INQUIRY INTO THE STRUCTURAL SEPARATION OF TELSTRA

Submission to the House of Representatives Standing Committee on Communications, Information Technology and the Arts

Communications, Electrical and Plumbing Union

January 2003

EXECUTIVE SUMMARY

The Communications, Electrical and Plumbing Union believes that the interests of the Australian community are best served by the retention of Telstra as an integrated, full service provider, held in majority public ownership.

The Union notes that the structure of Telstra and of the Australian telecommunications industry more broadly has been the subject of public debate for well over a decade. The Davidson Inquiry of 1982, the Carrier Review of 1990 and the Duopoly Review of 1994 all heard proposals for the structural reorganisation of Telecom/Telstra, whether on a geographic basis (as suggested by the precedent of the AT&T divestiture) or along product lines (infrastructure/services and its variants). Nevertheless, successive Australian Governments have chosen to retain the company intact. Similarly, Telstra management has resisted market pressures to "spin off" its mobile and internet arms and has, after internal analysis, rejected a model which could have seen the divestiture of the Customer Access Network (CAN).

The CEPU believes that these decisions have reflected an understanding of the dynamics and economics of the sector. Telecommunications is an industry characterized by significant economies of scope and scale, the basis of efficiencies from which the community stands to benefit. It is also an industry marked by rapid technological change. Regulatory interventions which seek to restrict carriers' product offerings and/or constrain their structural evolution risk the creation of inefficiencies and may erect barriers to innovation.

The present downturn in the industry and concerns over the rate of broadband take-up have prompted renewed calls for the splitting of telecommunications incumbents into separate network and services (wholesale/retail) companies in order to stimulate competition. As in the past, however, the proponents of such policies have failed to demonstrate how the possible benefits of such policies would outweigh their likely costs. On the whole, their arguments have been viewed sceptically by regulators and policy makers.

Both Oftel in the UK and state regulatory authorities in the US have rejected such proposals. The Union understands that a recent OECD draft report on the subject finds that the arguments in favour of structural separation are "inconclusive" and suggests that rather than resorting to such draconian measures governments should continue to refine current regulatory approaches. The CEPU endorses this conclusion and recommends it form the basis of ongoing policy in Australia.

INQUIRY INTO THE STRUCTURAL SEPARATION OF TELSTRA

Submission to the House of Representatives Standing Committee on Communications, Information Technology and the Arts

Communications, Electrical and Plumbing Union

January 2003

The Communications, Electrical and Plumbing Union (CEPU) represents 70,000 employees spread across the telecommunications, postal, electrical and plumbing industries. Its members play a major role in the development and maintenance of key elements of the national infrastructure. The Communications Division of the CEPU represents 40,000 employees in both the public and private sectors of the telecommunications and postal industries. The Division and its antecedents have contributed regularly to the successive public debates over the shape and direction of the telecommunications industry that have taken place over the last two decades. Our submission to the current inquiry reflects our long-held view that retention of Telstra as an integrated, full-service provider in majority public ownership is in the best interests of the Australian community.

Much of the material contained in this submission has been previously published by the Union in our June 2002 discussion paper, *What role for Telstra? A response to the Shadow Minister for Communications' discussion paper, "Reforming Telstra"*. The present contribution is largely an updating of that document in the light of ongoing policy debates, both in Australia and abroad.

1. Earlier Inquiries

The CEPU notes that proposals to structurally separate Telstra (formerly Telecom) have been considered during a number of previous inquiries. The models for structural reorganization have varied over time, reflecting changes in technology and industry dynamics. None of them, however, has found sufficient favour with government for it to be adopted as policy.

The Union believes that the rejection of such options to date reflects an understanding of the risks and likely costs of structural intervention and of the technical and legal difficulties that would attend it. The persistence of the proposals, on the other hand, largely reflects ongoing pressures from private sector companies, as they seek access to the national telecommunications infrastructure on ever more favourable terms.

The Union recognizes that the specific proposal before the inquiry also holds appeal for many who would like to see Telstra brought back into full public ownership. Nevertheless, in our view, the more fundamental driver of structural separation continues to be the desire of new entrants to maximize revenues and minimise regulatory imposts (such as the costs of universal service), irrespective of the long-

term impacts of structural interventions on consumer welfare. In this respect, little has changed over the last twenty years.

1.3. Davidson Inquiry (1982).

Two decades ago, the Davidson Inquiry heard proposals to end the then Telecom's monopoly on the provision of Australian telecommunications services and to provide favourable conditions for the entry of competitors focused on the business market. Business Telecommunications Services (BTS), a private sector lobby group, involving (*inter alia*) Publishing and Broadcasting Limited (PBL) and International Business Machines Australia Limited (IBM), argued for a reorganization of the industry to allow the competitive supply of a range of value added services.

