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Operational Separation in Australia and the UK

Report by Kip Meek, Chairman, Ingenious Consulting Network

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This report was commissioned by Telstra. The views expressed in this report are the author's alone.

Executive Summary

Broadly, my conclusions are:

- The UK form of separation was designed to address severe problems of non-price discrimination which, on the basis of evidence I have seen, do not exist to the same extent in Australia

- Although competition in the Australian fixed line telecoms market is not so well established as (for example) in the mobile market, it is not as weak as the fixed line competition was in the UK in 2004/5; consequently, the need for a radical intervention seems to be less pressing

- The powers of the Australian regulators and in particular the flexible approach enabled by these powers contrasts with the situation in the UK; the implication is that a 'wait and see' approach to addressing competitive issues in a "next generation network" (NGN) has less of a downside, although this should also be considered in the light of the benefits of regulatory certainty.

- The UK form of separation was implemented at a time when fibre in the local loop was a more distant possibility than is the case in Australia today: this underlines that there are trade-offs in creating technology-specific boundaries within a previously integrated organisation and weakens the case for further intervention

In the light of these differences between the Australian and British environments, I would not recommend that the UK form of separation be used as a starting point in the Australian context. The undertakings agreed between BT and Ofcom (plus a number of other developments, such as much reduced prices for unbundled local loops) have provided the basis for a transformation in the competitive environment in fixed telecoms in the UK and in particular in broadband; they have played a very substantial role in diminishing non-price discrimination as an issue in the UK; and they contain many interesting and innovative approaches. However, the position in Australia in 2008 is materially different from that in the UK in 2004 - and the fact that the current form of operational separation in Australia is less radical than the UK's does not, in isolation, mean that it is not fit for purpose.

(Note: this report was written on the basis of a review of the relevant documentation, including ACCC reports on Telstra's non-price performance, and a week long trip to Australia during which I met Telstra executives; I did not interview executives or stakeholders outside Telstra. While I found a consistency between the information I was given and my own observations, my conclusions should be read in this context; more detail is provided in the next section).

1 Introduction

In many markets around the world, the 2005 creation of BT's Openreach division as a result of *Undertakings given to Ofcom pursuant to the Enterprise Act 2002* (Undertakings) has re-ignited a long standing debate about the pluses and minuses of vertically integrated telephone companies – should there be clear boundaries between 'upstream' and 'downstream' activities, where should the boundary be drawn and how should the boundary be imposed and policed to discourage anti-competitive activity? The underlying cause of this is the persistent difficulty associated with achieving what in other sectors would be viewed as normal competitive conditions – in fixed line telecommunications, despite twenty to thirty years of effort, it has in many markets proved difficult to establish a truly competitive environment.

In Australia, the debate on operational separation gathered momentum at the same time as the last tranche of Telstra stock was due to be disposed by the Australian government – a transaction that was completed in November 2006. There was a strongly held view amongst Telstra's competitors and amongst some politicians that, without the restraining influence of government ownership, Telstra's strength in the Australian market would be too great, in the absence of a form of operational separation. This line of thought resulted in the *Telecommunications (Requirements for Operational Separation Plan) Determination (No.1)* of 2005. In reality, this measure did not require the creation of any new organisational divisions within Telstra but, for the most part, codified and tightened up Telstra's existing systems and processes associated with averting both price and (particularly) non-price discrimination. In this way, it was markedly less radical than the arrangements agreed a year earlier between BT and the UK's regulator, Ofcom.

Recently the issue of separation (including structural separation) has once again moved centre stage in the Australian debate about how to regulate Telstra. This time the debate has been stimulated by the Australian Government's broadband tender process. If Telstra was to win the contract to lay fibre-to-the-node, how would this infrastructure be made available to third parties and would not a more radical form of separation create or protect the chances of viable competition? Alternatively, if another bidder proposes a structurally separate or wholesale-only model, should this be preferred over a vertically integrated Telstra (with or without operational separation)?

In this report, I have set out to compare the UK and Australian experience of separation. I sought to answer the following question: **in the circumstances applying in Australia, is a more extreme form of separation, such as that adopted in the UK, a sensible approach from the perspective of the long term interest of Australian consumers?**

Three other points of background:

- I was asked to write this report because as an Ofcom board member I led the team that agreed the Undertakings with BT in 2005
- The central question addressed in this report focuses on what is in the long term interest of Australian consumers. This is because (first) this is consistent with the regulatory objectives deriving from the *Trade Practices Act of 1974* and (second) because (as an ex-regulator) I consider this the correct approach
- This report has been written on the basis of a week long trip to Australia, an interview programme with Telstra executives and an extensive review of the documentation associated with regulatory issues and approaches in Australia and the UK (the most important documents I reviewed are listed in Appendix A). While the evidence I have seen has

suggested very strongly that the issues of non-price discrimination do not have the salience they had in the UK in 2004, I have not discussed the issue with (for example) Telstra's wholesale customers and my report has to be read in this context

The rest of this report is structured as follows:

- Initial observations on forms of and approaches to separation
- Overview of regulatory frameworks in the UK and Australia
- History of functional separation in the UK
- Current operational separation regime in Australia
- Contrasts between the UK and Australia separation regimes
- The 'game-changing' role of fibre
- Conclusion

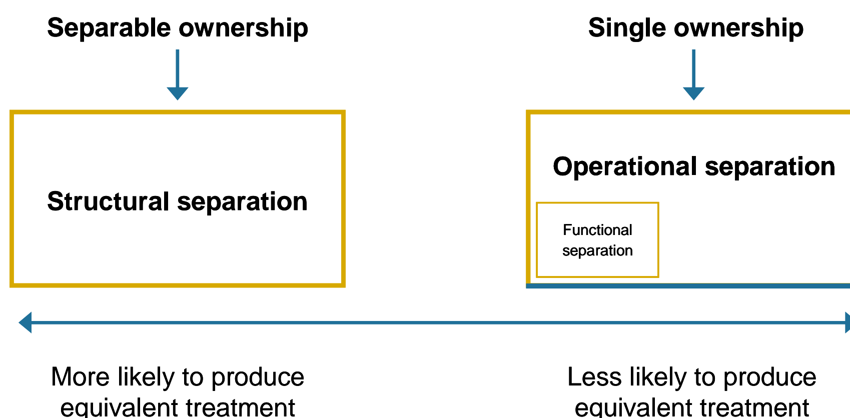
2 Initial observations on forms of and approaches to operational separation

The debate about the virtues of separating vertically integrated phone companies has continued for a generation – the divestiture of AT&T took place in 1984 and, both prior to it and ever since, various forms of separation have been contemplated by industry stake-holders in many developed economies around the world. During the period since the early 1980's, the terminology associated with separation has developed and terms are not always used with precisely the same meaning. In this report, I use the terms **structural separation**, **operational separation** and **functional separation** with the following meanings:

