# ASSESSING THE LIKELY EFFECTS OF ASYMMETRIC ACCESS REGULATION IN AUSTRALIA

## Telstra's Proposed HFC Exemption

**Paul Muysert, Paul Reynolds and Jason Ockerby**

**Prepared for Optus Networks**

**[Public Version]**

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Competition Economists LLP (CEG)

Brussels | London | Melbourne | Palo Alto | Milan | Sydney | Vienna

www.ceg-europe.com

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# 1 PRELIMINARY MATTERS

## 1.1 Instructions

1. Telstra has sought exemption from standard access obligations to provide declared fixed line services (ULLS, LSS, PSTN OA, WLR and LCS) to Optus in respect of premises within 75m of the existing Optus HFC network. On 22 September 2008, the ACCC released a draft decision proposing to reject Telstra's application. The ACCC has invited further submissions in response to this draft decision.

2. We have been asked to prepare a report that addresses the following specific matters relating to the draft decision based on our knowledge of and experience in the telecommunications industry:

   a) the effect on incentives for investment that would result from a decision to deny to a single access seeker, Optus, the right to obtain access to the ULLS in the proposed exemption area in circumstances where other access seekers, who have not undertaken such investment, retain the right to access the ULLS.

   b) the identification of any benefits (in terms of the promotion of competition and the efficient use of and investment in infrastructure) that may result from maintaining regulated access by Optus to the ULLS, even in circumstances where Optus also operates a HFC network;

   c) the extent to which the viability of Optus connecting to its HFC network premises it currently treats as unserviceable is affected by:

      - the high content costs faced by Optus in Australia;
      - the low take up of pay TV services in Australia compared to other jurisdictions;
      - the overbuild of the Optus HFC network by Telstra's HFC network and the co-existence of the Optus HFC with the PSTN;
      - technical constraints on the use of a HFC network to supply broadband internet services, particularly to business customers;
      - the impending rollout of the National Broadband Network; and
      - other relevant factors.

   d) Optus' contention that its approach to multi-sourcing ULLS and HFC connections is efficient.

## 1.2 Authors

3. This report has been prepared by Paul Muysert, Paul Reynolds and Jason Ockerby. Paul Muysert and Paul Reynolds are partners of Competition Economists LLP (trading as CEG Europe). Jason Ockerby is a director of CECG Pty Ltd (trading as CEG Asia Pacific). The authors have significant expertise in analysing the cable industry in a number of jurisdictions. Copies of the authors' resumes are attached as Appendix A.

## 1.3 Federal Court Rules

4. We have as part of our instructions dated 1 October 2008 been provided with a copy of Version 6 published in May 2008 of the "Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia" (Guidelines).

5. We have drafted this report to comply with those Guidelines.

6. Paul Reynolds and Paul Muysert have previously provided advice to Optus on matters relating to the regulation of mobile termination charges. Jason Ockerby was previously employed by Optus as its Regulatory Economics Manager and has subsequently advised Optus on the regulation of mobile termination charges and on competition issues for next generation access networks.

## 1.4 Documents and Materials Provided

7. We were provided with the following documents and materials:

- Telstra's application for Exemption from Standard Access Obligations in respect of SingTel Optus' HFC Network together with its two attached expert reports, December 2007
- ACCC Discussion Paper, January 2008
- Public version of Telstra's response to ACCC Discussion Paper on Telstra's Exemption Application relating to SingTel Optus' HFC Network, March 2008
- Optus' submission on exemption application, March 2008 (Confidential version)
- Optus' submission on exemption application, May 2008 (Confidential version)
- Public Version of Telstra's Submission in response to Optus' submissions on Telstra's proposed HFC exemption application together with its four attached expert reports, June 2008
- ACCC Draft Decision dated 22 September 2008 (Confidential version)

8. This report contains material the parties regard as confidential. This material is contained in square brackets and highlighted in yellow in this report as follows [CIC CIC]. Tables

containing confidential information are marked CIC in the title and material in the table which is confidential is highlighted in yellow.

## 1.5 Additional materials

9. We have reviewed a number of other documents. These are referenced throughout the report.

## 1.6 Factual premises

10. The factual premises on which we have based our report are the facts:

- Contained in the documents and materials provided to me; and
- Referred to in the body of this report.

# 2 EXECUTIVE SUMMARY

11. This paper assesses the likely economic effects of Telstra's proposal that it be exempt from standard access obligations to provide declared fixed line services (ULLS, LSS, PSTN OA, WLR and LCS) to Optus in respect of premises within 75m of the existing Optus HFC network. In particular, we examine the likely impact of the exemption on the efficient use of and investment in infrastructure as well as the likely impact on competition to help determine whether the exemption would be in the overall long-term interests of end-users (LTIE).

12. Fundamentally, the assessment of the exemption comes down to a question of whether the main non-incumbent operator that has invested in cable infrastructure should lose its current right to regulated access to Telstra's declared fixed access services while regulated access remains available to other operators. Such asymmetric regulation raises the potential for economic distortions that are distinct from more traditional issues relating to the overall desirability of access regulation.

13. A critical element of Telstra's case for the exemption is the argument that the exemption would lead Optus to invest more in its HFC network. However, there are compelling reasons in our view as to why this is unlikely. Optus' actual investment decisions demonstrate that investment in in-fill network build is not economic in certain areas of its network and in particular to the MDUs within Optus' HFC footprint which are not currently connected to the network. If Optus could supply those areas at least cost using its HFC network, it would already be doing so. Optus' behaviour reveals that it is, however, efficient to service customers in these areas with regulated access products. The implication is that, for these customers, regulated access services provide the least cost method of service provision. Further, were the exemption granted, other competitive service providers would still continue to enjoy regulated access to Telstra's services. As such, these providers would be able to deliver the services at a lower cost than Optus would be capable of doing using its HFC network and take most if not all of the potential demand in an area where build was being contemplated. It would therefore make no sense for Optus to invest further in a higher cost network in these areas.

14. Even from a dynamic perspective, we do not consider that the exemption would promote efficient investment. In part, this is because Optus' current rights to regulated access services do not remove Optus' incentive to develop its own HFC network where doing so would give Optus a competitive advantage over the many providers reliant on Telstra's access services. However, as recognised by the ACCC, the exemption would in fact carry a serious risk of deterring efficient new investment. In particular, granting the exemption would send a signal to Optus and potential other investors in new network build that new investment would risk the loss of those operators' future rights to regulated access to Telstra's declared fixed services. While Telstra has put forward a number of expert reports

which seek to argue against the significance of this deterrent effect, none of the arguments are in our view adequate to regard the potential deterrent effect as anything other than a serious drawback with the proposed exemption.

15. In support of its arguments on investment, Telstra and its advisors have put forward a variety of arguments drawing on particular observations of the experience of cable operators internationally to suggest that greater investment in the HFC is likely to be economic for Optus. The arguments suggest that Optus could readily be a more effective competitor (if only it chose to do so). However, the overall performance of international cable operators has been much less positive than suggested by Telstra and indeed they have lost significant market share in broadband and pay TV. The cable overbuilders in the US in particular remain very marginal players and have been plagued by financial problems.

16. There are a number of factors moreover that suggest the case for network investment may be more unfavourable for Optus than for many international cable networks. Overall pay TV take-up in Australia remains very low by international standards and this relatively small subscriber base is fragmented by the co-location of two cable networks which is rare elsewhere. While Eisenach has argued that Optus' results are superior to major US cable overbuilders, his analysis turns out to be dependent on the use of a highly favourable spot exchange rate. Our analysis shows that the more reasonable approach of using a long-run average exchange rate leads to Eisenach's conclusion no longer being valid. Further, Optus' average revenue per subscriber is low and there are indications that Optus faces relatively high content costs. The planned National Broadband Network adds a further element of risk for further investment by Optus.

17. Telstra has also argued that the exemption would promote competition. However, these arguments are dependent on the assumption that the exemption would promote efficient new investment in rival infrastructure to Telstra's network which we do not believe is likely. Rather, we believe that the impact of the exemption on competition would be to remove or reduce the competitive benefits resulting from Optus supply of access-based services (either by the complete loss of access for Optus or by Telstra raising prices or reducing the quality of the access products supplied to Optus).

18. There is evidence that Optus' access to Telstra's local access services is enabling Optus to have a significant pro-competitive impact on market outcomes. Optus has significantly more ULLS-based customers than any other access seeker, suggesting that Optus is able to use ULLS to produce services of greater value to end-users than other access seekers. Optus is also in a better position than most access seekers to make bundled offers, which include home phone, broadband and mobile components with the potential for significant integrated product innovation.

19. In summary, we find that asymmetric regulation through the removal of the access rights of one player is likely to give rise to quite different effects than the issues commonly considered in general discussions of the merits of access regulation. Incentives for efficient investment are likely, at best, to be left unaffected and, at worse, to be harmed through raising the risk associated with new investment. Competition can also be expected to be harmed through removing or reducing the competitive impact of a leading ULLS-based competitor. For these reasons, we do not believe that the exemption would be in the LTIE.

# 3 LIKELY IMPACT OF EXEMPTION ON INVESTMENT INCENTIVES

20. As noted by the ACCC, a key issue in deciding whether to grant an exemption is whether the exemption would create an environment whereby the participants have improved incentives to undertake efficient use of and efficient investment in infrastructure.[1]

21. In this section, we set out the reasons as to why the exemption can, in fact, be expected to harm efficient investment incentives including in relation to the direct implications for the use of infrastructure as well as the harmful effects on investment incentives. In the following section, we explain why the exemption would be unlikely to lead to Optus investing more in extending its HFC network as argued by Telstra in its application for the exemption.

## 3.1 Impact on use and investment in Telstra's and Optus' networks

### 3.1.1 Efficient use of existing infrastructure

22. The ability of Optus to access Telstra's local access services results in Optus having a 'build/buy' choice between providing a service via Telstra's ULLS services or via construction of its own network. Optus' decision can be expected to be made on the basis of its incremental costs and benefits associated with these two options.

23. In general, where a physical connection is in place, it will be significantly cheaper to provide a broadband service using an add-on technology such as DSL or a cable modem than it will be to establish a new physical connection. As such, for incremental provisioning to customer premises where there is already a connection to Telstra's PSTN, a broadband connection using ULLS and a DSL modem can be expected to be more cost effective than cabling the relevant premises (from the perspective of both society and Optus).

24. Optus has advised that it follows an internal Business Rule that directs its consumer sales staff to sell services provided over the Optus HFC network (rather than services provided over the Telstra fixed line network) where the customer's premises are serviceable by Optus' HFC network, even where this requires additional cabling to the premise from the HFC infrastructure in the street.[2] Optus' approach is consistent with the expectation that where serving a customer predominantly involves investment that has already been incurred then it will be cheaper in the long run for Optus to serve that customer using its own network than by acquiring an access service from Telstra for which the access price includes a contribution to Telstra's network investment costs. Optus has stated that HFC installation at serviceable premises involves a relatively high upfront cost ([CIC CIC]) which

1 ACCC Draft Decision, p. 102.

2 Optus submission, March 2008, para. 2.21. We discuss the issue of the unsuitability of HFC for wholesale supply later in the report. This unsuitability means that Optus uses different procedures for wholesale sales.

is more than twice the upfront cost of connection for a new customer on Optus' DSLAM network ([CIC CIC]).[3] However ongoing costs (if pay TV costs are excluded) are significantly lower for HFC services, since for these services Optus does not pay Telstra a monthly charge for the ULLS. For these serviceable customers, the exemption would be expected to have no effect on the use of, or investment in, infrastructure.

25. It follows that Optus' current ability to access ULLS helps to promote productive efficiency in terms of the efficient use of infrastructure. In particular, Optus will use its cable where it is the least cost method of connection, to offer a broadband service. In section 3.1.4 we consider the question of whether retaining Optus' ability to gain regulated access to the ULLS is also dynamically efficient.

### 3.1.2 Efficient investment in infrastructure

26. The claimed benefits of the exemption largely stem from the assumption that Optus will, in the absence of access to regulated access services, choose to build more HFC infrastructure. In particular, that Optus will engage in infill investment and connect a significant number of currently unserviceable premises classified as MDUs to the Optus network.

27. In considering the effects of the exemption, the first fundamental point to recognise is that Optus' incentives for efficient investment should not be directly affected to any significant extent by whether or not Optus is able to gain regulated access to Telstra's services.[4] This is because the exemption will not remove regulated ULLS from the market. Telstra and other providers would still be able to use Telstra's services and this will severely constrain Optus' ability to earn a commercial return by seeking to compete against these providers by making significant new investments in higher cost infrastructure. If the exemption is granted, the cases where at present Optus would optimally choose to offer service via ULLS will remain cases where a service can be offered using the ULLS at a price equal to the least cost means of servicing the customer using best in use technologies. If the exemption is granted, other service providers would still be able to use ULLS including in these cases in which it is the least cost solution.[5]

28. Optus can be expected to be making its 'build/buy' decisions on the basis of the incremental costs (including risk) and benefits associated with these two options. The likely minimal impact of the exemption on Optus' incentive to invest can be seen by considering the benefits and costs of investment before and after the exemption.

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3 Optus May submission, Appendix A

4 We examine the indirect effect of the exemption in deterring new investment in Section 3.2.

5 In this section we assume that the services provided by Optus can be substituted reasonably completely by other competitors within a relatively short time span. We consider the case where Optus services cannot be easily replaced in section 3.1.3 and 3.1.4, and in section 5.

