Our Ref: 00951 D770371

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SUBMISSION TO THE INQUIRY INTO THE PERFORMANCE OF THE AUSTRALIAN TELECOMMUNICATIONS REGULATORY REGIME

The Western Australian Government welcomes the opportunity to provide the attached written submission to the *Inquiry into the Performance of the Australian Telecommunications Regulatory Regime*.

The Western Australian Government maintains the view that an efficient and effective regulatory regime is crucial for ensuring Western Australia's continued growth and development. The main suggestion here is that comprehensive information available to the public would facilitate a simpler and substantially more effective regulatory regime.

This submission also highlights the need for improvements in access to market information to further promote investment and competitiveness, elimination of distance-based tariffs, improvements to the current consumer safeguards and an overhaul and expansion of the universal service regime.

Should you need clarification on any of the points made, please contact the Western Australian Department of Industry and Resources: Grant Coble-Neal (phone: (08) 9222 5321, email: Grant.Coble-neal@doir.wa.gov.au) or Dan Scherr (phone: (08) 9222 5675, email: Dan.Scherr@doir.wa.gov.au).

Yours sincerely

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Submission to the

Inquiry into the Performance of the Australian Telecommunications Regulatory Regime

April 2005

Department of
Industry and Resources

INQUIRY INTO THE PERFORMANCE OF THE AUSTRALIAN TELECOMMUNICATIONS REGULATORY REGIME

INTRODUCTION

The Western Australian Government welcomes the opportunity to provide comments on the performance of the Australian telecommunications regulatory regime.

The provision of affordable, advanced communications services in Western Australia's rural, regional and remote areas is crucial to the future economic and social development of the State. The issue is particularly important to regional Western Australians who live and work in vast, sparsely populated areas that collectively account for approximately one third of Australia's landmass. Two of Western Australia's most productive industries, mining and agriculture, are increasingly integrating advanced telecommunications services into daily operations. The result is improved productivity as time delays between information exchanges imposed by vast distances are compressed. The potential, however, still greatly exceeds the realised benefits and the Western Australian Government strongly encourages initiatives that will deliver greater telecommunications investment in Western Australia.

An efficient and effective regulatory regime is a crucial element in simultaneously enhancing the certainty for investment and benefits to end-users. The main tenets of this submission are:

- that comprehensive information provided to the public would facilitate a simpler and substantially more effective regulatory regime;
- elimination of distance-based tariffs would facilitate substantial industry development and community benefit; and
- improvements to the current consumer safeguards and expansion of the universal service regime are required.

In dealing with the substance of the Inquiry, this submission does not address every point in the Terms of Reference. In addition, the response is divided into sections addressing specific Terms of Reference.

RESPONSE TO THE TERMS OF REFERENCE

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

> *(e) whether regulators of the Australian telecommunications sector are currently provided with the powers and resources required in order to perform their role in the regulatory regime;*
>
> *(j) whether it is possible to achieve the objectives of the current regulatory regime in a way that does not require the scale and scope of regulation currently present in the sector; and*
>
> *(k) whether there are any other changes that could be made to the current regulatory regime in order to better promote competition, encourage investment or protect consumers.*

The Western Australian Government believes that public disclosure of comprehensive information about Australia's telecommunications network would:

- facilitate the development of a less cumbersome regulatory regime; and
- better promote competition, encourage investment and protect consumers.

The regulators have been assigned a difficult task and need comprehensive and relevant information in order to make the best possible decisions. Toward this objective, the Commonwealth Government should provide all regulators with unfettered and mandatory rights to compel information from telecommunications providers. In the interest of promoting fair and open competition, substantially more information relating to the telecommunications network should be disclosed publicly.

Facilities-based competition, one of the Commonwealth Government's key mechanisms for stimulating investment, is critically dependent on public disclosure of relevant and comprehensive information about Australia's telecommunications network. Yet as recently noted by the journal *Exchange*, "…there is no comprehensive information publicly on, for example, the extent of Telstra's optic fibre transmission network…"[1] The article, 'What's the reach of Telstra fibre?', quotes a telecommunications expert, Robert Brand who comments that optic fibre extended to surprisingly small communities, "…but that its presence had not translated into broadband services for customers…" Despite the information and regulations currently in place, anecdotes such as this are not easy to verify.

