concept economics

EXPERT REPORT BY DR PAUL PATERSON OF CONCEPT ECONOMICS FOR MALLESONS STEPHEN JAQUES ON THE RESPONSES TO THE ACCC DISCUSSION PAPER 'TELSTRA'S DOMESTIC PSTN ORIGINATING ACCESS SERVICE EXEMPTION APPLICATIONS'

Prepared for:
Mallesons Stephen Jaques
Governor Phillip Tower
Sydney, NSW

Prepared by:
Paul Paterson

Date: 27 June 2008

Concept Economics:
Level 7, 107 Pitt Street
GPO Box 5435 Sydney
NSW 2001 Australia

27 June 2008

Mallesons Stephen Jaques
Governor Phillip Tower
Sydney NSW 2000

RE: EXPERT REPORT BY DR PAUL PATERSON OF CONCEPT ECONOMICS FOR MALLESONS STEPHEN JAQUES ON THE RESPONSES TO THE ACCC DISCUSSION PAPER 'TELSTRA'S DOMESTIC PSTN ORIGINATING ACCESS SERVICE EXEMPTION APPLICATIONS'

Please find enclosed the final Expert Report as outlined above.

Yours sincerely

Dr Paul Paterson
Executive Director, Operations
Head of Telecommunications Consulting
Tel: 02 8233 4052

For further information on this report, please contact the project manager of this report on +61 2 82334052 or email paulpaterson@concepteconomics.com.au.

Disclaimer

Concept Economics and its author(s) make no representation or warranty as to the accuracy or completeness of the material contained in this document and shall have, and accept, no liability for any statements, opinions, information or matters (expressed or implied) arising out of, contained in or derived from this document or any omissions from this document, or any other written or oral communication transmitted or made available to any other party in relation to the subject matter of this document. The views expressed in this report are those of the author(s) and do not necessarily reflect the views of other Concept Economics staff.

Table of contents

1. INTRODUCTION

My name is Dr Paul Paterson. I am employed as an executive director and senior economic consultant with Concept Economics, an Australian-based economic consulting firm. My curriculum vitae, including qualifications, experience and publications, is included in Appendix A.

In October 2007, the Australian Competition and Consumer Commission ('the Commission') released a discussion paper ('Discussion Paper') on Telstra's domestic PSTN originating access ('PSTN OA') exemption application.[1] Subsequently Telstra, AAPT, Optus, Macquarie and Soul lodged responses to this Discussion Paper.[2]

I have been asked by Telstra, through the offices of Mallesons Stephen Jaques ('MSJ'), to provide an expert report on two key economic issues raised by these responses and, in the context of the long term interests of end users (LTIE) focus required, the merits of the economic arguments put forward. These issues are:

a. Whether granting the exemptions would detrimentally affect the ability of access seekers to compete with Telstra for the provision of national long distance voice services; and

b. Whether granting the exemptions would inhibit the ability of access seekers to transition to facilities-based supply (such as supply based on ULLS).

My instructions from MSJ are reproduced in Appendix B. These instructions indicate that my report is to be prepared with regard to the Federal Court's 'Guidelines for Expert Witnesses and Proceedings in the Federal Court of Australia', which I have done.

Prior to the preparation of the current report I have prepared for MSJ two earlier expert reports relating to Telstra's PSTN OA exemption applications:

- My original report ('original report') on this matter, in which I address in detail the question of whether the Exemption Orders sought by Telstra for PSTN OA would be in the LTIE;[3] and
- A supplementary report ('supplementary report'), in which I address specific issues raised by the Commission in its Discussion Paper.[4]

---

1 ACCC, "Telstra's domestic PSTN originating access exemption application", Discussion Paper, October 2007 ('Discussion Paper').

2 "Submission by AAPT Limited & PowerTel Limited to the Australian Competition and Consumer Commission in response to *Telstra's PSTN originating access exemption application Discussion Paper*", December 2007; "Optus Submission to the Australian Competition and Consumer Commission on Telstra's PSTN OA Service Exemption Application", December 2007; "Submission by Macquarie Telecom in response to ACCC *Discussion Paper* reviewing Telstra's PSTN Originating Access service exemption applications", December 2007; Soul, 'Telstra's domestic PSTN originating access service – exemption applications', 14 December 2007.

3 Telstra, "Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for a PSTN Originating Access Exemption", Annexure A to "Telstra's PSTN Originating Access Exemption Application – Supporting Submission", October 2007.

4 Telstra, "Supplementary Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for the domestic PSTN originating access exemption", annexure to "Telstra Response to Questions from ACCC Discussion Paper of October 2007", December 2007.

The remainder of this report is structured as follows:

- In Section 2 I discuss the first key issue, namely whether granting the exemptions would detrimentally affect the ability of access seekers to compete with Telstra for the provision of national long distance voice services; and
- In Section 3 I consider the second, whether granting the exemptions would inhibit the ability of access seekers to transition to facilities-based supply.

To foreshadow my conclusions, I do not consider the access seeker submissions on either of these issues to hold any significant merit. Hence, these submissions do not persuade me to change my previously espoused view that granting the exemptions sought by Telstra would be in the LTIE.

2. WOULD GRANTING THE EXEMPTIONS DETRIMENTALLY AFFECT THE ABILITY OF ACCESS SEEKERS TO COMPETE WITH TELSTRA FOR THE PROVISION OF NATIONAL LONG DISTANCE VOICE SERVICES?

Optus argues in Section 2 of its submission that:

- With regard to the markets potentially impacted by PSTN OA exemption, long distance services constitute a market in their own right and the competition implications of exemption for this market should be considered separately from the implications for the provision of bundled voice services;
- There is greater potential for competition in the long distance segment of the fixed voice services market than in the local services segment as the cost structures associated with long distance transmission (less extensive economies of scale) give rise to greater potential for competitor entry (lower barriers to entry);
- PSTN OA plays a key role in the realisation of this greater potential for competition in the long distance market. Infrastructure-based competition is not fully substitutable for PSTN OA in fulfilling this role, meaning exemption would allow Telstra to exploit this market;
- More specifically, without access to PSTN OA (due to actual or effective refusal to supply by Telstra), customers taking basic access from Telstra would be locked into taking long distance (and other preselection) services from Telstra as ‘competitors would be unable to offer long distance services or PSTN OA services in respect of Telstra line rental customers’;[5] and
- There is a relatively large number of customers with respect to whom Telstra could foreclose long distance competition, as evidenced by the [c-i-c] wholesale long distance services Optus provided to a number of wholesale customers in May 2007, with the provision of these ‘switchless’ wholesale services reliant on preselection (“… PSTN OA is an essential input to this wholesale business”).