Under the model proposed by BTS, a publicly owned Telecom would have continued to be responsible for the national provision of "basic" telecommunications services, defined as local and long distance fixed voice telephony and the national telegram service. "Enhanced" services, including mobile telephony, data, leased lines and telex would have been opened to competition, with Telecom obliged to establish a separate company (Telecom Enhanced) if it wished to participate in the anticipated growth of these market sectors. This requirement, it was argued, would be necessary to create a level playing field between Telecom and the new entrants and to lessen the opportunities for the former to crush its competitors through cross subsidies and predatory pricing.

Although the present proposal to split Telstra along infrastructure/services lines differs somewhat from the BTS scheme, the contours of the 1982-3 debate are remarkably similar to those of today. Under the BTS model, a (severely constrained) public sector utility with national responsibilities would provide the basic infrastructure to allow private sector profit maximization in selective areas of the market.

For its part, the Australian Telecommunications Employees Union (now part of the CEPU) argued that such an industry structure would:

- Deny consumers the benefit of the economies of scope and scale available to Telecom as a full service provider
- Encourage cream skimming of high growth, high revenue market segments
- Reduce Telecom's ability to cross-subsidise unprofitable services and hence undermine its statutory role as national carrier.

The Davidson Inquiry chose to set aside these concerns and endorsed the basic/enhanced services split. However, the election of a Labor government in March 1983 saw the Inquiry's recommendations rejected.

1.2. Carrier Review (1990)

Proposals to split Telstra into a number of smaller companies in order to facilitate competition arose again in the course of the Department of Transport and Communications (DOTAC) 1990 review of structural arrangements in the

telecommunications industry. That review considered the relationship between the then Telecom, the Overseas Telecommunications Corporation (OTC) and the satellite-based carrier, AUSSAT, prior to the market liberalization of 1991.

The policy debate arising out of this review eventually crystallized around two options – the so-called Beazley option for the creation of a second general carrier based on AUSSAT and the Keating option, which would have seen Telecom broken up into a number of smaller regional operators. The latter, inspired by the US precedent of the AT&T divestiture, would have seen a loss of economies of scale that a market as small as Australia's could ill afford, especially at a time when telecommunications was becoming increasingly internationalized. The successful Beazley option, while containing its own contradictions, was nevertheless informed by an understanding of the need to protect and strengthen the capabilities of the national carrier in the face of growing global pressures.

In the words of the Second Reading Speech to the *Telecommunications Act 1991,* the aim of policy was

> to create a world class telecommunications company that has the ability and ethos to compete vigorously in what will be a key industry in a very competitive global environment.[1]

The CEPU regards this objective as no less pertinent today.

1.3. Duopoly Review (1994)

Finally, the review of the general carrier duopoly, begun in 1994, considered and rejected proposals for the splitting of Telstra into separate infrastructure and services companies, the impetus for which came largely from the service provider lobby.

Frustration over access pricing issues had been a prominent feature of the duopoly period, not least because policy had deliberately distinguished between the right of carriers and those of service providers in this area. Critics argued that an equitable market structure, allowing all firms an opportunity to compete on their merits, would only be possible if all, including Telstra, had access to the national infrastructure on equal terms. This could only be guaranteed, it was suggested, through structural, as opposed to accounting, separation. The Service Providers Action Network (SPAN) indeed argued that the whole industry be organized along such structurally separated lines.[2]

In the CEPU's view, the latter position, while involving enormous technical and regulatory difficulties, at least had the merit of consistency. One of our major objections to the proposals to split Telstra into separate infrastructure and services companies is that it would leave the two resulting entities exposed to competition

---

[1] Kim Beazley, Minister for Transport and Communications, Telecommunications Bill 1991, Second Reading Speech, House of Representatives, *Weekly Hansard*, No. 8, 1991, p. 3094.

[2] Service Providers Action Network, "Beyond the Duopoly: Australian Telecommunications Policy and Regulation, Submission to the Minister for Communications and the Arts", November 1994, p.15.

from rivals who remained free to exploit all the benefits of vertical integration. We note that there are no voices, among those presently supporting the break up of Telstra, calling for a similar divestiture of Optus or of AAPT. We also note that the off-shore owners of these companies (Singtel and Telecom New Zealand) remain vertically integrated in their home markets.

We consider the implications of an asymmetrical application of the structural separation model in section 5. We note here, however, that neither the Labor government which initiated the 1994 review nor the Coalition government which succeeded it saw merit in such a policy.

