## NEW ZEALAND BUSINESS ROUNDTABLE

SUBMISSION ON THE COMMERCE
COMMMISSION'S AMENDED DRAFT REPORT
ON TELECOMMUNICATIONS ACT 2001
SECTION 64 REVIEW AND SCHEDULE 3
INVESTIGATION INTO UNBUNDLING THE
LOCAL LOOP NETWORK AND THE FIXED
PUBLIC DATA NETWORK

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## **Executive summary**

- This submission on the Commerce Commission's Amended Draft Report Telecommunications Act 2001 Section 64 Review and Schedule 3 Investigation into Unbundling the Local Loop Network and the Fixed Public Data Network (ADR) is made by the New Zealand Business Roundtable (NZBR), an organisation comprising primarily chief executives of major New Zealand businesses. The purpose of the organisation is to contribute to the development of sound public policies that reflect overall New Zealand interests.
- The ADR recommends (eg paragraph 52): the designated unbundling of Telecom's local loop network and its public data network; designated access to co-location and backhaul services; benchmarking for the Initial Pricing Principle; and cost-based pricing for the Final Pricing Principle. It envisages a net [consumer] benefit of \$67.5 million for full unbundling and \$83 million for PDN unbundling (paragraph 27). These recommendations are largely based on the Commission's assessment that competition in the relevant part of the telecommunications market is limited and on a cost-benefit analysis undertaken by its consultant, OXERA.
- A consumer (present value) gain of \$67.5 or \$83 million is equivalent to a 0.8 percent movement in Telecom's share price. Telecom's share price fell by around 2.1 percent or \$200 million relative to the market on the day of the release of the ADR. The loss of value in Telecom points to a loss of producer surplus that could substantially exceed the gain to consumers. The ADR's measure of welfare ignores such losses. The Commerce and Telecommunications Acts have a focus on economic efficiency, a measure of which is the sum of producer and consumer surplus. Using a broader welfare (economic efficiency) criterion, the conclusions of the ADR would appear to be welfare-destroying, given the share price movement.

- This submission analyses how the ADR comes to its mistaken conclusions. It focuses on its policy framework and on the costbenefit analysis that underlies the claim of \$71.25 million net benefits by confusing consumer benefits with efficiency gains.
- In evaluating the ADR's *policy framework* in section 2 we submit, *inter alia*, that the reasons for giving weight to distributional issues are unsound. Instead, they support the case for efficiency as the sole objective.
- We also argue in section 2 that the ADR's 5-year time horizon for analysis is far too short to allow the dynamic effects of forced unbundling on facilities competition to be assessed.
- Section 2 also faults the ADR for confusing dynamic efficiency with the short-run level of innovation and investment, and for being far too complacent about the wealth-destroying effects of what has been termed 'infrastructure socialism'.
- In section 3 we consider the issue of *problem definition* and find that the ADR is biased towards a static *status quo* counterfactual. As a result its finding of limited competition is myopic and unconvincing.
- In section 4 we analyse the basis of the ADR's finding that there are significant efficiency gains from forced unbundling. Our main conclusions are that:
  - the finding is spurious because it is based on unwarranted presumptions and false measures of efficiency;
  - the specific claim of around 3 percent per annum gains in productive efficiency from unbundling is inconsistent with concerns about monopoly profits and lacks commercial reality;
  - the Commission's consultants have also let it down in failing to stress the heroic (ie unreliable) nature of their estimates;

- the cost-benefit analysis on which the ADR relies is biased in that it assumes market failure but does not consider the probability of regulatory failure; and
- it fails to adequately consider the likelihood that efficiency will fall if the short-term gains in consumer surplus are accompanied by greater losses to shareholders.

#### • In section 5 we:

- provide further expert opinions on the international evidence against forced access;
- question the ADR's reasons for rejecting our earlier advice on the need for a long time horizon for analysis; and
- make a strong plea for a presumption in favour of the preservation of private property rights.
- In section 6 we review our conclusions and find that the ADR fails to discharge the Commission's responsibility to the community to provide a competent analysis of the issues before it. In our view the Commission has not made out a credible case for forced unbundling of the local loop and public data network, and acceptance of its argument would seriously deter long-term, irreversible investments in infrastructure in New Zealand.

#### 1 Introduction

- 1.1 This submission on the Commerce Commission's Amended Draft Report Telecommunications Act 2001 Section 64 Review and Schedule 3 Investigation into Unbundling the Local Loop Network and the Fixed Public Data Network (ADR) is made by the New Zealand Business Roundtable (NZBR), an organisation comprising primarily chief executives of major New Zealand businesses. The purpose of the organisation is to contribute to the development of sound public policies that reflect overall New Zealand interests.
- 1.2 Section 64 of the Telecommunications Act 2001 ('the Act') requires the Commerce Commission ('the Commission') to conduct a review of access to the unbundled elements of Telecom New Zealand's local loop network and access to the unbundled elements of, and interconnection with, Telecom New Zealand's fixed public data network (PDN). The Commission published an Issues Paper on this subject on 10 April 2003 and must deliver its final report by 20 December 2003.
- 1.3 The NZBR's submission of May 2003 commended the Issues Paper for its recognition of the need to focus on dynamic efficiency, the long term, and problem identification. It also suggested some technical improvements in relation to the definitions of 'long term', 'essentiality', the counterfactual, externalities, and the relevant categories of costs and benefits. The general theme was to urge the Commerce Commission to pay greater attention to the issues of problem identification, the rule of law and the protection of private property rights.
- 1.4 The ADR recommends (eg paragraph 52): the designated unbundling of Telecom's local loop network and its public data network; designated access to co-location and backhaul services; benchmarking for the Initial Pricing Principle; and cost-based pricing for the Final Pricing Principle. It envisages a net [consumer] benefit of \$67.5 million for full unbundling and \$83 million for PDN unbundling. (paragraph 27). These recommendations were largely based on the Commission's assessment that competition is limited in the relevant part of the telecommunications market (eg paragraph 15) and on a