Macquarie expresses similar concerns to Optus about the impact of PSTN OA exemption on the competitive provision of long distance services, noting that while it does not acquire PSTN OA directly from Telstra, “…PSTN OA services form a crucial input to the services which Macquarie acquires from its wholesale suppliers [including Powertel and Optus].” Macquarie argues in Section 3 of its submission that:

- Its customers are in many cases reluctant to shift their direct connection service (basic access) to a different network due to the “ … inevitable disruptions and outages which that entails”;
- Nonetheless Macquarie can currently source the most efficient and cost-effective wholesale provider of pre-selectable services to on-sell to these customers through the use of override codes or pre-selection;

5 Optus fails to note that the Preselection Determination could arguably be interpreted as requiring Telstra to provide PSTN OA independent of declaration. See Part 2 of *Telecommunications (Provision of Pre-selection for Specified Carriage Services) Determination 1998*

- PSTN OA is an essential input to this arrangement and if exemption was granted, Macquarie's ability to source the most efficient wholesale provider of pre-selectable services would be foreclosed or severely curtailed, as Telstra would have the ability and incentive to refuse to supply PSTN OA or greatly increase its price; and
- The collapse of these wholesale markets for pre-selectable services would adversely affect competition in downstream retail markets and not be in the LTIE.

These concerns come down to two core issues around which I have structured my analysis:

- Would fixed voice services only be available as a bundle post-exemption, or would stand-alone long distance (and other preselection) services also be provided?
- If there was only bundling, would this diminish competition?

2.1. WOULD ONLY BUNDLED FIXED VOICE SERVICES BE AVAILABLE POST-EXEMPTION?

Industry submissions imply that only bundled fixed voice services would be provided if PSTN OA exemption were granted, as a PSTN OA service would no longer be provided.[6]

I do not agree that regulation is necessary for the 'unbundling' of long distance (and other preselection) services from other fixed voice services. Given the current level of competition from ULLS-based providers, and the potential for even greater competition going forward, it is my view that such unbundling will occur in the absence of regulation to the extent that it is efficient, for the reasons outlined in my original statement.[7] The competitive constraint imposed by ULLS-based suppliers on Telstra and each other will provide an incentive to these network operators (including Telstra) to facilitate unbundled supply by providing a PSTN OA-like service or resale preselection services *to the extent that it allows for more efficient supply*.

In economic terms, this is because more efficient supply creates additional surplus which can be redistributed as necessary.[8] If separate supply of long distance service is indeed efficient, and there are several suppliers of network services (provided over ULLS or alternative networks such as HFC), then those suppliers will have incentives to wholesale to potential long distance service providers. The fact that Macquarie obtains wholesale services in this way attests to the efficacy of the incentive.

In short, where there is competition from vertically integrated operators (in this case ULLS-based operators), unbundled supply is likely to occur if it is efficient, even in the absence of regulation.

---

6 For example Optus suggests in paragraph 2.10 that Telstra ceasing to supply PSTN OA is 'a likely result of exemption'. See "Optus Submission to the Australian Competition and Consumer Commission on Telstra's PSTN OA Service Exemption Application", December 2007 at 2.10

7 Telstra, "Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for a PSTN Originating Access Exemption", Annexure A to "Telstra's PSTN Originating Access Exemption Application – Supporting Submission", October 2007

8 Economic surplus is the sum of the net benefit to consumers (enjoyment from the product that exceeds the price they need to pay) and producers (revenues above the minimum price at which they would be willing to supply) of a certain market outcome. An increase in surplus therefore implies an increase in net welfare.

2.2. IF THERE WAS ONLY BUNDLING, WOULD THIS MEAN A LESSENING OF COMPETITION?

As I have concluded in my previous reports, I am of the view that efficient competition in the market for the full suite of fixed voice services will be ensured by the ongoing availability and demonstrated viability of regulated ULLS in the exemption area, regardless of whether the dominant mode of retail supply is bundled or unbundled services. For this reason the issue of whether or not bundling will prevail in the retail market post-exemption is irrelevant to the competition effects of exemption.

Nonetheless in this sub-section I address some specific issues raised in the submissions. In particular, I consider whether any possible shift towards bundling may be detrimental to competition in the supply of long distance services. I do this under the following headings:

- Is there a stand-alone market for long distance services (i.e. what is the relevant arena of competition)?
- Is the scope for competition greater for long distance services?
- Can Telstra foreclose long distance competition?
- How many customers are involved?
- Would the move to bundling itself tilt things Telstra's way?

Is there a stand-alone market for long distance services?

As noted in my original report, it is my view that the product market is wider than long distance services for the following reasons:[9]

- Customer preferences are heavily skewed in favour of taking the full bundle. For example, I note that [c-i-c] of Telstra's basic access customers take the full bundle of fixed voice services. The Commission has also noted the trend towards bundling and the diminishing relevance of pre-selection, stating in 2005:[10]

  > *The benefits of preselection may be decreasing due to the increasing popularity of bundling – that is, where consumers acquire two or more services as a single package.*

- Any significant price rise for stand alone long distance services would likely be met by a competitive response from ULLS-based suppliers offering the full bundle of voice services at prices that reflect the substantial economies of scope in the supply of fixed voice services.