Structural separation	implies that a previously integrated company is separated with distinct share-holder registers. The mechanism for achieving this could be a sale to a third party or the issuing of new shares with the latter case creating different ownership as shares are progressively bought and sold.
Operational separation	implies some type of boundary being drawn between different parts of an organisation with rules being applied to the different parts to encourage them to emulate to different degrees the behaviour of structurally separated units. Operational separation is therefore a term which encompasses a wide range of outcomes – BT, for example, had a form of operational separation (between Wholesale and Retail) prior to its offer of Undertakings in 2005 and a much more demanding and rigorous form afterwards (with the creation of Openreach). The current Australian approach is a form of operational separation, although with more requirements than applied to BT's earlier version of operational separation – including some elements from the current BT model such as separate premises for the Wholesale business unit.
Functional separation	implies (in this report) something similar to the more radical form of operational separation established for BT by the Undertakings – i.e. with very strict rules to ensure that the external customers of an incumbent are treated equivalently to the other divisions of the incumbent that are buying services from the separated division.

These distinctions are illustrated visually in Exhibit 1 below:

Exhibit1.



Equivalence can be delivered anywhere between full structural separation and the least demanding form of operational separation. The form of separation which is appropriate will depend on the presenting circumstances in each market, including the seriousness of the problems of non-price discrimination which exist in the absence of separation remedies.

In the UK, Ofcom considered whether structural separation would be an appropriate remedy for the challenges identified in the UK market. However, ultimately Ofcom decided against this as a model because of the procedural difficulty of implementing this approach (discussed in more detail in the next section) and, more fundamentally, because it would interfere with the ability of BT to make coordinated investment decisions. Even at the time, this was considered particularly relevant both because of the plans for investing in BT's 21st Century Network (an all IP upgrade of BT's core network) and because of the prospect of investment in next generation access. Given the increased interest in fibre, this argument would carry even more weight today.

The debate about the form of separation should be primarily concerned with problems of non-price discrimination. As explained above, a functionally (and, to a lesser extent, operationally) separated business will have strict rules on equivalence applied to it – for example, the provision of services internally and externally have to be on identical terms. These rules however do not prohibit price discrimination – to illustrate this point, a wholesale service can be provided by a functionally separated entity at an identical high price to competitors and to an incumbent's retail arm, creating a price squeeze for the competitors. In the case of price discrimination therefore, equivalence does not preclude discrimination. The debate about separation should therefore be a debate about how best to address non-price discrimination issues, with other tools, such as imputation tests, being used to resolve price discrimination issues.

Separation also tends to be more effective if it is seen as a tool of incentive regulation and not solely as an enforcement tool. This is because operational separation as a remedy tends to have complexities associated with it and an entirely adversarial relationship between incumbent and regulator does not tend to produce optimal outcomes when the form of separation is determined.

3 Overview of regulatory frameworks in the UK and Australia

The UK's regulatory system operates under the European Framework, a set of directives ratified by the European parliament and Council and transposed into UK law by the *Communications Act* passed in 2003. The basic approach embodied in the legislation dictates that *ex ante* regulation must be justified on a market-by-market basis by the presence of significant market power (SMP). Remedies can then be applied. Implicit in this approach is a bias against *ex ante* regulation – it must be justified by a market review - and a vertical market approach to regulation. Vertical markets are defined as wholesale and retail and sub-divided further between, for example, origination and termination. This latter point means that systematic abuses, operating across several markets (for example, various practical issues associated with migrating customers from an incumbent to a competitor) are at minimum cumbersome to respond to under the UK system.

Ofcom is also a competition authority and it has the discretion in defined circumstances to refer companies to the UK's Competition Commission under the *Enterprise Act*. The Telecommunications Strategic Review (TSR) process, described in the next section in more detail, used this possibility to exercise influence over BT, over and above the powers emanating from the European Framework and to address cross-market issues. Because of the characteristics of a potential referral – time consuming and uncertain with respect to outcomes – the use of this competition power will be extremely infrequent.

In summary therefore, Ofcom has a series of ex ante powers that apply in individual markets and that have to be justified periodically against the actual state of competition in the market place. Ofcom's discretion to operate outside this framework is limited, although it can from time to time and, if merited, use the *Enterprise Act* as a further mechanism for securing behavioural and (conceivably) structural change.

The environment in Australia is very different. There are a range of regulatory powers and obligations in Australia which either do not have a direct comparator in the UK or the Australian power seems to be wider than the powers which Ofcom had, at least prior to the Undertakings:

- Part XIB of the *Trade Practices Act* establishes the competition notice regime. This is an enhanced form of competition law and allows the Australian Competition and Consumer Commission (ACCC) to issue competition notices where it has "reason to believe" that the Competition Rule has been breached (which itself is a modified competition law test focusing on "effects"). Liability for substantial fines - $10 million and a $1 million a day – potentially accrue from the date of the competition notice. Ofcom has concurrent jurisdiction under the UK competition laws and, unlike in Australia, the competition regulators can themselves find a breach of competition law and determine a penalty (subject to a merits based review). However, the lower "reason to believe" threshold for which [this] applies under Part XIB as the initial step of issuing a competition notice and the expedited procedures available to the ACCC seem to provide a more effective tool than the standard competition law approach embodied in the UK's procedures;

- the ACCC has a number of powers to require information to be provided by industry participants. It has powers under Part XIB to issue Record Keeping Rules. Rules have been issued requiring Telstra to report on costs (i.e. accounting separation), but also on pricing margins and comparable treatment of wholesale and retail channels on non-price performance issues. The ACCC also has powers to require the production of information under the general provisions of the *Trade Practices Act* which have been specifically extended to telecommunications regulation;

- the ACCC has power under Part XIC to make standard terms and conditions and to approve undertakings. Ofcom does require BT to produce Reference Interconnection Offers, but they are not subject to direct Ofcom approval;

- the threshold for the regulation of access services also seems to be somewhat lower than in the UK. The ACCC can regulate access services where this is in the long term interests of end users. In the UK, Ofcom is required under the EU Framework to determine that an operator has significant market power in respect of a market in which the access product is supplied and then to determine that regulation of the access product is "proportionate". The UK test would seem to be closer to a bottleneck test than the Australian test, although certainly whether a service is a bottleneck is taken into account by the ACCC; and

- there are access-type obligations which sit outside the *Trade Practices Act* under the *Telecommunications Act 1997*. These include access to ducts and towers, access to operator services, mandatory number portability, and participation in industry administered public number database schemes. The Australian Communications & Media Authority has direction powers over some of these matters and the ACCC has powers in relation to others, including to arbitrate disputes.