- cost-benefit analysis that was undertaken by its consultant, OXERA (eg paragraph 948).
- 1.5 The Commission seeks comments on its report and has posed 48 questions for submitters. Those with a detailed knowledge of the industry and its technology are best placed to answer many of those questions. In this submission we focus on the more general questions that relate to the policy framework and the cost-benefit analysis of the proposed regulations.
- 1.6 Section 2 below responds to the ADR's discussion of the legal and statutory framework. Section 3 comments on the ADR's analysis and finding that competition is limited. Section 4 comments on OXERA's cost-benefit analysis of the efficacy of forced access regulation. Section 5 comments on some other issues: the international experience with unbundling, the Commission's rejection of the NZBR's earlier suggestion about the counterfactual, and the importance of a presumption in favour of protecting investors' property rights. Section 6 presents our conclusions.

# 2 Policy framework

- 2.1 We commend the ADR's discussion of the legal and statutory framework where it stresses the importance of:
  - efficiency considerations in general (eg paragraph 103) and the "central importance" of dynamic efficiency in particular (paragraph 133); and
  - not expropriating private property rights "more than the Act, its scheme and proper purpose require" (paragraph 126).
- 2.2 However, we submit that this section of the ADR is in error in:
  - deducing that it must address distributive issues explicitly (eg paragraphs 114 and 116);
  - adopting a time horizon of only 5 years for the assessment of competition and the counterfactual (paragraph 151);
  - interpreting consumer surplus during a 5-year period as a measure of welfare (eg paragraph 24); and

- confusing dynamic efficiency with the level of investment (eg paragraphs 40 and 787).
- 2.3 Distributional considerations. The only economic justification for the Commerce and Telecommunications Acts arises from the concern that monopolies misallocate or poorly use resources, thereby reducing community welfare. This is an economic efficiency concern. One measure of it is the degree to which the sum of producer and consumer surplus is reduced. Economists customarily refer to this reduction in welfare as a deadweight loss. (This is in order to distinguish it from the wealth transfer from consumers to producers that is expected to accompany monopoly pricing.) consumer welfare is also likely to be maximised when the sum of producer and consumer surplus is maximised. This is because any attempt to increase consumer welfare further by driving prices down will reduce supply - which could raise the average cost of supply. Both effects imply higher consumer prices and reduced supply in the long run.<sup>1</sup> Reflecting this analysis, it is widely accepted amongst economists and policy makers that the purpose statements in the Commerce Act<sup>2</sup> and the Telecommunications Act<sup>3</sup> should be interpreted as serving the purposes of economic efficiency and thereby economic growth. The Commerce Commission itself usually accepts these interpretations, as explained in paragraphs 101-105 and, particularly, 107.
- 2.4 However, in the ADR the Commission departs from orthodox economic analysis, statutory requirements and its own normal practice and gives weight to distributional considerations. Its reasons or doing so are set out in paragraphs 110-116. On inspection, all of them are consistent with the efficiency rationale for regulating a monopoly namely preventing the inefficiency that arises when socially profitable output is forgone because price exceeds marginal cost by more than would have been necessary to induce

This consumer welfare argument applies even if all producers are 100 percent overseas owned, in which case community welfare is measured only by consumer welfare. The argument is easier to see where citizens own shares in producers, and so are both consumers and investors.

<sup>&</sup>lt;sup>2</sup> "The purpose of this Act is to promote competition in markets for the long-term benefit of consumers within New Zealand."

<sup>&</sup>quot;The purpose of this Part and Schedules 1 to 3 is to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers."

supply (ie by more than average cost).<sup>4</sup> Moreover, all of the reasons have too narrow an application to be explicable under a distributional objective. Specifically:

- The first argument (paragraph 114) refers to the need to control monopoly rents. This is consistent with the efficiency objective of allowing price to exceed marginal cost (*ex ante*) but not to the extent that it exceeds average cost (*ex ante*). In contrast, if the objective were redistribution, it would not be limited to monopoly rents. Rents occur whenever private property exists. They are most evident in land values. The only obvious reason for singling out monopoly rents is the efficiency reason.
- The second argument (paragraph 115) attributes a distributional rationale to section 3(1)(b) of Part 1 of Schedule 1. However, this section refers to excess returns. Clearly, this is consistent with the efficiency objective. Again, it is implausible that the concern with excess returns can be distributional. It is a matter of common observation that excess returns occur widely, along with their obverse financial failures and bankruptcies. Success and failure are intrinsic to a market economy. Indeed it is the hope of achieving an excess return that drives much investment and innovation.
- The third argument (paragraph 116) relates to the provision in the Act for cost-based regulation of prices. Again this is consistent with the efficiency objective of allowing price to be above marginal cost, but not to also exceed average cost. Again, if the objective were redistribution rather than efficiency there would be no case for limiting its application to monopoly situations.

