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Separating New Zealand's Incumbent Provider: A Political Economy Analysis

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Abstract

The economic and policy literature on vertical separation of incumbent telecommunications providers indicates that the costs and risks of separation are high, and the benefits hard to identify. Consequently, a general consensus has emerged that separation should be mandated as a regulatory remedy only when there is a proven risk of discrimination occurring in downstream retail markets, all other feasible regulatory avenues to control the risk have been eliminated, and a cost-benefit analysis indicates a favourable outcome for separation.

In 2007, the New Zealand government passed legislation requiring the incumbent telecommunications provider, Telecom New Zealand, to functionally separate into stand-alone network, wholesale and retail operations. The decision was notable for the absence of economic analysis of the case for separation, and the requirement for separation to be implemented concurrently with local loop unbundling, which was mandated in legislative changes made in 2006. In the absence of an economic rationale, and consistent with the recent history of the sector, it appears that political factors best explain both the motivation to require Telecom to separate, and the manner in which the separation was imposed. New Zealand's separation policy process thus provides a questionable model upon which to base economic-principled policy-making in other jurisdictions.

Introduction

Vertical separation of competitive network services from the (presumed non-competitive) local loop network of an incumbent operator is a costly, risky and radical step that fundamentally changes the structure of the industry in which that firm participates. Whether adopted voluntarily or by legislative or regulatory mandate, there is a general agreement amongst academics, policy-makers and industry participants that it should not be undertaken lightly.

On the one hand, separation appears to offer the promise of a “level competitive playing field” whereby the incumbent’s ability to discriminate in favour of its own wholesale and retail operations is severely constrained (Cave, 2006; 2010). However, on the other hand its substantiated costs are large in magnitude and wide-ranging in effect (Xavier & Ypsilanti, 2004), and the anticipated benefits are at best highly uncertain and difficult to quantify (Crandall & Sidak, 2002; Cave, 2002; OECD, 2003; Crandall, 2005). Moreover, once imposed, separation is generally considered irreversible (Xavier & Ypsilanti, 2004). Consequently, caution has been advised when considering its imposition (e.g. OECD, 2003). A broad consensus of policy frameworks for evaluating separation has emerged. This includes both the elimination from feasible consideration of all other possible regulatory options *and* the presence of a cost-benefit analysis that clearly demonstrates a net positive benefit before any mandatory separation is required by legislators and regulators (e.g. Xavier & Ypsilanti, 2004; de Bijl, 2005).

In this context, structural and behavioural choices for separation—both the form of separation undertaken (on a continuum between full ownership separation at one end and simple accounting separation at the other - Cave, 2006) and the manner in which it is imposed (voluntary versus mandatory) — should be considered strictly secondary to the determination of whether it offers the most cost-effective way of remedying the perceived market imperfections. Clarity about exactly what these imperfections are, and compelling evidence that in the long run, the proposed remedy is the most efficient available amongst a range of possible alternatives, are necessary.

Extreme caution is required because the mere existence of either a bottleneck or risk of discriminatory activity occurring is insufficient to justify mandatory separation. Given the high costs and uncertainties associated, and the extent of fixed and sunk costs involved in telecommunications networks, separation will have a substantial negative effect upon investment incentives for both the current operator and infrastructure competitor entrants when bypass is likely (that is, effective infrastructure competition is imminent) (de Bijl,

2005). The exact imperfections that separation is to address must be identified to ensure that the instruments under which it is imposed are aimed at the appropriate target. It is important therefore that separation is not viewed simply in isolation, but in conjunction with the entire range of regulatory instruments alongside which it will be operating.

Both access regulation and separation are predicated upon the assumption that industry structural changes are necessary *precisely because* the network concerned is an enduring natural monopoly for which bypass is infeasible (Alleman & Rappoport, 2005). Access regulation stimulates services competition as a second-best to full infrastructure competition (OECD, 2003). To the extent that the ‘ladder of investment’ is a variation of access regulation, it derives its legitimacy from the assumption that bypass is feasible (and has not emerged because of exertion of dominance by the incumbent) and its success is measured by entrants investing in successive rungs until they eventually become full infrastructure competitors (Cave 2006a). As separation interferes with the incentives to invest, it begs the question of why it would be employed in an environment where the ‘ladder’ has already been implemented. To encourage investment on the one hand, but then impose an instrument that is inimical to investment incentives appears perverse, except as an acknowledgement of the failure of the ‘ladder’ to deliver its intended outcome. That is, either infrastructure competition will not emerge because the network concerned is a true natural monopoly (in which case it is inappropriate to encourage any investment other than that of the incumbent, as it constitutes an unnecessary duplication) or the regulations imposing the ladder have failed. In the latter case, it is important to distinguish between the failure of the ladder as a consequence of foreclosure by the incumbent (of which there is incontrovertible evidence) and the inability of the range of regulatory mechanisms so far employed to engender the degree of infrastructure competition sought.

