SUBMISSION TO

The Senate

Environment, Communications, Information Technology and the Arts References Committee

INQUIRY INTO COMPETITION IN BROADBAND SERVICES

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1   INTRODUCTION AND KEY RECOMMENDATIONS

Uecomm welcomes the opportunity to provide input into the Senate Inquiry into Competition in Broadband Services.

Uecomm is an independent provider of optical fibre broadband Services

Uecomm is a specialist broadband carrier, operating in the key metropolitan markets with extensive fibre optic infrastructure in the metropolitan areas of Sydney, Melbourne, Brisbane and the Gold Coast. We also have fibre resale agreements in Perth, Adelaide and Canberra.

Uecomm focuses on broadband (data) services and on the corporate and government markets within these key markets, as well as providing wholesale services to other carriers.

Broadband is not an objective in its own right – it is a tool for improved productivity for industry and administrations as well as for delivery of services such as health and education to end user customers. These benefits will be maximised by an infrastructure that can deliver true broadband at speeds exceeding 10Mbit/s.

Uecomm's submission pertains to the deployment of optical fibre infrastructure...

This submission focuses on point (b) of the terms of reference for this inquiry, i.e. impediments to competition and to the uptake of broadband technology and is based on its practical experiences from servicing the business market in metropolitan areas since the introduction of the current legislative framework in 1997. Uecomm has identified impediments arising from supply as well as demand aspects. From a supply perspective, Uecomm has encountered a number of impediments when offering and provisioning optical fibre based services to its customers. These are:

- Problems in accessing existing infrastructure for the installation of optical fibres
- Local Government planning rules that create delays and add significantly to the costs of extending the network
- Lack of co-operation by some building owners and managers.

On the demand side, Uecomm has identified that a major impediment to increased infrastructure competition is the purchasing behaviour of government agencies both at the federal and state level. In particular, onerous terms and conditions and "Whole of Government" deals can create impediments to the success of competitive supply.

...and to Governments' own purchasing behaviour.

For a carrier such as Uecomm, establishing a presence in a new area is a significant commercial risk. This risk can be significantly mitigated by the presence of an anchor tenant. Government customers as anchor tenants can ensure infrastructure is invested in the local area. Once the infrastructure has been installed, it can be used to service other customers through demand aggregation, thereby improving competition.

2   WHAT IS BROADBAND?

The National Office for the Information Economy (NOIE) issued a booklet entitled "*Broadband for Small Business*" in 2002. In this brochure, NOIE defined broadband as the "term used for any kind of fast Internet access. Broadband is designed to give a business or residential user instant Internet access 24 hours a day." "Fast" was defined as "generally 10-20 times faster than your existing dial-up modem, operating at up to 28.8 Kilobits per second (Kbit/s) or 56 Kbit/s."

optical fibre broadband offers speeds many times faster than DSL services

10-20 times faster than dial-up is certainly an improvement on dial-up. But it is also an unnecessarily limited definition, a definition that will not deliver the significant productivity gains which would be made available by the introduction of true broadband at speeds between ten megabits per second (Mbit/s) and one gigabit per second (Gbit/s).

Broadband is used for wide area networks, i.e. intra-organisation links, as well as for access to the Internet. It is a very important tool for direct communications in a wide area network of customers with more than one location.

The booklet listed a range of technologies used to deliver broadband services. It was disappointing that optical fibre was not among these especially when many overseas organisations consider true broadband must deliver bandwidth not available from Australian DSL providers.

Of all media used for the delivery of broadband services, optical fibre has the highest available bandwidth and thus has the greatest potential to deliver benefits associated with greater use of online services, whether delivered by the public or private sectors.

A paper entitled "The Inevitability of Big Broadband"[1] (New America Foundation, Dec 10, 2003) by Professor Reed Hundt, former FCC Chairman and currently at the Yale University, illustrates in more vivacious words, the differences between Uecomm's and NOIE's definition of Broadband:

Real broadband requires access speeds exceeding 10Mbit/s

"…….The big fish of today is Big Broadband - access to the Web at 10 to 100 megabits per second for homes and 1 to 10 gigabits per second for businesses. The small fish are broadcast, DSL, cable modem, and voice. The questions are not whether Big Broadband will swallow the fish, and perhaps the whole ocean, but how, when and by whom will the swallowing be done? Who will create value and who will capture it? How much capital will regulation and market failures cause to be wasted in the process? Lastly, will we include all Americans in the new medium, so as to create community and greater social value?..................…….The answers to these questions will define not only Information and Communications Technology ("ICT") policy, but also a major part of America's domestic and economic policy."