We submit therefore that the Commission should reject distributional issues in considering long-term benefits for end-users.

Note that this concern is *ex ante*. Once an irreversible investment has been made, *ex post* price can be above (or below) *ex post* average cost depending on how the future unfolds, without necessarily raising efficiency concerns.

- 2.5 We also submit that even if the Commission determines that distributional issues should be taken into account, it should take great care to be principled and predictable in determining how large a weight to put on redistribution. We note here that the Commission appears to have considerable discretion in assigning a weight since it finds in paragraph 106 that the legislation does not direct it as to how much weight to put on distributional objectives (or presumably on any other 'competing factors' that it deems relevant). If the Commission's decisions as to weights are seen to be arbitrary they are bound to deter some long-term investment. In our view, the Commission should use its discretion to establish, at the very least, a strong presumption in favour of efficiency.
- 2.6 Time horizon. The ADR adopts a 5-year time horizon (eg paragraphs 11, 21, 151, 441 and 641) despite the requirement of the Act to focus on long-term benefits for end users. In paragraph 149 the ADR baldly rejects as "not appropriate" the NZBR's argument that dynamic efficiency considerations require the definition of long term to be based on the duration of irreversible investments. This rejection overlooks the need for investors to expect to be able to recover sunk costs.
- 2.7 The ADR's reasons for rejecting the NZBR's suggestion and adopting a 5-year time horizon are not clear. One reason (paragraphs 151 and 152) appears to be the level of uncertainty involved in even a 10-year time horizon. However, investors in any number of assets, such as plantation forests, railroads, dwellings and industrial buildings, plant and machinery, commonly have to take a much longer view.<sup>5</sup> Even government policy commonly has to take a much longer-term view, as is illustrated by the major project investments of the early 1980s, the projections of greenhouse gas emissions out to 2100 and beyond for the Kyoto Protocol, and road infrastructure investments.
- 2.8 Another reason for the myopic time horizon appears to rest on an analogy with the existence of investment analyses and cost-benefit analyses that make detailed projections for, say, 5-10 years. However, this analogy is misplaced because no competent analysis ignores the present value of costs and benefits

The riposte that they might be intending to sell out within a few years is not valid because the price at which they can sell depends on the outlook for the investment at that time.

or net cash flows beyond the forecast period. The normal approach is to model cash flows in detail through an establishment period and estimate a terminal value to represent the net present value of subsequent (steady state) returns. Under this approach, the excess returns necessary to justify the investment must occur within the forecast period.

- 2.9 OXERA's calculations appear to give no consideration whatsoever to the likely producer or consumer surplus beyond year 5. Nor do they appear to allow the incumbent to achieve an excess return during the forecast period. In our view, this is unacceptably myopic.
- 2.10 *The consumer surplus measure*. The ADR takes the view that increases in consumer surplus measure gains in overall welfare (eg paragraphs 37, 49, and 51 in the executive summary). However, consumer surplus can be increased by forcing prices down so as to transfer wealth from investors to consumers. The overall welfare gain could be negative.
- 2.11 A commonly accepted measure of welfare is the overall sum of producer and consumer surplus. If there is an overall gain for the community as a whole, the winners would gain enough to compensate the losers so that everyone can be better off in principle.<sup>6</sup> To illustrate the likelihood of a negative overall outcome, consider the amended ADR's finding of an anticipated (present value) gain to consumers of \$67.5 million (local loop) or \$83 million (PDN). Each amount is only around 07-0.8 percent of Telecom's market capitalisation. Yet Telecom's share price fell by around 2.1 percent relative to the market on the day of the release of the ADR. This represents a loss to shareholders of about \$200 million.<sup>7</sup> The loss from the announcement effect alone exceeds the anticipated gain to consumers. This points to the likelihood of an overall decline in the sum of producer and consumer surplus.
- 2.12 Of course the loss to Telecom's shareholders is not the only source of loss in national economic welfare. To the degree that Telecom and other investors in

<sup>&</sup>lt;sup>6</sup> This is the Hicks-Kaldor welfare criterion.

See *New Zealand Herald*, 19 September 2003. Note that this drop in share price indicates that investors were unfavourably surprised *compared to expectations*. It tells us nothing in itself about how negative were the prior expectations and therefore what level of loss was built into the share price before the \$200 million relative decline.

facilities reduce their investments in facilities, consumer surplus from the product of those investments will also be forgone. The scope for benefits from competition in facilities to exceed the hoped-for \$67.5 million net present value gain is illustrated by the small magnitude of this gain in relation to the size of the industry. For example, it represents 0.3 percent of Telecom's annual operating revenues each year for five years. It is also small relative to the hundreds of millions of dollars that could be invested in the coming years in infrastructure development and diversification if laws and property rights are respected. To risk so much for so little makes no sense.