Poor market information has long been recognised as a major impediment to fair and open competition. Among its consequences, the effects of inadequate

[1] 'What's the reach of Telstra fibre?' *Exchange*, volume 17 number 13, 8 April 2005.

information range from too little investment, unnecessarily high prices, reduced output and proliferation of waste through lost opportunity.

One outcome of inadequate disclosure, asymmetric information, is an identified market failure. Regulations dealing with asymmetric information, such as those that deal with insider trading on financial markets, recognise competition on the basis of information disparities between parties is unfair and ultimately has a destructive impact of the economy. By contrast, full and fair disclosure of all relevant information empowers all stakeholders and provides:

- the best opportunity to maximise the benefits of, and better target, government funding;
- a more favourable investment environment for telecommunications providers;
- the opportunity for end-users to select the best service available at the lowest price.

Though not comprehensive, the Western Australian Government believes that the type of information that should be readily available in the public domain includes:

- Data and information that would better enable consumers to make informed choices about the services available to them.
- Availability of comprehensive network reliability indicators for every exchange.
- Basic information about type and age of equipment in operation at each exchange, available floor space, service capability and other information relevant to prospective third party investment.
- Exact type and location of cable deployed in the Customer Access Network (e.g. optic fibre cable, RIM, or pair gain).
- Expenditure data on maintenance, upgrade and operation by exchange service area.
- Number of subscribers and average prices by service for each exchange service area.
- Statistics relating to latent (as distinct to realised) demand commonly available through surveys such as ‘most preferred service’ and ‘consumer willingness to pay’. Formal registers and waiting lists should be published on an ongoing basis.
- Customer complaint data by exchange service area.
- Details and prices of interconnection agreements between communications carriers. This will be particularly effective at driving wholesale prices down to competitive levels.
- Details of all sites and structures such as location, type, capacity etc.

As a guide to what is possible and practical to provide, is provided in the former Postmaster General’s (PMG’s) Department and Telecom annual

reports, which are contained in Commonwealth Parliamentary Papers. The annual reports contain a wealth of statistical information about Australia's telecommunications network, which has proven to be invaluable over the years. In addition, Parliamentary Papers corresponding to the 1960s and 1970s contain the PMG's *Financial and Statistical Bulletin* while the early to mid 1980s volumes contain Telecom's *Service and Business Outlook*. A contemporary example is the US Federal Communications Commission web site: www.fcc.gov/wcb/iatd/stats.html.

Indeed, it is somewhat ironic that the decline in information about Australia's telecommunications network has coincided with the advent of competition. The irony is that comprehensive information is one of the key elements of fair and open competition.

Adequate public disclosure provides facilities-based competition, or at least the threat of it, the best possible chance of delivering lower prices and better services for all end-users.

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

(a) whether Part XIB of the Trade Practices Act 1974 deals effectively with instances of the abuse of market power by participants in the Australian Telecommunications sector, and, if not, the implications of any inadequacy for participants, consumers and the competitive process;

(b) whether Part XIC of the Trade Practices Act 1974 allows access providers to receive a sufficient return on investment and access seekers to obtain commercially viable access to declared services in practice, and whether there are any flaws in the operation of this regime.

Broadband Gazumping

The consequences of asymmetric information provides opportunity for dominant firms to exercise non-price forms of market power.

For example, announcements of infrastructure deployments by small carriers at specific exchanges appear to be closely followed by rival announcements from bigger and substantially better-resourced carriers. On a superficial level, it could be suggested that this behaviour is evidence that facilities-based competition is stimulating investment. However, such arguments are made in the absence of prior information about the original investment intentions. For example, it is also possible that investment plans have simply been reprioritised to 'gazump' competitors while the original total investment remains unchanged.[2]

Though difficult to verify, the perception of systematic gazumping appears to be having a demoralising impact on smaller carriers. The end result may well be a substantial slow-down in broadband deployment, particularly in non-metropolitan areas.