Professor Hundt concludes the paper with his views on the importance of "real" broadband and the government's role in facilitating its implementation:

"Many chapters of regulatory history counsel against government policies that promote specific technologies. However, a high capacity physical link is not so much a technology solution as a platform for innovation and a basis for service level competition. It should be a basis for a future of technology discovery, and the creation of a new common medium that can bind us all together."

3   ROLE OF GOVERNMENTS IN BROADBAND

Uecomm's position in this submission reflects its view that the role of the Government in this context is to create the environment within which organisations and individuals are able to communicate in an efficient manner within Australia and on a global basis. This includes communications through media that may have significant bandwidth requirements, such as imaging. Consistent with the Commonwealth's competitive framework for telecommunications and the media, this environment should include a choice of carriers. The current regulatory framework has been established on the premise that competition is of benefit to the end users. Six years of competition has demonstrated that customers have benefited from increased choice.

The Government can stimulate competition by facilitating access to infrastructure...

Uecomm faces specific impediments in both supply and demand. On the supply side, there are still many obstacles associated with access to infrastructure and buildings. Uecomm would like the Senate Inquiry to devote sufficient attention to the very important 'pits and pipes' angle in its review of broadband.

On the demand side, the whole of business approach adopted by some organisations makes it difficult for a carrier of Uecomm's size to break into certain markets. The public sector has a role and an obligation to set an example for the rest of industry on how to make use of competitive access providers such as Uecomm.

...and through government purchasing behaviour.

The supply and demand side perspectives are further addressed below, together with recommendations that the three tiers of government take certain actions to overcome some of the obstacles. Rather than considering these issues from an abstract perspective, Uecomm has chosen to address these issues from its own experiences, starting with a summary of its history.

4 UECOMM'S EXPERIENCE AND BUSINESS APPROACH

Uecomm's strategic focus is on providing optical fibre based services over its own optical fibre network deployed in the metropolitan areas of Melbourne, Sydney and Brisbane-Gold Coast – see Appendix A. For services that are beyond the reach of Uecomm's own optical fibre network, Uecomm uses services provided by other carriers on a wholesale basis.

Originally a fully owned subsidiary of a power distribution company, Uecomm started its operations with the deployment of optical fibres within the franchise area of United Energy (UEL) in the southern and south-eastern parts of the Melbourne metropolitan area. UEL's power poles became the first infrastructure on which Uecomm installed its optical fibre network.

Uecomm has significant experience deploying state of the art broadband

Through Uecomm's innovative approach to servicing the market, organisations in sectors such as health and education were able to obtain from Uecomm, what had until then only been a dream – direct fibre services. Uecomm's willingness to supply what other carriers in Australia refused to supply, enabled Uecomm to gain a foothold in a market from which it may otherwise have been excluded. Customers benefited from being able to operate their own optical equipment. Once established as a carrier, rather than just an infrastructure provider, Uecomm began selling a range of managed services, initially SDH[2] and ATM[3].

In 1998 Uecomm offered Wave Division Multiplexing (WDM) based services between the data centres of one of Australia's major banks. Uecomm was the first carrier to offer this type of service. WDM works by combining and transmitting multiple signals simultaneously at different wavelengths on the same fibre. In effect, one fibre is transformed into multiple virtual fibres

In 1999, Uecomm scored another first in Australia. Uecomm then became the first carrier in Australia to install a Gigabit Ethernet platform on which it offers Ethernet as a wide area network (WAN) and Internet access service. In addition to the benefit of offering customers more affordable bandwidth, Ethernet in the WAN and for Internet access also enable customers to connect directly into their existing local area networks (LAN) without the need to purchase specific communications equipment. The LAN functionality across the WAN is a considerable productivity improvement tool for Uecomm's customers.

Uecomm extended its network in the geographic dimension to meet customer demand. To satisfy connectivity arrangements outside UEL's franchise area, Uecomm entered into facilities access agreements with Telstra and a number of utilities. Negotiations on facilities access have been protracted and some of them have not proceeded to actual agreements. Timely access to infrastructure is one of the key obstacles to Uecomm's ability to provide services to many customers.

5 SUPPLY SIDE ISSUES

Connecting customers to an optical fibre service often requires construction in the last mile

Uecomm extends its network in a flexible and cost effective manner to specific locations where and when there is customer demand. This "build as you grow" strategy requires an environment where access to infrastructure and local government permits to construct can be obtained reasonably quickly. The long term planning perspective many of the infrastructure owners and local government authorities expect from Uecomm is incompatible with Uecomm's mode of operation.

Additionally, development approval processes vary between local governments, which makes prediction of a service delivery date impossible. Customers are less likely to order a service without a confirmed delivery time frame.

