall with the Proposed Transaction, I expect such a change to increase competition and benefit consumers. Economic theory shows that a substantial part of a firm-specific reduction in marginal costs can be expected to be passed through into lower prices.⁶⁶ Even a monopolist (with linear demand) can be expected to pass-through 50% of a marginal cost saving and the rate of pass-through of firm-specific marginal cost reductions generally increases with competition.
- 4.11 In this respect, I consider that Telstra gaining additional spectrum will lower its marginal costs more than it would for Optus to gain additional spectrum. As discussed in my First Report, Optus has large amounts of spectrum per SIO in regional areas, and therefore, Optus is likely to have lower existing costs of expansion than Telstra.⁶⁷ [REDACTED]
- [REDACTED].⁶⁸ In this respect, the Proposed Transaction may reduce Telstra's prices more than a network sharing counterfactual would reduce Optus' prices. That said, the effect should not be overstated given that a cost reduction in the RCZ would only be expected to have a relatively small impact on national prices.
- 4.12 Analysys Mason compare the impact on average network costs of the Proposed Transaction to an alternative scenario where Optus and TPG form an MOCN. It appears that the model assumes the same market shares for TPG as under the Proposed Transaction.⁶⁹ This is unrealistic given that Telstra's network is superior to Optus' in the RCZ, and so provides a larger improvement to TPG's quality. Unsurprisingly, Analysys Mason find that Optus' average costs would be lower in a scenario where it has a MOCN with TPG, and they consider that this would improve Optus' ability to compete.
- 4.13 Although the primary benefit of the Proposed Transaction is to increase the competitiveness of TPG in the RCZ, Analysys Mason downplays this effect. Analysys Mason assumes that TPG will have a stable wholesale charge per GB under the Proposed Transaction and this will affect TPG's competitiveness in the RCZ relative to Telstra.⁷⁰

⁶⁵ Analysys Mason Results Analysis, page 5.

⁶⁶ See, for example, RBB Economics, *Cost pass-through: theory, measurement and potential policy implications – A report for the Office of Fair Trading* (2014), Section 4.12 and 4.2.2.1.

⁶⁷ See, my First Report, para. 5.21.

⁶⁸ Telstra TPG MOCN – Authorisation Application, para. 55.

⁶⁹ Analysys Mason Model Overview, page 6.

⁷⁰ Analysys Mason Results Analysis, pages 3 and 10.

a. Currently, TPG is a minor player in the RCZ. The Proposed Transaction will make TPG a more effective competitor in regional areas. [REDACTED]

b. Analysys Mason do not appear to compare TPG's competitiveness under the Proposed Transaction with its competitiveness in the counterfactual. As noted above, I consider that in any counterfactual that involves a potential arrangement between Optus and TPG, Optus would offer less competitive terms to TPG than Telstra, because TPG would no longer have an alternative wholesale access supplier if the Proposed Transaction is blocked.

4.14 In a nutshell, Analysys Mason conducted a cost analysis of limited, if any, relevance for the assessment of the Proposed Transaction, and has drawn the wrong implications from that analysis. While the Proposed Transaction may indeed reduce Telstra's costs, that change would not reduce Optus's incentive to invest and may increase price competition to the benefit of consumers. [REDACTED]

⁷¹ Telstra TPG MOCN – Authorisation Application, para. 116(c).

5 Response to Mr Houston's Supplementary Report

- 5.1 Mr Houston's Supplementary Report responds, inter alia, to my First Expert Report. In his Supplementary Report, Mr Houston revises his conclusions from his first report. He concludes that:⁷²
- a. he is no longer able to draw a conclusion as to the overall effect of the Proposed Transaction on price competition in the short-to-medium term; and
 - b. Optus would (based on the information available to him) invest less in network quality under the Proposed Transaction, while Telstra would have a better ability to invest in quality but less incentive to invest.