A partial solution to this problem is to require all carriers to publish detailed capital programs so that all carriers, governments and community groups have the best chance possible of planning complementary (rather than duplicate) investment programs. Far from being a radical suggestion, this idea is based on Telecom's practice of publishing the *Service and Business Outlook* in Parliamentary Papers during the 1980s.

[2] 'Broadband biffo in the bush', *Australian IT* (22 February 2005) for a recent example relating to perceptions of deliberate broadband gazumping.

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

(c) whether there are any structural issues in the Australian telecommunications sector inhibiting the effectiveness of the current regulatory regime:

A major structural issue inhibiting the effectiveness of the third party access regime to the telecommunications network is the widespread practice of imposing distance-based tariffs on regional backhaul (long-distance cable) routes. The Government of Western Australia believes that removing distance-based tariffs associated with backhaul (long-distance cable) routes would create a substantial shift in commercial incentives. Indeed, the impact is likely to force wholesale backhaul providers to consider applying volume-based tariffs. In turn, a volume-based tariff regime would require a substantial increase in transit traffic created by the accelerated introduction of new innovative services, thereby creating considerable benefit and opportunity for regional communities.

Maximising the speed of new service deployment in regional Australia calls for change through regulation to:

- eliminate distance-based tariffs; and
- create a National Internet Protocol Network.

The remainder of this section discusses the practical issues associated with these proposed changes.

The stifling impact of distance-based tariffs

The difficulty with the current distance-based tariff structure is that backhaul routes carrying relatively little traffic become punitively expensive. The viability of providing downstream services to regional communities is undermined, as all service charges have to recover costs imposed by distance-based tariffs. The result is severely reduced transit traffic with end-users in effect paying for substantial idle capacity.

The effectiveness of the market in dealing with this has been limited. Along certain backhaul routes competition through infrastructure duplication (facilities-based competition) has been effective at reducing distance-based tariffs, e.g. the main routes between Australia's capital cities. In other cases, where backhaul routes serve smaller population centres, facilities-based competition is unlikely to be effective because the value of traffic transiting regional backhaul routes is often insufficient to support infrastructure duplication. In these cases, some form of regulatory intervention may be warranted.

In thinking about the impact of regulatory intervention, it is worthwhile to consider the proposition that removal of distance-based tariffs is likely to lead to a substantial revenue increase for regional backhaul routes. This is because the demand is inside the price-elastic region of demand. Thus relatively large price cuts will stimulate a surge in transit traffic volume, with a consequent net increase in revenue.

Forcing the removal of distance-based tariffs will stimulate telecommunications carriers to make better use of technology already deployed. For example, the widespread deployment of Internet Protocol (IP) based technology means that all services (such as voice, data and video) can be provided through a single converged network. In the short term, popular services such as broadband Internet and multimedia services would provide the initial surge in traffic. Over the longer term, traffic is likely to continue growing as the removal of distance-based tariffs improves the viability of regionally located information-based industries.

However, the impact of the change in funding regime also depends on the ease in which Internet Service Providers (ISPs) can establish access to the backhaul routes. Hence, the need for mandated creation of the *National IP Network (NIPN)*.

The Case for NIPN

In years past, the bottleneck facility in providing value-added services was the so-called 'last mile'. However, in recent years, 'last mile' access to end-users has been substantially improved through the deployment of a variety of technologies, including the multiple variants of Digital Subscriber Line (xDSL), aggregated Integrated Services Digital Network (ISDN) and short to medium range radio / microwave links. As demonstrated by the deployment of such technologies under the Commonwealth Government's Higher Bandwidth Incentive Scheme (HiBIS), there is a wealth of technologies available to fulfil the 'last mile' issue. However, the viability of deploying these technologies depends on the cost of backhaul. In effect, the bottleneck has now shifted from the 'last mile' to the backhaul network.

Ironically, major public investment in telecommunications infrastructure in the past means Australia's backhaul network is relatively bandwidth rich even in rural and regional Australia. Most telephone exchanges throughout Australia are interconnected by a world-class fibre-optic network. Even exchanges using remotely located pair-gain systems are linked by optic fibre. Almost without exception, each fibre-optic link has substantial idle capacity.