It might be expected, therefore, that mandatory legislated separation in those jurisdictions in which it has been imposed has been accompanied by rigorous analysis. This should include both an assessment of the state of both competition and regulation in which the firm to be separated is operating, and an empirical assessment of the costs and benefits of the proposed instruments. If separation is to be mandated in order to address foreclosure, a test of the adequacy of the policy-making process via which separation is imposed should therefore look for unequivocal evidence of both the existence of a material discrimination risk. If it is to address shortcomings in the regulatory processes, then the assessment should include a detailed theoretical and empirical assessment of the efficacy of the proposed separation arrangements and their superiority over other possible remedies. In either case, empirical assessment must take account of the extent to which separation will affect the nature and

extent of future network investment. A statement of how the separation regulations will interface with existing regulatory instruments could also be expected.

This paper examines the policy-making processes via which separation has been imposed on New Zealand incumbent network operator Telecom. Section one provides a brief history of New Zealand telecommunications regulatory environment from 1987. This analysis sets the long-run industry and policy context in which the decision was made in 2006 to separate Telecom into network, wholesale and retail operations. Sections two and three respectively document the processes over the period 2005-2008 via which separation was firstly proposed and legislated, and then subsequently imposed. Section four discusses the adequacy of the New Zealand process, benchmarked against the aforementioned expectations of policy process adequacy.

Contrary to theoretical expectations, the New Zealand example has been characterised by an absence of principled economic consideration, and overt politicisation of the processes via which separation has been imposed. It would appear that political, rather than economic factors best explain both the motivation to separate Telecom and the manner of the policy's imposition. The pursuit of increased competition, in order to be seen to deliver upon a populist electoral commitment, appears to have prevailed over the historic economic efficiency considerations and arms-length discharging of the regulatory function that prevailed in the period leading up to separation. Consequently, Telecom's separation has proceeded despite the substantial transaction and investment opportunity costs incurred and without any evidence of the benefits accruing being sufficiently larger than those evidenced in other jurisdictions in order to compensate for the New Zealand market's substantial scale disadvantages.

The New Zealand separation policy development process is therefore unsuitable as a model for principled policy-making in other jurisdictions.

1. *Efficiency and the Separation Debate in New Zealand: 1987-2005*

Debate about vertical separation of the incumbent New Zealand telecommunications provider Telecom New Zealand originated from decisions taken in the 1980s to separate telecommunications from the banking and postal services operated for over one hundred years by the Government-owned Post Office and privatise the resulting entity (Howell & Sangekar, 2009). When Telecom was incorporated in 1989, separation of the local access network from long distance services, similar to that undertaken contemporaneously in the United States (Crandall, 2005) was considered, but was ultimately rejected in favour of a single integrated firm. In part, the decision was influenced by financial advice that a higher price might be

expected upon privatisation for an integrated firm (Wilson, 1994), reflecting a contemporary market view that in New Zealand vertical integration offered scale and scope economies.

1.1 ‘Light-Handed’ Regulation

At the same time, the Government rejected industry-specific regulation of former Government-owned infrastructure businesses in favour of generic competition law, albeit with additional disclosure and contractual obligations and the threat of future ministerial price control being imposed on formerly Government-owned businesses holding a dominant market position (Boles de Boer & Evans, 1996). These arrangements have come to be known as New Zealand’s ‘light-handed’ approach to the regulation of dominant firms (Evans, Grimes, Wilkinson & Teece, 2006).