29. The benefits of acquiring customers are the expected revenues. Optus revenue forecasts will be driven by factors such as the market prices, the expected penetration Optus can achieve and the expected customer lifetimes. Importantly, the market price for a broadband connection will be strongly influenced by ULLS and DSL modem costs. To the extent that cable is used to provide services substitutable with DSL services, Optus' expected revenues would not be expected to increase following the exemption. [6,7]

30. The costs of supply are either the cost of building or buying (i.e. accessing ULLS) absent the exemption, or the cost of building alone if the exemption is allowed.[8] For circumstances in which Optus would currently choose to use ULLS (given its expected penetration rate which will impact expected returns), then the cost of ULLS supply can be said to be revealed to be lower than the cost of building. The ACCC sets ULLS at cost based prices. With ULLS widely available in the market, it is reasonable to expect that the market price will be set by the ULLS cost, plus an efficient retail margin. This implies that Optus expects the average cost of building HFC (revealed to be higher at Optus' expected penetration level) plus an efficient retail margin to be greater than the expected market price. With the exemption not altering Optus' cost structure or the expected market prices, then Optus would not find that investment in the HFC network which was previously uneconomic has suddenly become viable.

31. The conclusion is that for customers (particularly those living in MDUs) where the HFC network does not provide an efficient means of connection, granting the exemption would be unlikely to change the economic viability of using the HFC network.[9]

32. In this regard, it is important to distinguish the current issues of an asymmetric access exemption application (i.e. the removal of access rights for one player only) from the more traditional regulatory assessment of whether access regulation should apply *generally*. Whatever the merits of a general removal of access requirements, the main consequence of this exemption would be the removal of Optus as a competitive supplier to these customers and the stranding of Optus DSLAM investments.

33. For similar reasons, the overall incentive for new investment generally by Telstra or by other providers would not be expected to be affected by simply denying regulated access to one player while leaving regulated access in place for all other players. As such, there are good

6 Though as we consider in section 5, the loss of the largest access seeker from the DSL market may have an impact on competition and hence market prices.

7 We consider the conceptual case where cable is a superior technology, capable of generating additional revenue streams, later in this section.

8 The trade-off might not be this stark in practice. Telstra might for example offer ULLS on commercial terms, presumably above the regulated rate but below the build cost. This would have no direct effect on productive efficiency or investment – the same infrastructure would be used at a higher supply price. However, end-users could be made worse off through the higher wholesale price to Optus flowing through to higher retail prices for some customers.

9 To the extent that Optus could use its HFC network to connect a new customer at lower cost compared with the use of Telstra's access services, Optus can be expected to already be doing so.

reasons to be sceptical of the claims in relation to the impact of exemption on Telstra such as that made in Telstra's statement with respect to the impact of the exemption on its incentives for network upgrades:

> "Telstra would secure greater downstream benefits from such upgrades, because it would not be required to share them, and would thus avoid the negative externalities resulting from competitive spillover of its innovations." [10]

34. Whether or not a benefit of this type might accrue from the general removal of access requirements from Telstra, removal of access rights for a single player is unlikely to deliver any significant efficiency benefit as other access seekers would still be able to share in such upgrades.

### 3.1.3 Potential for inefficient investment

35. The only circumstances in which the exemption would improve the commercial viability of the use of the HFC network would be the hypothetical situation where there were customers who could only be economically served by Telstra and Optus (using Telstra's access services) but not by other providers reliant on Telstra's access services. In such circumstances, the exemption would immediately leave Telstra as the monopoly supplier. Telstra would then be expected to respond by raising its retail prices (and thereby reducing the use of its network below efficient levels). It may be that the new higher level of prices is sufficient to alter the economic viability of new HFC investment. However, even in these circumstances such investment by Optus may not be economically efficient as it would represent a higher cost means of service provision than using Telstra's existing network. Accordingly creating such a situation may not be considered to be in line with the aim of promoting efficient use of and investment in infrastructure.

36. We note that the ACCC has recognised that while infrastructure competition is a highly desirable objective, this does not imply that economically *inefficient* duplication of infrastructure would be in the Long Term Interests of End-Users (LTIE):[11]

> "Where it does not result in the economically inefficient duplication of infrastructure, facilities-based competition is more likely to promote the LTIE." (Page 15)
>
> "The Commission's position has consistently been that it will only seek to promote facilities based (full or quasi) competition where it is likely to be economically efficient, and therefore in the LTIE." (Page 21)

[10] Telstra, "Public Version of Telstra's Response to ACCC Discussion Paper on Telstra's exemption application relating to SingTel Optus' HFC network submitted on 25 March 2008" para 152.

[11] ACCC, Fixed Services Review, A second position paper, April 2007.

### 3.1.4 The status quo is consistent with maintaining dynamic efficiency

37. In the analysis so far, we have considered a situation in which the HFC network offers services which are substitutable with DSL services. We now consider the alternative conceptual situation in which the HFC network is able to offer a better service and greater value to customers than the use of a DSL connection. Understanding the impact of the exemption in such a situation is potentially relevant to examining implications for dynamic efficiency as the capabilities of the HFC network may change over time.

38. In our view if cable technology was superior, Optus' incentives to use the HFC network would also be unaffected by the exemption. In particular, with its existing HFC network, Optus can be expected to continue to seek technical upgrades to its network that would enable it to gain a competitive advantage even while retaining the right to regulated access to Telstra's services. Optus would not be expected to turn down profitable opportunities to gain an advantage from its HFC network in favour of remaining as one of many providers reliant on Telstra's access services. However, this will only occur in the case where the commercial value of the service that can be offered over cable exceeds the cost of construction and is most efficiently provided via cable. This means that Optus' current rights to regulated access are unlikely to change the incentive for efficient investment by Optus over time.

39. We examine the flaws in Telstra's specific contentions as to why the exemption might stimulate additional investment in Optus' HFC network in Section 4.

## 3.2 The exemption would deter efficient new investment generally

40. In the previous section, we noted that the direct effect of the exemption would be to leave Optus' investment incentives unaffected or, in the specific case where new investment results from Telstra raising its retail prices, such investment would not be efficient. In this section, we discuss the reasons as to why the exemption may have a harmful indirect effect on the investment incentives of Optus and other potential investors in new network infrastructure.

41. Telstra is asking for an exemption involving a single access seeker, Optus. In particular the exemption would deny Optus the right to obtain access to the ULLS in the proposed exemption area in circumstances where other access seekers, who have not undertaken such investment, would retain the right to access the ULLS.

42. While the exemption application applies only to the area currently covered by Optus' HFC network, any potential investor in new network build would develop expectations as to the potential future regulatory rights based on the approach the ACCC takes to the application. Telstra's application for the exemption states:

> "Where infrastructure-based competition exists, the shackles of regulatory intervention should be removed….Specifically, Telstra seeks to redress the incongruity of SingTel Optus continuing to utilise regulated access to Telstra's network to supply services customers who could be served using their own, end-to-end competitive network."[12]

43. Telstra's fundamental arguments for the exemption would appear to apply as much to future situations in which new network build has been undertaken as they apply to the current situation in which Optus has rolled out its cable network. For these reasons, granting the exemption would be likely to send a signal to potential investors in new network build that new investment would risk the loss of those operators' future rights to regulated access to Telstra's declared fixed services.

44. The consequence of the exemption would be that operators which are contemplating undertaking risky investments in an alternative infrastructure would be faced with an additional new risk that they may lose rights to regulated access that would be retained by service providers without their own networks. As Cave notes:

> "It can be argued, as noted in Section 2 above, that a discriminating access policy will create disincentives for investment in the future: an operator will fear that if it invests, it (and it alone) will be forced to negotiate for access on commercial terms, or be denied access, (a future version of bitstream, for example) which continues to be available to other competitors which have undertaken less infrastructure investment."[13]

45. The ACCC's draft decision details the ACCC's concern that a discriminatory access policy, as would result from the exemption, could "*lead to a disincentive for all competitive carriers, not just Optus, to deploy infrastructure, and therefore discourage the promotion of competition*."[14]

46. Telstra has put forward a number of expert reports that seek to argue against the significance of this deterrent effect to efficient investment. Cave himself has argued the disincentive effect could be overcome by the ACCC stating that the exemption is being granted where an operator has constructed "*nearly all the assets permitting it to self-supply*"[15] or by the exemption being presented as a "*precursor of a review of the obligation with respect to other operators at some future date based on market developments*."[16] However, neither of these proposals would appear to overcome the disincentive effect. The first proposal is so uncertain in its application that it is unlikely to serve the purpose of avoiding the disincentive effect. For instance, what constitutes 'nearly' all of the assets required to self-supply? When does an investor cross the line? This uncertainty could

12 Telstra, Application for exemption from standard Access Obligations in respect of the SingTel Optus HFC Network, Schedule A, 7 December 2007, page 1.

13 Cave, *Applying the ladder of investment in Australia*, p. 14.

14 ACCC Draft Decision, p. 89.

15 Cave, *Applying the ladder of investment in Australia*, p. 14.

16 Cave, *Applying the ladder of investment in Australia*, p. 15.

discourage other operators from extensive investments (i.e. investing in most of the assets for self-supply of a customer) while the announcement of a future review is hardly likely to provide the level of certainty needed for an operator to undertake a substantial investment in new network build in which the pay-back period may extend well into the future.

47. Cave's second report argues that even if new investment by Optus to expand its network was deterred, the loss of this investment may be small and outweighed by greater investment in its existing network service area. However, Cave's assessment does not take into account the potential deterrent effect on other potential investors in new network build, despite Cave earlier raising this possibility. Moreover, for the reasons discussed in the previous section, it is highly unlikely that the exemption would lead to Optus investing more in network in-fill except in one hypothetical situation in which such investment would be economically inefficient. Accordingly, the exemption would carry a risk of reducing incentives for new build while being unlikely to lead to efficient in-fill investment and as such result in overall harm to end-users.

48. Ergas has also put forward a number of arguments as to why the ACCC should not be concerned about the disincentive effect. First, Ergas argues that "*if the access seeker's goal is to use its own facilities and not access, then it would not be concerned that it would lose its ability to obtain access only when and where it had established its own facilities and hence achieved that goal*".[17] This argument ignores the uncertainty and complexity surrounding actual network investment decisions. An operator contemplating investing in a new network, and potentially using a new technology, may not know with certainty the eventual cost and competitiveness of service provision using that network. If the investment turns out to be uncompetitive, the operator may wish to continue to rely on regulated access services, at least to a limited extent (e.g. in particular geographic areas or for particular types of premises). Accordingly, the risk that new investment may lead to the loss of the right to regulated access may materially increase the overall riskiness of new network build. Even if the investment is successful generally, there may be some customers within the network service area who are uneconomic to serve and hence the exemption would mean that the operator would lose the ability to serve them.

49. We note Telstra's own HFC still suffers from a proportion of customers who are unserviceable by the HFC network and even Telstra do not suggest that 100% coverage is likely.[18] The exemption, even if it encouraged some in-fill by Optus, is likely still not to provide ubiquitous Optus HFC coverage within the exemption area. In other words, of the 800,000 unserviceable premises there will be a proportion who remain unserviceable and who Optus could no longer reach if access to declared fixed line services is removed. This may affect the operator's ability to market effectively (i.e. given that its service availability would be patchy) as well as more directly reducing the expected return to the investment.

[17] Ergas, Expert Report, 4 June 2008, para. 47.

[18] Telstra submits that 94% of its homes are serviceable. Telstra *Main Submission*, Table 6.

More generally, however, Ergas' argument effectively undermines Telstra's main reason for its exemption. If investment decisions will proceed regardless of access, then granting the exemption would leave Optus' investment decisions unaffected.

50. Ergas' second argument is that there will not be disincentive effects if "*declarations are made and exemptions are granted broadly (as opposed to in any specific case) on the basis of conditions that access seekers investment actions do not directly influence and the regulatory environment in no way guarantees that access, once imposed, will only be withdrawn if access seekers actually make facility-based investments*".[19] However, whatever the merits of this argument in general, it is not relevant to the type of exemption being sought by Telstra which is directly linked to the specific investment by an individual access seeker. Moreover, the Australian telecommunications regime does not establish an expectation that all access regulation will be removed in the foreseeable future. Indeed, to the extent that there remain bottlenecks or that new bottlenecks emerge, then access regulation is likely to continue to be consistent with the long term interests of end users. As such, the risk that new investment may lead an operator to lose its rights to regulated access can be expected to remain a material factor for future investment decisions.

51. Ergas' third argument is that "*rejecting the exemption will signal that there are few circumstances in which the Commission can be expected to remove access regulation*".[20] However, the Commission's major concern with the exemption should be its specific discriminatory effect in penalising a carrier for its network investment and the consequent disincentive created for new investment. As such, it is unlikely that potential investors would interpret the decision as implying that the Commission will not remove particular forms of access regulation in the future. Indeed, the Commission has already taken decisions to remove general access regulation in relation to WLR and LCS in CBDs and on inter-capital transmission. These decisions are likely to be accorded more weight in understanding the Commission's general approach to access regulation than any decision in relation to whether Optus alone should lose its rights to regulated access.

## 3.3 Summary

52. Optus' current rights to regulated access to ULLS can be expected to support the efficient use of and investment in infrastructure as Optus is provided with the ability and incentive to use the least cost means of service provision. The exemption would not be expected to alter Optus' investment incentives in any efficiency-enhancing way and if it did result in the in-fill investment described by Telstra, that would likely not be an efficient outcome. Moreover, the exemption may harm investment incentives more generally by signalling to potential investors that new network build may result in the future loss of rights to regulated services.