The processes adopted by infrastructure owners and local governments create problems for Uecomm when offering services to its customers. Having identified a customer or a specific area, Uecomm then faces extended delays and considerable expense in finding out how much it may costs to service a site and then to connect the service.

Uecomm's preference is to use existing infrastructure, such as underground facilities or power poles, wherever possible. This causes the least environmental disruption in the area to be serviced, usually has the lowest cost and enables faster deployment.

5.1 Facility Access

Timely information on availability of infrastructure is imperative to success of competitive providers...

Part 3 of Schedule 1 of the Telecommunications Act (1997) and the subsequent ACCC Code on access to underground facilities and towers; illustrate the Commonwealth's recognition of the importance of facility access for new entrants.

Uecomm was the first new entrant to negotiate facility access to Telstra's underground facilities under these provisions of the Act. Subsequently, Uecomm has negotiated facility access agreements with other infrastructure owners, including railway and road authorities and a number of power distribution companies. In addition to facilities access, Uecomm also requires approval from local government authorities for the installation of infrastructure.

The major cost of extending Uecomm's network to service new customers is associated with the infrastructure. Should it be known in advance whether Uecomm could use existing facilities for its network extensions, the costs can be estimated with a high degree of accuracy.

Customers do not necessarily plan telecommunications requirements well in advance of need. Uecomm may get only a few days notice to provide price and availability. If the service is required within a building that is not already fibred, Uecomm will have to obtain a quote for the delivery of the service.

With the time delays associated with finding out whether Uecomm can gain access to existing infrastructure, it is often not possible for Uecomm to base a quote on the assumption that access is available which leads to higher charges.

5.2   Local Government Impediments

Whether or not existing infrastructure can be used, some construction is normally required when a service is provisioned in a building not previously connected to Uecomm's network.

The process for gaining approvals varies from state to state, council to council and even job to job. The delays involved in gaining approvals can vary from several days to several weeks.

The planning rules of many local governments impose delays in service provisioning. The re-instatement requirements in some local governments are very costly. For example, some local governments require that the re-instatement is done by the local government. The lack of competition for the re-instatement work can make this component very expensive. In many cases, a quote for re-instatement is not provided prior to the work being carried out. This creates uncertainty for Uecomm as well as its potential customers.

5.3   Building Access

Some building owners and managers are reluctant to allow the installation of optical fibre cables in their buildings, even where a tenant has ordered a service. Although there are provisions in the Act and through the TIO arrangements to address these problems, building entry issues nevertheless create delays in the service delivery process.

This can also lead to inefficient infrastructure installations and to additional cost of services. Smaller carriers that do not have the advantage of existing infrastructure in buildings are disadvantaged by the processes designed to help them under the Telecommunication Act. Building managers/owners recognise the time required to follow the access regime under 'The Act' and the immediate need of Uecomm's customers to have their services connected. This situation is an opportunity to extract additional access charges from Uecomm.

When providing a fibre based service in a building, a fibre cable can be terminated either directly on the premises of the customer or in a common area. It is often more efficient to terminate the fibre in the common area, since the same cable can then be used to service multiple customers. With the delays in negotiating agreements with building owners and managers to terminate the fibre in a common area, Uecomm often has to resort to terminating the fibre at the customer premises. Where the fibre has been terminated at the customer premises, the connection of the second and subsequent service in the building is more expensive and time consuming.

6 DEMAND SIDE ISSUES

Current government policies place unnecessary barriers in the way of smaller and new telecommunications service providers. Examples of this are the NOIE Whole of Government Telecommunications Arrangements and various other government "whole of business" purchasing arrangements.

Government customers should ensure that purchasing arrangements do not penalise competitive suppliers...

Federal and state governments often take a no risk all benefit to the government position when purchasing telecommunications services including broadband. Unlimited consequential damages clauses, onerous indemnity conditions and non commercial warrantee clauses unduly penalise smaller carriers (or benefit larger carriers). Also unconditional guarantees and financial undertakings, divert funds away from other business activities.

Add to this a government "take it or leave it" negotiation attitude, and doing business with the government becomes expensive. These policies effectively reduce competition for government business. Businesses on the other hand take a more normal commercial position when dealing with suppliers.

A 2002 ATUG study on the 'Demand Side View of the Telecommunications Industry"[4] concluded that Telstra's dominance among Top 100 companies is comprehensive. Optus emerged as the only other widely used provider in this market. Telstra's dominance is to a great extent due to Telstra's network infrastructure reach and associated economies of scales and scope – the ingredients for 'whole of business' deals. The study noted Uecomm among five other local carriers that have made inroads into the Top 100.