---

9 The Commission has indicated in its recent LCS/WLR draft determination that it holds the same view. See ACCC, 'Telstra's local carriage service and wholesale line rental exemption applications: draft decision and proposed class exemption', April 2008, pp34-39

10 ACCC, 'Review of Telstra's price control arrangements', February 2005, p. 23

In short, I do not agree there is a separate market for long distance services as the trend in consumer preferences towards bundling, and the economies of scope from bundling, imply that for the small number of customers taking unbundled services, any significant increase in the price of stand alone long distance services would likely result in them shifting to a competitor's bundle.

Optus also argues that the geographic limit of the wholesale market in which PSTN OA is supplied is the individual customer's line and not the ESA. However, this position is predicated on there being a stand-alone market for long distance services, which for the reasons just outlined is unlikely to be the case. If, as the evidence suggests, the relevant retail market is that for bundled voice services, then for reasons I outline in my original PSTN OA exemption report (Section 2.4), the individual ESA is the appropriate geographic limit for the wholesale market. A line-by-line market makes little sense as it ignores ready supply side substitution within an exchange. It also ignores the difficulty of price discriminating on a line-by-line basis. Moreover, as a matter of commercial reality, entry into an exchange alters competitive conditions for all lines in that exchange.

Furthermore, even if one took the view that there was a stand-alone retail market for long distance services (noting that this is a view with which I do not agree), it is by no means apparent that Telstra would be in a position to exploit this market if PSTN OA exemption was granted. If the supply of wholesale originating access is efficient, there will be competitive pressure for ULLS-based providers (and Telstra) to supply this service or downstream services that embody OA such as resale long distance services.

Hence if Telstra attempted to foreclose long distance competition by not supplying PSTN OA on unbundled lines, it would face a competitive response from other vertically integrated (including ULLS-based) operators in the ESA. For customers that prefer unbundled voice services rather than taking bundled services at discounted prices (apparently a very small proportion of customers given the trend to bundling), refusal by Telstra to provide wholesale originating access would likely lead to a loss of those customers. That is, these customers would have the choice of switching to an alternative provider relying on another network (including ULLS-based networks) and willing to supply unbundled services.

In short, if using a PSTN OA-like service to provide a downstream stand-alone long distance service is efficient, Telstra would be defeated in an attempt to reap monopoly profits from the long distance service.

Is the scope for competition greater for long distance services?

It is my opinion that whilst this claim may have had merit in the past, it can no longer be supported in light of recent market evidence. Specifically, it is my observation that neither supply-side nor demand-side characteristics are materially different in the long-distance segment of the fixed voice market.

(a) Supply-side characteristics

I do not challenge the view that, when PSTN OA was first declared, the provision of long distance services was more competitive than the provision of local services as there were substantially lower barriers to entry into this market segment. As Optus points out, the cost structures associated with long distance transmission were more conducive to competitive entry than those associated with basic access and local transmission. In particular, the large fixed costs involved at that time in replicating a customer access line were not present in long distance transmission. This meant that Telstra's competitors were able to gain a significant share of long distance volumes in a relatively short period of time.

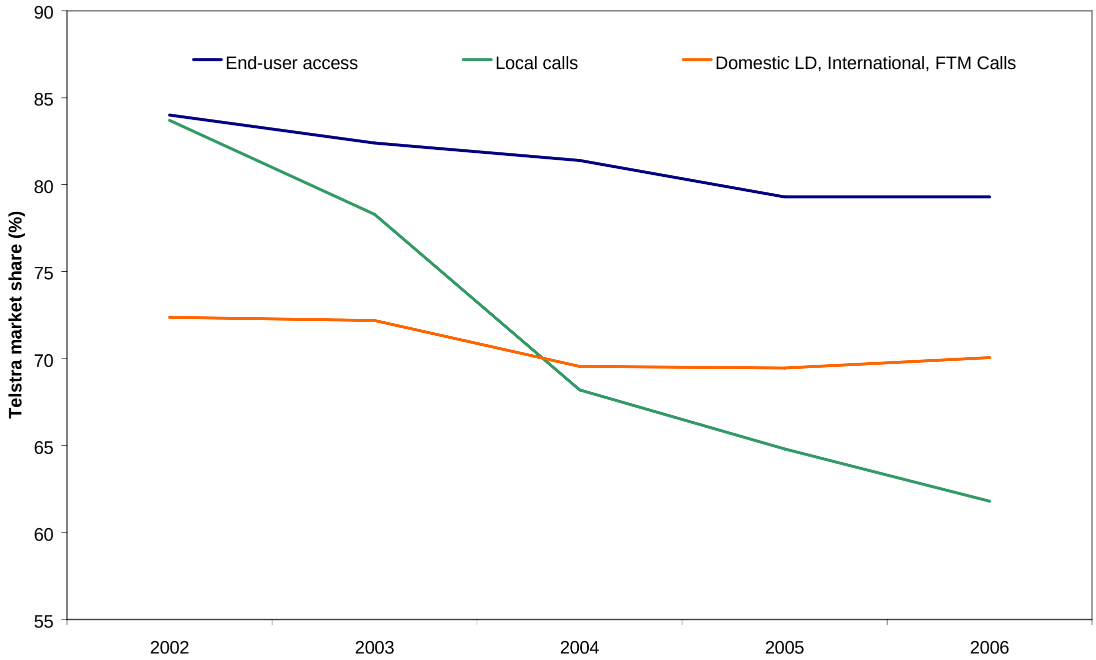
However the traditional differences in the scope to replicate the infrastructure needed for long distance transmission and customer access have now largely disappeared. Regulated unbundling of the local loop, in addition to other technological and market developments such as an expansion of wireless local loop options, the deployment of Optus' HFC network, widespread fibre loop deployment in CBD areas and the steady (if limited) substitution of fixed access services with mobile subscriptions,[11] have negated the barriers to competition in customer access and local carriage (chiefly the substantial economies of scale) and allowed competitors to reduce Telstra's market share in this segment of the market. This is clear from analysis of Telstra's market shares in access, local carriage and long distance between 2002 and 2006. Whilst Telstra's share of long distance was eroded early, its share of access and local calls has fallen more recently (see Figure 1). Indeed Telstra's share of local call volumes is now lower than its share of long distance volumes (62% compared to 70%).