The irony of this situation is that despite Australia's wealth in bandwidth carrying infrastructure, Australians are currently effectively denied the benefits of their previous investment by virtue of the high cost, distance-based tariff regime currently imposed along these routes.

Description of the NIPN

The proposed NIPN is based on the existing Internet Protocol (IP) network, which is comprised of an interconnected "mesh" of Network Access Points (NAPs). Each NAP is an Ethernet switch, with high capacity bandwidth interconnecting the Ethernet switch to at least two other peer NAPs. For a single flat monthly fee[3] users of the NIPN (so called 'Peering Partners') would have access to a single port on the NAP's Ethernet switch allowing traffic exchange between 'peers' at an agreed financial interchange rate (nominally less than $0.001 per MegaByte).

[3] The imposition of the single flat monthly fee facilitates efficiency by confining NIPN interconnection to ISPs.

The exchange of traffic at low charge should ideally be restricted to traffic originating from within an NIPN peer. It is fair and reasonable that NIPN peers will need to purchase traffic originating from outside the NIPN (eg traffic from the USA) on a fully commercial basis, on the open competitive market. However, such transit traffic could be purchased from a provider interconnecting anywhere on the NIPN; a small ISP in Albany, WA, could purchase transit traffic from Telstra or Optus, for example.

NIPN Costing

NAP equipment is relatively inexpensive and even allowing for 100% overheads on installation it is estimated that each NAP will cost no more than $50,000 to implement.

NIPN Summary

The NIPN proposal provides a more equitable and innovative approach to telecommunications. The proposal is cost effective because the Australian public has already paid for backhaul construction. The proposal encourages innovation by facilitating IP-based service providers to deploy new services to all Australians, regardless of their proximity to a capital city. It meets the primary needs of consumers, is inexpensive to deploy and does not require major structural changes to the Australian telecommunications market or operation.

The value of information in progressing the issues

It is likely that backhaul service providers would challenge the claim that the replacement of distance-based tariffs with volume-based tariffs would create a net increase in revenue. The only rational way of settling this issue is by regular public disclosure of traffic volumes transiting all backhaul routes. This would then provide ample opportunity to determine the likely impact of changes in tariff structure and the most efficient means of funding.

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

(d) whether consumer protection safeguards in the current regime provide effective and comprehensive protection for users of services

One of the central tenets of the consumer protection regime in place currently is the Customer Service Guarantee (CSG). The CSG came into effect in 1998 in response to calls to improve service levels and to guard against poor service to customers. The Government of Western Australia has previously[4] identified the following key areas where improvements to the CSG could lead to improved safeguards for consumers:

- improved installation and repair timeframes;
- improved seasonal repair timeframes for remote area customers;
- mandatory scheduling of appointments;
- improved procedures for reporting of faults;
- alternative and interim service arrangements and pricing of same; and
- prescribed trial periods for alternative and interim arrangements.

We also suggest extending the CSG safeguards, with appropriate transition arrangements, to include:

- data products;
- customer premises equipment;
- customer cabling;
- payphones;
- business oriented services; and
- regional mobile telephony and satellite services.

In a large state such as Western Australia, the reliance upon basic telephony services by our most remote residents is not just a matter of convenience but one of life and death. The CSG benchmark statistics do not adequately reflect the service delivery problems experienced by regional, rural and remote West Australians.

The 1999 Australian Communications Authority's Investigation of Telstra's Performance under the CSG Standard and the Universal Service Obligation (USO) confirmed that statistics under the CSG standard are largely driven by existing infrastructure and connections performance and that they unfairly obscure performance in other categories.

The CSG definitions of "Minor Rural" and "Remote" apply to all but the largest 30 centres in the State. In other words, the vast majority of the service areas of the state are defined as rural or remote. In practice, this means that many WA farmers are subjected to delays of between 6 and 12 months to obtain a

[4] Department of Industry and Resources, *Universal Service Obligation Review*, 2004

new service, depending upon availability of infrastructure. This is an unacceptable timeframe and it gravely impacts upon the livelihood, competitiveness and ability to compete fairly of Western Australia's primary producers. Rather, it is suggested that the Accessibility Remoteness Index of Australia (ARIA) is a better measure of remoteness and is better equipped to deliver acceptable outcomes and meet the broad objectives of the CSG than the current definitions of "Minor Rural" and "Remote".