Pivotal factors in the decision to adopt a ‘light-handed’ regulatory approach were New Zealand’s small size, geographical isolation, low population density, high concentration levels in most significant industries and the very substantial overheads of maintaining industry-specific regulation (Howell, 2007). New Zealand has a population of only just over 4.3 million people with only 471,000 significant businesses and 1.6 million households.¹ The three-firm concentration ratios in almost every significant industry (even those without significant scale effects) exceed 90% (Arnold, Boles de Boer & Evans, 2002).

The historic decisions to privatise and ‘lightly regulate’ a vertically-integrated Telecom and several other formerly state-owned businesses have engendered long-standing divides in the New Zealand political landscape between the politicians who oversaw the initial decisions (the Labour Government of 1984-1990) and perpetuated the policies (the National and National-led Governments of 1990-1999) and opponents favouring greater Government involvement in the economy and wishing to differentiate themselves from decisions that were highly contentious due to allegations that they were undertaken without a popular political mandate (predominantly the Labour Party leadership dating from the early 1990s) (Bassett, 2008).

Following extensive litigation between Clear Corporation and Telecom from 1991 to 1994 over Telecom’s alleged exertion of its dominant position (Telecom was ultimately found by the Privy Council not to have acted anti-competitively), structural separation (along with other possible changes to the regulatory regime) was later revisited by a joint Treasury and Ministry of Commerce (1995) investigation. Consistent with the theoretical recommendations for robust separation policy analysis, efficiency-based criteria (including the costs and risks of regulatory as well as market failure) were utilised to develop a cost-benefit analysis of the

¹ Data from Statistics New Zealand, 2008. www.stats.govt.nz

prevailing arrangements and a number of alternatives, including various degrees of vertical and ownership separation. The review found no conclusive evidence that the existing structural and regulatory arrangements had “failed” in respect to the objective of maximising the contribution of the telecommunications sector to the overall growth of the economy through the promotion of economic efficiency (Howell, 2007).

1.2 Industry-Specific Regulation

However, persistent dissatisfaction amongst Telecom’s competitors and political opponents of ‘light-handed’ regulation culminated in 2000 (following the election of a Labour-led coalition Government in 1999) in another sector review (MED, 2000). Industry-specific regulation overseen by the Telecommunications Commissioner was introduced via the Telecommunications Act 2001. Nonetheless, the pursuit of economic efficiency as a prevailing sector objective was reinforced in Section 18(2), which required the Commissioner to take account “in determining whether or not, or the extent to which, any act or omission will result, or will be likely to result, in competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand, the efficiencies that will result, or will be likely to result, from that act or omission”.

Consistent with the Act, subsequent Commission recommendations were underpinned by cost-benefit analyses undertaken using efficiency-based decision criteria (Howell, 2008). Notably, in 2003, using total welfare as the decision metric (Hausman & Sidak, 2005), full local loop unbundling was rejected in favour of limited bitstream unbundling as “the overall benefits from unbundling are not sufficiently persuasive to satisfy the Commission that a regulated solution is warranted” (Commerce Commission, 2003, p.v). Furthermore, twice (2005 and 2006) the Commission recommended regulation of mobile termination rates, on the basis of increased consumer welfare (Howell, 2007).

However, as the Telecommunications Act 2001 empowers the Commissioner only to make recommendations, which must subsequently be either approved or rejected by the Minister (with appropriate legislative changes made), there is no binding obligation on politicians to legislate consistent with the efficiency objective. Whilst the Minister accepted the local loop recommendation (a decision very unpopular with Telecom’s competitors, despite the additional imposition of broadband account and market share targets), both mobile termination recommendations were rejected in favour of a Ministerially-brokered contractual agreement (Howell, 2007).

2. The 2005-6 'Stocktake'

Vertical separation of Telecom was not addressed again specifically as a remedy for any alleged market or regulatory failures until May 2006, when it was proposed as one of the possible options in a review of the industry instigated by the Minister of Communications in November 2005. The "stocktake" review in part fulfilled the minority Labour Government's telecommunications policy in the September general election campaign, which included a promise to closely monitor and enforce unbundling commitments that Telecom had made, and to ensure the Government's targets for broadband uptake were met. In the year ended December 2005, Telecom sold 11% more connections than agreed with the Minister in 2003 as a consequence of his accepting the Commissioner's bitstream unbundling proposal. However, only 24.5% (rather than 33%) were retailed by Telecom's competitors (Commerce Commission, 2006).