Whilst I do not challenge the view that the erosion of Telstra's market share in basic access and local calls was initially driven by uptake of resale-based services such as LCS and WLR, evidence indicates that it is now increasingly a result of infrastructure-based competition. As Telstra's market share has continued to decline in recent years, the uptake of LCS and WLR has declined, indicating that competition in local carriage and basic access is increasingly attributable to replication of these services through deployment of alternative infrastructure.[12]

11 I note that ACMA, in a recent study has noted the increasing tendency of consumers to substitute mobile services for fixed lines. Results of ACMA's consumer survey indicate that 45% of households now prefer mobile as their main form of voice communication, and a quarter of fixed-line users would consider substituting away from the service. ACMA notes the advantages of mobile communication in certain situations, particularly where mobility is required and/or where short duration calls are being made. See: ACMA, 'Telecommunications Today, Report 5: consumer choice and preference in adopting services', April 2008

12 [c-i-c]

Figure 1: Telstra market shares



Note: Long distance volumes include domestic long distance, international and FTM.

Source: ACCC Market Indicator Reports.

(b) Demand-side characteristics

In my view there is no evidence to support Macquarie's assertion that customer inertia is greater with respect to basic access. Rather, the evidence available to me points to the contrary conclusion. As noted in my original report, the majority of SIOs pre-selected away from Telstra for long distance (and the other services in the preselection basket) also take access and local calls from an alternative supplier.[13] [c-i-c][14] This suggests that customer inertia is not greater with respect to long distance since the vast majority of customers switching away from Telstra for long distance have also switched away for basic access.

The lack of customer inertia is also evidenced by high customer churn rates, including an increasing willingness of customers to switch to ULLS-based supply.

As noted in my original report, on average around [c-i-c] customers per month churned out of Telstra retail services between June 2001 and April 2007.[15] Whilst initially the bulk of this churn was accounted for by customers switching to Telstra wholesale services, in recent times Telstra has witnessed an increasing share of its retail churn-out SIOs shifting to alternative network providers, including ULLS-based suppliers (see Table 1).

Table 1: [c-i-c]

[13] Telstra, "Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for a PSTN Originating Access Exemption", Annexure A to "Telstra's PSTN Originating Access Exemption Application – Supporting Submission", October 2007.

[14] [c-i-c]

[15] [c-i-c]

In the last 12-18 months, there has also been an increasing shift of Telstra wholesale customers to ULLS-based supply, demonstrating a widespread willingness to change networks. [c-i-c].[16]

Figure 2: [c-i-c]

In short, recent evidence does not suggest to me a substantial degree on inter-network inertia amongst end customers.

Will Telstra have the ability and/or the incentive to foreclose long distance competition?

Even if one were to accept that the supply of long distance is more competitive, this would not imply that regulation of PSTN OA is necessary to maintain or promote competition in this segment of the market. Actual and potential competition in the local loop by ULLS-based suppliers (as well as other alternatives) would continue to discipline Telstra's market behavior.

Hence I do not agree with Optus' argument that Telstra will be able to leverage market power from the basic access segment into long distance if PSTN OA exemption is granted. For Telstra to be able to do this it would require monopoly or near monopoly power in the basic access segment. In 2005-06 Telstra accounted for less than 80% of basic access lines,[17] indicating that competitors already operating impose a competitive constraint on Telstra. Furthermore, given the availability of ULLS at regulated prices and the widespread roll-out of entrant DSLAMs, competitors now impose a very real constraint on Telstra at the margin. That is, the threat of competitor entry and the loss of access lines – particularly in the exemption area where ULLS-based entry has been demonstrated to be viable – disciplines Telstra's market behavior. The absence of monopoly power implies that any attempt by Telstra to raise its profits by tying its basic access customers into taking Telstra long distance services and extracting supra-competitive rents would be met by either of the following responses:

- Customers could switch away from Telstra's service altogether and choose another supplier of the fixed voice bundle; or
- If a particular customer prefers unbundled supply of voice services and/or the costs of unbundled supply by a competitor are lower than those for Telstra's bundled supply, the customer could switch to an alternative supplier willing to offer this. If this is the nature of supplier costs and/or customer preferences it would be in the interests of both Telstra and its ULLS-based competitors to offer unbundled supply. Failure to do so would result in a loss of basic access customers.

---

16 [c-i-c]

17 In its most recent Market Indicator Report, the ACCC reports that Telstra accounted for 79% of access lines in 2005-06. I note that this share is significantly lower than that observed in many other developed countries. For example in Europe only the Danish and UK incumbents account for lower shares of basic access than Telstra. The average share of access lines held by incumbents in the EU in July 2006 was around 90% (see EC, 12th Implementation Report at p12).

On this basis I consider it unlikely that Telstra will be able to leverage market power in basic access into the long distance segment. The competitive constraint imposed by ULLS-based supply in the exemption area will discipline both Telstra's pricing and its incentives to continue offering unbundled supply. This market discipline does not rely on the availability of regulated PSTN OA.

Furthermore, for the reasons outlined in Section 2.1 above I believe Telstra would not have an incentive to foreclose the stand alone supply of long distance services by a competitor, *to the extent that such supply is efficient*. That is, if unbundled supply is welfare-enhancing (relative to bundled supply),[18] Telstra will face an incentive to offer unbundled access and local calls whilst allowing a competitor to offer long distance (by providing them with wholesale services). For example, consider the situation where a customer values unbundled supply more highly or a supplier of stand-alone long distance can supply at lower cost than a bundled supplier. In such a case, unbundled supply would constitute what economists call a Pareto improvement on bundled supply and the welfare gain could be distributed between the upstream supplier (in the form of higher wholesale prices), the retail long distance provider (in the form of a larger margin between the retail price and wholesale cost of supply) and the consumer (through the higher value put on the service and potentially a lower price).[19]

In such a case the consumer will be in a position to increase surplus by moving to unbundled supply and will seek a firm willing to supply in this way. In this way any firm (including Telstra) unwilling to provide unbundled supply will lose basic access customers to those firms providing unbundled supply. Indeed, Optus has previously acknowledged that for this reason, PSTN OA regulation may be unnecessary where there is competition in the provision of basic access to the local loop:[20]

> *Preselect-only providers may also hold some countervailing power in PSTN OTA negotiations in a competitive wholesale basic access market. For example, a long distance provider could potentially offer retail long distance prices that differ according to the carrier that the long distance customer subscribes to for basic access services. To the extent that this would influence the ability of the basic access provider to compete in that market, the access seeker may have incentives to offer PSTN OTA rates to preselect providers at competitive rates.*

It follows that, given competition at the network layer, any firm (including Telstra) will face incentives to provide unbundled supply to the extent that it is efficient.