1. Current Structural Separation Proposals: The Background.

Given the consistency of Australian policy over the last twenty years on this question, it may be asked why the structural separation proposal has been recently given a new lease of life. The Union believes that the answer to this question lies chiefly in the depressed conditions facing the industry, both at home and abroad.

The collapse of new market entrants since the height of the dot.com boom and the financial difficulties now being experienced by many of the world's telecommunications majors have led to fears that the competitive experiment is failing. Such concerns have been exacerbated by the relatively slow evolution of local loop competition, whether on the basis of infrastructure duplication or regulated access (local loop unbundling). This is in turn, it is argued, is retarding the rate of broadband take-up in many countries. These circumstances have provided fertile ground for access seekers to demand more radical pro-competitive interventions into the networks of incumbent operators.

Before elevating these largely opportunistic demands to the level of public policy, however, the CEPU believes that the causes of the current downturn and the barriers to both local telephony competition and broadband deployment need to be more carefully analysed. To the Union's mind, it is by no means obvious that all the current ills of the industry can be sheeted home to the behaviour (or indeed the very existence) of vertically integrated incumbents, as some proponents of structural separation tend to do.[3]

2.1. Global industry Downturn and Rationalisation.

The telecommunications industry worldwide is currently experiencing a slowdown of growth relative to the rapid expansion that occurred in the latter half of the 1990s. During the whole of the last decade, but particularly over its last years, the twin drivers of technological change (particularly the internet) and market liberalization combined to produce an explosion of investment in telecommunications assets.

This phase of global activity saw:

---

[3] See for instance, Budde, P. "Stop fighting change and lead the way," *Australian Financial Review,* 4 February, 2003 and Tanner, L., *Reforming Telstra,* May 2002

- Increased cross-border activity by the major telecommunications operators
- The creation of international alliances between such companies
- Investment in media and internet assets by telcos
- Massive investment in transmission capacity in both domestic markets and internationally

It is now widely acknowledged that the activities of this period directly paved the way for the consequent slump in the telecommunications industry world-wide:

- International alliances (e.g. the British Telecom/AT&T company Concert) have proven to be both unstable and costly.

- The high prices paid for both cross-border and domestic acquisitions have weakened the balance sheets of many of the leading European and US companies. (In the case of several European telcos, these weaknesses have been exacerbated by the high prices paid for third generation (3G) mobile licences).

- The creation of excess capacity in international transmission (submarine cables) has led, inevitably, to the collapse of several of those companies which sprang up to serve a demand for bandwidth which never materialised (Global Crossing, Level 3).

- Over-investment in domestic markets has been followed by the collapse of dozens of new entrants, most notably in the US, where over 60 alternative access providers disappeared during 2001-2002.

This crisis in the industry, which has raised the hitherto unthinkable prospect of a major world telco (e.g. France Telecom, BT) facing insolvency, has both fed into and been heightened by the wider slow down of world economic activity. Lower rates of revenue growth, combined with the existence of excess capacity, have led to a sharp cut back in spending in the industry, the effects of which have flowed through to other sectors such as manufacturing.

In response to these new conditions, several clear trends have emerged:

- A re-consideration of global strategies by major operators. British Telecom, for instance, has sold off many of its overseas assets in an attempt to reduce debt.
- A rising cost of capital for those companies which survive and hence a continuing squeeze on earnings
- More insistent calls for regulatory relief by new market entrants, largely in the form of pressure for more favourable terms of access to former monopolists' infrastructure, particularly the local loop.

2.2. The Downturn in Australia

It is in this context that arguments about the success or failure of telecommunications policy in Australia need to be considered. The Australian majors, notably Telstra, have not incurred the crippling debt levels that now threaten the viability of many of

their European counterparts. Nevertheless, the problems identified above can be observed in Australia, especially the creation of excess capacity in certain sections of the market.

During the duopoly period (1991-1997), opportunities for investment were limited by regulation. Full liberalisation has seen the number of licensed carriers expand from three to 90.[4] While many of these companies depend largely on existing infrastructure to provide services, a significant number have embarked on network build, buoyed by the expectation of a rapid rise in demand for bandwidth and fuelled by the ready availability of finance.

In 1999, the National Bandwidth Inquiry reported that the potential capacity of installed backbone networks in Australia exceeded usage by between 100 and 100,000 times. Since that time, more fibre optic cable has been rolled out along the east coast and across the continent. Yet as the Productivity Commission was told during its recent inquiry into competition in the industry, advanced technologies have

> .. the capability to enhance the capacity of a single fibre so that it would be capable of efficiently carrying the entire forecast load between Melbourne and Sydney for the next five years.[5]

Meanwhile, investment in rural and regional Australia has languished. The post-1997 period has seen the appearance of a small number of niche operators which have targeted the larger regional centres (Neighborhood Cable in Albury and Mildura, Agile in the Coorong), but it is doubtful whether such entrants will achieve the scale necessary to sustain their operations in the longer term.