Short-to-medium term competition

- 5.2 In his first report, Mr Houston concluded that competition in the near to medium term would be likely to be reduced by the Proposed Transaction. He considered that the closeness of competition would reduce between Telstra and Optus under the Proposed Transaction, which would reduce the intensity of price competition.⁷³ In relation to competition between TPG and Optus, he considered that they would become closer competitors, so the intensity of price competition would increase, but he considered this competition to be of 'lesser importance'.⁷⁴
- 5.3 In Mr Houston's Supplementary Report, he states that he is now uncertain about the likely impact of the Proposed Transaction on competition in the short-to-medium term.⁷⁵ He updates his analysis of short-to-medium term competition to consider the impact of competition between Telstra and TPG, which was absent from his first analysis. He also revises his assessment as to whether TPG and Optus would be closer competitors under the Proposed Transaction or under a potential TPG/Optus arrangement, and now considers that it is uncertain as the terms of that arrangement are not known.
- 5.4 In relation to competition between TPG and Telstra, Mr Houston considers that the short-to-medium term impact is uncertain. This is because, although competition is strengthened if competitors provide a more similar product, it is weakened if wholesale charges between Telstra and TPG reduce their incentives to win customers from each other.⁷⁶
- 5.5 I consider that TPG's network quality is likely to be much closer to Telstra's under the Proposed Transaction than any possible TPG/Optus arrangement. This is because under the terms of the Proposed Transaction, TPG gains equal access to Telstra's network in the RCZ, with the only differentiator being a six-month delay in being able to offer 5G at new sites.

⁷² Mr Houston's Supplementary Report, para. 110.

⁷³ Mr Houston's First Report, para. 49.

⁷⁴ Mr Houston's First Report, paras. 50-52.

⁷⁵ Mr Houston's Supplementary Report, para. 29.

⁷⁶ Mr Houston's Supplementary Report, paras. 26-7.

- 5.6 As Optus' coverage is lower than that of Telstra in the RCZ, it is unlikely that Optus would be able to offer TPG an arrangement which would make TPG a closer competitor to Telstra. Even if Optus were to invest more under a TPG/Optus arrangement (which is uncertain), it would take significant time before Optus' network in the RCZ would match Telstra's. If the ACCC blocks the Proposed Transaction, Optus would also face no competitive pressure to offer TPG competitive terms.
- 5.7 I consider that TPG's higher coverage under the Proposed Transaction will benefit customers both directly and by increasing competitive pressure on both Telstra and Optus to reduce their prices. By improving TPG's regional coverage, existing TPG customers are given a significant improvement in the network quality offered by TPG. In addition, TPG would become a more effective competitor to Telstra and Optus which would increase price competition and reduce their prices. As I set out in my Second Report, customers of Telstra and Optus are likely to become much more willing to switch to TPG as a consequence of its improved coverage. I estimated that this could reduce Telstra's profit-maximising price by [REDACTED].⁷⁷
- 5.8 Mr Houston considers that the impact on competition between TPG and Telstra is uncertain due to the wholesale payments made under the Proposed Transaction. As set out in my Second Report:
- a. the wholesale revenues Telstra receives from TPG for each customer in the RCZ who joins TPG ([REDACTED] per month) are much lower than the margin which Telstra would lose on that customer (which I estimated to be \$27.48 on average).⁷⁸ Telstra would therefore retain strong incentives to compete with TPG;
 - b. for TPG, the charge for data under the Proposed Transaction is [REDACTED]. This is [REDACTED]
[REDACTED]
[REDACTED]
 - c. [REDACTED]
[REDACTED]
[REDACTED]⁸¹
 - d. There is no reason to consider that TPG would face lower costs in any TPG/Optus arrangements, especially considering TPG's likely weak bargaining position if the ACCC blocks the Proposed Transaction.
- 5.9 For these reasons, I continue to consider that the impact of the Proposed Transaction will be to increase competition by more in the short-to-medium term than any plausible TPG/Optus arrangement. This is the case even taking into account TPG's wholesale payments to Telstra and noting that the wholesale payments to Telstra are likely to be on more competitive terms than what TPG would receive in a TPG/Optus counterfactual.