---

18 Welfare is enhanced if the sum of the net benefit to consumers (enjoyment from the product that exceeds the price they need to pay) and producers (revenues above the minimum price at which they would be willing to supply) increases. This may occur if (for example) the cost of production is lower (for unbundled supply in this case) while the value of the product to consumers remains the same or increases.

19 A Pareto improvement occurs where at least one party to a transaction is made better off without making any other party worse off, meaning an unambiguous improvement in overall consumer welfare. This may occur in this context if an unbundled supplier can supply long distance services more efficiently than a bundled supplier and hence generate additional surplus. If part of this additional surplus is distributed to the upstream supplier (in the form of higher wholesale charges) and the downstream consumer (in the form of lower prices and/or higher quality services) then all three parties will be better off – a Pareto improvement. Moreover this distribution of surplus will create an incentive for wholesale long distance services to be supplied.

20 'Optus Submission to Australian Competition and Consumer Commission on A strategic review of the regulation of fixed network services', February 2006, at p24

If, on the other hand, bundling of fixed voice services is the most efficient form of supply due to economies of scope in bundled supply and customer preference for having a single supplier of voice services, then bundled supply will prevail. Competing suppliers at the network level will not provide unbundled wholesale services (though they may well offer bundled wholesale services), and the costs of unbundling will be avoided.

As in my original report, I do not express a view here as to which of these situations will prevail post-exemption. What is clear to me, however, is that efficient competition will not be compromised by exemption. Telstra will not be able to raise its profits by foreclosing alternative long distance supply and any attempt to do so will be met by a competitive response.

If current pricing of PSTN OA is reflective of Telstra's costs then in my view it is likely that wholesale provision of long distance services will continue. The fact that there is currently stand-alone provision of long distance services to end customers implies that there are operators who can provide a more attractive service than Telstra (or indeed other providers of bundled voice services). Their ability to provide a more attractive long distance service may arise due to different cost structures (for example cheaper transmission and international termination) and/or better service offerings. If this is the case then for the reasons outlined above, it is likely these suppliers will continue to operate post-exemption. Telstra and its ULLS-based competitors will face incentives to provide wholesale services to these operators or risk losing retail local services customers.

Macquarie states in its submission to the ACCC Discussion Paper that it currently takes wholesale long distance services from Optus (as well as others). On lines where Optus takes WLR (and PSTN OA) or ULLS, Optus could tie the end customer into also taking Optus long distance services (as it claims Telstra will do post-exemption). The fact that it does not do this shows that there are incentives to provide unbundled supply where it is efficient. Conversely, mandating the provision of an unbundled service over-rides this market-based mechanism for determining the degree of unbundling and increases the risk of regulatory error.

How many customers are involved?

Even if Telstra did have an incentive and the ability to foreclose long distance competition by leveraging market power from its basic access lines, the number of lines that this would affect would be relatively small. [c-i-c].[21]

In relation to the [c-i-c] wholesale long distance services provided by Optus, it is likely that most of these are provided using ULLS or on Telstra wholesale lines.[22] Whilst it is possible that some of these may be Telstra retail lines, this would be a relatively small share of the total since in total only [c-i-c] Telstra retail lines are pre-selected away from Telstra for long distance. Rather, it appears that:

- Optus is already using ULLS (and its HFC network) on some of the [c-i-c] lines for which wholesale long distance services are provided; and

21 [c-i-c]

22 See Optus submission at p7

- Optus is taking LCS/WLR in combination with PSTN OA and retailing access and local calls while wholesaling long distance.

Under either of these scenarios, Optus could simply continue to wholesale long distance using ULLS. For lines on which Optus already takes ULLS, exemption would have no impact, while on WLR lines this would mean migration to ULLS. As I have demonstrated in this and my previous reports, there are no material barriers to ULLS migration in the exemption area. Indeed, Optus states in its submission to the Discussion Paper that it currently has DSLAMs deployed in [c-i-c] out of the 404 exemption area ESAs.[23]

Would the move to bundling itself advantage Telstra?

Macquarie argues that customer inertia is greater in respect of basic access than for long distance services. This suggests that if there was a shift towards the supply of bundled services only from exemption being granted, it would be more likely that customers switch away from their long distance provider rather than switch away from their local services provider. As Telstra still retails most basic access services, this would give Telstra an advantage.

This argument is not compelling on a number of counts:

- The data I have examined suggests that customer inertia in switching networks is low for basic access services;
- Even if there are material barriers to shifting local service networks (which is not supported by available evidence), this is not grounds for rejecting PSTN OA exemption – rather, the Commission should focus its attention on addressing these transition rigidities; and
- Macquarie's concerns about customer inertia for basic access relate to changes in networks, but for reasons already covered above it is not apparent to me that customers would in fact need to switch networks if PSTN OA exemption (and for that matter LCS/WLR exemption) is granted – if the use of these wholesale services is efficient then they will continue to be supplied post-exemption.

I expand on these points in the following paragraphs.

In my view, Macquarie's claims that customer inertia is greater with respect to basic access and therefore poses a barrier to competition cannot be supported. Such claims are at odds with market evidence, in particular:

- A large majority of customers pre-selecting away from Telstra for long distance also take an alternative carrier for basic access.[24] This suggests that the inertia to stay with Telstra is not significantly stronger for basic access than it is for long distance.
- Over [c-i-c] of Telstra's basic access customers also take Telstra long distance services. This suggests that customers have much the same degree of flexibility in their service provider choice for preselection and local fixed voice services with customer inertia not significantly weaker with respect to long distance.