The stocktake was led by officials from the Ministry of Economic Development (MED), rather than the Telecommunications Commission. Increased economic efficiency was replaced as the principal objective by "advancing policies to ensure that the telecommunications sector becomes more competitive and that we achieve faster broadband uptake in line with our competitors" (MED, 2006, para. 2). The report was tabled in Cabinet in May 2006. The primary recommendation was mandatory full local loop unbundling. Separation was proposed as a subsidiary recommendation to be invoked only if the desired outcomes were not being achieved via the preferred instruments: "that structural separation of Telecom into a wholesale and retail business, to remove incentives to impede access to its network for competitors, be kept under review in case there are on-going difficulties with implementation of the Government's broadband objectives" (MED, 2006, para. 10).

2.1 Inadequate Empirical Analysis

Scant literature reviews and no empirical cost benefit analyses were undertaken during the stocktake, even though the Commissioner's extensive 2003 local loop unbundling (LLU) analysis found only a very small net benefit and very substantial risks, especially in respect of future investment incentives and stranded competitors' assets in light of Telecom's proposed Next Generation Network (NGN) investments. Instead, regulatory costs were presumed to be lower in 2006 than when the Commissioner undertook his analysis, thereby increasing the desirability of the proposed regulations (MED, 2006a, pp..52-53). On the basis of OECD officials' assertions, the stocktake authors did "not consider that there are any disincentives present for core network infrastructure investment under the proposed packages" (MED, 2006a, p.54).

The fiscal risk associated with the proposed changes was assessed as neutral because the increased regulatory costs would be passed on to the industry participants (MED, 2006a, p.50), and that whilst production costs would increase in respect of regulatory operational and information burden, it was presumed most would be borne by Telecom and “the increased costs for Telecom are considered to be minimal compared to their total turnover, and to be significantly offset by the benefits to consumers and other market players” (MED, 2006, para. 154). Whilst Telecom would have less control over its network infrastructure and would face increased competitive pressures, the negative effects upon the firm’s profitability, return on investment and share price were couched as only possible, not certain, outcomes (MED, 2006a, p.52). In the two months following the tabling of the stocktake report, Telecom’s share price fell from \$5.60 to \$4.00 (ordinary share value on the New Zealand Stock Exchange), representing approximately \$4 billion lost shareholder wealth, approximately \$1 billion of which was incurred by New Zealand.

Benefits were deemed to be primarily manifested in reduced costs to access seekers (MED, 2006a, p.51) (although access-seekers were already buying Telecom services (including bitstream access) at regulated cost-based prices and increased competition increasing the uptake of broadband services, although “consumers might expect to benefit through” unquantified price reductions, expanded services and product innovation (MED, 2006a, p.53).

To the extent that any possible future separation of Telecom might affect the cost-benefit trade-off, benefits cited were the elimination, discrimination, and cross-subsidisation, and a reduction in regulatory overhead (MED, 2006, para. 72-73), whilst (unquantified) costs included one-off adjustment costs, loss of (unidentified) scale and scope economies, delays in broadband development and the time taken to enforce the remedy relative to other interventions including full unbundling (MED, 2006, para. 73). Increased prices were seen as a likely consequence of separation, especially if it was imposed compulsorily (ibid). The question of whether Telecom actually had or might engage in either discriminatory behaviour towards competitors or cross-subsidisation amongst its horizontally and vertically integrated activities was not raised in either the stocktake report or supporting documentation. Over twenty years, Telecom has been twice prosecuted under the Commerce Act for alleged anti-competitive behaviour and was found not guilty on each occasion (Howell, 2008). Cave (2006) likewise notes that despite many allegations of anti-competitive behaviour being made against BT prior to its separation, “not one of which led to a formal finding adverse to BT” (p 99).

Separation thus appears to have been considered in the stocktake as simply one of the array of regulatory tools available to increase both competition (via the elimination of a potential anti-

competitive action) and New Zealand's broadband uptake (despite the identified apparent contradictory effect upon broadband market development).

2.2 From Commercial Offer to Policy Imperative

A Bill implementing unbundling and potential separation was sent to the Finance and Expenditure Select Committee on 29 June 2006.