77 Second Padilla Report, para. 4.12.

78 Second Padilla Report, para. 4.18.

79 Second Padilla Report, para. 3.19.

80 [REDACTED]

81 Second Padilla Report, para. 3.42.

Medium-to-long term competition

- 5.10 In his supplementary report, Mr Houston considers that the Proposed Transaction would reduce Optus' incentive and ability to invest in network quality relative to a TPG/Optus arrangement.⁸² In relation to Telstra, he considers that a Telstra/TPG arrangement would increase Telstra's ability to invest in network quality but reduce its incentives to invest as it would become more differentiated from Optus.⁸³ He considers that the overall effect of the Proposed Transaction on competition in the medium-to-long term is uncertain.
- 5.11 I understand Mr Houston's arguments on the impact of Optus to invest are as follows:
- a. the Proposed Transaction would increase the quality of Telstra's network relative to that of Optus which he considers would increase the incentives on Optus to invest to reduce the network quality differential.⁸⁴
 - b. the Proposed Transaction would increase the quality of TPG's network relative to that of Optus. This reduces differentiation between TPG and Optus and will reduce Optus' incentives to invest in order to increase differentiation and reduce price competition.⁸⁵
- 5.12 While Mr Houston's conclusions are not fully clear to me, I understand that he considers that the dominant effect will be that TPG's better coverage under the Proposed Transaction will deter Optus from investing to increase its coverage.⁸⁶
- 5.13 Although I agree with Mr Houston (and disagree with Mr Hunt⁸⁷), that the improvement in the quality of Telstra's network will increase Optus' incentives to invest, I disagree on his conclusions on the overall impact on Optus.
- 5.14 I consider that Optus' decision to invest will depend on its profits from investing versus its profits if it does not invest. While the Proposed Transaction is likely to reduce Optus' profits from investing (because TPG will be a more effective competitor), it will also raise the cost to Optus of not investing and thereby ending up with much worse coverage than TPG. I consider that this will lead Optus to continue to invest to upgrade its regional coverage under the Proposed Transaction. I have set out my modelling of this in my Second Report.
- 5.15 As I consider that Optus will continue to invest under the Proposed Transaction, I consider that the incentives on Telstra to invest will continue. Mr Houston argues that the comment he made in his first report that Optus might respond to the Proposed Transaction by choosing to limit its investment is based on the assumption that firms aim to maximize their profits. More specifically, Optus investment decision depends on the various factors that affect Optus' profit and how these may be affected by the Proposed Agreement.⁸⁸
- 5.16 Mr Houston misinterprets the arguments I raised in my First Report.
- a. Mr Houston comments that in my First Report, I characterise the choice available to Optus as being to offer high quality services and earn high profits or low quality services and earn low profits. He also argues that all firms would choose the high quality and high profit option in this

⁸² Mr Houston's Supplementary Report, para. 124.

⁸³ Mr Houston's Supplementary Report, para. 126.

⁸⁴ Mr Houston's First Report, para. 77.

⁸⁵ Mr Houston's First Report, para. 78.

⁸⁶ Mr Houston's Supplementary Report, para. 66.

⁸⁷ Mr Hunt's report, para. 275.

⁸⁸ Mr Houston's Supplementary Report, para. 80.

situation.⁸⁹ However, in my First Report, I argue that Optus currently offers a high quality network, and therefore serves high value customers. Optus' investment decision is not an entry decision to serve the most valuable customers in the market, but it is a decision to keep its current customer base and potentially acquire additional customers.⁹⁰ In addition, if Optus reduces its investment in the RCZ, I would expect that it would also need to reduce its prices and thereby further reduce its profits.

- b. While investment is costly for firms, not investing can be even more costly. As I discuss in my Second Report, by not investing in network quality, Optus would put more of its profit at risk than the cost of the investment necessary to maintain its high network quality in the RCZ.⁹¹

Declaration

- 5.17 I have made all the inquiries which are desirable and appropriate (save for any matters identified explicitly in this report) and no matters of significance I regard as relevant have, to my knowledge, been withheld in preparing this report.



Signature of Dr Jorge Padilla

17 November 2022

⁸⁹ Mr Houston's Supplementary Report, paras. 81-83.

⁹⁰ See, my First Report, para. 55.

⁹¹ My Second Report, paras. 5.22-5.38.