---

[23] Refer to Appendix 2 of Optus' submission to the PSTN OA discussion paper.

[24] [c-i-c]

- The telephony market has experienced nearly a decade of reforms and market developments aimed at reducing customer switching costs. During this time, high churn rates have been observed, indicating that consumers are willing to change their connection to networks of alternative providers. As noted in my original report, between July 2001 and April 2007 an average of [c-i-c] SIOs churned into Telstra retail per month, while [c-i-c] churned out.[25] As documented in Table 1, an increasing share of these churn-out SIOs is shifting to alternative networks (including ULLS and HFC).

- Finally, customers have shown an increasing willingness to switch to ULLS-based service from Telstra retail and wholesale services. Between January 2007 and February 2008 alone, nearly [c-i-c] customers were switched from either Telstra retail or Telstra wholesale services to ULLS-based service.[26] As Figure 2 above indicates, the bulk of this substitution towards ULLS has been away from Telstra wholesale services.

The above evidence indicates to me that there are no material differences in customer inertia between access and long distance services. Rather, it suggests that increasingly consumers are looking to take a bundle of voice services from a single provider.

Moreover, the substantial churn-out levels from Telstra's network to the supply of fixed voice telephony over competing networks demonstrate that pure pre-selection providers would not face material impediment in changing their business model to provide a bundled product through ULLS-based infrastructure. Telstra has observed a large number of its customers switching to alternative providers in recent years.

Even if there are material adjustment costs (and the above evidence suggests there are not), in my view it would not be in the best interests of competition to deny exemption for this reason. Rather, the better solution would be for the Commission to investigate and, if deemed necessary, address any rigidities themselves while allowing the LTIE benefits of exemption to occur.

Conclusions

I remain unconvinced that PSTN OA exemption would necessarily mean a shift to the provision of fixed voice services on a bundled basis only. Furthermore, even if it were to do so, I am equally unconvinced that this would necessarily be of concern from a competition perspective.

---

25 Note that these measures understate true industry-wide churn that involves customers changing networks, as they do not account for customers who switch between non-Telstra networks or customers who churn out of Telstra wholesale services.

26 [c-i-c]

3. WOULD GRANTING THE EXEMPTIONS INHIBIT THE ABILITY OF ACCESS SEEKERS TO TRANSITION TO FACILITIES-BASED SUPPLY?

Macquarie argues in Section 3.3 of its submission that, if Telstra refuses to supply PSTN OA to service providers post-exemption, the possibility of using PSTN OA as an interim step to the provision of services via a direct connection with an alternative service provider would be removed:

> *The removal or curtailing of the ability of competitive operators to offer services on this basis as a result of the granting of these exemptions is likely to significantly reduce the utilisation of alternative infrastructures. This is because the impact of customer inertia is far greater in relation to directly connected services and the ability to offer services using PSTN OA will remove the possibility of these services being used as a transition to direct connection.*

In particular, Macquarie argues in Sections 3.3 and 3.4 of its submission that PSTN OA allows the operator of a new network to obtain additional revenue early in the life of the investment by carrying preselection traffic, and provides an opening to migrate preselection customers to the new access network.

Using preselection traffic to supplement network revenues

While I understand that including additional revenues (from preselection traffic) early in the life of an access network would improve the business case for such an investment, the economic logic of the argument that the ongoing provision of regulated PSTN OA by Telstra would enhance efficient investment in competing infrastructure investment appears to be to be awry, for the following reasons:

- First, preselection traffic is not carried on an entrant's customer access network, only on its inter-exchange network. Accordingly a soundly-based business model for access network investment would not ascribe revenues from preselection traffic to the proposed access network investment, but to the inter-exchange network.

- Second, while revenues from preselection traffic may assist the cash flow position, and hence scope for self-financing, for an entrant wishing to establish its own access network, it does not change the position regarding the alternative of external financing options. Further, to my mind there is no particular merit in terms of an efficient outcome from a self-financing approach, with external financiers arguably in a better position to take balanced and objective view of the true economics of an investment option than internal assessment. In short, the presence of an efficient finance market must to some extent obviate the need for self-financing and makes redundant arguments based on this consideration.

- Third, the assumption underpinning the argument appears to be that entrants can earn significant ***net*** cash flows (that is, cash flows over and above costs) from offering preselection, and that those net cash flows will serve to finance expansion. However, this is inconsistent with the claim in submissions that the supply of preselection services is strongly competitive and the view expressed by several operators that resale-based supply generates relatively low margins, particularly when compared to ULLS-based supply.[27]

- Fourth, even putting aside the above considerations, it should not be taken as a foregone conclusion that an externally-provided PSTN OA-like service would not be available if exemption is granted. Rather, as demonstrated earlier in this report, if the use of an externally provided PSTN OA-like service is an efficient and effective means of providing downstream services, and access seekers are willing to pay the efficient price for this service, it is likely that other access network operators will willingly provide such a service even if Telstra does not.

PSTN OA as a transition to direct connection

Macquarie's argument appears to be that, having established a preselection relationship with a customer, a network-based entrant is in a better position than otherwise to attract these customers to its access network. While I do not challenge Macquarie's judgement that this is the case, I am not convinced that this is grounds for retaining declaration of PSTN OA where alternatives are now available, and forgoing the wider benefits of exemption, for the following reasons:

- First, as indicated in Section 3 of this report and in my LCS/WLR exemption supplementary report, I am of the view that if an exempted access service (here PSTN OA) is an efficient means of providing downstream services, this service will continue to be supplied in the market whether required by regulation or not; and

- Second, given the preponderance of bundling of fixed voice services, there is no longer a material number of 'unbundled' customers open to be attracted in this way.[28]

These points aside, while there may be some immediate appeal to the argument that the availability of PSTN OA helps address certain rigidities in the market, it is my view that if such rigidities exist then the more efficient solution is likely to be to address these rigidities directly rather than forego the benefits of exemption to better live with these rigidities.