Contemporaneously, Telecom announced its intention to undertake a voluntary separation of its wholesale and retail fixed line activities, and offered to enter into some form of legally binding agreement with the Government. The Government indicated at the time that if a robust operational and accounting separation model could be achieved, then full structural separation might not be legislatively necessary.

However, on 28 November 2006, the Select Committee reported back to the House recommending that the legislation be amended to provide for future mandatory full three-way separation of Telecom according to a process activated by the Minister at some unspecified future date. The statutory changes to the Telecommunications Act were passed into law on December 18, 2006. The purpose statement relating to Part 2A covering separation notes it is intended to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications in New Zealand; require transparency, non-discrimination and equivalence of supply; and facilitate efficient investment in telecommunications infrastructure and services.

3. Mandatory Separation: 2007-8

The Minister of Communications announced on April 5 2007 his intention to proceed directly with mandatory separation of Telecom, as per the revised Act. Mandatory separation was therefore activated some eleven months *before* March 13, 2008, when the first unbundled Telecom loops were sold. In practice, development of the separation framework proceeded in parallel with development of the infrastructural and institutional arrangements for local loop unbundling. 'Separation Day'—when Telecom was officially separated into stand alone network (re-branded Chorus), wholesale (Telecom Wholesale) and retail (Telecom Retail) arms - was March 31 2008, just over two weeks after the first unbundled local loop was sold.

3.1 A Fait Accompli

The separation discussion documents (MED, 2007; Azimuth, 2007; Network Strategies, 2006; 2007) establish that a three-way separation would occur exactly as provided in the Act, without the benefit of any debate about the efficacy of the policy. The ensuing process was to provide detailed design of the separated entities, the exact regulatory regime in which they

would operate, and a plan for transition. Consequently only two pages of the 76-page primary discussion document (MED, 2007) address any separation policy considerations. Of these, all but one paragraph address the benefits of separation as a tool to pre-empt discriminatory behaviour: “These potential positive effects do, however, need to be considered in light of potential disadvantages associated with vertical separation, such as loss of vertical integration scale and scope economies, and an increase in the transaction costs of dealing between internal business units” (para. 55).

The balance of the documentation addresses mainly detailed governance and technical issues (Azimuth, 2007), including the applicability of the BT separation arrangements in the New Zealand context (Network Strategies, 2006) and how “equivalence” of the products delivered by the separated network entity to its own downstream affiliate and arms-length customers could be defined, monitored and enforced (Network Strategies, 2007).

3.2 Telecom’s Response

Telecom responded on April 27 (Telecom, 2007) that the proposed model was rigid, unworkable and unable to be delivered in the proposed timeframes (para. 32), failed to address the need for regulatory certainty (para. 14), was predicated upon a regulatory regime in which returns were too low and risks too high to engender sectoral investment (para. 6) and that under the arrangements, the firm was prepared to invest only \$0.5 billion of the \$1.5 billion required for building the network envisaged in the Government’s Digital Strategy (para. 5). The threat to withhold investment was made credible when on May 3 the firm returned to shareholders \$1.1 billion of the proceeds from the sale of its directories business (Telecom, 2007b). Concerns were also expressed at the costs and complexity of implementing the proposals, the “unworkable” timetable given the significant requirement for scarce technical resource to implement both separation and local loop unbundling access simultaneously (para. 34) and the risks posed to the achievement of other regulatory priorities (para. 35). Telecom estimates placed the one-off cost of separation at \$300 million (£110 million), somewhat more than the cost of separating BT (£70 million - Network Strategies, 2007).

In a supplementary submission (Telecom 2007a), purported similarities with the BT model were rejected, both in respect of the process via which the progression to separate entities would take (para. 11) and the functional consequences (para. 12). Telecom alleged the New Zealand arrangements imposed greater prescriptive controls on the Telecom board than Ofcom imposed on BT (para. 12.1), created a confusing set of regulatory arrangements requiring accountability to three separate authorities (the Minister, the Commissioner and a new Commission-appointed oversight group—para. 12.5), imposed greater regulatory control

over both appointments to the Telecom board (para. 12.2) and the relationships every Telecom unit had with any other business unit (para. 12.4) and sought to maintain regulatory control of Telecom no matter how successful competition was in the market (para. 12.3).