- 2.13 OXERA makes no attempt to estimate the losses to shareholders from the devaluation of private property associated with unbundling. Instead, it freely concedes that its consumer surplus methodology "does not explicitly model efficiency gains" (but see section 4 for more).8
- 2.14 *Dynamic efficiency and the level of investment*. The ADR characterises dynamic efficiency in paragraph 754 as investment that lowers costs through time. It adds that investment in new products, services, processes etc *can* also reflect gains in dynamic efficiency (emphasis added).
- 2.15 We submit that the ADR is deficient at this point in not observing that "can" does not mean "will". We suggest that this omission leads the Commission into the error of confusing dynamic efficiency with the level of investment. In particular, it treats "service innovation" the expected investments by competitors in exploiting an incumbent's network as a gain in dynamic efficiency (see, for example, in paragraphs 40, 751 and 787 and, in this submission, paragraph 4.16).
- 2.16 By the same argument, abolishing property rights overnight in patents, farmland, forestry, or any other private asset would produce a gain in dynamic efficiency as competitors leap in to exploit the incumbents' property. The Soviet Union took something like an 'open access' approach after the Bolshevik revolution. If the Bolshevists had adopted the Commerce Commission's 5-year horizon and used consumer surplus as a welfare measure, they would no doubt have declared their expropriations to be economically efficient. Partly for this

<sup>8</sup> Appendices to ADR, Public Version, Appendix 2, p 4.

reason, measures such as forced unbundling have been termed 'infrastructure socialism'.

- 2.17 The fallacy of confusing dynamic efficiency with the level of investment or innovation is discussed in Begg and Wilkinson (2003, pp 67-69) and Evans, Quigley and Zhang (2000, section 1.3). A regulation that increases the nearterm level of investment in new products, services, processes etc by competitors could well reduce rather than increase overall welfare, as the example in paragraph 2.11 illustrates.
- 2.18 We submit that the ADR's analysis must be revisited and that particular attention needs to be paid to the issue of providing an incentive for future investors to make irreversible investments in network assets. Given the magnitude of sunk costs in network industries, any competent discussion of dynamic efficiency must address the issue of their recovery.

## 3 Problem definition – limited, healthy or excessive competition?

- 3.1 Section 3 of the ADR sets out the basis for its finding that competition is sufficiently limited in respect of the local loop and the public data network to warrant consideration of government intervention. The main exceptions are said to relate to the wholesale market in Auckland and some other major service areas (see table 4.1, paragraph 579).
- 3.2 In reaching this finding, the ADR adopted the criterion of "workable or effective competition" and developed (paragraph 434) nine factors relevant to assessing the level of existing competition and four factors for assessing potential competition. Many of these factors are static and this is reflected in the commentary in the text which often focuses on market shares or 'counting the heads' of competitors (eg paragraphs 477, 511, 559).
- 3.3 In our view, the analysis should focus more on the complexities of facilities competition and less on current market shares. The more the incumbent

Competition Law at the Turn of the Century: A New Zealand Perspective, ed Mark Berry and Lew Evans, New Zealand Institute for the Study of Competition and Regulation, Victoria University of Wellington Press, 2003; and Evans, L, N Quigley and J Zhang, An Essay on the Concept of Dynamic Efficiency and its Implications for the Study of Competition and Regulation, New Zealand Institute for the Study of Competition and Regulation, 2000.

charges competitors for access to its facilities, the more it increases their incentive to invest in alternative facilities. Telecom acknowledges this constraint in paragraphs 760 and 768. TelstraClear draws attention to the reality of the prevalence of bypass in paragraph 783 where it argues that the Commission should regulate in order to stop the "unnecessary duplication of networks". So what is the problem – limited competition or excessive competition?

- 3.4 To clarify the problem, it is necessary to make judgments as to how the industry is likely to evolve in the absence of unbundling. This is essentially the question of the counterfactual. The ADR's counterfactual is briefly described on page 148. It is essentially the status quo with "consideration" of likely trends in technology.
- 3.5 Two factors time horizon and an unstated presumption concerning the burden of proof bias the ADR towards a myopic, static counterfactual. The myopic 5-year time horizon for the counterfactual referred to earlier is far-sighted compared to the use of a 1-year time horizon for assessing market power (paragraph 356). This is far too short for a credible evaluation of facilities-based competition. On the second point, the ADR appears to impose the burden of proof on those who argue against the static *status quo*. Thus:
  - in paragraph 439 it suggests that mobile phones are not a strong substitute for landlines because they are currently priced higher;
  - in paragraph 469 it discounts the claims of fixed wireless operators to offer voice services in future, on the grounds that their commercial feasibility is not "proven";
  - in paragraph 473 the potential for Project Probe to increase competition is discounted because "some uncertainty" remains about how the future will unfold;

<sup>10</sup> Chris Barton, "Aussies offer lessons on unbundling", *New Zealand Herald*, 7 October 2002, cites Telstra's Yasmin Dugan as identifying "overbuilding" of networks in Australia as one of the motivations for introducing unbundling.

- in paragraph 474 it notes that Wired County has deployed a local broadbank network, but draws a pessimistic conclusion on the basis of limited information about *current* penetration rates;
- in paragraph 477 it infers that a finding that the constraint from new entry is uncertain "suggests a finding of limited competition";
- in paragraph 510 it acknowledges the competition being offered by Walker Wireless's networks, but argues that the "current uncertainty" as to how the technology will evolve "suggests that lesser weighting be placed on them in terms of their competitive constraint on existing fixed networks". Paragraph 553 also complains that "it is not currently clear" that Walker Wireless offers a "sufficiently proven" competitive restraint;
- in paragraphs 514 and 515, it acknowledges the reality of entry that avoids the costs of digging trenches which "suggests that barriers to entry may be low" but considers "that significant levels of under-utilised network" may deter "further new entry";
- in paragraph 559 it acknowledges stronger competition for corporate customers but concludes that "it is not clear" whether this represents effective competition; and
- in paragraph 641 it states that Telecom provides "no convincing reasons" for expecting North American and European network operators to extend their networks into New Zealand.
- 3.6 What could possibly make the future "clear", "convincing", or "proven"? It is difficult to avoid the impression that the Commission's judgments concerning such matters as the likelihood of entry, the future competitiveness of wireless and the likelihood of foreign entry are fundamentally arbitrary. This impression is heightened by the arbitrary 25 percent scaling down of estimated net benefits from regulation (eg paragraph 848) and the assertion that the costs of unbundling the fixed PDN are not likely to be "excessive" (paragraph 923). What is the benchmark for determining what is excessive, if it is not arbitrary?