19 Ergas, Expert Report, 4 June 2008, para. 52.

20 Ergas, Expert Report, 4 June 2008, para. 55.

# 4 THE CLAIMED BENEFITS OF THE EXEMPTION ARE UNLIKELY TO EVENTUATE

53. In the previous section, we have explained the fundamental point as to why the exemption would be unlikely to promote efficient new investment. When the use of the HFC network represents the least cost means of connecting a customer, Optus can be expected to use its HFC network whether or not it has the option of accessing Telstra's network. In the other cases where ULLS represents the least cost solution, the exemption would leave Telstra and other access seekers able to use copper access and it is unlikely that Optus would invest in a higher cost, less efficient solution to seek to compete against multiple low-cost players. Optus would not be able to earn a return to justify the investment.

54. Telstra and its advisors have put forward a variety of arguments to suggest that greater investment in the HFC is likely to be economic for Optus and that higher investment would result from the removal of Optus' current rights to regulated access services. The arguments put forward suggest that Optus could readily be a more effective competitor (if only it chose to do so.)[21] In our view, the arguments put forward do not escape the logic of the fundamental point that the current access arrangements should not remove Optus' incentive to invest in its HFC where it is economically efficient to do so.

55. In the following sections, we consider a number of specific factors relating to the draft decision that, based on our knowledge of and experience in the telecommunications industry, we have been asked to offer opinion on. Where possible, we have sought to make clear where we have differences of views compared with Telstra and its advisors, and the factual basis upon which those views are based.

## 4.1 Cable has been losing share to DSL internationally

56. In support of its application, Telstra argues that "*the SingTel Optus HFC network 'punches below its weight' in contrast with comparable overseas networks*".[22] Telstra's argument is based on a number of claims together with an ad hoc collection of data. For example, Telstra notes the Optus HFC network's declining share of pay TV and broadband subscriptions in Australia and the rapid percentage growth of cable telephony subscribers internationally.[23] Eisenach argues that:

[21] For example, Telstra claims (p.2 of its supporting submission that "*The constraints on SingTel Optus' HFC network appear to be largely of its own making*").

[22] Telstra, "Application for exemption from standard Access Obligations in respect of the Singtel Optus HFC Network", 17 December 2007, p.3.

[23] Telstra, "Application for exemption from standard Access Obligations in respect of the Singtel Optus HFC Network", 17 December 2007, p.19 and 21.

> "First, firms using HFC infrastructures ("cable companies") compete successfully against traditional telephone companies, satellite providers and other communications providers in the United States and around the world. Indeed, in the US and elsewhere, cable companies are the leading providers of video and broadband services, and are rapidly increasing their shares of the market for voice telephony".[24]

57. The various observations put forward by Telstra and Eisenach are in sharp contrast to the clear picture that emerges from a more comprehensive review of international developments and even of the developments in the US on which Eisenach focuses.

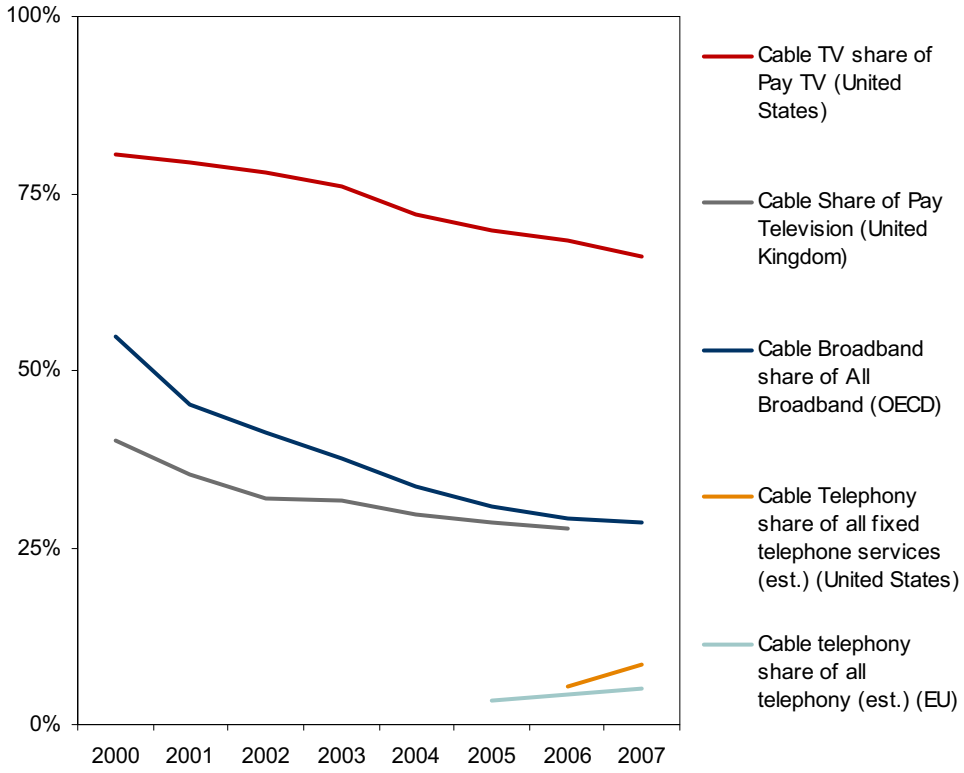
### 4.1.1 Cable's declining share of broadband

58. In relation to the broadband services, cable has been losing significant market share to DSL across the OECD as a whole (see Figure 1). A key reason for cable's loss of market share internationally is that cable operators have generally not found it economic to expand their networks while the availability of DSL services has increased markedly. This is consistent with DSL offering the most cost effective means of providing a new broadband connection and that regulated local loop access (typically at cost-reflective prices) is available in the large majority of OECD countries.[25]

[24] Eisenach Expert Report, page 4.

[25] OECD, Communications Outlook 2007, Table 2.9.

**Figure 1: Cable Networks Share of pay television, broadband and telephony, 2000-2007**




Source: Broadband statistics from OECD, *Communications Outlook*, 2007, Table 5.2 and OECD, *Broadband Statistics*, available at: http://www.oecd.org/sti/ict/broadband. United States cable television data from http://www.pff.org/issues-pubs/ps/2008/ps4.11whereisFCCvidcompreport.html and ITU, *World Telecommunications Indicators,* 2007; US cable telephony from ITU, *World Telecommunications Indicators,* 2007 and http://www.itbusinessedge.com/item/?ci=47672l; EU cable telephony from Cable Europe http://www.cableeurope.eu/index.php?page=cable-telephony-customers and http://www.cableeurope.eu/uploads/MediaRoom/documents/pub-41_en-cable_f&f_ye_2006.pdf. UK pay television from ITU, *World Telecommunications Indicators,* 2007.

59. Even in the US with virtually ubiquitous cable networks[26], cable's share of broadband connections has been declining. As shown in Table 1, in the last five years, US cable networks have lost 4.2% percentage points of their share of broadband subscribers. Cable's loss in market share has been taken by the growth in the share of fixed incumbent operators' DSL services. DSL services of non-incumbent operators have also lost share to the incumbent operators and, as such, are now even more marginal in the US market.

[26] More than 95% of homes in the US are passed by cable. OECD, *Communications Outlook 2007*, Table 6.3.

**Table 1: High Speed Internet Lines* by Type of Provider, Jun-02 to Jun-07, proportion of total High Speed Internet Lines**

| | Jun-02 | Jun-07 | Change in percentage points of market share |
|---|---|---|---|
| DSL or Wireline Service (Incumbent Operators) | 35.8% | 41.4% | 5.6% |
| DSL or Wireline Service (Entrant) | 3.1% | 2.1% | -(0.9)% |
| Cable Networks** | 56.5% | 52.3% | -(4.2)% |
| Other*** | 4.7% | 4.2% | -(0.5)% |

Notes: * Defined as a line having a speed over 200kbps in at least one direction. ** Excludes cable networks built by incumbent carriers (which accounted for 0.1% of broadband connections in June 2007). These networks are in the 'Other' category. *** Excludes mobile wireless broadband services. Source: FCC, *High Speed Services for Internet Access,* statistical releases, available at: http://www.fcc.gov/wcb/iatd/comp.html

60. The rise of DSL in the US which is predominantly supplied by incumbent operators suggests that DSL has competitive advantages over cable even when households are already in the coverage areas of cable networks.[27] The rise of DSL has also occurred over a time period in which a series of rulings in the US has systematically removed most of the access regulation designed to support broadband competition. For example, the FCC eliminated the obligation for incumbents to provide shared DSL access to competitors in 2003 and removed the obligation to provide DSL at wholesale on a non-discriminatory basis in 2005. Marcus has described the rulings in the following way:

> "The combined effect of these proceedings has been to substantially eliminate all regulatory obligations associated with last mile Internet access facilities, at both wholesale and retail levels, without consideration of whether SMP might be present in the underlying transmission facilities or not."[28]

61. The divergence between the US which commenced deregulation in 2003 and the retention of extensive access regulation governing the local loop elsewhere does enable a number of interesting observations to be made as to the ultimate implications for end-users. The US has virtually ubiquitous cable networks and hence might be considered an example of the ideal end-point of Telstra's reason to seek the exemption: "*this will light the competitive flame and incent investment in subscriber connections to customers passed by its cable*". In other OECD countries, cable networks are present to varying degrees although most of these countries now have more extensive access regulation than the US. Further, this access regulation has generally become effective only recently. As the OECD notes: local loop unbundling "*began to be effective in the last several years, having stuttered along*

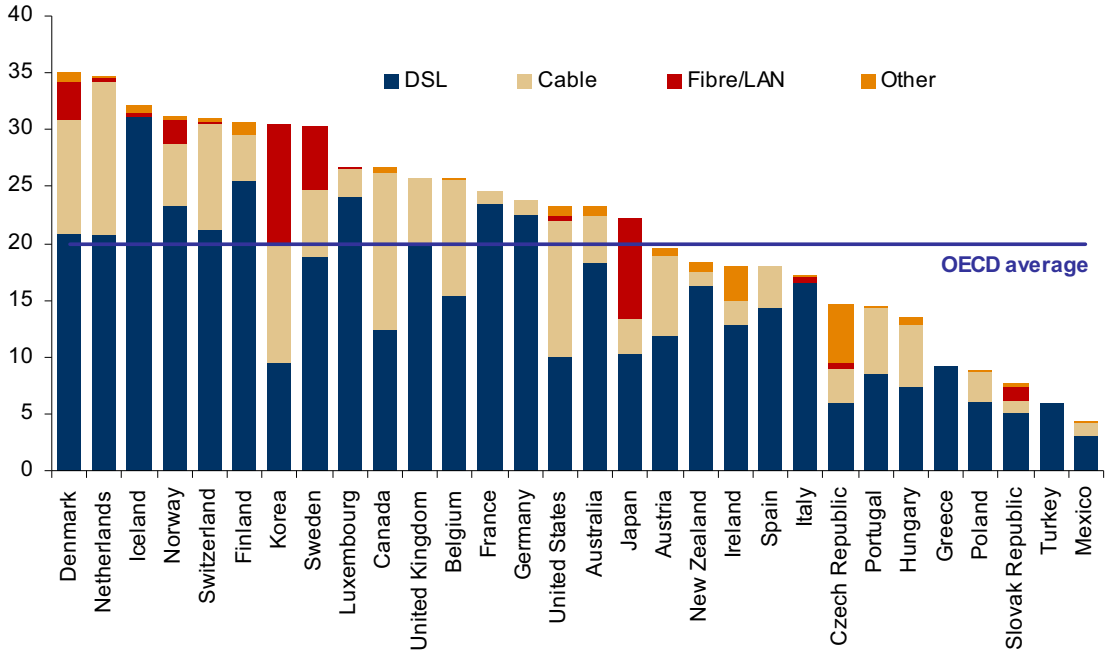
27 The OECD reports that 100% of US households were passed by cable in 2005 (OECD Communications Outlook 2007, Table 6.3).

28 J.S. Marcus, "Is the U.S. Dancing to a Different Drummer?" International Journal of Digital Economics 60 (2005), p.45.

*because regulators had not adequately put in place various requirements, such as the wholesale price for unbundled loops, collocation frameworks and service level agreements to be respected by incumbents in terms of delivery times and other technical requirements."*[29]

62. The first major observation is that the countries that lead the OECD (and the world) in terms of broadband penetration are the countries (particularly the Scandinavian countries and the Netherlands) that have both significant platform competition and effective local loop access regulation.

**Figure 2: OECD Broadband subscribers per 100 inhabitants, by technology, Dec-07**




Source: http://www.oecd.org/dataoecd/21/35/39574709.xls

63. The United States is currently ranked fifteenth in the OECD in terms of broadband penetration. In 2002, prior to the deregulation of local loop access, the United States was ranked sixth.[30] More detailed analysis of the impact of deregulation in the US suggests that it has not to date delivered better end-user outcomes or greater investment. For example, the US Government Accounting Office found that:

> "in areas where FCC granted full pricing flexibility due to the presumed presence of competitive alternatives, list prices and average revenues tend to be higher than or the same as list prices and average revenues in areas still under some FCC price regulation"[31] and

29 OECD Communications Outlook 2007, p.26-27.

30 OECD Communications Outlook 2003, Figure 5.2.

31 United States Government Accountability Office, Report to the Chairman, Committee on Government Reform, House of Representatives, *Telecommunications: FCC Needs to Improve Its*

> "The data developed in this report, at a minimum, raise questions about FCC's assertion that higher prices will induce competitive entry...There appear to be fewer competitors in areas where prices are higher. Moreover, economic theory generally holds that competitive entry would occur if markets are "contestable." FCC itself recognizes that the substantial sunk costs required to compete in these markets may serve as a barrier to entry."[32]

64. These high level observations suggest that while platform competition is an important driver of broadband market outcomes, access regulation may be able to provide additional benefits to end-users and need not come at the expense of platform competition.