Instead, Telecom proposed an alternative set of arrangements (Telecom, 2007) including both ownership separation of the fixed-line network 'Netco' (para. 18) and replacement of the complex regulatory oversight provisions with a regulatory contract between 'Netco' and the Government identifying services, prices and investment expectations (para. 21). However, the offer was conditional upon significant changes in the regulatory environment, including assurances of receiving a fair rate of return on investment (para. 24), and a retreat from the recently exhibited "propensity to change what is regulated after investments are made" (para. 25). Telecom also signalled that it had consulted the industry whilst developing the proposal, and as a signal of good faith would begin to implement the wholesale service elements of its proposal (para.38). On May 1, the Minister asked for public submissions on Telecom's proposals by May 15.

3.3 Political Direction

The Minister further announced on May 31, 2007 that he, and not the Telecommunications Commissioner, would lead the separation process. The decision reflected "the urgency attached by the Government to the need to secure a clear outcome on this matter in the shortest possible timeframe. Because this is a major structural issue and not a matter of micro regulation, this was felt and is still felt to be the appropriate way forward" (Cunliffe, 2007). On July 5, he confirmed that, although there were merits in Telecom's alternative proposals, the Government would "not be revisiting the policy framework of the recently updated Telecommunications Act" due to the "need for rapid progress to provide the industry, including Telecom, with the certainty they need to move forward with confidence" (Cunliffe, 2007a)..

When the final determination was released on September 27, it contained only minor changes to the April proposals. Subsequent activity (including detailed development of Telecom's contractual undertakings with the Minister required under the Act), was focused mainly on enabling the predetermined structures to be given practical force.

On October 27, shortly after filing its first draft undertakings to the Minister, Telecom announced that it would invest \$1.4 billion over 5 years to build a new fibre-based network (effectively completing the 2003 investment plans originally scheduled to be complete by 2009 had bitstream unbundling not proceeded). Ten days later, the Telecommunications

Commissioner's Decision 609 announced final monthly rental prices for unbundled local loops 14% (rural) and 20% (urban) higher than those indicated in the July draft determination.

On March 31 2008, separated network firm Chorus began operations.

4. *The Political Economy of New Zealand Separation*

Benchmarking against the robust separation policy processes recommended by Xavier & Ypsilanti (2004) and de Bijl (2005), the New Zealand policy and decision-making processes fell well short of demonstrating the level of caution recommended for such a significant intervention. No cost-benefit analyses were undertaken, in either the stocktake or separation exercises. Indeed, separation was not even one of the primary recommendations of the stocktake, which focused principally upon local loop unbundling. Rather, consistent with the theoretical literature, it was proposed as a secondary measure to be invoked only if the primary measures failed to engender the degree of competition and increases in broadband uptake desired.

4.1 A Costly Endeavour

It is not surprising, therefore, to find that, consistent with both the literature and practice, the costs of separation in New Zealand have been both certain and large, and the benefits extremely hard to identify, let alone quantify. Shareholder wealth been destroyed. The impasse over how separation would be implemented has led to substantial delays in Telecom's NGN investment plans. Telecom's cost of capital has increased as debt levels have increased to fund new investment that might otherwise have been funded by retained equity (Moody's downgraded Telecom's credit rating from A2/P-1 to A3/P-2 on February 17, 2009, citing the regulatory changes as a significant factor). Telecom has incurred additional fixed separation costs in excess of \$300 million—1.5 times the \$200 million competitors indicated in 2006 they were likely to invest if unbundling proceeded. The obligation has caused competition internally and externally for scarce resources (including specialist human capital) to undertake separation, unbundling and network replacement simultaneously that has undoubtedly contributed to pushing out the deadlines for achieving any one of these projects alone.

To put the New Zealand costs in context, the one-off separation cost of \$300 million, spread across the estimated 1 million broadband accounts projected to be sold by 2010, amounts to \$300 per account—the equivalent of 10 months basic retail broadband connection at prevailing prices. Such a rudimentary cost-benefit analysis thus draws attention to New Zealand's scale diseconomies and how much larger the benefits of separation must be per account or user relative to larger jurisdictions for separation to be economically justifiable (a

similar exercise on the fixed costs of BT's separation equates to less than one month's broadband subscription fee per account). As the stocktake analysis states, although additional costs fall initially on Telecom, they will be passed through to access seekers and ultimately to consumers if, as presumed in all of the policy documents, Telecom's fixed line networks (both current and future) are genuinely bottleneck assets that will not be subject to infrastructure-based competition (bypass) in the foreseeable future, thereby violating the objective of regulatory change to reduce costs to consumers.