More broadly, while it might be argued that legacy access services such as PSTN OA provided an effective means of kick-starting downstream competition at the inception of Australia's telecommunications competition regime, this is no longer relevant. That is, now that self-supply of a PSTN OA-like service (and indeed wholesale supply by competitors if such a service is efficient) is viable using ULLS or other alternatives, this layer of regulation is no longer required as a transition.

[27] For example Optus has in recent times shifted away from resale-based supply towards ULLS in pursuit of higher margins. In its most recent financial report Optus states: 'Consistent with its strategy of focusing on on-net subscriber growth, Optus continued to exit unprofitable resale services'. See SingTel, 'Management discussion and analysis of financial condition, results of operations and cash flows for the third quarter and nine months ended 31 December 2007', at p47.

[28] [c-i-c]

APPENDIX A: CURRICULUM VITAE

DR PAUL PATERSON
Executive Director

Bachelor of Agricultural Economics
(First Class Honours)
University of New England

Master of Economics
Australian National University

Ph D (Economics)
Australian National University

Paul Paterson is Executive Director, Operations and Head of Telecommunications Consulting at Concept Economics, an Australian-based consulting firm with particular expertise in competition economics. Paul has been with Concept Economics and its predecessor CRA International since 2004, bringing commercial and government experience in industry analysis, corporate strategies, regulation and policy development. Paul has senior executive experience in the telecommunications industry. Prior to joining NECG, he was with Telstra Corporation Ltd as Director Regulatory from 2001 to 2004.

Prior to his appointment as Director Regulatory at Telstra, Paul was the Group Manager Competition, Regulatory and External Affairs for Telstra from 1998 to 2001. Until leaving Telstra he was on the Board of the Australian Communications Industry Forum. Paul has authored numerous economic reports and publications since 1978.

As a founding member of the Regulated Industries Forum in 2003, and convener since then, Paul also has extensive insight into regulatory issues in the utilities and transport sectors.

Experience

Paul has provided advice on regulatory, competition, commercial, strategic and government policy matters to major corporations and government agencies in telecommunications and other network industries. Jurisdictional experience spans Australia, New Zealand, Singapore, Hong Kong, Japan, United Kingdom, Ireland, Italy and the USA.

Professional History

March 2008 – present	Executive Director, Operations and Head of Telecommunications Consulting, Concept economics
2004 – 2008	Vice President, CRAI, Australia
2004	Principal, NECG, Australia
2001 – 2004	Director Regulatory, Telstra
1998 – 2001	Group Manager Competition, Regulatory and External Affairs, Telstra

1992 – 1998	Executive Director, Policy & Resources, Department of State and Regional Development (previously Chief Business Economist, Office of Economic Development, New South Wales Premier's Department), Sydney
1988 – 1992	Chief Economist, OTC Limited (now Telstra), Sydney
1987	Visiting Economist, Department of the Treasury, Canberra
1986	Special Advisor, Department of Trade, Canberra
1985 – 1986	Assistant Director, Bureau of Labour Market Research, Canberra
1983 – 1984	Administrator, Organisation for Economic Co-Operation and Development, Paris
1980 – 1983	Senior Project Manager, Bureau of Labour Market Research
1977 – 1980	Project Manager, Bureau of Agricultural Economics

Selected Publications, Presentations and Reports

H Ergas & P Paterson (1990) **The Joint Provision of International Telecommunications services: An Economic Analysis of Alternative Settlement Arrangements** 8th International Telecommunications Society Conference, Venice, March 1990.

D Shiff & P Paterson (1990) Regulatory Issues for International Telecommunications in the **New Environment: How do Overseas Arrangements Inform the Australian Situation?** Paper presented to the International Telecommunications Law and Policy Conference, Sydney, December 1990.

OTC Ltd **OTC's Operating Environments to the Year 2000: A Scenario Analysis** (research leader and joint author of this confidential OTC report).

OTC Ltd **OTC Economic Forecasts** (author of this quarterly OTC report).

OTC Ltd (1991) **AUSTEL Study of Arrangements for Interconnection and Equal Access. Part B: Economic /Commercial Arrangements**, OTC submission to AUSTEL on this issue.

OTC Ltd (1991) **Price Cap Issues: OTC comments**, OTC submission to DOTAC on price cap arrangements.

OTC Ltd (1991) **Considerations for Reform**, paper presented to the 13-14 May meeting of the OECD Ad Hoc Group of Experts on International Telecommunications Charging Practices and Procedures, Paris.

OTC Ltd (1991) **AUSTEL Regulation of International Telecommunications: Chart of Accounts Data Requirements**, OTC Submissions to AUSTEL on the specification of the regulatory Chart of Accounts.

P Paterson & H Ergas (1991) 'The World Economy to the Year 2020' in **Western Australia into the Twenty First Century: Economic Perspectives** edited by R T Appleyard, Committee for Economic Development of Australia.

P Paterson (1991) **What do you Benchmark? Benchmarks to meet different needs** Paper presented to the AIC Conference 'Benchmarking', Sydney, August, 1991.

P Paterson (1991) **Benchmarking on the World Best Practice in International Telecommunications** Paper presented to the CIRCIT conference 'Toward International Best Practice in Telecommunications: Preparing Australian Industry to Compete in Global Markets', Melbourne, September 1991.

P Paterson, S Poyzer & D Shiff (1991) **Regulation of International Telecommunications: Competitive Safeguards**. Paper presented to the 1991 Australian Telecommunications Law and Policy Symposium, Sydney, September 1991.

P Paterson (1992) **The Pursuit of World Best Practice in International Telecommunications: a Challenge for Human Resource Management**. Paper presented to the AIC conference 'Human Resource Management in the Public Sector' 28-29 April 1992 Sydney and 30 April-1 May 1992 Melbourne.

P Paterson (1992) 'Preparing for the Future: Forecasting Demand and Planning Capacity for International Telecommunications in a Changing Environment' in **TeleGeography 1992: Global Telecommunications Traffic Statistics and Commentary** edited by Gregory C. Staple, International Institute of Communications (IIC).