I understand that there are other regulatory controls as well, such as powers to specify universal service obligations and to impose retail price controls. Ofcom does have similar powers, although I understand that these are exercised in Australia by the Minister and not the ACCC.

Finally, from my observations while in Australia and from what we understood of the Australian approach to self regulation when I was at Ofcom, it would seem that Australia has been successful from a much earlier date in dealing with technical issues which impact interconnection and access than the UK. The Australian Communications Industry Forum (ACIF) (now the Communications Alliance (Comms Alliance)) appears to have produced a significant number of codes dealing with issues which have consumed either Ofcom's or the Office of the Telecommunications Adjudicator's time in the UK. I understand that the issues which the industry resolved itself include inter-operator churn, the technical and operational processes for number portability and Local Loop Unbundling (LLU) technical and operational issues, including a negotiated outcome in favour of co-mingled collocation at Telstra exchanges. While LLU pricing issues continue to be highly contested in Australia, I am told that the resolution of the LLU issues took approximately 12 months, which compares very favourably to the slow, highly controversial process in the UK in the early years of this decade – which again was one of the reasons why Ofcom decided to move to a separation model in an effort to secure a less contested process.

4 History of Separation in the UK

The UK began to liberalise its telecoms market relatively early, at least in European terms – the 1984 Telecommunications Act enabled BT's privatisation, created a duopoly regime which led in due course to the creation of Mercury Communications, BT's first competitor, and established Oftel, the independent regulator. Professor Bryan Carsberg was Oftel's first director general and he famously asserted that his aspiration was that eventually, as competition became established, regulation and regulators would become redundant.

In reality, the history of telecoms regulation in the UK for the next 20 years was far from that envisaged by Professor Carsberg and many others – while many competitors emerged in both the fixed market (after the duopoly regime was phased out) and the mobile market, regulation did not wither but proliferated. The Ofcom Strategic Review of Telecommunications identified three phases of regulation, as follows:

- The duopoly years (1984-1991): In this period, there were regulated duopolies in both fixed telecoms (BT and Mercury) and in mobile (Cellnet and Vodafone). In fixed telecoms, the privatisation of BT in 1984 had created a private sector monopolist, and the imperative was to reduce the prices of a relatively homogeneous product: fixed voice telephony (mobile was then a relatively niche service). It was hoped to achieve this through a combination of price controls and emerging competition from Mercury (now C&W). Mercury was not required or expected to build an alternative access network, and relied upon continued regulation of BT in consequence to support its business;

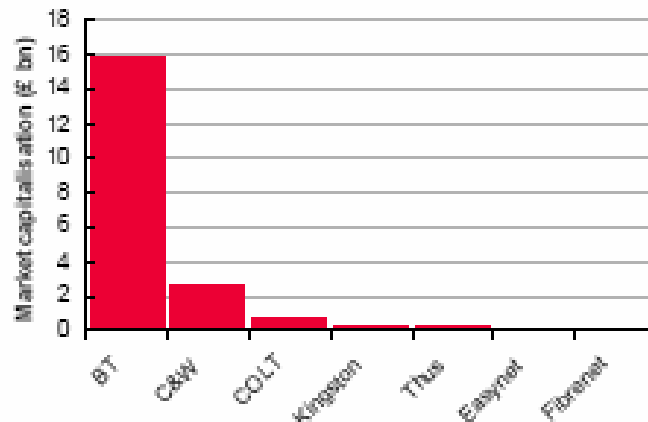
- Post duopoly market and infrastructure competition (1991-1997): In this period, regulation aimed principally to promote infrastructure competition, particularly in access. In mobile, the policy was successful. The two additional network operators (Orange and One2One, now TMobile) proved sustainable, stimulated price competition and service innovation in the market, and eventually were able to provide a real competitive threat to the two incumbents. In fixed telecoms, there was a wave of investment in different types of infrastructure; access infrastructure (such as the cable operators and COLT's metropolitan access business), and core networks (such as Energis). However, these new infrastructure-based operations were slow to win market share from BT and to achieve sufficient scale to threaten BT's market power; and

- Services competition (1997 onwards): In this period, partly as a result of the implementation of the 1997 EU Directives, regulation aimed to promote more equally service-based and infrastructure-based competition in fixed telecoms. For example, service providers and infrastructure operators were treated more equally in interconnection arrangements. But both types of competition proved slow to take root. Infrastructure-based operators continued to struggle to achieve scale, while network-based operators and service providers were frustrated by delays and inadequacies in wholesale access products such as indirect access, carrier pre-selection and wholesale line rental (WLR).

By the time Ofcom was created in 2004, the third phase identified above was evidently not succeeding. Two simultaneous trends were visible:

- First, fixed line competition to BT, while prolific, did not look sustainable – profits were marginal amongst the larger fixed line players – C&W, COLT, Kingston, Thus, Easynet and Fibrenet. Consequently, their market capitalisations were a fraction of BT's (see Exhibit 2 below). Even these capitalisations provide a picture that underestimates BT's dominance – C&W's value was largely associated with its overseas businesses and COLT's with its persistent (if eroding) cash reserves:

Exhibit 2. Market capitalisation of UK-listed fixed telecoms operators, November 2004



- Second, a highly adversarial and intrusive relationship had emerged between incumbent and regulator. Oftel maintained a welter of price regulation at the retail level and also felt compelled to reach into the heart of BT's business, for example by effectively designing an internet access product (FRIACO) and insisting BT offer it.

This adversarial relationship did not emerge from nowhere – wholesale products took a long time for BT to design and implement and Oftel's ability to make progress was often frustrated. So, for example, while carrier pre-select services were implemented reasonably swiftly, wholesale line rental seemed to present major problems for BT and regulator to resolve. An early attempt at local loop unbundling got nowhere. In general, problems of non-price discrimination were constantly cited by competitors to BT – in addition to the perceived unresponsiveness of BT Wholesale to progress product design requests, BT Retail seemed to have leverage over BT Wholesale which was not reciprocated for other customers of Wholesale, space was not available in exchanges for unbundling and, when customers opted to switch suppliers away from BT, small mistakes or omissions in their address, for example, seemed to sabotage the switching process.

This state of affairs persisted into the period when Ofcom the converged regulator was created. The *Communications Act* of 2003 and the creation of Ofcom did however present an opportunity to break the attritional cycle of mutual mistrust that had become embedded in the relationship between incumbent and regulator – Ofcom's leadership team were almost completely new to regulation. The Ofcom board authorised a wide ranging review of telecoms regulation – the TSR – with the explicit objective of seeing if there was a more productive approach to regulating the telecoms sector.