65. The conclusion that access regulation can generally provide for improved end-user outcomes is not surprising. In particular, for the foreseeable future, the alternative to access regulation to support broadband provision is at best an incumbent/cable operator duopoly and in some areas a monopoly. While a duopoly can lead to a degree of competitive rivalry particularly in the growth phases of a new market, the degree of rivalry may fall well short of a fully competitive market and risks coordinated behaviour as overall market conditions become more stable.

### 4.1.2 Cable's declining share of pay TV

66. While we have been unable to source recent comprehensive figures for cable's share of pay TV subscribers, in the UK and the US where data over time is available cable has been losing its share of TV viewers to satellite and more recently DSL (see Figure 1). Again, this contradicts the claim that Optus has underperformed.

### 4.1.3 The limited significance of cable telephony

67. Telstra has highlighted the recent rapid percentage growth in cable telephony in some countries. However, it should be noted that such growth is off a low base. Use of cable for *voice telephony* remains negligible in most international markets although it is becoming more significant in certain countries with ubiquitous cable networks. In the US, the latest FCC report provides figures that voice revenues (circuit switched and VoIP) accounted for only 3.4% of total cable revenues in 2005.[33] In Europe, cable accounted for only 5% of non-mobile telephony lines in 2007.[34]

*Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, November 2006 ("*GAO Report*"), p.2.

32 The *GAO Report*, p.45.

33 FCC, 12th Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming. Table 4.

34 Based on figures from the website of Cable Europe (sourced 9 October 2008).

### 4.1.4 Cable's limited penetration of business and wholesale services

68. Telstra has also suggested that Optus has underperformed cable operators internationally in relation to winning business and wholesale customers. For example, Telstra notes that *"Many overseas cable operators have already made these upgrades and are winning significant market share amongst business customers."*[35] Eisenach also argues that cable can compete successfully for small and medium enterprises (although this is based on longer term forecasts rather than actual outcomes) and that "*Optus is also incorrect in its contention that HFC infrastructures are 'not suitable for…wholesale services*."[36]

69. Compared with residential customers, business customers attach more importance to both speed and the reliability of that speed. The contention or overbooking ratio is a key factor impacting on the reliability of broadband speed which measures the extent to which subscribers share a limited amount of bandwidth and have an impact on the speed of a connection for all customers sharing that bandwidth. A 20 to 1 contention ratio means the bandwidth may be shared with up to 20 other subscribers. Where several users are using the shared bandwidth at the same time, broadband speeds can reduce sharply. Even relatively small businesses will be concerned if they lose customers because of periods of slow broadband access.

70. Cable networks tend to have much higher contention ratios than fixed networks. For instance, in the UK cable networks may have contention ratios three times those of BT's DSL broadband services.[37]

71. Optus has previously presented evidence as to why the HFC network is not suitable for business services because of limitations to quality of service particularly in terms of availability, symmetric capability and diversity.[38] This is consistent with international experience. For its regulatory purposes, the Dutch regulator OPTA distinguishes between two separate broadband markets: a market for high quality wholesale broadband access and a market for low quality wholesale broadband access.[39] The distinction is based on the contention ratio of the services. OPTA does not consider that cable operators form part of the market for high quality broadband but does include them in the low quality market. The technical problem of the contention ratio severely limits cable operators' abilities to win business customers. Ofcom has found that in the UK, business take-up of cable Internet access is "*very low*".[40]

35 Telstra supporting submission, p.3.

36 Eisenach, paragraphs 31 and 32.

37 The Guardian, "Broad options for broadband", 26 February 2004.

38 For example, see paragraphs 2.12 to 2.20 of Optus' Submission to the ACCC of March 2008.

39 European Commission, Case NL/2005/0281: Wholesale Broadband Access in the Netherlands, 2 December 2005.

40 Ofcom, Review of the wholesale broadband access markets 2006/07, para. 4.56.

72. For these reasons, Optus currently relies on resale and ULLS products to supply competitive services to the corporate and government sectors in particular. We recognize that these market segments (where the issues with HFC are most severe) will not be affected by the exemption application, as these customers typically are located beyond 75 metres from the Optus HFC network. Nonetheless we note that exemption if granted may remove the option of Optus supply via ULLS to some business customers within the affected area (including small and medium business customers) that would not be prepared to accept supply via Optus HFC.

73. Contention is also a problem for provision of wholesale access to cable broadband particularly any form of access that goes beyond simple resale. In this regard, the European Commission has recently noted: "*Moreover, the unbundling of cable networks at this stage does not appear technologically possible, or economically viable, so that an equivalent service to local loop unbundling cannot be provided over cable networks*."[41]

74. Eisenach refers to Time Warner Cable offering wholesale access to competing ISPs. We note that this was a condition of it gaining clearance for its merger with AOL. It also appears that the wholesale access offered involves simple resale activities.[42] Clearly, simple resale of a cable service (i.e. different branding and billing relationships) is technically possible but this is not the same from a competition perspective as unbundled access which provides for substantial product differentiation.

75. In short, international evidence supports Optus' view that the HFC network is not suitable for business or wholesale customers.

### 4.1.5 Failure of new network build

76. The general market outcomes discussed above are reflected in the fact that in countries where cable was not already ubiquitous as a major TV platform, new cable network builds have often been highly unsuccessful. In the UK, the largest cable operator ntl (whose network is now operated by Virgin Media) filed for Chapter 11 bankruptcy protection in May 2002 and only emerged from protection following the conversion of around US$11 billion of debt into shares – described as the world's biggest corporate bond default.[43] Telewest, the second largest UK pay TV operator prior to its merger with ntl, had a history of substantial losses. Investment in many markets has tended to be incremental upgrade investment, rather than new infrastructure build. As the Chairman of Ofcom has noted with respect to

41 European Commission, Commission Staff Working Document – Explanatory Note Accompanying document to the Commission Recommendation on Relevant Product and Service Markets, 13 November 2007, p.31.

42 'Earthlink at Bear, Stearns & Co. Inc.', 10 March 2008, Media Conference, available from Voxant FD Wire (Fair Disclosure).

43 The Independent, "NTL's shareholders wiped out by $10.6bn debt-for-equity swap", 17 April 2002.

the UK "*But cable passes only about 50 per cent of all homes. And there has been little evidence of appetite to invest to extend that footprint*."[44]

### 4.1.6 Summary

77. The overall picture that emerges from the international evidence is that while cable was initially strong in a number of markets, it has been losing ground in recent years in both the key revenue sources of pay TV and broadband. Cable telephony is developing although it is still of marginal significance overall.

78. Cable's loss of market share internationally supports the view that DSL is a more efficient (lower cost) means of service delivery compared to cable, particularly for new connections where copper legacy infrastructure is in place and equivalent cable infrastructure is not. Given that in the event the exemption was granted, the ULLS would remain available to Telstra and other access seekers at regulated cost-reflective prices, it is clear that in such circumstances a new investment in cable infrastructure by Optus would not be competitive. Not only would such a hypothetical investment be inefficient (given it is not least-cost); but given its lack of cost competitiveness it is unlikely that it would ever happen.

## 4.2 Comparing Optus' performance with that of US cable operators

79. Eisenach seeks to buttress his arguments by presenting an analysis that he argues shows that "*when penetration rates and revenues for all customers and all services are taken into account, Optus' operating results are comparable to those of US cable companies and, indeed, superior to those of the major US cable overbuilders*".[45]

80. Eisenach produces an analysis of Optus' revenues in Appendix D of his report. In the analysis, he compares Optus revenues with those of two overbuilders (Knology and RCN), and four Incumbents (Cablevision, Comcast, Mediacom, Time Warner). He notes that Optus earns less revenue per subscriber than US cable companies. However, he argues that Optus performs well with respect to revenue per serviceable home passed which he states "*measures the ability to successfully defray the costs of deploying the network*". He then argues that the revenue calculated exceeds the comparable figures for Knology and RCN, arguing that "*the analysis fails to support Optus' contention that the unique characteristics of the Australian market make its HFC infrastructure uneconomic compared with cable TV companies in the United States*".[46]

81. There are number of fundamental flaws with the analysis presented by Eisenach. These include:

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44 Speech by David Currie at the LBS Global Communications Consortium Conference – Regulation, investment and the consumer interest, 12 November 2007.

45 Eisenach Expert Report, paragraph 43.

46 Eisenach Expert Report, Appendix D.

- Even if the analysis were otherwise meaningful (which it is not), Knology and RCN are not successful firms and are not a useful benchmark;
- The analysis uses an unrepresentative spot exchange rate. When recalculated using long run average exchange rates, Eisenach's conclusions are no longer valid; and
- Revenue per serviceable home is not a good measure of profitability.

### *Unrepresentative cable operators*

82. The evidence suggests that cable overbuilders have not generally been successful in the United States, and Knology and RCN in particular have not been successful models that provide support for Telstra's contention that Optus should invest in further infrastructure build. This is discussed in our analysis of US cable overbuilders in section 4.3.3.

### *Exchange rate adjustment*

83. The analysis uses a spot exchange rate. Exchange rates are highly volatile in the short term. The exchange rate used (0.9472) varies significantly from both the current spot rate and long run average exchange rates. Given the volatility of exchange rates, we consider that if a single exchange rate is to be used for making comparisons, it is more reasonable to use a long run average exchange rate. This approach lessens the potential for a single day rate to be unrepresentative of either historic or future subscriber revenues.[47] We have adjusted the figures reported by Eisenach using a ten year average exchange rate in the table below.[48]

**Table 2: Adjusted Table D-3, Eisenach Expert Report (estimated Optus ARPU)- CIC**

| | ARPU (AUD) | ARPU (USD) | | |
|---|---|---|---|---|
| | | Eisenach Exchange Rate | 5 year average exchange rate | 10 year average exchange rate |
| Telephony | | | | |
| Broadband | | | | |
| Pay TV | | | | |
| **Overall** | | | | |

84. Using the figures based on the ten year average exchange rate significantly impacts the analysis. [CIC CIC].

47 Alternatively a forward looking exchange rate could be used.

48 The New Zealand Commerce Commission, after extensively considering, the issue of the appropriate time horizon to use for exchange rate adjustments for regulatory purposes, has decided that a 10 year average exchange rate is appropriate (NZCC Determination on the *TelstraClear Application for Determination for Designated Access Services*, 5 November 2002).

85. For completeness, in Table 3 we have adjusted the calculation again using Optus data for the 07/08 financial year, and internal ARPU and subscriber data supplied to us by Optus. This has no significant impact of the analysis of the individual services. It does however significantly increases the overall average revenue per subscriber for Optus compared with the figure derived by Eisenach.[49] [CIC CIC]

**Table 3: Adjusted Table D-3, Eisenach Expert Report, Optus Data – CIC**

| | ARPU (AUD) | ARPU (USD) | | |
|---|---|---|---|---|
| | | Eisenach Exchange Rate | 5 year average exchange rate | 10 year average exchange rate |
| Telephony | | | | |
| Broadband | | | | |
| Pay TV | | | | |
| **Overall** | | | | |

### *Revenue per serviceable home is not an appropriate measure of profits*

86. Eisenach relies on revenue per serviceable home to argue that Optus earns reasonable returns compared with US comparator firms. [CIC CIC]

87. We have corrected the calculation of revenue per serviceable home passed using a ten year average exchange rate, Optus data for the 07/08 financial year, and internal ARPU data supplied to us by Optus.[50] There is no discernable difference in the analysis as a result of using the Optus annual data. There is a significant difference resulting from the exchange rate correction.

88. Using a more representative ten year exchange rate, the Optus figure falls to [CIC CIC].

89. More fundamentally, revenue per serviceable home is not a suitable measure for such a comparison. The costs of deploying a network are largely fixed (and in large part sunk), so a 'returns per serviceable home' measure could be a useful measure to the extent that it reflects that overall cost of building the network. However, a more appropriate measure for such a comparison is a measure of contribution margin (gross profit) – revenue less the variable cost of supply. This is because it is not the revenue received that covers the network costs, but the gross profit on products sold, and this can be radically different to the revenue. This is a major issue for Optus, as the cost of content in Australia means that there is no significant contribution to network costs from the pay TV sales it makes. The issues associated with the cost of content are discussed further in our discussion in section 4.3.2.

49 This change is due to revised subscriber numbers being used in the analysis.

50 The rate used is 0.6875. Source: Reserve Bank of Australia.

## 4.3 Australian conditions are unfavourable relative to those faced by international cable operators

90. In this Section, we discuss a number of underlying market conditions that reduce the economic viability of further investment in Optus HFC network.

### 4.3.1 Low penetration of pay TV services

91. Pay TV is a critical part of the business proposition of a cable 'triple play' offering. Until recently, it was also one of the services that demanded the higher quality and bandwidth offered by cable connection. As such, the ability to sell pay TV has been an important driver of cable penetration and of expected revenues for a cable operator.

92. In the United States where cable has historically been a pay TV platform, most of the industries revenues come from pay TV. The FCC report basic and CPST (Cable Programming Services Tiers) revenue as 46% of industry revenue, while adding all video related revenues boosts the share of revenue to more than 70% of income.[51] In the UK, Virgin Media reports more than 50% of its subscribers as being 'triple play' customers.[52] More than 70% of Virgin Media subscribers have a pay TV subscription.[53] This reflects that for many subscribers it is one of the key drivers for the decision to take cable. It also contrasts starkly with the number of HFC subscribers taking Pay TV service from Optus – around [CIC CIC].