P Paterson (1992) **Sub-National Governments, Economic Development and International Competitiveness**. Paper presented to the Economic Society of Australia (Queensland) Conference 'Economics in Business and Government: Micro-Economic Policy and Reform for International Competitiveness', Gold Coast, September 1992.

P Paterson & J Saunders (1993) **State Level Industries Strategies: NSW – Leading Australia into the 21st Century**. Paper presented to the Royal Institute of Public Administration Australia – National Conference 'The Changing Ethos', Sydney, November 1993.

NSW Dept. of State Development (1992) **Submission by State Development to the Government Pricing Tribunal Inquiry into the Determination of Electricity Prices – 1993/94**. Author.

NSW Premier's Department, Office of Economic Development (1993) **Strategic Directions for Economic Development and Employment Policy**, confidential paper prepared for the August 1993 NSW Government Cabinet retreat.

NSW Premier's Department, Office of Economic Development (1993) **The NSW Government - Working with Business to Internationalise the Economy**, November 1993.

The NSW Premier, the Hon John Fahey MP (1993) **Helping the NSW Manufacturing Sector to Better Compete on World Markets**, November 1993.

KPMG Peat Marwick, Office of Economic Development and Department of Business & Regional Development (1993) **Making it Happen in NSW – A Directory of Business Incentives and Assistance Provided by Federal, State and Local Governments for Investment and Economic Development in NSW, Australia**, November 1993. Joint editor.

J Saunders & P Paterson (1994) **Practical Benchmarking – Keynote Address**. Paper presented to the IIR Practical Benchmarking Conference, Sydney, February 1994.

J Saunders, P Paterson & H Peterson (1994) **Establishing Australia as your Regional Headquarters**. Paper presented to the KPMG Peat Marwick seminar 'Establishing Australia as your Regional Headquarters' Sydney, July 1994.

P Paterson (1994) **Assistance from the Office of Economic Development and Key Policy Issues**. Paper presented to the NSW Health Industry Forum, Sydney, November 1994.

P Paterson (1994) **The Big Picture View: NSW Government Initiatives and Policies Relevant to Facility Management**. Paper presented to "The Competitive Advantage", Facility Management Conference and Exhibition, Sydney, 1994.

NSW Premier's Department, Office of Economic Development (1994) **NSW Competitiveness Report**, August 1994.

NSW Premier's Department, Office of Economic Development (1995) **NSW Health Technology Park Proposal**, discussion paper prepared for NSW Health Industry Forum Management Board Meeting, 1995.

NSW Premier's Department, Office of Economic Development (1995) **Purchasing Policy – Industry Development**, discussion paper prepared for NSW Health Industry Forum Management Board meeting, March 1995.

NSW Premier's Department, Office of Economic Development (1995) Liberal National Government Economic Development **'Creating Jobs for NSW'** March 1995.

Department of State Development (1995) **NSW Economic Development – Policy Issues**, April 1995.

P Paterson (1995) **The New Government: Industry Development Initiatives, Including Government Purchasing**. Paper presented to the Australian Information Industry Association seminar 'NSW Familiarisation' Sydney, April 1995.

P Paterson, Michael Jerks & Michael Carman (1995) **State Merchandise Exports - A Survey of Policy and Practice**. Paper presented to the Industry Economics Conference, University of Melbourne, 6-7 July, 1995.

Department of State and Regional Development (1996) **Managing Contaminated Land in NSW: State and Regional Development Comments on EPA Green Paper**, November 1996.

Department of State and Regional Development (1997) **Call Centre Report: Benchmarking Information, Market Research, Implementation**, February 1997.

P Paterson (1997) Speech at Conference **"Key Issues in Private Provision of Infrastructure: NSW Experience"**, Sydney, 11 March, 1997.

Department of State and Regional Development (1997) **Information Technology and Telecommunications Infrastructure for Delivering Government Services and Developing Employment Opportunities in Regional NSW**, June 1997.

Paul Paterson (1997) Speech at **“Australian Infrastructure Investment Forum: Panel Discussion Unsolicited Proposals”**, Sydney, 28 August, 1997.

Paul Paterson (1997) **Using Business Plans and Measured Outcomes to Drive Performance within the Public Sector**. Paper presented at the International Quality & Productivity Centre ‘Business Planning for Government Conference’ Melbourne, 22 October, 1997.

Paul Paterson (1997) **Where are the Future Markets for Regional New South Wales?** Paper presented at the Planning Research Centre, University of Sydney, Sydney 21 November, 1997.

Paul Paterson (1998) **A Government Balanced Scorecard – One Size Does Not Fit All**. Paper presented at International Quality and Productivity Centre Conference, 'Using the Balanced Scorecard to Measure Corporate Performance’ Sydney, 12 February, 1998.

Paul Paterson (1998) **Integrating Non-financial Measures into Department Strategic Planning with the Balanced Scorecard**. Paper presented at the ICM conference, 'Performance Management of Strategic Planning in Government', Canberra, 17 March 1998.

Department of State and Regional Development (1998) **Economic Development and Employment Location in the Sydney Greater Metropolitan Region: Possible Initiatives**, March 1998.

Department of State and Regional Development (1998) **Asian Economic Crisis: Briefing for Leaders Forum**, March 1998.

Paul Paterson (1998) **Interconnection: the Australian Experience – Telecommunications Competition and Access Regulation in Australia**. Paper presented at the IBC conference, 'Interconnection ‘98’, Amsterdam, 17-18 November, 1998.

P Paterson & O Renard (2006) **Platforms for IT Productivity**. Paper presented to ASCN Preliminary Conference for APEC 2007 ‘Reshaping APEC for the Asian Pacific Century – priorities and strategies’ Melbourne, December, 2006.

P Paterson & D Schadt (2007) **Fixed-Mobile Convergence: What is happening and why this is important?** Presentation to the International Telecommunications Society Conference, Perth, August, 2006.

APPENDIX B: INSTRUCTIONS FROM MSJ

[c-i-c]