But there were serious problems to address. As discussed above, the competitors to BT had a series of significant issues of non-price discrimination in dealing with BT. Further, as stated above, the European Framework, because it was based on market analysis, did not deal well with a horizontal or generic issue of this type. Through Ofcom's competition powers, it had recourse to a potential referral to the Competition Commission – a possible course of action which had some power as a threat but which practically had two significant disadvantages to Ofcom, namely the creation of delay and uncertainty and the loss of control which would have ensued.

In the December 2007 review of the effect of the TSR by Ofcom, the conclusion was that the Undertakings have delivered benefits to consumers and industry, although Ofcom did identify the TSR was a long process. It was initiated at the end of 2003, the first consultation document was published in April 2004, the second in November 2004 and the final statement in September 2005. The final statement also embodied BT's Undertakings.

The key ingredients in the Undertakings were as follows:

- The delineation of a boundary between Openreach and the rest of BT which meant that Openreach had within it both local access (MDF to premises) and backhaul, where backhaul was part of the bottleneck services (as distinct from being part of the core network)

- The establishment of incentives on Openreach management which were wholly associated with Openreach's performance

- Rules on the branding of Openreach which were intended to emphasise the separation of Openreach relative to BT

- The embedding of the notion of equivalence into Openreach's Equivalence was defined in two different ways – input and output, with the former being particularly demanding i.e. the provision of access services on identical terms, timings etc, to competitors to BT and to BT itself. All the key services had to be provided on an equivalence of input basis, according to a strict time-table and particular emphasis was placed in the Undertakings on equivalence of input

- The establishment of Chinese Walls between both Openreach and BT and also between BT Wholesale and other parts of BT. This involved specified and time tabled separation of systems

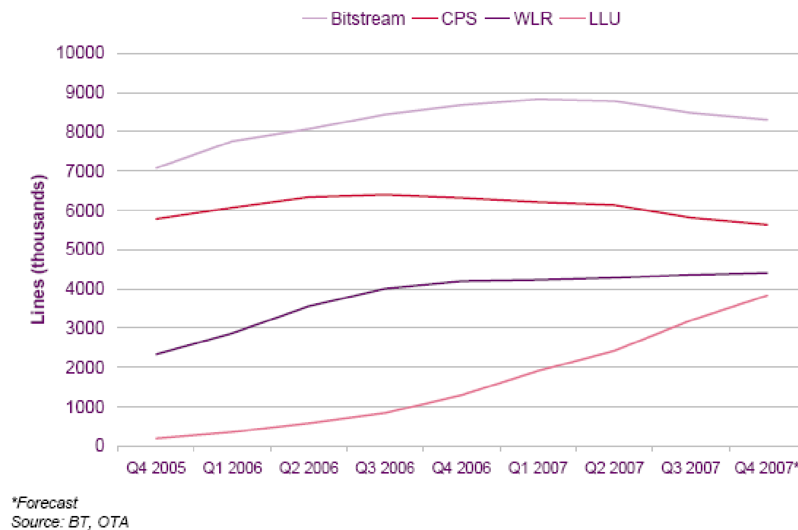
- The creation of a new compliance system, the Equivalence of Access Board (EAB), supported by the Equivalence of Access Office (EAO). The EAB had heavyweight external representation (including Professor Carsberg, Oftel's first Director General) and had formal reporting obligations to the Board of Ofcom

In addition, because the Undertakings were 'in lieu of a reference' to the Competition Commission, they were enforceable in law.

Implicit in the Undertakings was an acceptance that regulation should be focussed on the bottleneck assets of a telco. Although BT doubtless judged that the Undertakings made a referral to the Competition Commission redundant, it also hoped that a consequence of offering the Undertakings and their being accepted would be the progressive rolling back of regulation elsewhere on its business.

The subsequent performance of Openreach has inevitably been interpreted differently by different parties. During the same period as Openreach was being established, Ofcom and BT reached an accommodation on the pricing of LLU which led Sky, Carphone Warehouse and others to invest heavily in LLU services. The initial experience of implementing LLU was extremely negative, although the fault for this lay on both BT's side and its competitors – both sets of systems were inadequate. However, progressively the situation has improved markedly to the point where the UK has around 4.6 million unbundled local loops and there has been a major switch from WLR, Bitstream and Carrier Pre-select (CPS) products to LLU (see Exhibit 3 below). Most observers, including Openreach's customers, now agree that the creation of Openreach has markedly reduced the incidence of non-price discrimination. Reflecting this, the workload of the EAO has reduced considerably since its creation in 2005.

Exhibit 3. Take-up of bitstream, carrier pre-selection, wholesale line rental and local loop unbundling products



**Forecast*
Source: BT, OTA

It is useful to compare access outcomes in the UK and Australia. LLU and shared spectrum services (called LSS) services in the UK in the 12 months period following the introduction of functional separation grew by a little under 400%. Over the equivalent period in Australia, the growth rate of LLU grew by almost as much - approximately 360%. The higher level of unbundling in the UK is potentially explained, in my view, by the greater population density in the UK – the UK has more than twice the number of lines as in Australia, but in a geographic area the size of Victoria. The data that I have seen tends to suggest therefore that access seekers in Australia acquiring LLU from Telstra do not seem to be in a materially disadvantaged position in respect of non-price terms of supply compared to access seekers buying LLU from a functionally separated Openreach. Overall, BT Retail's share of DSL lines in the UK is about 46% - the rest are wholesale lines, which are a combination of LLU, spectrum sharing, layer 2 DSL or resale DSL. Again, I understand that the Telstra Wholesale's share of DSL lines is much the same.

The non-price terms of supply, of course, are only one element. However, the comparable levels of access utilisation for access in Australia and the UK is consistent with my observations of the equivalent non-price supply processes in Australia.

Since the establishment of Openreach some lightening of regulation has also occurred – a variety of retail price regulation have for example disappeared. The extent to which Ofcom both promised some relaxation and delivered it is shown in Exhibit 4 below.

