The Revolution in Telecommunications

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ALTOUGH a strong telecommunications policy was not judged by any political party to be a powerful electoral strategy, the resounding Coalition victory has put Telstra strongly back into the spotlight. The privatization of Telstra, for so long a backburner issue, has suddenly become not just a possibility, but almost a certainty.

The Productivity Commission recently released a draft of their Review of National Competition Policy Reforms which, in part, advocates an enormous structural change to the carrier and to the Australian telecommunications industry.

The copper wire network in Australia is based on an open access regulatory system. Telstra owns and is responsible for the network, while the ACCC forces the carrier to rent the network out to the other carriers. This system is akin to forcing the owner of a property to take boarders, with the cost of rent subject to centralized price controls—similar to the rent control system in New York City.

Needless to say, this process is highly inefficient. Wholesale price changes are not controlled by market forces, but by a slow and time-consuming process of bureaucratic review, and often legal proceedings. It can also be used by some companies as a weapon to wield against competitors—by claiming that another carrier is acting anti-competitively, companies can stifle others' business. Still, at the time of the original sale of Telstra, when nearly all telecommunications was conducted through the same copper wires, such an open access system may have seemed attractive.

The proposal of the Productivity Commission is, therefore, to split Telstra in two, to create a clean separation between its retail and wholesale functions.

Passing ownership of the network to a separate entity would compel Telstra to petition and deal with this new entity on the same footing as all the other 100-plus Australian carriers. The loss of market dominance by Telstra would surely follow, as would the repeated cries of 'Telstra is a bully!' As the Productivity Commission argues, the entity that arises from the vertical separation of the network would improve its relations

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with the other carriers. No longer would the owner of the network also be a competitor, but more a neutral arbiter of the industry.

Would the entity be a private company or a further government bureaucracy? The restrictions placed on private ownership would be nontrivial. For instance, such a firm would be forbidden to offer any cut-rate services to businesses or consumers because to do so would make the separation from Telstra meaningless. This private entity would be trapped between the ACCC and the telcos as the regulators try to micro-manage the industry—an unenviable position in which to be, and a prospect which would excite few firms.

The other option is to leave the government in charge. At least, by this method, the ACCC would be less busy. There would be no need for the tedious legal back-and-forth that frustrates our telecommunications innovation cycle. By essentially integrating the regulators with the regulated, the ACCC would have no worries about promoting 'competition and fair trade' for the 'consumers, business and the community'.

By this method the government could continue to fix wholesale prices at whatever it feels are in the best interest of the community. Not only that, but it could use its new power over the industry to regulate consumer prices—refusing to rent lines to companies which charge more than 22 cents for local calls, for instance. Instead of removing the government from the business operations of telecommunications firms, ownership of the copper wire gives them far more capacity to manage the industry as they see fit, without the pesky corporate lawyers trying valiantly to defend the competitiveness of their firms.

There is a term for this, of course—'infrastructure socialism'. It

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is not intended as a compliment. This would give them the entire copper wire network in Australia, and control of the entire industry, not just the occasional oversight that the ACCC now affords them. It is an understatement to say that government is not the most effective manager of the telecommunications industry—Telstra was partly privatized in 1996 for a reason. For instance, installing a basic copper wire phone service in some rural and regional areas used to take up to 30 months; it is now less than three. Exposing the telecommunications industry to competition has increased the quality and decreased the price of services across the board—an illustration of the stunning inefficiencies of socialized communications.

Considering both options, it is clear that selling the wholesale side of Telstra to a private company is far preferable to leaving it in the hands of a government bureaucracy. But what is not clear is why slicing Telstra down the middle is actually necessary.

THE REVOLUTION IN TELE-COMMUNICATIONS

Telstra may have a monopoly over the copper wire system, but that doesn't mean that Telstra has a monopoly over the means of communications. Not any more.

It is often argued that the successor to the industrial revolution of the eighteenth and nineteenth centuries has been the revolution in computing of the last two decades. This is not without truth, but it is becoming clearer and clearer that the revolution is not that of 'computing' but of 'communications'. Since the first e-mail message in 1971, the most powerful and the most useful of all the myriad functions that computers can fulfil has been that of communication. There is nothing computers like to do more than talk to each other. And we just suck it up.

It is estimated that, by 2005, over 35 billion e-mails will be sent … each day.

Of course, innovation doesn't stop at e-mail. Developments in user-to-user software have all but broken any social restraint on breaking copyright in music and movies. Similarly, a new system, Voice over Internet Protocol [VoIP], promises to do the same for the copper wire network.

Simply put, VoIP is a method of making a call to a traditional cop-

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per-wired phone from a computer through an Internet connection. The quality can far surpass that of traditional phone calls, depending on the individual preferences of the users. (Like most computer programs, VoIP software is highly customizable.)

As long as one is connected to the Internet, the outward call bypasses the copper wire network—and, by doing so, bypasses Telstra's monopoly. The 22 cent phone call which is the norm around the country drops suddenly to a fraction of that. If, however, one makes calls between two VoIP services, they become absolutely free. And VoIP is not just idle experimentation. Skype, the most popular program, boasts that it has already been downloaded 33 million times.

To use VoIP services, you still need an Internet connection, preferably a broadband one. In Australia, one of the most common methods of broadband access is still through the copper wire networks, a system called ADSL. ADSL is sub-

ject to the same forced access regime that traditional voice services are—Telstra owns the lines and is forced to sell access to its competitors by the ACCC.

The telecommunications revolution, however, is breaking this monopoly as well. Many Australians are connected to the Internet via their pay-television cable lines. Around the world, companies are starting to lay fibre-optic cables. The capacity of this technology is incredible. In principle, optic cables can carry up to 25 trillion bits per second—enough, in a single cable, to carry all of the conversations in Australia and the United States at any one time, and still leave room to provide broadband speed Internet.

Innovation isn't limited to laying cables. Wireless broadband is steadily becoming more common in homes and businesses, and smaller ISPs are experimenting with full wireless services. Exetel is providing wireless services to metropolitan Sydney for prices comparable with normal ADSL connections.

When you combine the extraordinarily fast Internet connections being developed and installed around the world with the monopoly-breaking Voice over IP, it is clear that we are undergoing a revolution in telecommunications. But the Productivity Commission proposals appear ignorant of these momentous changes. The benefits of splitting Telstra in two will, at best, last for a few years, and will then be nullified by technological progress.

The Productivity Commission's proposal is akin to reforming a water-canal transport network after the invention of the car. Considering the massive cost, the legal nightmare, and the damage to Telstra's shareholders' investment, splitting the company is just not worth it. The benefits are both marginal and temporary.

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