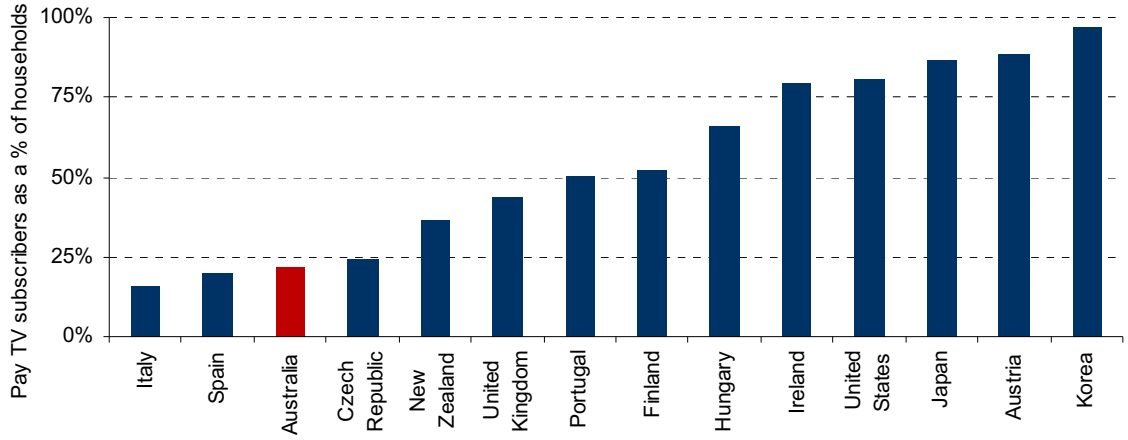
93. While pay TV is a significant driver of demand for cable connections internationally, pay TV take up in Australia is low by international standards, as shown in the figure below. The low penetration of Pay TV in Australia means that it will be more difficult to achieve an economic level of penetration as an Australian cable operator will have lower expected revenues from Pay TV when compared with overseas operators.

51 FCC, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 12th Annual Report, Table 4. Other video related revenue includes premium tiers, pay per view, local advertising, home shopping and total digital tier.

52 JP Morgan, Virgin Media, Europe Equity Research, 26 June 2008. Data for Q1 08.

53 JP Morgan, Virgin Media, Europe Equity Research, 29 June 2007, page 15.

**Figure 3: Pay TV subscribers as a percentage of households, 2005**




Source: OECD Communications Outlook 2007, ITU World Telecommunications Indicators, 2007

94. Eisenach argues that 'Optus' focus on pay TV penetration is misplaced. He states:

> "The relevant question … is not how many people subscribe to pay TV … but rather how much they pay for the entire bundle… Its [Optus] overall revenue per serviceable home passed, a ratio which captures both its penetration and its overall revenues in a single figure, compares favorably with that of U.S. overbuilders."[54]

95. We have however shown above that even on his own preferred measure the analysis shows that Optus does not in fact compare favourably in terms of revenues per serviceable home, and further that the question is not in fact how much subscribers pay for the bundle, but how much gross profit is earned, a question Dr Eisenach has not addressed.

96. Beyond these points however, his comparator firms do not in any way suggest that pay TV is not a key product for successful cable firms in the US.

97. All of the incumbents listed by Dr Eisenach rely on video for the bulk of their revenues.[55] Recent financial reports for these firms show:

- Comcast's video business accounted for 56.1% of its revenues (Q1-08), as compared to 20.7% for broadband, and 7.0% for voice.[56]
- Cablevision's video business accounted for 60.0% of its revenues (4Q-07), as compared to 22.3% for broadband and 12.5% for voice.[57]

54 Eisenach Expert Report, Appendix D, paras 1-3.

55 The analysis in the following section on the cost of content suggests that, unlike in Australia, cable firms make good margins on content in the US.

56 Comcast, *1st Quarter Results*, 1 May 2008, available at: http://library.corporate-ir.net/library/11/118/118591/items/291110/1Q08bwslides.pdf

57 Cablevision Systems, Fourth Quarter and Full Year 2007 Results, p.9, available at: http://media.corporate-ir.net/media_files/irol/10/102703/Q407_earnings_release.pdf

- Mediacom's video business accounted for 66.1% of its revenues (2Q-08), as compared to 22.9% for broadband and 6.4% for voice.[58]
- For Time Warner Cable the video business accounted for 61.3% of its revenues (Q2-08), compared with 24.0% for broadband, and 9.2% for voice.[59]

98. With respect to the overbuilders, the FCC refers to overbuilders as 'BSPs' (broadband service providers). However these are defined as '*newer firms that are building state-of-the-art, facilities-based networks to provide video, voice and data services over a single network*'. Both of the overbuilders used as comparators (RCN and Knology) are specifically listed as significant supplies of video services.[60] Company statements also confirm that pay TV is an important product for overbuilders. A senior executive at RCN was for example recently reported as stating that RCN was "the original triple-play competitive provider".[61] WideOpenWest, another US overbuilder was quoted in the Wall Street Journal as stating that in response to its financial problems it had '*skipped the rollout of pricey cable telephony service and instead concentrated on cable TV and high-speed Internet service*'.[62]

99. In line with the evidence from the United States, in Europe television revenues also account for the bulk of cable operators revenues. In 2007, this amounted to €10.5b from total revenue of €17.9b – nearly 60% of all revenues.[63]

100. In summary, there is no evidence to support the view that a focus on pay TV is 'misplaced' for a cable firm. Indeed, the evidence consistently shows that pay TV is a core offering.

### 4.3.2 The cost of content

101. As already demonstrated, pay TV is a key part of the offering for cable operators in most countries.[64] This implies that the cost of content (programming) is also important to the economics of a cable network. If the content cost is high relative to the revenues that can be earned, this reduces the profit margins available from to the cable platform. In particular, it makes 'triple play' sales less profitable which will reduce the returns to building, and in turn the likelihood of build, all else equal.

58 Mediacom, 2nd Quarter 2008 earning presentation, 7 August 2008, available at: http://phx.corporate-ir.net/phoenix.zhtml?c=98270&p=irol-earnings

59 Time Warner Cable, *Q208 Earnings*, available at: http://files.shareholder.com/downloads/TWC/435589482x0x218765/fb7b1498-0032-494d-914e-d39cd69155db/q22008earnings.pdf

60 FCC 12th Report [full ref] paras 87 and 89.

61 *Environment's Changed For RCN*, CT Reports, Vol 2, Issue 32 27 April 2007.

62 *WideOpenWest Issues a Challenge to Big Cable*, The Wall Street Journal, 3 January 2002.

63 http://www.cableeurope.eu/index.php?page=cable-revenues

64 Indeed, in the most highly penetrated cable countries, pay TV was in most cases developed primarily as a TV platform.

102. There is considerable evidence that the cost of content is high in Australia, implying that pay TV sales provide little incentive for Optus to invest in significant network build. The OECD stated in a report in 2003 that the primary impact of cable overbuild and content competition in Australia has been "*some of the highest prices in the world being paid to the right's owners*".[65] Optus has provided us with internal analysis showing that the incremental cost of the core TV package it purchases [**CIC CIC**] the incremental revenue Optus earns from sales of the package (even before operating costs are taken into account). We understand that Optus has ceased promotion of its pay TV product. All this evidence points to Optus making little or no return from the sale of pay TV.

103. This evidence is in contrast to the position of cable operators in the US, who still offer pay TV as a primary reason for a cable subscription. Figures from the FCC report that in 2005, content costs accounted for about 19% of all revenue, and about 26% of the revenue share that can be counted as related to video and TV services.[66] These figures are not directly comparable with the Optus data. However, they do underline the fact that US cable networks face a very different business proposition and cannot be considered close comparators for the situation in Australia.

### *Content ownership issues*

104. Professor Cave comments that with respect to Foxtel, Optus faces a similar dependence on content issues as Virgin Media does in the UK with Sky. Further, he notes that Virgin Media 'probably lacks the regulatory protections available to Optus'. These include a commitment not to acquire or renew channels on an exclusive basis; and the commitment to supply its pay TV service on similar pricing terms to those available to Telstra.

105. It is unclear that an undertaking to offer prices for content to other pay TV delivery platforms on the same terms as that offered to Telstra is much of a protection to other providers, including Optus. Telstra owns 50% of the content supplier, and therefore receives part of the benefit of setting a high content price for subscriptions connected on its own network, plus it receives part of the benefit of high prices for content on competitors' networks. Further, the pricing of content is likely to impact the penetration of HFC based pay TV services and by-product sales of telephony, which impacts the returns to Telstra's legacy CAN network. The overall impact of these complex relationships is difficult to assess in the abstract, but it is far from clear that such an undertaking offers any real guarantee that the price set to Telstra for Foxtel content will reflect the commercial margins that might be expected from arms length transactions between unrelated entities.

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65 OECD, *Broadband And Telephony Services Over Cable Television Networks*, 7 November 2003, page 25.

66 FCC, 12th Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming. Table 4. Revenues classified as video related are: Basic Service and CPST Tiers, Premium Tiers, Pay-per-view, Local advertising, Home Shopping and Total Digital Tier.

106. Further, to the extent that Optus faces similar issues to Virgin Media, it is far from clear that all is well in the UK pay TV market. Ofcom is currently investigating the UK pay TV market. A major concern of Ofcom is that:

> "Firstly, there is a risk that Sky, as a vertically integrated firm, with market power in a key upstream market, will distribute its premium content in a manner that favours its own platform and its own retail business. It might do so either by denying this content to other retailers and / or other platforms, or by making it available on unfavourable terms. The effect of this would be to distort retail competition for the provision of pay TV services. The increased importance of 'triple-play' bundles creates a further risk that this distortion would extend to the other services which are included in such bundles, notably broadband and telephony services." [67]

107. Ofcom is concerned that Sky is acting on this incentive. Ofcom states that it believes that:

> "… the current combination of wholesale charges and incremental retail price makes it unprofitable for Virgin Media to sell premium channels to existing basic subscribers, and Virgin Media therefore has no incentive to do so unless this is absolutely necessary in order to retain a subscriber. There has been a dramatic decline in the number of subscribers to Sky's premium channels via cable in recent years.'"[68]

108. Ofcom further notes that although Sky has consistently grown its pay TV subscriber base over time, Virgin's cable pay TV customer base has been stable for several years at around 3.5 million subscribers.[69]

109. While there will clearly be a range of factors impacting on the overall performance of a cable operator, Ofcom's concerns are consistent with the potential for content ownership issues to distort market outcomes against cable operators.

### 4.3.3 Cable overbuild

110. The Telstra overbuild and existence of dual cable networks plus the PSTN is a highly unusual feature of the Australian environment. The consequence is that it fragments the available customer base and reduces the economic viability of new cable investment (for both operators). In the context of the MDU issue, unless it is thought that the incumbent cable operator will not acquire any cable customers cable overbuild reduces the expected number of customers that can be gained within an apartment complex, reducing the likelihood that such an investment would ever be profitable.

111. European cable operators are virtually always the only cable provider in their coverage area. The OECD reports that Portugal is the only European OECD nation with significant cable overbuild.[70]

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67 Ofcom, Pay TV second consultation, 30 September 2008, paragraph 1.28.

68 Ofcom, Pay TV second consultation, 30 September 2008,, paragraph 1.29.

69 Ofcom, Pay TV second consultation, 30 September 2008,para 6.83.

### *Overbuild in the United States*

112. Eisenach's focus on cable overbuilders as a success story and example that cable overbuild can be a viable competitive model is highly surprising. Firms such as RCN incurred substantial losses that were written-off as part of bankruptcy proceedings. Indeed, it is worth looking at the rather unfortunate history of RCN and Knology in some detail.

113. **RCN Corporation** began an overbuilding program in the late 1990s, and is the largest BSP in the United States. By 2002, its share price had fallen 95%, it had made over 2,000 employees redundant in 2001 alone (a third of its workforce), and Moody's was indicating that a debt restructuring or liquidation was "seemingly inevitable".[71] At the end of June 2002, it reported $1.1bn in operating losses, on only $294m in sales.[72] At the end of 2002, the utility companies in Portland began removing RCN's network from their poles – due to non-payment of rent.[73] In 2004, RCN Corporation filed for Chapter 11 bankruptcy after missing interest payments on its £1.7bn.[74] At the time, media reports indicated that "like other overbuilders, RCN has been on the brink of financial disaster for much of its short life".[75] In December 2004, RCN emerged from bankruptcy having swapped new equity for approximately $1.19bn in debt, reducing its debt to around $500m.[76] RCN has recorded a single profitable quarter since emerging from bankruptcy, with its 2008 year end loss equalling $32.4 million, compared to a year-earlier net loss of $24.7 million. Its current forecast for 2008 is a net loss of $71 million to $81 million on revenue of $730 million to $740 million.[77]

114. As with RCN, **Knology Inc** has struggled with high debt levels. In mid-2002, the company restructured its debt, by moving debt to a subsidiary and filing a voluntary petition under Chapter 11.[78] The deal allowed the company to reduce debt owed to investors from $380 million in old bonds to about $193.5 million in new bonds.[79] Dr Eisenach lists Knology in Table 2 of his expert report, describing it as having a 'large positive valuation' of $499

70 Broadband And Telephony Services Over Cable Television Networks, OECD 2003, page 17.

71 'Mixed Signals even as it gains customers, RCN is deep in debt, its stock battered', *The Boston Globe*, 18 July 2002.

