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PM orders high-fibre diet

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FEW communications technologies are as remarkable as fibre optics. Commercial fibre-optic cable first became available in 1981; since then hundreds of millions of cable kilometres have been laid across the world. Over the years, the quality of the cable has improved dramatically: by providing a progressively clearer transmission medium, fibre-optic cables have allowed vast increases in the volumes of information carried over the light waves they channel. Were the oceans as transparent as the cables that are now available, you would be able to stand in the middle of the Pacific and see the ocean floor.

It is consequently uncontroversial that fibre will be at the heart of future telecommunications networks. But there are crucial issues of timing and transition. We have a ubiquitous copper network; it makes no sense to scrap or duplicate that network, which already relies extensively on fibre optics for fat pipes where they are most needed, for as long as it can serve demand at less cost.

Determining that timing is no simple matter. No doubt, demand for data transmission is growing rapidly. Propelled by applications such as YouTube, Australian data traffic has increased more than a hundredfold this decade. Projected increases in residential demand, however, are readily capable of being carried by a combination of fibre in the backbone network with copper, and hybrid fibre-coaxial (used by pay-television networks) for the last mile. Moving fibre closer to the home using clever technology combinations would allow capacity expansion at a fraction of the cost of complete replacement.

The capacity increase would obviously be greater were fibre pushed all the way to the home. The reality, however, is that the vast majority of homes with access to premium DSL, which offers speeds of up to 20megabits per second, choose not to take it. Similarly, very few customers within the footprint of HFC cable networks, which offer up to 30mps, take the high speeds on offer.

Given that, will consumers value capacity of 100mps at more than its substantial additional cost?

The simplest way of allowing this judgment to be made is to leave it to the market. That is largely what is being done in the other advanced economies, with the exception of South Korea, Singapore, Greece and New Zealand (where a publicly funded scheme was an election commitment of the new Government). Those exceptions aside, public funding is generally limited to subsidising service in loss-making areas, with Finland, for example, adopting a controversial scheme to fund fibre rollout in its areas of sparsest population. And even where substantial public funding is being provided, there is little or no direct government involvement in network construction and operation.

The assumption underpinning a market-based approach is straightforward: given a regulatory framework that provides the confidence required for long-term investments, commercial investors are best placed to bear and manage the risks involved in determining timing and technologies. The pragmatic outcome is that private shareholders, rather than taxpayers, shoulder the costs of any mistakes.

There is no reason why this approach would not work for Australia. Our central business districts, where the demand clearly justifies the investment (and where telecommunications has been lightly regulated), are awash with fibre. Were our telecommunications regulatory arrangements more supportive of long-term investment, other parts of the network would also have been upgraded long ago. The Government therefore has a low-cost option: fix the regulatory framework and let markets do the heavy lifting, with properly targeted, technology-agnostic and competitively neutral subsidies for service provision in country areas.

Instead, the Rudd Government has opted for a central planning approach.

The rationale for the decision appears to be the failure of the Government's $4.7 billion tender for a fibre-to-the-node network. Few doubt that process deserves to be buried, but that hardly justifies spending 10 times more on the funeral than one had been willing to spend when the deceased was alive. Rather, a proper cost-benefit analysis of alternative options should have been carried out and published for public

scrutiny: "announcement first, assessment later" has prevailed instead.

Moreover, what little analysis has been disclosed is plainly erroneous. For example, the Government claims its proposed approach is cost-effective because it avoids the need to pay Telstra for use of its copper network. But this is like saying that it is cheaper to dig a tunnel underneath a property than to pay the owners compensation for building a road through it. The payment to the owners is largely a transfer, which at most redistributes society's resources; in contrast, the digging is a cost, consuming resources that could be put to other uses. Confusing costs and transfers is a sacking offence in even first-year cost-benefit analysis.

The Government also claims that going direct to fibre is justified on cost-benefit grounds because it avoids the expense of intermediate upgrades. But that merely assumes that a near-term move to complete replacement is indeed warranted. No evidence has been given for that assumption, while there is plenty of investor choice and consumer behaviour, in Australia and overseas, that cautions against it.

The commercial assessment seems even sparser. No business case has been developed, yet ministers promise both low prices and (as required by the Competition Principles Agreement) a fully commercial rate of return. However, even with high take-up rates, breaking even requires national retail prices of $160 a month; to break even with lower take-up rates would require retail prices higher than $200 a month. Given those prices, the network will struggle in metropolitan areas, where it will face strong competition, while bearing large losses in the country (where costs per line will be more than $300 a month).

Compounding the risk of losses is the fact that laying pipes is easy, but providing service that reliably meets customer expectations is incredibly hard, as TransACT and many others have discovered.

On how this will be done, the Government has nothing to say.

In short, everything points to a decision taken in haste and then announced as a fait accompli. Were the choice indeed between this costly, risky and poorly documented scheme and doing nothing, then it would be wiser to do nothing. But telecommunications is vital to our future: it deserves more than a stunt. With so much at stake, the Senate should demand a comprehensive, independent and fully transparent review, in the best tradition of Australian public policy, before any final decision is taken.

Henry Ergas has served as a consultant to Telstra and other telcos and is the author of numerous books on telecommunications, including Wrong Number: Resolving Australia's Telecommunications Impasse (Allen & Unwin, 2008).