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

(f) the impact that the potential privatisation of Telstra would have on the effectiveness of the current regulatory regime.

Effective competition is dependent on information. The Western Australian Government believes that the paucity of information with respect to telecommunications will mean that the privatisation of Telstra will result in adverse outcomes for many Australians.

Therefore, comprehensive information about Australia's telecommunications network should be placed in the public domain. We particularly ask for extensive information and data relating to Western Australia's telecommunications network. The information and data should range from 1990 to the present so that present performance can be benchmarked against past performance across time, state boundaries and communities. All of this information will be helpful in directing attention and effort to areas of need.

Whether the current telecommunications regulatory regime promotes competition, encourages investment in the sector and protects consumers to the fullest extent practicable, with particular reference to:

(g) whether the Universal Service Obligation (USO) is effectively ensuring that all Australians have access to reasonable telecommunications services and, in particular, whether the USO needs to be amended in order to ensure that all Australians receive access to adequate telecommunications services reflective of changes in technology requirements:

In the interests of clarity, we begin by distinguishing between the right to telecommunications services and the cost of service. The principle of universal access is already established with respect to a standard telephone service, which is enshrined in the Universal Service Obligation (USO) and universal access to a basic data service (the Digital Data Service Obligation (DDSO)). The principle of universal access should be extended to all telecommunications services.

In addition to industry and community needs, Australia's emergency services need high capacity telecommunications services. GPS tracking is required to ensure that emergency service personnel are safe. High capacity data services are needed so that emergency field personnel can view and analyse satellite images. Widespread mobile telephone coverage is needed to communicate with and coordinate volunteer emergency personnel. Tailored broadcasting capability is required to provide the public with up to date and accurate information about their local area. All of these needs require advanced communications infrastructure as well as those provided via the USO and DDSO.

In discussing associated costing issues, it is necessary to be clear about the following. Telecommunications service is funded by a combination of: revenue derived from end-user purchase of services; and government subsidy. It is the Commonwealth Government's obligation to ensure sufficient funds are provided for telecommunications services where the market fails to provide them. To date, the Commonwealth Government has not provided a serious ongoing commitment to ensure that all of the telecommunications services needed by Australians will be provided.

Further, it is entirely appropriate that the Commonwealth Government accept a formal residual funding obligation, given that the Commonwealth Government has the power to make laws with respect to telecommunications under the Australian Constitution. In other words, the Commonwealth Government decides whether investment is provided by the private sector through facilities-based competition, a mandated monopoly or some other regime. Assigning a formal, residual funding obligation to the Commonwealth Government ensures the Commonwealth has the incentive to implement the best regime given specific circumstances rather than the current 'one size fits all' regime of facilities-based competition. There are many regional areas where facilities-based competition is unlikely to provide sufficient investment.

Facilities-based competition is unlikely because of the large infrastructure overhead, which imposes a substantial fixed cost of providing telecommunications services. The implication is that areas with relatively low end-user density may be incapable of profitably supporting facilities-based competition. In these areas, it is likely that there will be only one facilities provider. In this case, the Commonwealth Government should ensure that, for community benefit, regulations simultaneously maximise third party access and investment incentives. Hence, any subsidy (such as those provided for infrastructure upgrade) provided to the sole provider should contain explicit and precise conditions that guarantee that the full benefit flows to the whole community.

In other areas, the end-user density may be insufficient to support even one private facilities provider. Thus, the Western Australian Government asks that universal service funding be tied to specific net loss service areas. This is in contrast to the existing arrangement in which universal service payments are made in lump sum to a single provider. This leaves open the possibility that the universal service payment is used to enhance the provider's market position in profitable service areas while allowing equipment to degrade in net loss service areas.

In addition, it should be clear that tying universal service payments to specific net loss service areas requires close monitoring to ensure funding is appropriately spent on maintenance and upgrade. The Western Australian Government asks that all of the information required for the purposes of close monitoring be publicly disclosed. This will allow the community and other interested stakeholders to satisfy themselves that the maximum benefit is being derived from the universal service payments.

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