WBT Inquiry
Submission No. 38

MINISTER FOR CORPORATE & INFORMATION SERVICES

PARLIAMENT HOUSE
DARWIN NT 0800
TELEPHONE: (08) 8901 4118

GPO BOX 3146
DARWIN NT 0801
FACSIMILE: (08) 8901 4119
minister.toyne@nt.gov.au

The Secretary
House of Representatives Communications,
Information Technology & the Arts Committee
Suite R1, 116
Parliament House
CANBERRA ACT 2600

Dear Sir

The Northern Territory Government welcomes the opportunity to provide comment on the current and potential use of wireless technologies for broadband communications. We believe wireless technologies will be an important element in the delivery of telecommunications on an equitable basis to all Territorians.

Access to broadband technologies should not be limited to those businesses and residences in major centres and the cost of broadband services must be provided on an affordable basis for those living in remote areas. The remote areas of the Northern Territory are home to some of the most disadvantaged people in Australia and we must insure that every opportunity is provided for these people to join in the information economy. Wireless technologies may be one mechanism that could help in minimising the widening of the digital divide in the remote areas of Australia.

The Northern Territory Government's response to the House Committee's inquiry is attached.

Yours sincerely

Peter Toyne

PETER TOYNE
18 JUN 2002

Northern Territory Government's Response to the

House of Representatives Communications, Information Technology & the Arts Committee inquiry into

Wireless Broadband Communications

The Northern Territory Government does not believe that the requiements for broadband services in the Territory are greatly different to those of the other states and territories. The take up of broadband services will be driven by similar factors, namely cost and the availability of applications and content that are valued by consumers.

It is critical however to ensure that no section of the Territory population is disadvantaged because they do not have access to equitably priced broadband services. These services must provide similar levels of functionality as are available in the metropolitan based products.

The availability of terrestrial based broadband ADSL services are limited to within four cable kilometres of suitably provisioned exchanges. In the Northern Territory, with the current level of technology, ADSL will be limited to seven exchanges in the more populous areas. In Darwin and some of the other regional centres, it is estimated that ADSL will be available to slightly more than 60% of the metropolitan population. Across the Northern Territory ADSL will be available to an estimated customer base of 50%, or less of the total population of the Northern Territory. Far less than the average estimated across Australia, of 81%[1].

The expansion of broadband capable infrastructure will be driven only by commercial outcomes. Infrastructure provisioning is expensive, in particular in the more remote areas. In metropolitan areas competing with carriers with existing well established infrastructure is difficult.

The Northern Territory Government encourages competition in all areas. The fast and relatively cheap provisioning of a network through wireless technologies may provide opportunities for reduced costs and sufficient competitive stimulus in the difficult market environment within the Territory.

However, wireless technologies must prove to be;

1. reliable in difficult climatic environments; and
2. provide affordable and attractive consumer products.

The Northern Territory Government views telecommunications, in part as a community development tool. The possibilities that reliable, high bandwidth communications offer for improvement in health and education of the indigenous community members in remote areas are significant. Indigenous societies are non literal and rely heavily on audio-visual means for communication. Broadband technologies will provide the necessary bandwidth to deliver better outcomes to these remote areas in a manner that is targeted to the consumer's needs and culturally appropriate.

---

[1] Research Note no. 34 2001-02, Department of the Parliamentary Library, Household Broadband Access in Australia.

These communities are arguably some of the most disadvantaged in Australia and potentially have the most to gain from reliable broadband communications. Wireless broadband may provide an important mechanism to reduce costs to those that can least afford it.

Wireless technologies in the local loop may provide the means for cheaper provisioning of voice and data services into remote communities. Given the USO only requires Telstra to deliver to a single point in a remote community (property boundary) the cost of reticulation within the community may be required to be carried by the community. Wireless technologies may provide a more cost-effective alternative of delivering the last mile (last yard) infrastructure.

At the same time wireless technologies may also provide an opportunity for the emergence of community or regional based organisations that could provide broadband reticulation in communities. To do this would require a close examination of the regularity regime to ensure that the benefits provided under a number of Commonwealth funded schemes, such as the USO and the Untimed Local Calls in Extended Zones are not negated. There is potentially great benefit in using new technologies to develop community-based business.

To ensure that the business opportunities are realised in remote areas, the cost of spectrum must be kept low or offered at no cost where delivery is into remote communities. This will provide an environment that could encourage the growth of competitive organisations for the delivery of data and potentially voice communications into remote communities. This should be extended into all areas of the spectrum where commercial products can deliver a service.

For the most part the technical nature of the delivery platform for broadband products is immaterial. The functional nature and related price of the product offering is key. Some exceptions are however relevant, notably the idiosyncratic behaviour of satellite delivery systems has shown to be problematic in some areas. Satellite services have proven unpopular for voice communications because of the noticeable propagation delay, so this would not provide a suitable combined data and voice service as is available over ADSL. Some business applications have also proven to be difficult or impossible to run over broadband satellite services. Most notably however is the continued high cost of use of satellite services. Based on current commercial offerings, satellite broadband is almost twice the price of terrestrial services. This places those remote communities that need these services the most, but are too distant from an exchange to access terrestrial broadband at a distinct disadvantage.

No comment is offered in relation to the particular standards emerging in the wireless arena. A detailed investigation into each of these technologies would be necessary to offer valued comment. It is expected that industry will drive out the standards. The regulatory bodies responsible must retain a broad perspective in reviewing appropriate standards.

Similarly in relation to the complex area of regulation no comment is offered.