A Appendix A: Exhibits for Dr Padilla's Expert Report

A.1 I attached the following exhibits:

- Exhibit A – Copy of Dr Padilla's further letter of instructions dated 16 November 2022;
- Exhibit B – Documents provided to Dr Padilla; and
- Exhibit C – Other documents relied upon

Exhibit A – Copy of Dr Padilla's further letter of instructions dated 16 November 2022

Our reference
JGAVODA15317-9168462

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16 November 2022

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Partner
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[REDACTED]
Dear Dr Padilla

Further Letter of Instruction – TPG / Telstra MOCN Arrangement

We refer to:

- our engagement letter dated 26 April 2022 (**Engagement Letter**), letter of instruction dated 18 July 2022 (**Letter of Instruction**), and letter of instruction dated 1 November 2022 (**Further Letter of Instruction**);
- Optus' submission in response to the ACCC's Statement of Preliminary Views dated 26 October 2022 (**Optus' Response**); and
- the following reports provided in support of Optus' Response by:
 - AlixPartners dated 25 October 2022;
 - HoustonKemp dated 26 October 2022; and
 - Analysys Mason on network cost analysis (results analysis) and on network cost analysis (model overview) dated 24 October 2022,

(together, the **Reports**).

The defined terms and terms of engagement set out in our previous letters in respect of your engagement apply in this letter.

1 Instructions

- 1.1 You are instructed to provide a further independent expert report (**Third Report**) setting out your response to the Reports insofar as they relate to the questions asked of you in the Engagement Letter, Letter of Instruction and Further Letter of Instruction.

2 Materials

- 2.1 In preparing your Third Report, we request that you have regard to:
- (a) Optus' Response;
 - (b) each of the Reports; and

16 November 2022

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Further Letter of Instruction – TPG / Telstra MOCN Arrangement**

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- (a) materials and assumptions we provided to you in connection with your previous reports in relation to Telstra and TPG's application for merger authorisation.
- 1.2 In accordance with the Code, any documents referred to in your Third Report which have been provided to you in the course of this engagement must be listed as a schedule to your Third Report. Any other information provided to you for the purposes of preparing your Third Report should be appropriately referenced in your report.

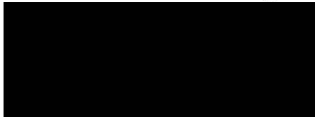
2 Conditions of engagement

- 2.1 The hourly rates, conditions of engagement and confidentiality terms outlined in sections three and four of the Engagement Letter apply to this engagement.
- 2.2 We ask that you prepare your report in accordance with the requirements of the Code.
- 2.3 You provided, and we accept, a fee estimate of [REDACTED] for the production of the Third Report on the basis of the hourly rates extracted in the Engagement Letter. We understand that your fees are subject to periodic adjustment. However, you agree to provide regular updates in relation to your fees and that you will not exceed your fee estimate without our prior approval.

We look forward to receiving your Third Report.

Yours faithfully

Corrs Chambers Westgarth



Jodi Gray
Partner

Exhibit B - Documents provided to Dr Jorge Padilla

A.2 This exhibit lists the documents provided to me on which I rely.

No.	Document description
1	Expert economic Report of Matt Hunt prepared at the request of Optus, "Assessment of the application for merger authorisation by Telstra and TPG," dated 25 October 2022
2	Analysys Mason, "Network cost analysis of the Telstra-TPG agreement – Model overview," dated 24 October 2022
3	Analysys Mason (The Analysys Mason Model Overview), "Network cost analysis of the Telstra-TPG agreement – Results analysis," dated 24 October 2022
4	Supplementary expert report of Greg Houston, "Competitive effects of the proposed Telstra-TPG arrangement," dated 26 October 2022
5	Telstra TPG MOCN – Authorisation Application (TPG Version)
6	Updated Regional Network Research 1a vs 2a vs 2b + 3 07.10.2022
7	Expert Report of Greg Houston, "Competitive effects of the proposed Telstra-TPG arrangement," dated 28 June 2022

Exhibit C - Other documents relied on

A.3 This exhibit lists additional documents, which were not provided to me, on which I rely.

No.	Document description
1	ACCC, Merger Guidelines, 2008.
2	RBB Economics, <i>“Cost pass-through: theory, measurement and potential policy implications – A report for the Office of Fair Trading”</i> , 2014.
3	ACCC, Mobile Infrastructure Report 2022, September 2022
4	ACCC, Communications Market Report 2020-21, December 2021
5	Noh, Y.H. and Moschini G. (2006), Vertical product differentiation, entry deterrence strategies, and entry qualities, <i>Review of Industrial Organization</i> , 29(3), 277-252.
6	Lutz, S. (1997), Vertical product differentiation and entry deterrence, <i>Journal of Economics</i> , 65(1), 79-102.

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