Exhibit 4. UK Progress in reducing regulation

Market	Statements made in the Telecoms Strategic Review	Latest status
Residential voice services	Ofcom committed to: • Relax the retail price cap (from RPI – RPI to RPI – 0) once it was satisfied that a fit-for-purpose WLR product was available to communications providers. • Consider further deregulation via a consultation in the early part of 2006 on whether remedies, including price controls, continue to be needed in fixed narrowband retail service markets.	• Residential charge controls were removed in August 2006. • Ofcom intends to initiate a review of the retail narrowband market in 2008.
Business retail services	In the TSR statement, Ofcom committed to: • Complete its review of the replicability of BT's business calls, exchange lines and leased lines products to allow BT to offer bundles of these products should replicability of these services be proven. • Complete its analysis of whether BT should also be allowed to offer bespoke discounted prices on bundles of these products.	• Ofcom has conducted a replicability analysis and a statement was published in April 2007. • There has been no relaxation of regulation on low bandwidth PPCs as these were not found to be replicable. • Business exchange lines were identified as being replicable. • Relaxation on bespoke pricing has been implemented.
Leased lines (geographic analysis)	In the TSR statement, Ofcom committed to: • Complete a review of the extent to which competitive conditions vary in different parts of the UK in retail and wholesale markets for leased lines: - Should there be a strong case for defining separate geographic markets, Ofcom would launch a full market review of the relevant markets. - Should there be a strong case for varying remedies by geography within a single market, Ofcom would launch a further consultation document in the first half of 2006.	• A discussion document was issued during 2006. • The leased line market review is currently underway and Ofcom plans to publish a consultation documents in December 2007. • The leased line market review will be considering the potential for deregulating 155Mbit/s partial private circuits and 34/45Mbit/s PPCs in central London and Docklands.
Wholesale international services	In the TSR statement, Ofcom committed to: • Complete a new review of wholesale international markets to assess whether the SMP status of BT and Cable & Wireless continued to exist.	• Ofcom has delivered on its commitment: - Ofcom completed a market review of wholesale international voice services in 2006 and concluded in July 2006 with a finding of no SMP on 235 routes. - In its final statement Ofcom lifted the existing regulatory obligations on BT.
Wholesale broadband access	In the TSR Statement, Ofcom stated that it would: • Complete a new review of WBA which should consider the potential constraining effect of LLU on WBA markets. • Consult on whether there is a case for varying regulatory solutions by geography.	• Ofcom has relaxed Wholesale Broadband Access regulation.
Wholesale fixed narrowband access	In the TSR, Ofcom stated that: • The market for inter-tandem conveyance and transit, was already deregulated in 2005; this was accompanied by a relaxation of obligations on BT in the market for local tandem conveyance and transit; regulation was kept in three markets where BT was found to have SMP: - Call origination in the UK - Single transit in the UK - Call termination in the UK • While believing that BT's dominance in these markets will continue for several years, Ofcom committed to monitor developments such as the impact of BT's 21CN and, in due course, conduct a full review of these markets to explore the potential for further deregulation.	• Ofcom intends to launch a review of the wholesale narrowband market in 2008.

Source = Ofcom

There are three criticisms that are still made of the Undertakings however. The first is that the pace of deregulation is too slow – Ian Livingston, BT's new Chief Executive, is making much of the persistence of universal service obligations and the unfair burden they impose on BT. The second also emanates from BT – the Undertakings incurred substantial costs and management time diverting

substantial financial and human resources. The third criticism is that the Undertakings have made it more difficult for the UK to implement an NGA network.

This criticism is the most fundamental. At the moment, BT is clearly not convinced of the business case for extending fibre from the exchange into the local access network, either to the cabinet (or node) or to the home. This contrasts with the situation in other countries around the world – local access fibre is being deployed in many countries in Europe (Sweden and the Netherlands, for example) and around the world. Some economists and many incumbents (worried about separation) argue that there is a link – that even the partial lack of control of the entire value chain associated with functional separation makes risky and innovative investment more difficult to justify. My own view is that the real reason why the UK is being relatively slow to deploy local access fibre is much more complicated and that, when the economics improved, Openreach will be able to invest in a normal way, if anything with its investment case strengthen by having both BT and others as wholesale customers of its local access fibre. This view remains conjectural, however.

The Australian Government's decision to provide funding up to $4.7 billion should help remove some of the roadblocks which may be holding back nationwide NGA investment in the UK. However, it does not then follow that Australia can or should embrace a separation model for its National Broadband Network (NBN). It is still necessary to identify what the problem is that is being solved for and whether separation is a sensible policy in the radically altered environment of the NBN. While the case for open access requirements may be stronger where public funding is involved, it is the equivalence of that access which is the objective and not separation in itself. Separation is only one of the means by which equivalence can be achieved and, even if it was thought to have had some success in doing so in the UK environment, it would still be necessary to consider its costs and benefits relative to other measures in the environment of an NGN.

I will turn to address these issues. I will first consider the issue of non-price equivalence in Australia on current legacy networks and then turn to consider the issues in an NGN environment.

5 Current operational separation regime in Australia

The lead-up to the introduction of operational separation in Australia occurred against a history of regulatory and industry actions that prompted Telstra to develop operational and billing systems that give access seekers the ability to directly manage provisioning, churn, fault management and billing. The background that lead to the development of these systems are:

- the Competition Notices issued by the ACCC in 1998 and 1999 to Telstra in respect of its commercial churn terms and conditions. In particular, the ACCC complained that Telstra required other carriers, wanting to transfer customers from Telstra, to use a manual process that the ACCC alleged was slow, inefficient and cumbersome. The matters raised in the Competition Notices were eventually resolved by a negotiated settlement, as part of which Telstra agreed to improvements to its wholesale billing system and to fund an upgrade to other carrier's systems to enable these to interoperate with Telstra's systems;
- I understand that in the late 1990s there were a large number of billing disputes between Telstra and wholesale customers over the accuracy of wholesale billing and the form in which it was provided, some of which resulted in litigation. Arising out of this litigation, Telstra set about building new wholesale billing engines and interfaces which today deliver billing information in an electronic feed to wholesale customers; and
- in the late 1990s, the Department of Communications stepped in and in a joint initiative with the service providers association, SPAN, and Telstra sponsored an industry wide initiative to "bring the telecommunications industry online". I understand that this initiative was taken up by ACIF and lead to the development of a number of industry codes and practices.

As a result of these developments, Telstra business-to-business interfaces allow wholesale service providers to directly provision a range of fixed line and mobile products and to manage fault handling and an online portal to view and access billing data. Service providers can also transfer or "churn" customers directly via an online portal.

The introduction of these systems addresses many areas for non-price discrimination that were an issue in the UK. As a result of these systems, for example, the service qualification of transmission paths takes on average 6 seconds (compared with 2 days previously for a manual request), service providers can self-manage a request for a new connection or temporary disconnect within minutes and view their bills online and extract and electronically manipulate the data for their internal business reporting. Telstra data indicates that over 90% of all Telstra Wholesale customers use these online self-serve systems and 98% of all ordering transactions occur online.