Certainly, neither their activity nor that of other government-funded regional entrants such as the now defunct Green Phone, offers any plausible alternative to the role of Telstra, on whose ubiquitous network such companies continue to depend. Yet that network is suffering from the effects of long-term under-investment, especially in these same regional areas.

In short, liberalisation has to date offered no answers to the question of how to guarantee socially optimal patterns of investment in telecommunications infrastructure and services. In the meantime, it has produced an industry structure which is highly brittle and which is likely to undergo further rationalisation, especially given the higher cost of capital that its members now face.

- In time there may be a rationalisation of the Telstra and Optus HFC networks, which currently act as a drain on both companies' profitability.

- The high costs associated with the transition to third (or fourth) generation mobile networks are likely to prompt further rationalisation in this sector. This may take the form of network sharing or other joint venture activity (as with the current

---

[4] The 100th carrier licence was issued in May last year. To date 109 licences have been issued, but 19 of these have subsequently been surrendered.

[5] Productivity Commission, *Telecommunications Competition Regulation: Inquiry Report*, Canberra, 2001, p.91.

TCNZ/Hutchison agreement) but could also involve one or more of the present operators exiting the Australian market.

- Some rationalisation can be expected among the current backbone network providers (Flowcom, Nextgen, Amcom), given the degree of overcapacity in this section of the industry.

2.4. Some implications for policy.

In the CEPU's view, the behaviour of the telecommunications industry over the last decade poses certain challenges to those who place a quasi-religious faith in the rationality of financial markets and of corporate decision makers. It does not, however, lead us to conclude that Telstra should be structurally separated. On the contrary, the Australian experience suggests that it is the vertically integrated businesses that have been best placed to weather the turbulence of the industry during its phase of "irrational exuberance" and subsequent hangover. Over this period, both Telstra and Optus have generally outperformed competitors who operate largely as resellers (most of the smaller carriers) or in only one market segment (e.g. Vodafone).

Nor does our reading of these global trends lend support to the contention that it is the anti-competitive behaviour of incumbents that is primarily to blame for the failure of so many telecommunications enterprises over the last 2-3 years. Setting aside the problems that have been caused by administrative ineptitude on the one hand (the 3G auctions) and corporate fraud (Worldcom) on the other, the main cause of failure appears to us to have been the unrealistic business models adopted by so many entrants. These have too often been based on a cheerful disregard for the underlying economics of the industry (large economies of scope and scale) and/or on fanciful projections of demand.

This is particularly so in the case of many of the broadband aspirants who have sought to enter the high speed data market, whether through their own network roll-outs or on the basis of access to the copper "last mile" of incumbent operators. The collapse of so many of these companies in the US has fuelled proposals for the establishment of "wholesale only" network suppliers, either through the structural separation of current operators or through the creation of new companies.[6] Yet as Crandall and Sidak argue, the probable cause of these failures can be found in the "Field of Dreams" strategies ("if you build it, they will come") of the new market entrants.[7]

> Hundreds of upstarts rushed to build state-of- the-art networks to carry the expected surge of demand...But the demand didn't materialize as quickly as expected and the Baby Bells proved to be tough competitors for the upstarts. Today, more that 97% of

[6] For a discussion of the Alternative Distribution Company (ADCo) and LoopCo models, see Gabel, D. "Why is There So Little Competition in the Provision of Local Telecommunications Services?", Queens College Department of Economics and Massachusetts Institute of Technology: Internet and Telecom Convergence Consortium, October 3, 2002.

[7] Crandall, R. and Sidak, J.Gregory, "Is Structural Separation of Incumbent Local Exchange Carriers Necessary For Competition?" *Yale Journal on Regulation,* Vol.19.2, 2002, p.54.

fiber-optic capacity goes unused.[8]

Crandall and Sidak are also illuminating on the way strategies based on the shifting sands of arbitrage helped seal the fate of many US Competitive Local Exchange Carriers (CLECs). As has been the case in Australia, new entrants were able to exploit the opportunities presented by regulation of interconnection rates to extract large payments from incumbents for the termination of their traffic, primarily from Internet Service Providers. When the Federal Communications Commission (FCC) moved in April 2001 to address this issue, a key revenue stream began to dry up.

In Australia, there were initial attempts to sheet home the single most dramatic corporate failure in the industry - that of One.Tel – to Telstra's unreasonable "wholesale" prices. It is now generally agreed that the problem lay elsewhere – in the disarray that existed within the company in the billing area, which undermined cash flow, and in the strategy of acting as a loss leader in local calls in order to gain market share in mobiles.