...and that their purchasing behaviour rewards innovation

There are a number of innovative broadband carriers, specialising in particular segments of the market. The solutions offered by these carriers are suitable for some specific requirements of major 'whole of business' or 'whole of government' tenders. However such arrangements allow incumbent carriers to bundle services across a range of products to counter the advantages of these more innovative suppliers.

Whereas it would not be appropriate, let alone possible or desirable, to interfere in the procurement policies of private enterprise, Uecomm believes that government authorities can and should use their procurement policies to encourage competition in the supply of broadband services. The current trend for whole of business supply tenders bundling broadband services with other telecommunications services works against the innovative broadband suppliers rather than stimulating the industry.

Uecomm is not advocating that governments should support inefficient operators or any specific competitors. Rather, they should provide the framework within which it is possible for their procurement policies to make room for specialist broadband carriers.
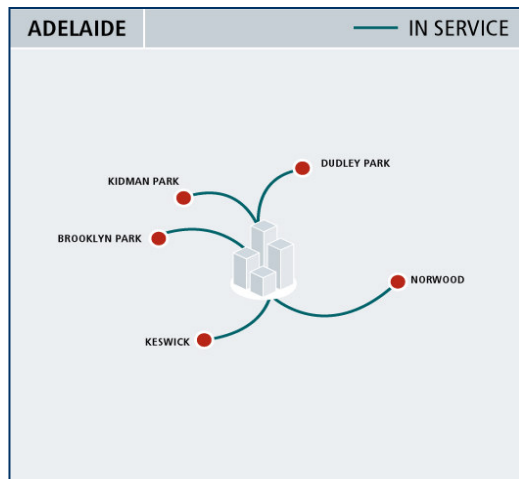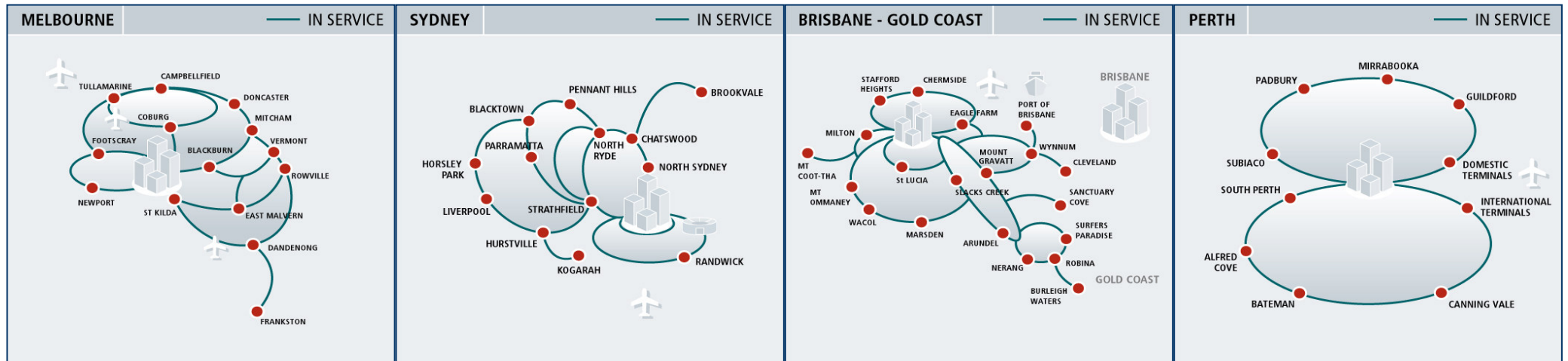
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[1] Professor Reed Hundt "The Inevitability of Big Broadband" (New America Foundation, Dec 10, 2003)

[2] SDH - traditional telecommunications transmission services delivered over fibre optic cable

[3] ATM – traditional network technology based on transferring voice, data and video using fixed sized cells or packets

[4] ATUG McDonnell Communications Research, May 2002: 5 Years On: A Demand Side View of the Telecommunications Industry

APPENDIX A – UECOMM NETWORK COVERAGE

MELBOURNE — IN SERVICE

SYDNEY — IN SERVICE

BRISBANE - GOLD COAST — IN SERVICE

PERTH — IN SERVICE

ADELAIDE — IN SERVICE

Note:

- Adelaide network leased from major SA utility

- Perth network sold to Western Power in 2003. Uecomm retains ownership of the switching equipment, has the right to use capacity on the network and has exclusive rights to market and sell telecommunication services in the Perth market

- Point of presence installed in Canberra enabling customers to be connected directly to Uecomm's network