- 3.7 Many of the above points fail to recognise that what counts for entry and pricing behaviour are the perceptions of those making the investment and pricing decisions. If the Commission wishes to assess the constraint imposed by likely future developments on Telecom, it needs to focus more on what managers and owners believe and less on its own speculation. In a market-driven system, what would count is whether Telecom, Walker Wireless and others think fixed wireless is a real threat. Admittedly, the Commission has to distinguish between what self-interested submitters say and what they believe. But here the ongoing investments in competing facilities speak for themselves. TelstraClear's concern (not shared by us) about excessive duplication indicates that it thinks barriers to entry are low for facilities competition.
- 3.8 The Commission does identify one barrier to entry in paragraph 467 that may well be a public policy concern problems experienced by TelstraClear in getting consents to deploy a network in Auckland. We urge the Commission to give more serious attention to this problem in order to determine if the better remedy is to address the problem at source (the Resource Management Act or local government administration of it). (In section 5 we question the Commission's refusal to consider another impediment to competition the Telecommunications Service Obligation (TSO)).
- 3.9 In our view, the combination of a myopic time horizon and the imposition of a burden of proof against change biases the counterfactual in favour of a relatively static *status quo* and the ADR's recommendations in favour of state-imposed solutions. The bias is compounded by the failure to apply a corresponding level of scepticism to the efficacy of future regulatory decisions (see the next section).

## 4 The efficacy of unbundling – the cost-benefit analysis

4.1 If it were to comply with Cabinet Manual requirements for assessing the case for a regulation, the ADR would have to conform, *inter alia*, with the requirement for a Regulatory Impact and Business Cost Compliance Statement. This would require it to identify the problem, the objective and the full range of relevant alternatives, and to establish that mandatory unbundling is superior to the next best alternative.

- 4.2 The ADR gives the impression that this has been done in stating in paragraphs 37 and 38 that there are gains in productive, allocative and dynamic efficiency from unbundling. It asserts that: (i) the gains in allocative efficiency exceed the gains in productive efficiency; and (ii) the dynamic efficiency gains are "substantial".
- 4.3 In drawing these conclusions, it appears (eg paragraph 49) to have relied on a consumer surplus analysis by its consultants (OXERA). OXERA's analysis claims gains against only one alternative a static *status quo* counterfactual (see section 4.1 of its report). Likewise, it does not address the possibility that existing competition will force the price and productivity gains that it envisages under unbundling. OXERA does not consider other options for enhancing competition such as addressing the entry barriers created by the RMA or the TSO obligation. Finally, it does not consider the option of a return to light-handed regulation.
- 4.4 By ignoring all such alternatives, OXERA effectively assumes its conclusions that there are price and productivity gains from unbundling that are additional to the gains that can be achieved by any other means. For example, on page 40 it states that it *assumes* gains in productive efficiency of 3 percent per annum, or 16 percent over five years. As evidence in support of this assumption it cites research on the gains from moving from a heavily regulated, or nationalised, industry to a privatised or liberalised industry. Arguably, it would be more logical to use this research to justify assuming that a move back to a more heavily regulated industry would *reduce* productive efficiency.
- 4.5 OXERA's argument that there are efficiency gains that can only be achieved by forced unbundling is a market failure argument. It assumes that there are failures in both the product market and in the market for corporate control that perpetuate waste. However, OXERA makes no case that it is plausible to believe that both these failures exist.<sup>11</sup>

OXERA's base case assumes a price elasticity of demand of -1.5 (see page 49). An elasticity this large points to the absence of monopoly power at the margin since a monopolist could reduce costs and lift revenue by restricting output.

- 4.6 To argue that Telecom would not minimise future costs without unbundling is to argue that it is not profit maximising. This fundamentally undermines the rationale for regulation. If Telecom is not profit maximising, why:
  - expect it to achieve monopoly rents (paragraph 114);
  - has it not been taken over by now by an acquirer that could do a better
    job for its shareholders (the hostile takeover is the market's discipline
    for a management team that is failing to perform); and
  - would it reduce costs after unbundling is mandated, but not before?<sup>12</sup>
- In contrast to its blithe assumption of market failure, OXERA ignores the problem of regulatory failure.<sup>13</sup> It ignores the problems of incentives and information associated with intrusive state control.<sup>14</sup> The law of unintended consequences gets no mention. On page 47, for example, the only costs OXERA acknowledges with respect to forced unbundling appear to be one-off set-up costs and the costs of making submissions. In particular, it ignores concerns about the rule of law, the need to obtain a return from stranded assets, the likelihood of hindrance to innovation and network integrity, anti-competitive effects, costs and delays from litigation and the likelihood of reduced facilities competition.<sup>15</sup>
- 4.8 These omissions are all the more notable because the ADR observes in paragraph 838 that local loop unbundling has been more acrimonious than interconnection issues, and states in paragraph 843 that the expected costs of implementing unbundling in New Zealand "are reflected in [OXERA's] cost-benefit analysis". However, there seems to be no mention of any costs arising from litigation or related delays in OXERA's report (eg on pages 39-41, 43-47 or

Berry and Evans, *op cit*, p 65 makes many of these points.