In the Union's view, the full impacts of the excesses of the telco/dot.com boom are yet to work their way through western economies and it is likely to be years before the surplus capacity created in this phase of activity can be profitably utilized. In the meantime, company failures and industry rationalization can be expected to continue. In this process, many incumbents may well consolidate their position in the market. To attribute such an outcome to an insurmountable "dominance" is, however, to confuse cause and effect.

3. IS THERE A CASE FOR STRUCTURAL SEPARATION?

Such an analysis of recent market dynamics does not of itself, of course, constitute a final argument against structural separation, although it does provide a basis for scepticism about both the motivations and the rationale of some of the policy's proponents. Still, it remains true that market liberalization has not led to vibrant competition in all market segments and geographical areas. As discussed at 2.2 above, investment patterns have been (predictably) uneven, with regional and local area competition slow to develop. Critics of the current policy framework point to these circumstances as warranting further structural interventions.

3.1. Has Competition "Failed"?

For its part, the CEPU has long held the view that the opportunities for facilities-based competition in telecommunications would be limited by the basic economics of the industry – high fixed costs (a large proportion of which are sunk), lumpy investment requirements and significant economies of scope and scale. In Australia, the inherent limitations such fundamentals impose are exacerbated by the relatively small scale of the domestic market and the country's demographic peculiarities i.e. the concentration of the population along the eastern seaboard. Add to this the distortions induced by

[8] ibid, p.54 quoting Zuckerman, G and Soloman, D., *Telecom Debt Debacle Could Lead to Losses of Historic Proportions,*, Wall Street Journal, May 11, 2001.

regulated retail pricing structures and an explanation for the investment patterns witnessed over the last decade begins to emerge.

Thin regional markets in Australia provide limited opportunities for profitable duplication of fixed network infrastructure. Even in the highly concentrated urban areas, however, competition in local fixed network provision has been largely restricted to CBDs. It may be argued that the failure of significant competition to emerge in the provision of local service is in part an effect of retail price regulation and that if access prices were allowed to rise closer to cost (through both rebalancing and deaveraging), more competitive opportunities would be created. Recent analysis suggests, however, that even if the subsidies that have historically underpinned retail access charges were eliminated, widespread duplication of local networks would remain uneconomic.

Gabel[9], in his recent examination of the economics of local loop provision in the US, identifies three sources of economies of scale that act as barriers to competitive entry in the local call market:

- Traditional facility installation costs (high capital and construction costs, fixed costs largely sunk)
- Billing and operational support system costs
- Customer acquisition costs.

Gabel estimates that the presence of scale economies in these areas means that a competitor would need to gain 50% market share to enjoy a cost structure that was competitive with the incumbent's.[10]

Comparison of Incumbent and Entrant Monthly Costs per Loop

Incumbent's Market Share	Entrant's Market Share	Entrant's Unit Cost/Incumbent's Unit Cost
98%	2%	4800%
92%	8%	1050%
90%	10%	800%
80%	20%	300%
70%	30%	133%
60%	40%	50%
50%	50%	0%

This conclusion would suggest that, theoretically at least, local call markets may support a duopoly ..

..but in the real world it is impossible for a new entrant to gain 50% market share upon entry due to the associated risks entailed and the natural

[9] Gabel, *op cit,* p.3ff
[10] ibid p.5

reluctance of consumers to switch to an unknown and new provider from which service may not be reliable.[11]

The CEPU acknowledges that the economics of local service provision may change as alternative access platforms develop. For the time being, however, competitive opportunities in this area of the market will be small. But this does not necessarily represent a "failure" of policy – rather an inherent limit to what can be reasonably expected (and rationally promoted) at any given point of technological development.

In fact Australian policy over the last decade has not been based on an assumption that competition would develop evenly and in all product markets once legislative barriers to entry were removed. The creation of the general carrier duopoly in the early 1990s involved roll-out requirements being placed on Optus, but these never extended to Customer Access Network (CAN) replication. Indeed, the early mandating of preselection pointed to an assumption that call termination (and by implication local call competition) would be accomplished largely through regulated access, rather than direct connection to the customer. [12]

This much, at least, of Australian policy has been rational. That said, access conditions and pricing have remained vexed issues not only in Australia but in all countries where competition has been introduced. Calls for structural separation are frequently based on the contention that access regimes are not working and, by definition, cannot offer the same certainty, equity and pricing advantages as could a pure network operator. Counter arguments stress that:

- Access regimes, which in many countries are of relatively recent birth, are still undergoing evolution and refinement and that
- Structural separation is likely to involve costs that outweigh any likely public benefits.