72 'Spectrum to buy RCN cable systems' *The Daily Deal*, 28 August 2002

73 'Remnants of Telecom Explosion Fade Away from Portland', *The Oregonian,* 6 September 2002

74 'RCN to seek bankruptcy protection to stay in cable business', *Associated Press*, 18 February 2004

75 'Princeton, N.J. Based Cable Provider RCN to File for Bankruptcy, *Tribune Business News*, 17 February 2004.

76 'RCN Expects to Emerge from Chap 11 by Year's End' *Dow Jones Newswires*, 9 December 2004.

77 'RCN 4Q Loss Widens, Sees 2008 Above Expectations' *Dow Jones News Service*, 11 March 2008

78 'Knology Inc to Recast Debt, Says Failure May Bring Ch 11' *Dow Jones Corporate Filings Alert*, 17 July 2002.

79 'West Point, Ga.-Based Internet, Telephone Company Files Bankruptcy' *Columbus Ledger*, 19 September 2002

million. In the interim its valuation has fallen to $185 million.[80] It was listed in August 2008 on a financial pundit's website as one of '5 Deathbed Stocks'.[81]

115. Overbuilders remain marginal in the US market today. The FCC reports that overbuilders had a market share of MVPD households of 1.63% in 2003, falling to to 1.49% by 2005.[82] Indeed, in summary the FCC state:[83]

> "…we define broadband service providers (BSPs) as newer firms that are building state-of-the-art, facilities-based networks to provide video, voice and data services over a single network. Most BSPs are overbuilders. As we have noted previously, BSPs continue to face considerable challenges as discussed below, and competition to cable from BSPs is limited to very few markets."
>
> "… BSPs were facing difficulties competing, such as access to programming and Multiple Dwelling Units (MDUs)…"

116. The US evidence actually confirms the severe challenges faced by Optus in being one of two competing cable networks in the same area. Forcing Optus to rely solely on its cable network alone would render it a marginal player and remove a significant pro-competitive force.

### 4.3.4 The National Broadband Network Rollout

117. There is considerable uncertainty over the likely timing and nature of the NBN rollout in Australia.[84] It seems likely however that if the NBN is rolled out, it will provide an extensive and subsidized ($4.7b of tax payer funding). Until the likely development path of the NBN becomes clear and access pricing arrangements set, in-fill investment of HFC broadband infrastructure would be even more risky than has historically been the case. This uncertainty is acknowledged by the ACCC. For example the ACCC notes that were significant sections of the Optus fibre in the HFC network to be incorporated into the NBN, significant investment in the coaxial cables that connect premises to network distribution cables may be lost or stranded.[85]

118. The ACCC has acknowledged that cable investment has a long payback period. As the payback period will likely cover future years when a NBN may be in place, it must increase the degree of uncertainty associated with investment in infrastructure at this point in time. This implies that if the exemption is granted, it would be risky to take a short term decision

80 Market valuation as at 9 October 2008, from Yahoo! Finance, http://finance.yahoo.com/q?s=KNOL

81 http://www.fool.com/investing/general/2008/08/22/5-deathbed-stocks.aspx?terms=knol&vstest=search_042607_linkdefault

82 FCC, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 12th Report, Table B-1

83 FCC, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 12th Report, paragraphs 87 and 91.

84 The Australian Government has published a request for proposals to roll out and operate the network. Proposals are due by 26 November 2008.

85 ACCC, Draft Decision (Confidential Version), page 67.

to invest in cable (when compared with the situation where the future development path of the NGN was known). For example, the NBN roll-out could reduce the potential future market that could be accessed by new cable build, and the NBN provider may itself commercially decide to expand into areas where cable is present.

# 5 LIKELY IMPACT OF EXEMPTION ON COMPETITION

119. We have outlined in our analysis of the potential impact of the exemption on investment why we believe that maintaining Optus' regulated access rights will promote the efficient use of and investment in infrastructure. We consider here whether allowing the exemption application would promote competition.

## 5.1 The proposed exemption could harm competition

120. The ACCC note that removing Optus' access to ULLS could reduce the level of competition in downstream markets, but that this impact could be limited by the replacement of Optus by other ULLS based competitors.[86]

> "The ACCC therefore considers that removing Optus' ability to access the regulated ULLS within the HFC footprint could reduce the level of competition and potential for competition in retail fixed voice and broadband markets, and could damage the competitive process. As other competing carriers would be able to compete through regulated access to Telstra's services, this competitive detriment may be somewhat limited…"

121. If the consumer offering currently made by Optus based on ULLS could be easily and fully replaced by other competitors, and the impact of the exemption was to incentivise Optus to invest in more infrastructure than would have been built absent the investment, then it is unclear what the benefit of the exemption is to Telstra and therefore why it is seeking the exemption. Telstra would face a similar level of competition based on ULLS services, and increased infrastructure based competition from Optus. This suggests that in fact Telstra does not expect these pro-competitive outcomes to eventuate.

122. There is evidence that Optus' access to Telstra's local access services enables Optus to have a significant pro-competitive impact on market outcomes. Optus has significantly more ULLS-based customers than any other access seeker. This evidence suggests Optus is able to use ULLS to produce services of greater value to end-users than other access seekers. There is evidence for example that Optus' pricing offers such as the introduction of fixed line caps into the Australian market, which are available to ULLS-based customers as well as HFC customers, have boosted competition in relation to retail prices. The ACCC found for example in its 2006-07 pricing review that:

[86] ACCC, Telstra's exemption application in respect of the Optus HFC network - Draft decision, September 2008, page 10.

> "During the reporting period, some carriers introduced new subscription based (bucket) offers for PSTN customers. These plans offer significant discounts on local calls (in some instances with no charge) and capped national long-distance calls, which in the past were typically charged on the time of day, destination and duration of the call. The emergence of capped plans for fixed services, where end users are charged on the basis of a cap instead of on a per-call basis, seems to be contributing to the readjustment of the pricing mix between basic access product charges and per-call costs of PSTN calling services." [87]

123. And further:

> "Competition is also forcing fixed network operators to upgrade their networks in order to capture a share of the flourishing demand for broadband services:
>
> • The entry of Optus into DSL broadband in 2004 led to Telstra slashing entry level broadband prices to $29.95 in response to competitors. Optus has recently introduced its 'Fusion' entry-level broadband and phone cap for $69 and Telstra is responding."[88]

124. This market outcome may reflect economies of scale, scope or density that enable Optus to offer retail services at a lower cost or with more features or with a better quality of service. An example of this is Optus' 'Fusion Plus' bundled offers, which include home phone, broadband and mobile components. Internationally, operators are developing dual mode products that enable customers to use a single handset to make and receive calls over a WiFi connection while at home and a GSM mobile connection when away from home. Few other access seekers in Australia are able to offer this type of bundle from within their own organisations. We note that while in theory such bundles could be offered via collaborations between independent firms, it may be more difficult to coordinate these specific offers via contract. Mergers such as the purchase of Virgin Mobile by ntl to create Virgin Media in the UK have at least partially been driven by the desire to offer 'quad-play' products including fixed and mobile telephony as well as broadband and pay TV services.

125. As already noted, HFC networks are not well suited to providing some forms of access service. In particular business customers tend not to favour the use of HFC connections. While the exemption should have limited impacts on larger businesses (which are not generally located within the HFC footprint), there could be a negative impact on some smaller businesses that particularly value the complex bundles Optus can offer.

126. For these reasons, we believe that granting the exemption would risk removing or weakening the direct competitive impact of Optus' access-based services either by the complete loss of access for Optus or by Telstra raising prices or reducing the quality of the

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87 ACCC, *Changes in the prices paid for telecommunications services in Australia 2006–2007*, page 23.

88 ACCC, *Submission to the DCITA review of the universal service obligation (USO)*, November 2007, p.5

access products supplied to Optus. Thus there would be the risk of significant and immediate harm to competition.

## 5.2 Evidence on the benefits of access based competition

127. Eisenach argues that infrastructure competition produces lower prices for consumers.[89] He supports this with US data showing beneficial price effects in areas of the United States where infrastructure competition occurred. We have a number of issues with the analysis presented.

128. First, the underlying assumption is that removing Optus' access rights will result in additional infrastructure build and then presumably the benefits noted by Eisenach. However, as noted we do not believe this is the likely outcome of granting the exemption, for the reasons already outlined. Beyond this however, there is already very considerable overlap of the Telstra and Optus HFC networks. Given the very large overlap that exists between the Telstra and Optus HFC networks (in excess of 80%) the benefits of infrastructure competition should already exist for all HFC subscribers (whether on the Telstra or Optus HFC network).

129. Second, some of the data supplied tells us little or nothing about the development of competition. The falls in entry level prices for DSL services referred to in paragraph 126 could result from competition, falling costs, a penetration pricing strategy or some combination of these factors. Falling costs will lower the optimal price of any firm, even a monopoly. Likewise, even a monopoly may engage in penetration pricing (pricing low in order to develop the market) in a market where there are potential scale economies, demand side network effects or significant first mover advantages.

130. Third and perhaps most fundamentally, the question is not whether infrastructure competition produces better market outcomes than monopoly – that result is rather uncontroversial. The issue is whether the exemption application – which involves removing cost-based access regulation in respect of a single provider – is likely to provide better competitive outcomes compared to the status quo.

[89] Eisenach Expert Report, paragraphs 124, 125.

### 5.2.1 Impact of competition based on regulated access

131. A number of studies have investigated the impact of access regulation and platform competition on stimulating broadband penetration. These have reached differing conclusions that are likely to reflect the particular data sets and variables used to proxy relative levels of regulation, competition and broadband usage. Furthermore, the different results are likely to reflect the fact that it has taken providers using ULLS services a number of years to establish a significant presence across local exchanges. Accordingly, earlier studies may not be as reliable as more recent studies as to the actual impact of unbundling. As discussed earlier in the report, in many international markets DSL services have been growing much more rapidly than cable services in recent years. In line with this, one relatively recent paper for the OECD that uses data for the whole OECD found that "The analysis also supports the contention that unbundling (as measured by the number of years the local loop has been unbundled) is currently more significant than platform competition in explaining broadband penetration."[90]

132. The experience in the US appears to be consistent with these findings. The US has significantly reduced wholesale access regulation since 2002/03. The US ranked 6th in the OECD in terms of broadband penetration in 2002. However the US had dropped to 13th in the OECD by June 2006 and this is despite widespread cable network providing for facilities based competition.

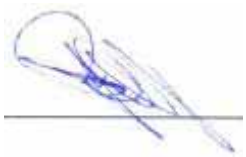
133. Optus' decision to use access services is evidence that the cost of the access service is likely to be below the cost of Optus establishing its own connection to that customer. Removing Optus' access to the local loops would simply reduce competition to Telstra without any longer term competitive or efficiency benefit.

134. Finally, we reiterate that in our view the key issues related to this application are not the generic issues related to whether or not access regulation should be used as a tool in regulation of the fixed network. Rather, the issue is whether a single network operator that has invested in infrastructure should be denied access to regulated products that will remain available to its competitors. In the long-term, there is a risk that infrastructure competition would also be harmed by an asymmetric exemption through the disincentive created by the exemption for new investment in network build.

[90] Ridder, J., OECD Working Party on Communication Infrastructure and Services Policy, "Catching-up in Broadband – What will it take?", 25 July 2007, p.20.

# 6 DUTY OF THE EXPERT

135. In preparing this report, we have made all the inquiries that we believe are desirable and appropriate and that no matters of significance that we regard as relevant have, to our knowledge, been withheld.



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|---|---|---|
| Paul Reynolds | Paul Muysert | Jason Ockerby |
| 14 October 2008 | 14 October 2008 | 14 October 2008 |

# APPENDIX A: CURRICULUM VITAE

## A.1 Paul Reynolds

136. Paul Reynolds is a founding Partner of the Competition Economists LLP (CEG). Paul is an expert in the economics of regulation, competition law and damages, with over 17 years experience in economic and financial analysis. Paul has assisted companies and lawyers in responding to investigations by national regulatory and competition authorities, the European Commission (EC) under Articles 81 and 82, the EC Merger Regulation, and in court proceedings and international arbitrations.

137. Paul has particular expertise in relation to the telecommunications and broadcasting industries. Paul has analysed the development of competition in fixed, mobile and broadcasting markets as part of competition law investigations and in the context of regulatory market reviews. Paul also has expertise in the design of regulation including for local loop, broadband access, and fixed and mobile interconnection services. Paul has developed and assessed Long Run Incremental Cost Models for a number of operators in Europe and the Asia Pacific.

138. Paul has advised on a number of the world's largest mergers including Sonae/Portugal Telecom, Procter & Gamble/Gillette, HP/Compaq and T-Mobile/telering. Paul has also advised on a range of general competition cases including in relation to alleged margin squeezes, anti-competitive price discrimination, refusal to supply, cartels and state-aid investigations.

139. Paul was previously a partner at another leading economic consultancy and has also worked as a director in the telecommunications branch of the Australian Competition & Consumer Commission and as a senior economist with the Australian Federal Treasury. Paul has a Masters of Commerce (in Economics) with first class honours and a Bachelor of Economics (Hons).