In section 5 we provide some international evidence relating to regulatory failure.

See for example, Adam Thierer and Clyde Crews, What's Yours is Mine: Open Access and the Rise of Infrastructure Socialism, Cato Institute, 2003. The ADR applies an arbitrary 25 percent factor to estimated consumer surplus benefits by way of acknowledgment of such risks (eg paragraphs 848 and 27). This makes the unwarranted assumption that such risks cannot make net benefits negative (eg Evans et al, op cit, section 2.8).

OXERA does a sensitivity analysis, but this does not model the effects of regulatory failure etc.

- 59). Even the discussion of the "take-up rate" on p 50 seems to assume frictionless implementation.
- 4.9 While OXERA undertook its own efficiency analysis, by way of response to a PwC Consulting study, it also made some use (eg footnote 32, page 43) of a study for the Commission by COVEC Limited. The ADR (eg paragraph 28) mentions that the prices supplied by COVEC were a "key element" of the cost-benefit analysis and it accepts COVEC's recommended pricing principles (paragraphs 30 and 32).
- 4.10 Our major criticism of these reports is that they fail to alert users to their shaky foundations. For example: COVEC's executive summary on pp 1-2 invites the reader to infer that its estimates are reliable. Similarly, OXERA's cost-benefit analysis (eg p 40) adopts a 2.3-5.2 percent range for estimated annual cost savings by Telecom under unbundling, as if its reliability is beyond doubt. This estimate arises from a separate efficiency analysis by OXERA. The executive summary of this efficiency analysis fails to draw attention to its heroic (unreliable) nature, notwithstanding the myriad of complications it acknowledges.
- 4.11 In fact, all methodologies for estimating an incumbent's costs are subjective, simplistic, artificial and contrived compared to an actual situation. Researchers' views about how the future will unfold including tax, regulatory risks, market and technology dynamics deserve much less weight than the views of those who are actually putting their own money on the line. For example, the approach of assuming that an incumbent could achieve the cost structure of a network built *de novo*, error free, is hopelessly artificial and contrived, even if the subjective view of the future on which it is based were articulated. No prudent investor would fail to consider, for example, the problem of designing a network so as to achieve the recovery of stranded costs, taking into account the risks of facing a hostile regulatory environment.
- 4.12 In effect, the Commission is acting as a central planner, and lacks information that is adequate for the task at hand. In our view it is incumbent on the Commission to take every care to identify the deficiencies in the information that is in front of it and to explain carefully how its knowledge of the risks of

error has informed its final decision. In section 5 we argue that the Commission should presume in favour of protecting investors' property rights in stranded assets unless it is very confident of the case for abrogating them.

- 4.13 The ADR relies heavily for its unbundling recommendations on OXERA's claims that its estimated consumer surplus gains represent efficiency gains. The ADR also uses the estimated consumer surplus gain as if it is an estimate of the *magnitude* of the efficiency gain (compare tables 5.11 and 5.12 on pages 181 and 182 in the ADR with table 3.1 on page 17 in OXERA's report).
- 4.14 We submit that both claims are false. First, a gain in consumer surplus does not tell us whether efficiency has risen or fallen. In our opinion, OXERA's report is negligent in failing to explain to readers that transfers to consumers based on the expropriation of wealth associated with stranded assets are not necessarily welfare-enhancing. Second, where a gain in consumer surplus is accompanied by an efficiency gain, it does not measure the magnitude of that gain. Whereas consumer surplus measures the benefit of lower prices to consumers, efficiency measures the net gains to consumers and producers combined.
- 4.15 We can illustrate the differences with reference to a simple textbook numerical example of a monopolist's cost and demand situation.<sup>17</sup> In this example, there is a gain in (allocative) efficiency in moving from a pure monopoly situation to a perfectly competitive situation, and a gain in consumer surplus. But the gain in efficiency is only 38 percent of the gain in consumer surplus. Now consider the case where the regulator forces prices down below marginal cost to achieve the same gain in consumer surplus as in the first situation. This time the *gain* in consumer surplus is accompanied by an efficiency *loss* of 21 percent of the consumer surplus gain. In short, the ADR is wrong to assume that an increase in consumer surplus means that efficiency has increased and it is wrong to assume that the rise in consumer surplus provides a meaningful estimate of the efficiency gain or loss.

It may be possible to construct a polar textbook example in which there is no change in producer surplus so that the change in consumer surplus measures the change in welfare. However, OXERA does not attempt to identify this case or to argue that it applies to Telecom.

Samuelson and Nordhaus, *Economics*, thirteenth edition, page 594.