3.2. Structural separation or regulated access?

The Union notes that the a commonly proposed model of structural separation involves divestiture of the incumbent's fixed Customer Access Network (CAN) only, as opposed to the more comprehensive infrastructure/services split proposed in the recent Australian debate. The Union believes that this latter model has specific weaknesses that will be discussed below. Both models, however, are based on the proposition that breaking up an incumbent to create a pure network operator would:

- Guarantee even-handed and non-discriminatory treatment of all market participants in relation to access prices and conditions
- Create efficiencies in both the wholesale and retail operations of the incumbent by bringing the demands of each separate business into sharper focus

---

[11] ibid, p.5.

[12] Australian policy in this regard differed notably from that in the UK, where preselection availability was delayed in order to promote infrastructure competition.

- Reduce regulatory costs by greatly narrowing the area of regulation and reducing incentives for regulatory gaming.

Against these claims it can be argued that:

- Structural separation would not automatically guarantee non-discrimination. A wholesaler may still have commercial incentives to offer more favourable access prices to a particular retailer, whether its former affiliate or another company. Regulatory vigilance would still be required.
- The efficiencies that may flow from separation are largely hypothetical whereas the costs of separation are more certain, whether in the form of the initial costs of policy implementation, the need to compensate shareholders or the loss of existing efficiencies (especially economies of scope).
- Structural separation does not in itself resolve the problems that arise as a result of the existence of natural monopoly elements in telecommunications, it simply shifts them to a different site. Access prices would continue to be contentious and to be the subject of regulation.

Indeed far from lightening the regulatory burden, this new and radical intervention would almost certainly increase costs to both firms and the public, as regulators struggled to contain industry activity within the new categories. Telecommunications is a technologically dynamic industry and the boundaries between infrastructure and services (or carriage and content) are continually shifting. In the US, the only country to have implemented a restructuring comparable in scope to that proposed for Australia, huge sums have been spent in regulatory arguments over the categories imposed by the Modified Final Judgement. In the Union's view, the chief beneficiaries of this process have been the legal fraternity.

In sum, the Union does not consider that the superiority of structural interventions over administrative measures (i.e. access regulation) is by any means certain, whereas the risks and likely costs of structural separation can be far more readily identified. These are discussed below.

3.3. Costs of structural separation.

3.3.1. Implementation costs. Costs which will be indisputably incurred as a result of structural separation are those associated with initial policy implementation. In a recent US case, involving the proposed splitting of Verizon, these costs were estimated to be of the order of US$800 million.[13] It must be expected that these costs would ultimately be passed on to consumers through pricing decisions.

3.3.2. Efficiency losses. The more substantial and ongoing costs of structural separation, however, would be those that flowed from the loss of efficiencies enjoyed by the vertically integrated operator. These include those that derive from the economies of scope available to the multi-product firm. A telecommunications operator which provides both infrastructure access (connection, maintenance) and services over that same infrastructure will enjoy economies of scope in such areas as

[13] In Docket No. M-0001353 before the Pennsylvania Commission

billing, customer acquisition and internal administration (human resources). Billing, in particular, is a notoriously expensive element of any telco operation and requirement that such a function be duplicated must impose substantial additional costs on companies and, eventually, consumers.

3.3.3. Transaction Costs. Crandall and Sydak also point to the efficiencies enjoyed by the vertically integrated firm in the coordination of investment and production functions.[14] Such co-ordination of the stages of product development and delivery (research, identification of investment requirements, product trialling, demand forecasting, pricing and marketing) is particularly important in industries operating on the "technological frontier", where internal processes and structures need to be highly responsive to change. Where product evolution has to be managed through external contractual arrangements, firms are likely to encounter expensive delays, arguments over accountabilities and imperfect control over end product.

It is, of course, true that telecommunications company structures are continually changing and that, at any one time, decisions may be made to contract out certain elements of a vertically integrated business. However, this is quite a different matter from enforcing a permanent division between elements of a company's operations through regulation.

3.3.4. Impacts on innovation and investment. Structural separation between infrastructure and services operations is likely to involve further longer-term costs in the form of disincentives to innovation and investment. This possibility should be of particular concern at a time when government is considering how the transition to broadband networks is to be progressed. Again, the problem is essentially one of coordination between production and investment in a climate of risk. If firms are to be denied the first mover advantage that comes with product innovation, where will the incentive come from to ensure the complementary network development?