### A.1.1 Professional Experience

***Regulation***

- Economic support to T-Mobile in relation to market reviews and regulatory design under the European Commission's Regulatory Framework in Austria, Germany, the Netherlands and the UK. Support for T-Mobile UK in the 2007 appeals of Ofcom's mobile termination decision to the UK Competition Appeals Tribunal. Earlier, support for T-Mobile (UK) in the 2002 UK Competition Commission inquiry into the price of calling mobiles and for T-Mobile (Netherlands) in their successful appeal of OPTA's mobile termination decision

- Advice to Friendi Mobile, a new MVNO in the Middle East, in relation to negotiating wholesale prices
- Lead author of reports to the GSM Association on the future regulation of IP interconnection, the European Commission's proposals to regulate international roaming services, the European Commission's online content initiative, liberalisation of international gateway services and best practice mobile licensing
- Lead author of a report providing a regulatory roadmap for reform of Bangladesh's communications policies (available for download at http://www.gsmworld.com/documents/public_policy/bangladesh_roadmap.pdf )
- Advice to Swisscom on future regulation of wholesale broadband access services including market definition and SMP assessment
- Advice to Bell Canada on future regulation of fixed and broadband services including a comparative review of market analysis and regulatory design in major EU markets
- Advice on LRIC cost modeling for operators in Australia, Austria, Belgium, Germany, the Netherlands, New Zealand, South Africa and the UK
- Reports for Ofcom on the assessment of leveraging issues and indirect constraints based on a comparative analysis of market reviews under the European regulatory framework and market analysis in competition law cases
- Led a team of economists in the ACCC responsible for reviewing Telstra's first PSTN undertaking including on the basis of LRIC cost modeling
- Lead author of report on the imposition of regulatory obligations under the European Regulatory Framework for the European Cable Communications Association
- Economic modeling for the Australian Gas Association and the Energy Supply Association of Australia as well as individual suppliers to determine reasonable level of cost pass-through following introduction of GST in accordance with statutory obligations
- Advice to Telecom NZ in evaluating the cost benefit analysis of local loop unbundling prepared for the Commerce Commission
- Expert advisor to the New Zealand ministerial inquiry into telecommunications in its review of the telecommunications regulatory arrangements
- Led ACCC's inquiries in whether local loop and national roaming services should be subject to access regulation
- Advice to a UK mobile operator in relation to bidding to supply national roaming services to H3G
- Development of a code for the ACCC governing access to mobile towers and ducts

### *Spectrum management*

- Expert testimony on the appropriate valuation of 3G licences in appeals to the UK Competition Appeals Tribunal
- Advice to Nigerian Communications Commission on the design of 2G mobile auction
- Advice on spectrum policy issues including Ofcom's refarming proposals and the introduction of spectrum trading and liberalisation
- Bidder support in relation to forthcoming Dutch 2.6 GHz auction
- Preparation of a report for the GSMA, Licensing for growth – reforming mobile licensing in developing countries
- Modelling and analysis of Ofcom's spectrum refarming proposals
- Advice to T-Mobile UK on Ofcom's mobile spectrum pricing charges
- Bidding advice to Partner Communications in relation to the Israeli 3G auction

### *Litigation support*

- Estimation of damages in relation to an alleged margin squeeze by Czech Telecom
- Advice in relation to a case regarding alleged anti-competitive price discrimination by Eircom
- Estimation of damages in relation to an alleged margin squeeze by Cellnet against Unipart
- Estimation of damages in relation to a dispute before the International Court of Arbitration between Elektrim Teleckommunikacja and PTC

### *Competition law investigations*

- Advice to Temasek on Indonesian competition authority's investigation of the competition implications of Temasek's ownership interests in Telkomsel and Indosat
- Advice in relation to the compatibility with European competition law of particular network sharing proposals
- Advice to Mitsubishi Electric in relation to an alleged breach of Article 81 in relation to gas insulated switchgear
- Advice in relation to the Northern Irish personal banking inquiry
- Advice in relation to alleged anti-competitive price discrimination by Czech Telecom
- Advice in relation to the European Commission's investigation of an alleged abuse of a dominant position by AstraZeneca
- Advice in relation to a State Aid case against OTE

- Advice in relation to a margin squeeze allegation against a Eastern European fixed incumbent operator
- Advice to a telephone directories company on the consistency of proposed pricing changes with European competition law
- Advice to a consortium of broadcasters in relation to the acquisition of premium sports rights
- Advice in relation to a margin squeeze allegation in relation to non-PSTN calls to mobiles
- Advice in relation to predatory pricing case before the UK High Court
- Advice in relation to time of day pricing of fixed incumbent operator

***Merger advice***

- Advice to Iberdrola on the proposed acquisition of British Energy
- Assessment of anti-trust risks in relation to BHP's proposed acquisition of Rio Tinto for investment bank
- Advice to Telkom South Africa on its proposed acquisition of Business Connexions Group
- Advice to UCB on its acquisition of Scharwz Pharma
- Advice in relation to a proposed acquisition in the industrial chemicals industry
- Advice to Sonae on its proposed acquisition of Portugal Telecom
- Advice to Babcock & Brown on its acquisition of eircom
- Advice to T-Mobile Austria on its acquisition of tele.ring
- Advice in relation to a proposed acquisition in a European transport market
- Advice to P&G on its acquisition of Gillette
- Advice in relation to a proposed acquisition in the personal care industry
- Advice in relation to the Areva—Urenco joint venture
- Advice to HP on its acquisition of Compaq

### A.1.2 Recent Papers and Conference Presentations

- "The economics of interconnection in next generation networks" (joint author) forthcoming in Telecommunications Policy.
- Regulating mergers in the communications industry in the 21st century" (joint author), the Computer and Telecommunications Law Review, Issue 6, 2008.

- Licensing for growth, joint author with Jason Ockerby, November 2007 (available for download from http://www.gsmworld.com/licensing/index.shtml )
- Reform of mobile licensing, GSM Asia Congress, Macau, 13 November 2007
- Assessing interconnection charging models, Evolving Telecoms and IP Interconnection Forum, Berlin, 17-19 September 2007
- The Economics of IP interconnection, GSM World Congress, Barcelona, February 2007
- Development of the Online Content Market, Digital Rights Management Conference, Brussels, February 2007
- "The waterbed effect in mobile telephony", joint author, CRA Discussion paper, 2006
- "Understanding economic evidence", joint author in Competition litigation in the UK, Sweet & Maxwell, 2005
- "Collective dominance and the New Regulatory Framework for Electronic Communications", joint author, CRA Discussion paper, 2006

## A.2 Paul Muysert

140. Paul Muysert is a Partner at CEG in London. He specialises in competition policy and regulation, with particular experience in network industries, including telecommunications, transport, and financial services.

141. Paul has extensive experience of competition law and regulation issues in a number of jurisdictions, including the UK, Europe, Australia, New Zealand, Singapore and South Africa. He has provided expert economic evidence to the UK High Court and Competition Appeal Tribunal. His experience includes cases in the aviation, banking, bus, dairy manufacturing, shipping, steel, telecommunications, and rail industries.

142. Paul has considerable experience in the Telecoms sector, including in developing cost models and conducting empirical cost-benefit analysis of regulatory proposals. He has worked both for private clients and regulators in the Telecoms sector.

143. Prior to joining CEG Paul worked at a leading international economic consultancy based in London. He has also previously worked as an economist in the telecommunications industry, and has worked internally for varying periods with a number of regulators. These include the New Zealand Commerce Commission, the UK Competition Commission and the UK Office of Communications (Ofcom).

### A.2.1 Professional Experience

***Merger advice***

- Tele Atlas/Tom Tom. Vertical merger of global digital map maker with downstream software and device manufacturer (2007/8)
- Maritime infrastructure. Advice on possible infrastructure transactions in Northern Europe (2007).
- Industrial Storage Tanks (2007)
- Mittal/DSP. Advice to a major international steel company on a proposed vertical merger in the steel industry (2007)
- Debt collection industry. Economic advice on possible acquisitions (2006).
- Lion Nathan - Alcoholic Beverages. Economic advice in support of a merger application by a major New Zealand brewing company (2006)
- European Ferries. Advice on a proposed transaction (2005)
- P&O/Brittany Ferries. Merger of ferry services in the west of the English Channel (2004/5)
- Safeway merger. Submission on the potential impact of merger on manufacturing suppliers (2003)

- New Zealand Banking. Advice on merger proposal (2003)
- Cargill/Cerestar (Montedison). Merger of glucose syrup manufacturing assets in the UK (2002)
- New Zealand Dairy Board/New Zealand Manufacturing Dairy Co-operatives. Economic advice to New Zealand government officials (2001)
- TeamTalk/Telecom New Zealand. Proposed merger of trunked mobile radio networks (1999)
- New Zealand Dairy Board/New Zealand Manufacturing Dairy Co-operatives. Proposal to merge the New Zealand dairy industry into a single exporting co-operative (1999)
- Kiwi Dairies/South Island Dairy Company. Manufacturing dairy company merger in New Zealand (1999)

### *Anticompetitive Practices*

- American Standard. Support to manufacturer of bathroom fixtures and fittings during cartel investigation (2007)
- ACCC investigation into IATA's application for exemption of interlining tariff practices under the Trade Practices Act (2005-2006)
- Analysis of European gas suppliers under Article 82 (2005)
- European Commission investigation into IATA interlining tariff practices under Article 81 (2004-2005)
- Investigation of BT leased line pricing for Radio Base Station backhaul, potential abuse of dominance case under UK Competition Act (2004)
- Office of Fair Trading Rule 14 Notice, credit card interchange and service fees (2001-2002)
- Investigation of Tranz Rail's (New Zealand's integrated rail operator) pricing and terms of competitive access (1999–2000)

### *Litigation Support*

- Expert statement for UK High Court on market definition principles for software distribution case
- Joint expert statement by Murray Bywater and Paul Goss of Silicon Bridge and Paul Muysert (2003)
- Preparation of Expert Witness statement in alleged predation case involving the Bus Industry in Ireland (2001)
- Analysis of Expert Witness statements in an abuse of dominance case involving cellular networks (2000)

### *UK Competition Authorities*

- Economic assessment of the effects of removing absolute territorial protection in UK magazine wholesaling (2005)
- Report to the Office of Fair Trading on the cost of newspaper and journal distribution models (2004)
- Economic advice on methodology to be applied to renewal of the financial terms of UK Channel 3 (ITV) licences (2004)
- Advice on RA/Ofcom proposed spectrum pricing methodology (2003)
- Review of cost of call termination for Oftel - EU market review (2003)
- Cost of Calls to Mobiles Inquiry, Competition Commission (2002)
- Competition Policy and Innovation, Research Project for the Office of Fair Trading (2001–2002)
- Advice to the Office of the Rail Regulator on competition issues involving rail freight markets (Sep 2001–Jan 2002)
- Office of the Rail Regulator. Market definition and dominance assessment in the rail freight industry (2001)
- Competition Commission inquiry into supply of banking service to small and medium enterprises in the UK (2000–2001)
- Report on competition in investment consultancy for the Myners review (2000)

### *Other Regulatory*

- Expert Report for Sonaecom on asymmetric regulation of mobile termination rates in Portugal (2007)
- Provide regulatory advice on various issues to Telecom New Zealand (2006-2007)
- Provide regulatory advice on various issues to T-Mobile (UK) (2002-ongoing)
- Competition Commission of Singapore. Design of a block exemption order (BEO) to exempt liner shipping agreements from section 34 of the Competition Act of Singapore (2006)
- Provide regulatory advice to T-Mobile (Netherlands) regarding mobile termination regulation (2005-2006)
- NZCC—support to Telecom New Zealand during inquiry into the efficient price of mobile termination in New Zealand (2004-2006)
- ACCC—submission on behalf of Optus Australia to the competition regulator providing an estimate of the efficient price of mobile termination in Australia (2004-2006)

- Irish Competition Authority—inquiry into supply of banking services in Ireland (2003-2005)
- ECCA submission—submission on behalf of European Cable Operators to European Commission (2003)
- A report on competitive issues surrounding multiparty IP licensing arrangements. Report to the European Commission (April 2003)
- Submission on whether access to mobile networks for service providers should be mandated in an EU cellular mobile market (2000)
- Initial investigation into whether major New Zealand Airports should be subject to price control (1999)

***Other***

- Advice to a European mobile network operator on the possible impacts of proposals by the European Commission to regulate international cellular roaming prices (2006)
- Provide economic advice to a New Zealand corporate client on the costs and benefits to New Zealand of a significant manufacturing operation (2006)
- Provide economic advice to a New Zealand electricity company on issues arising from the proposal to upgrade parts of the New Zealand electricity transmission grid (2006)
- Provide economic advice to a major bank on aspects of mortgage charges relevant to the Credit Contracts and Consumer Finance Act (2006)
- Strategic Review of Energy and Petroleum Service Sectors, for a major oil company, (2003)
- Integrated telecoms company, Internet strategy development (1998)
- Analysis of costing, pricing and competitive strategy issues involving the cellular mobile network (1996–1998)

### A.2.2 Publications

- The 'waterbed effect' in mobile telephony, CRA Competition Policy Discussion Paper, January 2006
- Collective dominance and the New Regulatory Framework for electronic communications, with Paul Reynolds, CRA Competition Policy Discussion Papers 12, April 2005
- Price discrimination: a good indicator of bad things? with Mike Walker, in Current Competition Law, vol.2, ed. By Mads Andenas, Michael Hutchings and Philip Marsden, 2004

- Price discrimination—an unreliable indicator of market power, European Competition Law Review, Issue 6, June 2004; CRA Competition Policy Discussion Papers 6, April 2003
- The European Commission's draft Technology Transfer Block Exemption Regulation and Guidelines: A significant departure from accepted competition policy principles, with Robert C. Lind, European Competition Law Review, Issue 4, April 2004; CRA Competition Policy Discussion Papers 8, November 2003
- Innovation and Competition Policy: Challenges for the New Millennium, with Robert C. Lind, European Competition Law Review, Issue 2, 2003
- Multiparty Licensing, A report to the European Commission, with Robert C. Lind, Anna Kleymenova and Marie Miauton. December 2002
- Innovation and Competition Policy, with Robert C. Lind, Paul Muysert, and Mike Walker. A report prepared for the Office of Fair Trading, March 2002. Enfo
- Regulating mergers in the communications industry in the 21st century (joint author) forthcoming in the Computer and Telecommunications Law Review

### A.2.3 Conference Presentations

- Mobile Termination Regulation - lessons for the future: Comments, Telecoms: Hot Topics in Antitrust enforcement, Brussels, 19 June 2007
- Regulating Mobile Termination Rates in the UK, Association of Competition Economics, Inaugural conference, Madrid, 20 November 2003
- The Draft Technology Transfer Block Exemption Regulation (TTBER) Guidelines: Principles and Multiparty Licenses, Competition Law and Licensing Agreements (one-day conference), London, 9 December 2003

## A.3 Jason Ockerby

144. Jason Ockerby is a Director with CEG Asia Pacific. He is an economist with over 15 years experience in competition and regulatory economics and has specialised in the areas of communications, energy and environmental economics.