- 4.16 OXERA is the source of these errors. At the bottom of page 4 it freely acknowledges that its methodology does not model efficiency gains, volunteers that marginal cost pricing is too hard to estimate (suggesting that it cannot hope to measure allocative efficiency gains) and adds that "estimation of dynamic efficiency is likely to be largely speculative and hard to determine since it is entirely forward looking". This is all unexceptional. Yet at the top of page 5 it commits the aforementioned errors in asserting that consumer surplus gains "implicitly captur[e] the allocative and productive efficiency gains arising from increased competition, which are passed on to consumers, while disregarding those that are reinvested by the firms or retained as a profit". In the next sentence it asserts that the level of "service innovation" that results from unbundling is "a proxy" for dynamic efficiency. This overlooks the issues discussed in section 3 above.
- 4.17 Somehow OXERA contrived to disregard the possibility that the gain to consumers from unbundling could reflect largely or entirely a taking of the value of stranded assets from shareholders without compensation. The stimulated investment might be parasitic and welfare-reducing when all the costs are properly considered. Given the substantial debate in the economic literature on this question, the failure to address it is incomprehensible.
- 4.18 The ADR documents the apparently unanimous view of those who really do invest in network infrastructure irreversibly that unbundling will have a negative effect on incentives to invest (see paragraphs 760, 772, 774 and 776 for the views of active investors Telecom, Broadcast Communications Limited, Counties Power and Walker Wireless respectively). However, it apparently gives little weight to such views compared to the views of OXERA who apparently give them no weight. In our view, the Commission should discount most the views of those who are not putting their own money on the line in support of the views they are expressing.
- 4.19 The following assessment from US experts illustrates the mistake made by OXERA:

Not only does forced-access regulation discourage investment and innovation by the incumbent network owner, but it also destroys the incentive for rivals to invest in new facilities of their own. In other words, contrived competition via forced access destroys actual competition.

The competition of which forced-access supporters speak is a fiction based on the sharing of existing facilities. Sharing is not competing. When regulators allow one set of companies to engage in regulatory arbitrage by picking and choosing the networks or network components to which they seek access, "it cannot but have a fatally discouraging effect on their own imitative and innovative efforts," says noted regulatory economist Alfred E. Kahn ... "18

## 5 Other aspects

## 5.1 International experience

- 5.1.1 The ADR reviews international experience with the regulation of local loop unbundling on pages 178-179 and summarises its conclusions on pp 25-26, 179 and 225. A feature of the discussion is the presumption that increasing the uptake of broadband is a good thing. This reflects the analytical error that confuses the level of investment with dynamic efficiency. Expansion of any service is only warranted from an economic welfare perspective up to the point where the marginal benefits equal the marginal costs.
- 5.1.2 The Commission finds that the uptake has been minimal in the United Kingdom and Australia (paragraphs 734 and 740). However, it offers no reason why New Zealand should be different. Indeed, on page 203, it envisages that New Zealand would follow the Australian approach to resolving the technical and practical problems associated with unbundling.
- 5.1.3 A recent review of the experiment in the United States since 1996 with forced-access regulatory regimes reported views or evidence that 19:
  - forced-access regimes are a pervasive form of regulation that lead to "a convoluted legal regime of mandates and price controls";
  - forced-access regulation has not created a class of credible competitors;
     instead it has created a group of regulatory opportunists;

Thierer and Crews, *op cit*, p 13.

<sup>&</sup>lt;sup>19</sup> Thierer and Crews, op cit.

- the increase in service providers induced by a forced-access regime is unsustainable, unless those providers build their own facilities; and
- they have discouraged investment in network upgrades and deployment, especially by incumbent carriers.
- 5.1.4 In line with this assessment, the US Federal Communications Commission has recently gone on record as follows:

Direction from the courts, our own experience, and the experience of the telecommunications industry over the last seven years have caused us to reevaluate the Commission's approach to these obligations in light of the Act's goals of opening local exchange markets to competition, fostering the deployment of advanced services, and reducing regulation. Although we recognize that Congress intended to create a competitive landscape through resale, interconnection and facilities-based provision, and a combination of these modes of entry, in practice, we have come to recognize more clearly the difficulties and limitations inherent in competition based on the shared use of infrastructure through network unbundling. While unbundling can serve to bring competition to markets faster than it might otherwise develop, we are very aware that excessive network unbundling requirements tend to undermine the incentives of both incumbent LECs and new entrants to invest in new facilities and deploy new technology. The effect of unbundling on investment incentives is particularly critical in the area of broadband deployment, since incumbent LECs are unlikely to make the enormous investment required if their competitors can share in the benefits of these facilities without participating in the risk inherent in such large scale capital investment. At the same time, continued unbundling for the network elements provided over current facilities appears to be necessary in many areas under section 251 of the Act, especially with respect to mass market customers. <sup>20</sup>

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Federal Communications Commission, Review of the Section 251 Unbundling Obligations of Incumbent Local exchange Carriers etc, FCC 03-36, 21 August 2003.

5.1.5 It is also relevant here to note that an incumbent might support local loop unbundling as an anti-competitive device in relation to facilities competition.