Given the magnitude of costs incurred and absence of evidence that discriminatory behaviour in New Zealand was a significant factor, it begs the question of why separation has been imposed in New Zealand, especially as the effects of the much less intrusive local loop unbundling remedy had not yet been demonstrated to be ineffective in addressing either an increased efficiency or competitiveness objective. An answer appears to lie in the political economy of the telecommunications sector.

4.2 Competition At Any Cost?

New Zealand's past regulatory history had been characterised by 'light-handed' interventions due to the challenges of small scale and, importantly the time in the investment cycle when the regulatory interventions had been considered (e.g. local loop unbundling in 2003, when the NGN investment was imminent) (Howell, 2007). Consequently, in 2006, the New Zealand telecommunications market did not exhibit artefacts such as the competitor numbers and market shares characteristic of regimes where more stringent interventions had been adopted. As 'competition' is not a good proxy for 'efficiency' when scale is important (Alleman & Rappoport, 2005), it is far from clear that New Zealand's 'insufficiently competitive' market was actually 'less efficient' than comparator countries, especially if other restraints (i.e. competition law and contractual obligations) were functioning appropriately (Howell, 2008a).

As long as the prevailing primary regulatory objective remained efficiency-based, the actual amount of competitive entry occurring was, rightly, a secondary consideration. However, around 2005, the prevailing political sector objective appears to have changed from the pursuit of increased efficiency, whereby competition is but one of the many potential means of achieving an efficiency end, to the pursuit of increased competition as an end in itself, apparently regardless of the efficiency consequences.

The policy change is evidenced in the 2005 Labour Party election manifesto, the stocktake review objectives, and the statement of regulatory intent in the separation section of the Telecommunication Act amendments cited above. It is reinforced by the Commerce Commission's second mobile termination decision released in April 2006, which interprets

the efficiency considerations of Section 18(2) of the Act as strictly secondary to the pursuit of competition: “where there is a tension between the net public benefits and promotion of competition, the statutory context indicates that the primary consideration is the promotion of competition ...the Telecommunications Act is focused on regulating access to promote competition. It does not provide a mechanism that specifically allows for efficiency considerations to take precedence over the promotion of competition. Nor is there anything in the statutory scheme to suggest that this should be the case” (Commerce Commission, 2006a, para. 47-48). The variance between this decision and the 2003 LLU inquiry suggests that, despite the original intention that the Commission operate at arms-length from political processes, regulatory decisions were beginning to be influenced by political objectives (Howell, 2008a).

The political origin of the changes is confirmed by the pattern of incremental interventions beginning in 1999 that had successively distanced the prevailing Government leadership from the ‘light-handed’ policies of its predecessors. Whilst industry-specific regulation under the Commission may have initially delivered efficiency-raising (or subsequently at least not efficiency-reducing) recommendations, they had minimal effect on competition metrics (Howell, 2008a). Having relied upon popular electoral support for its interventionist policies in the 2005 election, the Government was obliged to deliver evidence within the three-year electoral horizon of its success in increasing competition. Structural changes (unbundling, separation) provide more tangible evidence in the short-run of action being taken than relying on the more measured approach of regulatory processes. “Competition” metrics are also more tractable to a non-technical electorate than the more esoteric and longer-term outcomes of pursuing increased efficiency characteristic of regulatory and policy analysis. Far-reaching structural changes could be achieved in such a short time only if past processes could be bypassed. Thus it became imperative that politicians, rather than the Commissioner, take control of industry direction under the new objective to “increase competition”.

4.3 A Process for Political Ends

Thus, the absence of efficiency-based analysis in the stocktake can be explained. Efficiency was not a relevant decision-making criterion for enactment of predetermined Government policy, making detailed empirical analysis such as the Commission was bound to prepare, unnecessary. Conducting the stocktake from the Ministry, rather than the Commission, effectively bypassed the Commissioner’s statutory obligation to take account of efficiency, thereby obviating the possibility of a cost-benefit analysis that was contradictory to the predetermined course of action emerging, as either a check on the rationality of the Government’s policy or a justification to stall the progress of changes. The Minister’s

supervision of the separation process likewise forestalled any potential efficiency considerations complicating delivery of improved competition metrics, and was undertaken specifically to ensure that separation was achieved quickly via a set of processes that bypassed both the rigour and transparency characteristic of Commission activities (e.g. the Minister could deal behind closed doors directly with parties in a manner denied to the Commissioner, and his decisions were not subject to review and appeal as occurs with Commission decisions).