145. Jason has been involved in a number of significant mergers and acquisitions. He has advised on the competition effects of a number of energy transactions in Australia and transactions in the communications sector. These include the sale of electricity businesses in Victoria, the Optus-Foxtel Content Sharing Arrangement (CSA) and numerous confidential and sensitive transactions. He has had particular experience in the development of behavioural and structural remedies (undertakings) to address competition concerns.

146. Jason has substantial experience in the area of telecommunications and communications regulation. He has led an Australian telecommunication carrier's (Optus') regulatory economics practice for the five years to June 2007. In this time he has dealt with the full range of communications issues including: price squeeze allegations; spectrum licensing, access price costing and regulation, universal service, M&A, resale pricing, cost of capital, imputation testing and LRIC modelling. Jason has had his expert reports on regulatory matters accepted by the Australian Competition Tribunal. In addition, Jason has affidavit economic reports relating to market definition, misuse of market power and competitive effects before the Australian competition regulator. This evidence has led to competition remedies and the commencement of Federal Court proceedings.

147. Over the past five years Jason has had significant experience in advising lawyers and Counsel on economic and quantitative issues in the context of court proceedings.

148. Selected assignments and reports include:

- Appeared before the Federal Court as an expert witness on matters relating to weighted average cost of capital.
- Advisor to GSM Europe on the European Commission's review of the Universal Service Obligation across member states.
- Advice on the preparation of a Part XIC special access undertaking for a fibre to the node access network prepared for the G9 consortium of telecommunication operators.
- Expert report on the need to take into account asymmetric risk in setting the regulated WACC. Analysis of the social consequences of setting the WACC too high or too low when assets are sunk. Before the Australian Competition Tribunal. http://www.austlii.edu.au/au/cases/cth/ACompT/2007/3.html
- Affidavit sworn on the competitive effect of changes to local telephony pricing. Quantitative analysis of softening of competition resulting from incumbent raising

wholesale and unbundled retail prices. Advice on the preparation of pleadings and discovery categories for proceedings under section 46 of the TPA.

- Analysis of competition effects of 3G network sharing alternatives. Submission to the ACCC and briefing of Mergers Commissioner on competition effects. Advice to Baker and McKenzie acting for Optus.
- Competition analysis of various transactions in communications sector including IP1, NextGen, Alphawest, Ozemail and AAPT.
- Preparation of a Part XIC ordinary access undertaking for mobile termination services. Expert advice on statements, submissions and briefing of Senior Counsel and lawyers (Gilbert and Tobin) in an appeal of the undertaking to the Australian Competition Tribunal. Expert advice on top down LRIC modelling, Ramsey-Boiteux pricing, network externalities and market definition in two-sided markets.
- Independent advice on the regulatory regime in the acquisition of United Energy.
- Expert report for the Victorian Department of Finance on tax incidence for stamp duties and land taxes.
- Expert report for the Department of Primary Industries and Energy on a 'profit split' arrangement for determination of petroleum resource rent tax at the Northwest Shelf and Bayu-Undan LNG production facilities.
- Ockerby, J., Proctor, W. and Corder, C. (1996). Economic criteria for Exceptional Circumstances declarations under the national drought policy. Report to the Bureau of Resource Sciences.
- Various speaking engagements, analyst briefings and hearings before the ACCC and IPART.

149. Previously, Jason held positions with other major economics consulting practices, advising on general competition, energy regulatory matters and public policy issues. He has also held positions with the Australian Bureau of Agricultural and Resource Economics (ABARE) where he published widely.

150. Jason has a Master of Economics from the University of Sydney and a Bachelor of Economics (Hons) from the University of Queensland.

### A.3.1 Regulation

- Cost of capital in PNG – Digicel - Provided expert economic advice on the appropriate cost of capital for Government owned businesses in PNG and specifically the requirement for a country risk premium in the cost of capital.
- Regulated returns for a Next Generation Network - Advice on regulated cost of capital for the Terria consortium bidding for the National Broadband Network.

- Mobile termination in Australia - Advised on economic and competition matters relating to mobile termination for SingTel Optus. Provided an expert report on efficient operator benchmark for regulating mobile termination costs
- Universal service costing - Advised the Communications Alliance on universal service reform in Australia.
- Mobile termination in the UK - Advisor to T-Mobile in the Competition Appeals Tribunal hearing of an appeal of Ofcom's Final Statement on Mobile Termination.
- GSM Association on universal service- Advisor to GSM Europe on the European Commission's review of the Universal Service Obligation across member states including expert report on cost modelling.
- Integral Energy- Advised Integral Energy on the appropriate cost of capital for its distribution network services provider (DNSP) business.
- Electricity Business in NSW - Report to IPART on asset valuation approaches to determine the regulated asset base for electricity distribution charges.

### A.3.2 Competition policy

- British Energy - Expert report on potential acquisition of British Energy by UK based electricity generator. Development of economic model of UK generation market.
- Mining sector (confidential) - Advised client on impact of merger in the mining industry.
- Telecommunications in Australia (confidential) - analysis of competition effects of potential merger of telecommunications carriers in Australia.
- Optus and Vodafone 3G infrastructure sharing arrangement - At Optus - analysis of competition effects of 3G network sharing alternatives. Submission to the ACCC and briefing of Mergers Commissioner on competition effects with sharing of network element and core network functions. Advice to Baker and McKenzie on competition effects
- Foxtel-Optus content sharing arrangement - At Optus - submissions to the ACCC on competitive effects of moving to a monopoly acquirer of content for subscription television services on markets for television services, access services and content supplies (domestic and international). Analysis of possible undertakings to mitigate competition concerns. Briefing of lawyers (Atanastovick Hartnell) assisting Optus.

# APPENDIX B: FEDERAL COURT GUIDELINES

**Explanatory Memorandum**

The guidelines are not intended to address all aspects of an expert witness's duties, but are intended to facilitate the admission of opinion evidence (footnote #1), and to assist experts to understand in general terms what the Court expects of them. Additionally, it is hoped that the guidelines will assist individual expert witnesses to avoid the criticism that is sometimes made (whether rightly or wrongly) that expert witnesses lack objectivity, or have coloured their evidence in favour of the party calling them.

Ways by which an expert witness giving opinion evidence may avoid criticism of partiality include ensuring that the report, or other statement of evidence:

(a) is clearly expressed and not argumentative in tone;

(b) is centrally concerned to express an opinion, upon a clearly defined question or questions, based on the expert's specialised knowledge;

(c) identifies with precision the factual premises upon which the opinion is based;

(d) explains the process of reasoning by which the expert reached the opinion expressed in the report;

(e) is confined to the area or areas of the expert's specialised knowledge; and

(f) identifies any pre-existing relationship (such as that of treating medical practitioner or a firm's accountant) between the author of the report, or his or her firm, company etc, and a party to the litigation.

An expert is not disqualified from giving evidence by reason only of a pre-existing relationship with the party that proffers the expert as a witness, but the nature of the pre-existing relationship should be disclosed.

The expert should make it clear whether, and to what extent, the opinion is based on the personal knowledge of the expert (the factual basis for which might be required to be established by admissible evidence of the expert or another witness) derived from the ongoing relationship rather than on factual premises or assumptions provided to the expert by way of instructions.

All experts need to be aware that if they participate to a significant degree in the process of formulating and preparing the case of a party, they may find it difficult to maintain objectivity.

An expert witness does not compromise objectivity by defending, forcefully if necessary, an opinion based on the expert's specialised knowledge which is genuinely held but may do so if the expert is, for example, unwilling to give consideration to alternative factual premises or is unwilling, where appropriate, to acknowledge recognised differences of opinion or approach between experts in the relevant discipline.

Some expert evidence is necessarily evaluative in character and, to an extent, argumentative. Some evidence by economists about the definition of the relevant market in competition law cases and evidence by anthropologists about the identification of a traditional society for the purposes of native title applications may be of such a character. The Court has a discretion to treat essentially argumentative evidence as submission, see Order 10 paragraph 1(2)(j).

The guidelines are, as their title indicates, no more than guidelines. Attempts to apply them literally in every case may prove unhelpful. In some areas of specialised knowledge and in some circumstances (eg some aspects of economic evidence in competition law cases) their literal interpretation may prove unworkable.

The Court expects legal practitioners and experts to work together to ensure that the guidelines are implemented in a practically sensible way which ensures that they achieve their intended purpose.

**Nothing in the guidelines is intended to require the retention of more than one expert on the same subject matter – one to assist and one to give evidence. In most cases this would be wasteful. It is not required by the Guidelines. Expert assistance may be required in the early identification of the real issues in dispute.**

**Guidelines**

**1. General Duty to the Court** (footnote #2)

1.1 An expert witness has an overriding duty to assist the Court on matters relevant to the expert's area of expertise.

1.2 An expert witness is not an advocate for a party even when giving testimony that is necessarily evaluative rather than inferential (footnote #3).

1.3 An expert witness's paramount duty is to the Court and not to the person retaining the expert.

**2. The Form of the Expert Evidence** (footnote #4)

2.1 An expert's written report must give details of the expert's qualifications and of the literature or other material used in making the report.

2.2 All assumptions of fact made by the expert should be clearly and fully stated.

2.3 The report should identify and state the qualifications of each person who carried out any tests or experiments upon which the expert relied in compiling the report.

2.4 Where several opinions are provided in the report, the expert should summarise them.

2.5 The expert should give the reasons for each opinion.

2.6 At the end of the report the expert should declare that "[the expert] has *made all the inquiries that* [the expert] *believes are desirable and appropriate and that no matters of significance that* [the expert] *regards as relevant have, to* [the expert's] *knowledge, been withheld from the Court*."

2.7 There should be included in or attached to the report; (i) a statement of the questions or issues that the expert was asked to address; (ii) the factual premises upon which the report proceeds; and (iii) the documents and other materials that the expert has been instructed to consider.

2.8 If, after exchange of reports or at any other stage, an expert witness changes a material opinion, having read another expert's report or for any other reason, the change should be communicated in a timely manner (through legal representatives) to each party to whom the expert witness's report has been provided and, when appropriate, to the Court (footnote #5).

2.9 If an expert's opinion is not fully researched because the expert considers that insufficient data are available, or for any other reason, this must be stated with an indication that the opinion is no more than a provisional one. Where an expert witness who has prepared a report believes that it may be

incomplete or inaccurate without some qualification, that qualification must be stated in the report (footnote #5).

2.10 The expert should make it clear when a particular question or issue falls outside the relevant field of expertise.

2.11 Where an expert's report refers to photographs, plans, calculations, analyses, measurements, survey reports or other extrinsic matter, these must be provided to the opposite party at the same time as the exchange of reports (footnote #6).

## 3. Experts' Conference

3.1 If experts retained by the parties meet at the direction of the Court, it would be improper for an expert to be given, or to accept, instructions not to reach agreement. If, at a meeting directed by the Court, the experts cannot reach agreement about matters of expert opinion, they should specify their reasons for being unable to do so.

footnote #1
As to the distinction between expert opinion evidence and expert assistance see *Evans Deakin Pty Ltd v Sebel Furniture Ltd* [2003] FCA 171 per Allsop J at [676].

footnote #2
See rule 35.3 Civil Procedure Rules (UK); see also Lord Woolf "Medics, Lawyers and the Courts" [1997] 16 CJQ 302 at 313.

footnote #3
See *Sampi v State of Western Australia* [2005] FCA 777 at [792]-[793], and *ACCC v Liquorland and Woolworths* [2006] FCA 826 at [836]-[842]

footnote #4
See rule 35.10 Civil Procedure Rules (UK) and Practice Direction 35 – Experts and Assessors (UK); *HG v the Queen* (1999) 197 CLR 414 per Gleeson CJ at [39]-[43]; *Ocean Marine Mutual Insurance Association (Europe) OV v Jetopay Pty Ltd* [2000] FCA 1463 (FC) at [17]-[23]

footnote #5
The *"Ikarian Reefer"* [1993] 20 FSR 563 at 565

footnote #6
The *"Ikarian Reefer"* [1993] 20 FSR 563 at 565-566. See also Ormrod *"Scientific Evidence in Court"* [1968] Crim LR 240.