Innovation is also likely to be inhibited by the regulatory difficulties noted in 3.2. above. Structural separation of telecommunications networks poses particularly intractable problems at a technical level, given the growing complexity of modern systems and the presence of intelligence in different network layers. Where, in evolving networks, do "wholesale" carriage services end and "retail" value-added services begin? Where, for instance, would regulation locate such intelligent network services as caller line identification (CLI) and call waiting/ forwarding and where would the future incentives lie for the further development of such network capabilities for a pure utility operator?

Such difficulties have always bedevilled regulatory attempts to draw a neat line between different telecommunications functions. The original AT&T divestiture order, for instance, also required the RBOCs to offer "enhanced services" (i.e. services other than simple voice telephony) through separate subsidiaries. Within two years of divestiture, the requirement had been abandonned, the Federal Communications Commission (FCC) having concluded that:

---

[14] Crandall and Sidak, *op.cit.*, p.31

> Structural separation imposes opportunity costs by discouraging the BOCs from designing innovative enhanced services that utilize the resources of the public switched network. Such innovation losses, resulting from the physical, technical and organisational constraints imposed by the structural separation requirements, directly harm the public, which does not realize the benefits of the new offerings.[15]

3.3.5. Accountability issues.

Crandal and Sydak further argue that vertical integration allows a closer control over product quality:

> A cost of vertical separation is the loss of a single point of accountability. It is difficult for a customer to hold multiple vendors accountable for some form of product failure. Without this single point of accountability, consumers are left "calling firms" service departments and searching for the party responsible for the failure.[16]

Competition based on resale has already introduced these problems into telecommunications markets. That is no reason, however, to compound them through further regulatory interventions.

4. INTERNATIONAL EXPERIENCE.

Given the uncertainties that surround the structural separation proposal, it is not surprising that regulators and policy makers have to date received the renewed calls for such interventions with scepticism.

4.1. The United States.

In the US, a number of applications for the structural separation of certain RBOCs have been heard by state commissions. To date, however, no such moves have been successful. In 1999, the Public Utilities Commission of the state of Pennsylvania ordered Verizon[17] to structurally separate its retail and wholesale businesses, but the order was subsequently modified (after a state court challenge by Verizon) to require accounting separation only. In March 2001, the PUC acknowledged that the structural separation it had originally supported would involve substantial costs to implement and would require at least as much ongoing regulatory monitoring as the existing access arrangements.

Similar moves in other US state jurisdictions have also faltered. In March 2001, the Florida Public Service Commission was asked to order the structural separation of

---

[15] Quoted in Crandall and Sidak, *op.cit.* p.51

[16] Alchian, A. "Vertical Integration and Regulation in the Telephone Industry", 16 MANAGERIAL AND DECISION ECONOMICS 323, 323-26 (1995), quoted in Crandall and Sidak, *op.cit* p.33.

[17] Verizon, a "local" US carrier, was formed through the merger of Bell Atlantic (which itself had merged with fellow RBOC Nynex) and long distance provider GTE. Verizon boasts a customer base of some 134m access lines and 29m mobile customers.

Bell South to facilitate competition in local markets. The request was rejected on the basis of the "costs and inefficiencies" it would create, as well as on the grounds that such drastic remedies were premature, given existing access provisions:

> Each additional regulation imposed on BellSouth creates costs and inefficiencies; may interfere with other regulations previously imposed; and brings uncertainty to an industry in which stability is necessary to foster competition. Not only is it premature to judge the efficacy of our earlier efforts, but it is also premature to determine that another solution is necessary.[18]

4.2. European and UK Views.

Much has been made in recent industry debate of the OECD paper, *Structural Separation of Regulated Industries.*[19] This paper finds merit in structural separation in industries characterised by natural monopoly elements and suggests that in many countries there remains considerable scope for such interventions.

As the OECD is forced to acknowledge, however, the only example of mandated structural separation (as opposed to line-of-business restrictions, which the paper loosely includes in its discussion) in telecommunications is the AT&T break-up, a decision which is now in the course of being unwound. In Europe, countries which have examined the option have to date rejected it.[20]

The OECD reports, for instance, that the Norwegian Parliament voted down a proposal for separation of the Telenor network into a separate company in 1999. Similarly, the UK regulator Oftel has resisted structural remedies to address competition issues arising as a result of vertical integration.