In this context, the rapid unchecked progression from the initial stocktake recommendation of separation from a secondary to primary regulatory tool can also be explained, although the failure of Ministry policy analysts as agents of the public interest to fully examine the economic consequences must be questioned. As direct agents of political principals, they were likely subject to stronger incentives to follow Ministerial directives than to objectively critique the policy in the wider public interest (Holmstrom & Milgrom, 1991).

4.4 Back to the Future

Separation appears to become a de facto primary policy objective following Telecom's first voluntary offer in June 2007. It is likely that, given the Government's strong signal that it was going to exercise its legislative powers regardless, Telecom strategists had little option but to offer some concessions (i.e. voluntary separation) in the hope of being able to take back some control of the firm's strategic direction from the politicians. Thus, Telecom's offer was contingent upon trading off other likely regulatory impositions.

To those committed to increasing competition, the prospect of being able to implement the most invasive regulatory instrument considered (indeed one which had been mooted as far back as the creation of Telecom itself) against an incumbent whom many aggrieved competitors felt had 'escaped' increased regulatory attention on many occasions in the past would have been received with alacrity. As a structural remedy it provided the most visible evidence that action had been taken, and in effect (along with local loop unbundling) cemented in place the last of the regulatory alternatives considered, but dismissed in favour of 'light-handed' regulation in the 1980s.

Separation was also willingly endorsed by Telecom's competitors, who naturally had been ardent lobbyists for increased regulatory intervention since the 1990s. In addition to providing one further regulatory shackle on Telecom, it offered significant advantages as most were also fully vertically integrated firms with both voice and data infrastructure investments and downstream retail operations of their own (i.e. mobile, wireless and cable operators). The potential exists for selective inefficient bypass of separated Telecom networks using

competitors' own infrastructures in the most lucrative markets (either geographical or market segment) even if their costs are higher than Telecom's (absent separation). Telecom is left bearing the costs of separation uncompensated by entrant access revenues in the bypassed markets, thereby raising prices to remaining Telecom customers (both retail and wholesale) and delaying investments in new networks in the areas where bypass has not occurred.

Rather than 'levelling the playing field', separation thus inefficiently 'tips' it in competitors' favour, in a similar manner to the way cost-based access pricing, in the absence of a tax to compensate incumbents for lost revenues otherwise compensating the costs of fulfilling universal service obligations, also inefficiently 'tips' the field in favour of entrants (Armstrong, 2001). That competitors were already bypassing Telecom in some markets at the time of the "Stocktake" draws to attention the risks highlighted by de Bijl (2005) of incorrectly assuming that a bottleneck is enduring, leading to separation that increases competition in the short run, but impairs both total welfare and long-term investment incentives.

It is noted that political control of the telecommunications sector is now cemented in place in New Zealand for the foreseeable future, and that ultimately the Government is poised to once again become a significant owner of telecommunications infrastructure. In part to address the missing market that has emerged for investment in broadband in the face of recent interventions, both major political parties in the 2008 general election campaign promised substantial Government investment in broadband infrastructure. The winning National Party-led minority Government committed to invest \$1.5 billion in a nationwide fibre-to-the-home network—a process begun on March 31 2009 with the release of documents detailing how this will occur.

5. Conclusion

New Zealand's separation policy development and enactment bears little resemblance to the reasoned processes recommended in the literature. The lack of a principled economic process for its development is best explained by internal political factors, in particular a competition between the proponents and opponents of the 'light-handed' regulation. Whilst economic factors underpinned the justification for 'light-handed regulation', its opponents have succeeded in re-implementing most of the controls rejected at the time light-handed regulation was established, most recently by changing the explicit efficiency-raising objective to one of increasing competition. Consequently, the New Zealand processes provide a very

poor model for jurisdictions seeking to take a principled economic approach to the question of vertically separating an incumbent provider.

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