Partly because Telstra's Wholesale division had been established for some time and partly because of the genuine equivalence delivered by the developments described in the previous paragraph, Telstra did not have to create a new organisational structure to comply with the operational separation regime in Australia. Instead, the "three box" model of a network business (referred to by Telstra staff as 'the factory') which operates as a cost centre, a retail business and a wholesale business continued to apply.

Before the creation of this limited operational separation regime, there had been a history of progressively addressing a variety of potential or actual problems of discrimination (in addition to the churn measures discussed above). Under Part XIB of the Trade Practices Act, there had been a series of Competition Notices addressing predominantly non-price discrimination issues – for example, to do with the availability of peering to ISPs, to do with switching procedures when customers sought to move between networks and to do with the availability of Bitstream services. In addition, the ACIF now Comms Alliance proved effective at resolving numerous other potential issues of non-price discrimination, particularly in relation to number portability, other migration and churn issues, 0800 numbers and unbundled local loops (ULL).

Consequently, the effect of the operational separation regime was represented to me as being largely as follows:

- To support the equivalence regime by better systems
- To record and document how equivalence was delivered
- To establish governance procedures associated with the above

These representations were made to me by Telstra executives and, as an ex-regulator, I took every opportunity to test whether non price discrimination in particular was an issue. As already stated, in a short trip to Australia, I had no chance to speak to Telstra's wholesale customers. However, in the absence of such discussions, I was nevertheless as reassured as I could be that non price discrimination is markedly less of an issue in Australia in 2008 than it was in the UK in 2004/5.

The evidence for this judgement is as follows:

- The existence of procedures to ensure equivalence
- The effectiveness of Chinese Walls, both with respect to physical separation between Wholesale operations and those of Retail and the Factory and with respect to systems separation
- The existence of a suitable governance structure to oversee the operational separation regime
- The absence of complaints from Wholesale customers

In more detail:

The existence of equivalence procedures

In the UK during the negotiation of the Undertakings, a distinction was made between two versions of equivalence: equivalence of input and equivalence of output. The former (input) required that parts of BT outside Openreach used inputs from Openreach on exactly the same terms as other customers – same price, same delivery processes, same time-scales, etc. The latter (output) was less tightly specified and meant that in effect BT and other customers of Openreach were treated fairly relative to each other. The Undertakings opted in most cases for equivalence of input, but permitted equivalence of output in certain cases.

The regime in Australia embodies a somewhat different approach, although it shares key common elements with the UK approach. The non-discrimination obligations are called the Standard Access Obligations (SAOs) and are set out in Part XIC. They automatically apply to all declared access services. The SAOs importantly require that the access provider (e.g. Telstra) supply declared services to wholesale customers on key non-price performance criteria, such as timeliness of provisioning, which is "equivalent to that which the access provider provides to itself". The SAOs are also directly legally enforceable by access seekers bringing enforcement proceedings in the Federal Court, and they can seek a broad range of remedies, including damages for loss of profit. Direct rights for access seekers was only a point which the UK reached with the Undertakings.

While the language of "equivalence of input" and "equivalence of output" has not figured in the Australian debate, it would seem to me that when applied to unbundled access services which are sufficiently upstream, such as LSS and LLU and verified through the ACCC's Record Keeping Rules, the SAOs do align with the standard of equivalence which Ofcom was seeking to achieve through the Undertakings, particularly in relation to ordering, provisioning and faults and the supporting operational support systems (OSS) for these services. This can be seen in Telstra's approach at the

network or back office level which is generally to use common engines and platforms between wholesale and retail channels, which is being accelerated with the major transformation program now underway.

There are some differences. The first is in relation to information about regulated products (called "Commercial Information") in the UK, although I note that the separate operational separation rules require Telstra to produce an Information Strategy which sets out how it will keep wholesale customers informed about changes in wholesale products and also a longer "roadmap" of network developments.

The second difference is in product development requirements, which do not explicitly form part of the SAOs. Telstra is required by the SAOs to supply, on request, the regulated products, which would seem to include modified versions which fall within the ACCC's general product descriptions. But the downstream products are not subject to legal requirements in relation to product development. For example, ADSL2+ service will be available from Wholesale, after it was available to Retail. I understand that the ADSL 2+ product was developed with the future option of wholesale supply and that wholesale supply has now commenced.

The extent to which equivalence on issues such as product launches etc. apply depends on the view which is taken of the necessary scope of the regulated access services covered by separation. Even in the UK, the functional separation regime does not apply to all wholesale products, nor are the wholesale products covered by the Undertaking all subject to the equivalence of input rules. This comes back to the point I made above that operation separation is a remedy for bottleneck power and so necessarily a threshold decision is required about what products meet that description. I note that bitstream services in Australia are subject to a form of "quasi-access regulation" under Part XIB rather than being declared after a market review under Part XIC (which was done in the UK under the equivalent SMP procedures) and that competitors currently use LLU to provide competing ADSL 2+ services. I make no comment about whether this is the appropriate approach, but it does illustrate again the wider set of options available to the ACCC to address access issues and how the choices the ACCC makes about which route to go, may involve trade-offs in relation to the regulatory obligations which then apply.

Equally other issues, such as space shortages in the exchanges constraining local loop unbundling, do occasionally arise – and the ACCC has published (in May 2008) a Draft Record Keeping and Reporting Rule on this. Nevertheless, the frequency of these issues arising is totally different from the UK in 2004/5 and the processes for dealing with issues as they arise seem fit for purpose.

On the evidence communicated to me, equivalence on non-price issues seems to operate reasonably well in the Australian context and to be accepted by Wholesale customers.

Written policies emanating from Telstra suggest it takes providing services on an equivalent basis seriously. I have had the opportunity to review written Telstra's policies on Operational Separation. These include policies on the following areas

- Customer representatives
- Information security
- Service quality
- Information equivalence
- Price equivalence

All these policies appear sensible and congruent with the objective of establishing equivalence.

Finally, it is also important to look to practical outcomes in the market. While a direct comparison of performance is always difficult, as I noted above, while there has been clear improvement in many aspects of Openreach's performance, there continues to be some performance issues two years on. However, over the same period, the ACCC's monitoring of Telstra's relative performance between retail and wholesale channels for a very similar set of services has found no pattern of discrimination.

While it is some time since I have closely inspected BT's OSS, on the basis of my inspection of Telstra's systems, it is also clear that the current Telstra systems compare favourably with BT's systems at the time the Undertakings were under discussion. Establishing the sorts of systems that I saw at Telstra is very much the objective that we had in mind at Ofcom when we agreed the Undertakings with BT.

The effectiveness of Chinese Walls

Telstra has created physically separate resources for its Wholesale business. So, for example, it has a separated Wholesale Customer Service Centre in Sydney (meeting with Domenic Lombardo on 27th May); and the wholesale product development process that was explained to me (meeting with Trevor Brunton and Geoff Gerrard on 28th May) indicated again that physical separation was taken seriously by Telstra.