As Oftel explained in an April 2001 report

> Some commentators have suggested that a means of addressing ...competition concerns is to prevent the creation of vertically-integrated companies, and thereby forcibly separate content and carriage markets. In some cases, vertical integration enacted through merger and acquisition may be adjudged to be against the public interest. But Oftel believes an all-encompassing prevention of vertical integration would be unjustified, since it may hamper innovation in new services, damage competition across different platforms and hinder UK firms competing in world markets.
>
> Rather than precluding vertical integration altogether, it is more

---

[18] Order Granting BellSouth's Motion to Dismiss AT&T's and FCCA's Petitions for Structural Separation, Dkt No.010343-TP, Florida Public Service Commission, Nov 6, 2001 (downloaded from www.psc.state.fl.us/dockets/documents/01 on 6/11/02)

[19] *Structural Separation in Regulated Industries,* OECD, Paris, 2001

[20] A variant of structural separation was imposed on the Japanese incumbent NTT, with its domestic operations being split between two "local" companies and its mobiles division established as an independent entity. All companies remained, however, under the umbrella of a single holding company.

> appropriate to address any competition concerns through action by the sectoral regulator ...
>
> The potential problems which might emerge when vertically-integrated operators have market power are not new. More importantly, the solutions to such problems are well-established. For instance, BT is subject to obligations relating to the provision of access to its network on non-discriminatory terms. These obligations help prevent market power in one market from being leveraged into another market. [21]

Despite ongoing pressures from BT's rivals for such separation, a May 2002 House of Commons Committee report simply recommended that Oftel (or its successor OFCOM) "take account" of such propositions. [22] In its July response, Oftel reaffirmed its confidence in its existing powers and made it clear that a forced break-up of the company was not on its agenda.

> For Oftel to conclude that there is a compelling argument to support a forced split of BT would require confidence that the benefits for UK consumers outweigh the disbenefits. To expose the industry - not just BT - to the uncertainties of a Competition Commission reference would be a disproportionate response especially in the light of current turbulence in financial markets.[23]

The Union understands that this stance is likely to be endorsed by the OECD in a follow-up paper to their 2001 report. In the new study, the case for structural separation in telecommunications in examined in closer detail.

5. BREAKING UP TELSTRA

The CEPU has discussed specific proposals for the breaking up of Telstra in its June 2002 discussion paper, *What Future for Telstra.* That paper addresses both the model under consideration in this inquiry and other proposals, notably those of John Quiggin, which have been canvassed in recent years.

The CEPU has some sympathy with the political thrust of these proposals, insofar as they reflect a desire to see key elements of the national infrastructure brought back into full public ownership. However, while at first blush structural separation may appear to provide a solution to the policy problems that arise from Telstra's hybrid ownership structure, we believe such a step would in fact compromise the company's abilities to perform its historic functions as national carrier.

---

[21] Oftel, *Open Access: Delivering effective competition in communications markets,* April 2001, at 4.13- 4.15

[22] The Committee's Report can be found at www.publications.parliament.uk/pa/cm200102/cmselect/cmcumeds/539/53903-htm#a1

[23] Oftel, *Oftel's response to the Fourth Report from the Culture, Media and Sport Committee, Session 2001-02,* 17th July, 2002, p.3.

In Section 3 we considered the objections that exist to structural separation at the theoretical level. In practice, however, the model is, in our view, even more destructive because it would be implied asymmetrically. We note that no proponent of the policy in Australia is today suggesting that the whole industry be reorganised along infrastructure/services lines.

There is no proposal to require either Optus or AAPT to divest its fixed network. Nor is it being suggested that Hutchison and Vodafone put their spectrum into separate companies. It is only Telstra to whom this policy would be applied. At the same time, under the proposed model, there would be no barriers to other wholesalers operating in competition with TelstraNet. These companies would presumably be free (as they are now) to "cherry pick" the market by concentrating their offerings along thick routes,

The CEPU believes that such an industry structure would be highly destructive. Cut off from the synergies and incentives involved in retail product innovation, competing against both vertically integrated rivals and other "wholesale" carriers which did not bear national responsibilities and still, of course, being subject to price regulation, TelstraNet would soon face financial and technological stagnation. In our view, the company's capacity to fulfil its present regulatory obligations and its ability to provide a national platform for the transition to broadband networks would be seriously compromised.

As we have argued in our submissions to both the Estens and the Australian Network Inquiries, the CEPU believes that the Telstra fixed network still has a central role to play in that transition. For it to do so, however, a major investment programme will be required, as we believe we have demonstrated in our analysis of the current state of the PSTN, and particularly of the CAN. The challenge for policy is to identify the appropriate mix of regulatory requirements and commercial incentives that will be needed to encourage such investment on a national basis. To the Union it appears self-evident that a utility model is no answer to this challenge.

It is therefore with some relief that we find a policy consensus beginning to emerge around this issue, at least among the political parties. The Union believes this clears the way for a more productive discussion of the way forward for Australia in the development of our telecommunications capabilities. We would reaffirm our view, however, that full privatization of Telstra provides no more answers to the difficulties facing policy makers in this area than does structural separation.