This appears to have been one of Telstra's motivations in Australia.<sup>21</sup>

## 5.2 The counterfactual

- 5.2.1 The NZBR suggested that the counterfactual for analysis should be the best alternative, which may be a return to light-handed regulation and the abolition of the TSO regulation (paragraphs 635 and 636). Instead, the Commission has stuck to the counterfactual in the Issues Paper the most likely counterfactual of a continuation of a static (nuanced) *status quo* (see paragraphs 20, 602 and 642).
- 5.2.2 The ADR's reasons for rejecting the NZBR's suggestion are set out in paragraph 641:

The Commission does not consider it feasible or appropriate to adopt NZBR's proposed counterfactual of abolition of the TSO and the absence of industry specific legislation. The counterfactual should adopt the most likely expected outcome in the absence of unbundling

- 5.2.3 We have two problems with this rejection:
  - it obviously *is* feasible to abolish the TSO and return to generic legislation, given the political will. We would be very concerned if the Commission is suppressing the analysis of relevant alternatives for political reasons; and
  - it is beyond dispute that many experts and many in the industry agree that the TSO requirement is impeding competition.<sup>22</sup> The Commission's view that it is not appropriate to address a practice that is impeding competition is inconsistent with the purpose of the Act.

Barton, *op cit*, attributes to Telstra's Yasmin Dugan the view that Telstra decided to support local loop unbundling in part to reduce facilities competition since "... if competitors won customers to their own bypass networks, Telstra would never see that business again" and in part to pre-empt ACCC regulation.

The latest opinion on the subject is the NZIER's report *The Economic Impact of the Telecommunications Service Obligation*, September 2003. It points to adverse effects on competition and concludes that "... in the long run, all customers appear to lose out".

5.2.4 In our view the Commission has a responsibility to the community to identify the alternatives that would best serve its longer-term interests. It fails to meet this responsibility if it suppresses consideration of relevant alternatives because of short-term political considerations. The Commission should do a full analysis of the issues it faces. When it comes to choosing which option to recommend or adopt, it should make the basis for its opinion clear. A rejection of feasible alternatives without examination would expose the Commission to charges of politicisation.

## 5.3 Property right presumption and burden of proof

- 5.3.1 As noted in paragraph 2.1 above, the ADR at paragraph 126 essentially adopts a presumption in favour of preserving property rights. In our view its adoption of a 5-year time horizon for considering the effects of impairing property rights in stranded assets is inconsistent with this presumption.
- 5.3.2 We draw the Commission's attention to the Legislation Advisory Committee Guidelines for testing the advisability of a regulation. These Guidelines are a Cabinet Manual requirement. Checklist item 3.2 requires those preparing regulations to address the issue of whether it is essential to alter vested rights and to address the issue of compensation mechanisms.
- 5.3.3 We submit that in the light of the above criticisms the ADR falls well short of establishing that it is essential to make the local loop common property. The preservation of private property rights in network facilities is extremely important for the future of a dynamic telecommunications industry in New Zealand. To impose an open access regime on a facility is to abrogate private property rights that relate to trespass and exclusive use. It follows that the incentive to invest further in such facilities will be impaired.
- 5.3.4 By turning a private facility into a common facility, the regulator or the government takes on itself the problem of determining whether the facility should be maintained or enhanced in future, and how the costs of doing so should be allocated. Transpower's problems in determining who should pay for enhancements to the national grid illustrate the difficulties. If the Commission wishes to impose a form of infrastructure socialism on New

Zealand's telecommunications industry, we believe it has a duty to explain how it would overcome the 'Transpower problem'.

### 6 Conclusions

- 6.1 Significant investment in infrastructure in New Zealand will be required if the government is to achieve its target of returning the average standard of living to the top half of the OECD. Such investments are commonly irreversible and their duration could well be of the order of 20, 30 or 50 years.
- 6.2 It seems obvious that the Commission will deter such investment if it signals that it is only concerned with forcing down prices to consumers for a 5-year period, without regard to the need for investors to recoup a return on stranded assets. The ADR gives no sound reasons for heavily discounting the concerns of such investors about the deterrent effect of the unbundling decision.
- 6.3 The ADR's ill-justified shift from an efficiency objective to a distributional objective is a further negative signal for long-term investment in infrastructure.
- Irreversible investments in long-term assets will be made only if investors' property rights in them are secure. This requires state agencies to adhere to a strong presumption in favour of maintaining existing property rights unless there is an essential public interest case to expropriate them. In such cases the issue of compensation must be addressed under a principled approach. This principle has the force of the Cabinet Manual. In our view the Commission would be irresponsible if it flouts this principle. In the interests of security in property rights, the Commission should set a high threshold for the test of essentiality.
- 6.5 Facilities competition is also the best means of overcoming any remaining monopoly problems in network industries. By setting itself against facilities competition, in part through its adherence to a myopic time horizon, the Commission is in our view acting inconsistently with the requirement of the Commerce Act to promote competition in the longer-term interests of consumers. Market competition is superior to intrusive state control when no material public good issues are at stake.

- 6.7 We are also concerned that the Commission gives the impression that its reasons for failing to consider relevant alternatives such as drawing the government's attention to the merits of promoting competition by reducing undue barriers to entry arising from the RMA and the TSO are political. We stress its responsibility to the community to establish that its preferred alternative is superior to all contending alternatives.
- 6.8 In our view the efficiency analysis in the ADR is spurious. The Commission has relied far too much on a less-than-competent report by its advisers. If it continues to do so it will seriously discredit itself with the investment community.
- As in its inquiry into the costs of the TSO obligation, it is abundantly clear that the legislation is requiring the Commission to make judgments on the basis of very inadequate information. The cost models being produced by the Commission's advisers fail to reflect many commercial realities. We believe that the Commission has a public duty to draw this problem to the government's attention.
- 6.10 On the basis of the analysis in the ADR in respect of distributional issues, efficiency and the time horizon, we do not consider the Commission has made out a case for forced unbundling of the local loop and public data network.