Also, a variety of systems were demonstrated to me in Sydney and Canberra which also showed that care had been taken to preclude leakage of information between Wholesale and other parts of the business (meeting with Domenic Lombardo on 27th May and meeting with Andrew Zwartko, Jim Coburn and Terry Dyer on 28th May).

Governance procedures

In the UK (as explained above) compliance with the Undertakings was overseen by an Equivalence of Access Board and Equivalence of Access office. The former had independent members, i.e. members who had no other link with BT save membership of the EAB.

Under Telstra's implementation of operational separation, there is a Director of Equivalence who is a Telstra employee unconnected to any of the operating divisions of Telstra. There is also a Board Audit Committee (referred to in Australia's operational separation regime as the Operational Separation Plan Committee), comprised of Telstra independent directors only, which oversees compliance. In addition, Telstra's external auditor has to review compliance.

Although the configuration of the compliance procedures is different from those in the UK, it is difficult to argue that it is not suitable to the compliance task.

Absence of complaints

By far the most compelling evidence of the absence of major problems with the operational regime is the absence of a material level of complaints. During my visit, the Board Audit Committee had to deal with an issue arising when some end customers of Wholesale customers had received direct mail from a unit of the Retail business. This incident had attracted four complaints. Only two other complaints had been dealt with by this Committee since its inception.

The absence of complaints means that the compliance reports associated with operational separation elicit virtually no interest in Australia. In April 2008, the last full month prior to my visit, a total of six detailed compliance reports (in service quality and price equivalence etc.) were downloaded. While April had a somewhat lower number of downloads than other recent months, the picture is clear – consistent with the absence of complaints, there is little or no interest in an examination of the compliance regime.

Such behaviour could in theory be consistent with a complete lack of faith in the efficiency of separation and equivalence. However, taking into account the implications of other aspects of my visit, I would conclude that, from the perspective of Wholesale customers, equivalence and the limited form of operational separation that goes with it is working well.

6 Contrasts between the UK and Australia separation regimes

On the basis of what has been described above, I would make the following observations:

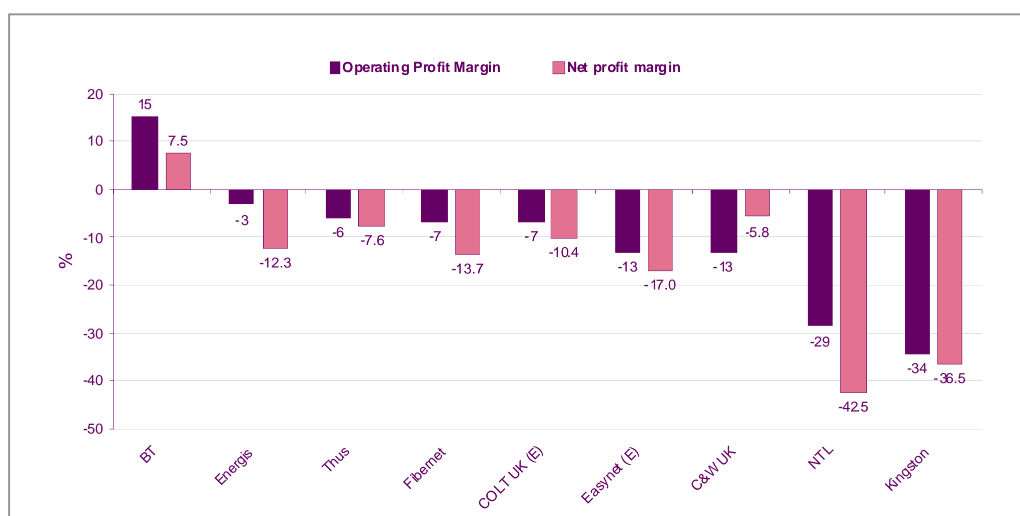
a) Non-price discrimination is not an issue in Australia in 2008 in the way it was in the UK in 2004/5. Although this judgement is based on a short visit and on discussions with Telstra and its advisers, and direct inspection of the Telstra OSS interfaces, all the evidence I saw suggests this to be the case.

   If this is the case, it (at minimum) raises question whether a more radical form of separation is a proportionate intervention.

   In this report, I have focussed on non-price discrimination and whether or not separation is an appropriate tool to address non-price discrimination. The relevant regulatory body in Australia, the ACCC, has other levers to monitor price discrimination and to address it, if it arises – for example, it can issue a Competition Notice under Part X1B of the *Trade Practices Act*, if it suspects Telstra has engaged in anti-competitive conduct. As I have stated earlier, operational separation is in any case more properly aimed at creating equivalence, which is in turn designed to address non-price discrimination.

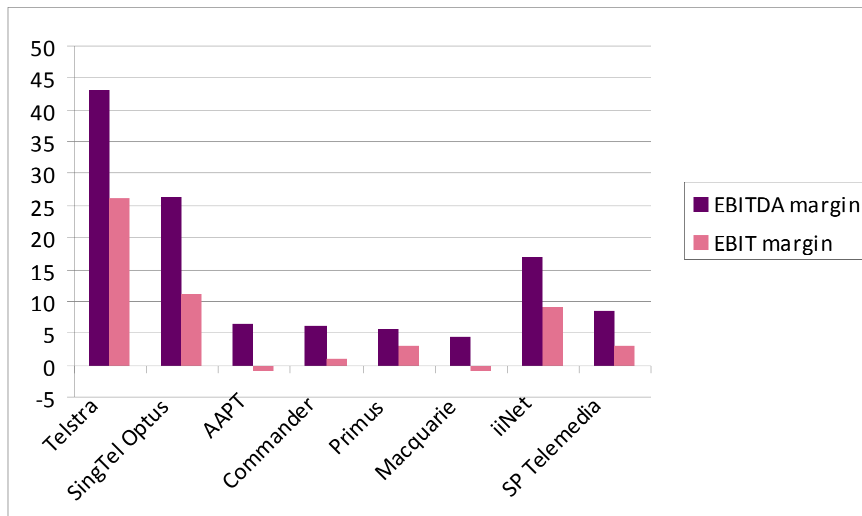
b) Fixed line competition in Australia in 2008 is more sustainable than in the UK in 2004/5. The exhibit (Exhibit 7) below shows that BT was in effect the only profitable fixed line player in the UK at the time of the TSR. The need therefore to address the competitive position was evident – 20 years after liberalisation, in a major economy, there was no substantially profitable competitor to BT. In the case of Australia, I understand that both Telstra and Optus make reasonable returns, notwithstanding that the number of consumers in Australia is a third of that in the UK.

Exhibit 7. Latest profit margins as identified by Ofcom in 2004



This point bears on the issue of the policy imperative – while consumers, regulators and politicians would all doubtless wish there to be a larger number of profitable competitors to Telstra, the need to act is less pressing than it was in the UK.

The same depressing picture is not seen in Australia. A similar chart for Australian competitors to Telstra in 2007 (Exhibit 8) shows Telstra's competitors as doing better, particularly SingTel Optus which is integrated across mobile, residential, cable and fixed networks.*Exhibit 8. 2007 Profit margins*



c) Relative powers of the Australian regulator

In the UK the regulator had a single opportunity (strictly, once in a decade or once in fifteen years) to use the threat of a referral under the *Enterprise Act* to effect change in the telecoms environment; and further European Framework and the transposition of the Framework into UK law (the 2003 *Communications Act*) limited the ability of the regulator to apply horizontal remedies across markets. Consequently, Ofcom, once it had let the genie (of referral) out of the bottle, had to use the opportunity to achieve an outcome sufficiently radical to address the problem in a substantial way – coming back for a second round was not an option.

This is not the situation in Australia. The determination under the *Telecommunications Act* that enabled the current form of operational separation gives the Minister continuing supervision over the Telstra operational separation plan. The way in which the ACCC has been able to use Parts XI B and XI C of the *Trade Practices Act* have also given it extensive powers which are not constrained by an equivalent of the European Commission or by the partially deregulatory bias of the European Framework. Consequently, the Australian regulatory authorities need not feel the urgency or the sense that there was a single opportunity to act that the British regulators experienced in 2004/5.

7 The 'game-changing' role of fibre

The imminence of NGA has raised issues about the Undertakings and the functional separation model adopted in the UK. The Undertakings specified a boundary between Openreach and BT Wholesale the basis of which was defined by the "bottleneck" parts of the network or those network elements where genuinely competitive provision was difficult to conceive of on a widespread basis. Local access and (some) backhaul were defined as bottleneck assets and therefore belonged in Openreach. However, NGA – if implemented through sub-loop unbundling – would shift the bottleneck to between cabinet and home, rather than exchange and home. By definition, operational (or functional) separation is not technology neutral and was imposed just prior to the first change in access technology (copper to fibre) since the establishment of telecoms as a mass market service. This, at minimum, calls into question the logic of Openreach's current boundary.

This observation, even if it was as evident in 2005 as it is in 2008, would probably not have persuaded Ofcom to have adopted a substantially different course – the problems of non-price discrimination were sufficiently severe to mean that a good enough solution was worth pursuing. However, when other countries look at the UK model, it is worth asking first **whether** the problems being addressed are as severe in the UK and **how** any problems should be addressed. In the UK, the lack of equivalent treatment between BT Retail and BT's competitors by the wholesale arm of BT was so severe that drastic measures were required.

Functional separation – a more radical form of operational separation - would inevitably require the establishment of a boundary between the parts of Telstra separated. For eighty or ninety years, access methods have been technologically stable. The advantages of further separation would need to be substantial to support the case for drawing such a boundary at exactly the moment when fibre is about to be introduced into the network. The fact that an FTTN is one interim step on the road to getting fibre all the way to the premise makes defining the boundary all the more difficult.

The NBN tender process is obviously a vital backdrop to the questions associated with separation. The Australian government is pioneering an innovative approach to fibre roll-out with some significant challenges attached to it – not least the objective of 98% coverage in an environment where meeting such a target is expensive. The UK experience suggests functional separation is complex and takes some years to bed down. Simultaneous functional separation and implementation of the NBN combines a variety of investment and operational risks with the hard-wiring of organisational boundaries at the very moment when judgement on the wisdom of such boundaries is most difficult to make.

8 Conclusion

Overall, my view is as stated at the beginning of this report – the UK model of functional separation worked in the UK, but (as with any radical policy) it had downsides as well as upsides; the situation is very different in Australia and in particular the problems of non-price discrimination are not as severe in the UK; and that consequently adopting the UK model may not be the right approach. I am also of the view, as I was when Ofcom was considering whether to adopt functional separation, that more radical measures, such as structural separation, would involve substantially escalated risk and costs. The demand risks and uncertainties associated with building an NGN, especially where it is intended to replace the PSTN, seem to me to raise doubts about whether a non-vertically integrated approach would be able to achieve the necessary level of investment co-ordination.

Appendix A

Operational Separation – A New Style of Regulation?

By Peter Waters Partner, Gilbert + Tobin (Australia) / Consultant, Arculli Fong & Ng (Hong Kong) and Albert Yuen, formally an Associate, Gilbert + Tobin (Australia)

http://www.gtlaw.com.au/gt/site/articleIDs/CE235B41D5A1B72DCA25716B0016575E?open&ui=dom&template=domGT

Submission to the Australian Competition and Consumer Commission

FANOC Special Access Undertaking
Dated 30 May 2007

http://www.accc.gov.au/content/item.phtml?itemId=788718&nodeId=ff339d1c314e3468eb6000682abe7a34&fn=FANOC's%20submission%20in%20support%20of%20its%20special%20access%20undertaking.pdf

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Economic Properties of the FANOC SAU

Project Team – Tom Hird (Ph.D.)
30 May 2007

http://www.accc.gov.au/content/item.phtml?itemId=788721&nodeId=d4766a3acfa748cc8cf5eb1d6eec6fe2&fn=Schedule%204%20%20NERA%20paper:%20Economic%20properties%20of%20the%20FANOC%20SAU.pdf

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Submission in response to the Commission's Discussion Paper
"FANOC Special Access Undertaking in relation to the Broadband Access Service - Discussion Paper"

Telstra Corporation Limited
27 August 2007

http://www.accc.gov.au/content/index.phtml/itemId/797540

Undertaking in relation to the Broadband Access Service - Draft Decision

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December 2007

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Response to ACCC Draft Decision regarding FANOC's SAU

Telstra Corporation Ltd
4 February 2008

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Ed Willett, Commissioner
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Australian Telecommunications Users Group

Graeme Samuel, Chairman
10th March 2005

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14 December 2006

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A Framework for the Assessment of Operational Separation Models

David Forman, Competitive Carriers' Coalition
June 2005

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Discussion Draft (Paper 5 in the CCC's Revitalising Competition Policy Discussion Papers Series)

Competitive Carriers' Coalition Inc.
March 2005

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Telstra Clear Limited
15 May 2007

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Pursuant to section 69F of the Telecommunications Act 2001, the Minister of Communications makes the following determination.

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TelstraClear Limited

23 November 2007

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For the 2006-07 Financial Year

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