

SUBMISSION TO THE REGIONAL TELECOMMUNICATIONS INQUIRY

Prepared by Townsville City Council



September 27, 2002

Executive Summary

Townsville City Council believes equitable access to high quality, affordable and reliable telecommunications services is critical to the quality of life and competitive of industries in our City.

Council is concerned that there is currently inadequate ADSL broadband service availability to Townsville businesses and residents. Over 10% of Townsville customers simply cannot get ADSL due to network and technology constraints. This is simply not acceptable.

Investments in technology and network infrastructure are required to achieve a satisfactory situation of ADSL availability to all. We believe this is an absolute imperative for our region.

Robust retail competition is recognised as an important ingredient to ensuring consumers receive quality services and affordable prices. Current levels of retail competition in broadband services are disappointing.

Council also is concerned that competition in basic telephony services and mobile services is inadequate and believes the ACA, the ACCC and the ITO have critical regulatory roles to play and should be adequately resourced.

Long term standards can only be maintained if there is ongoing investment in the maintenance and upgrade of the network infrastructure and technology. The most effective mechanism for ensuring that this occurs – that is, ensure 'future proofing' of service standards and availability – is for the core national telephony network to remain in majority public ownership.

Council therefore does not support the further sale of the 50.1% of Telstra.

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1 INTRODUCTION

This submission to the Regional Telecommunications Inquiry has been prepared by the Townsville City Council.

While Council welcomes the opportunity to raise issues and concerns, Council is disappointed that this current Inquiry's timeframe and approach does not provide adequate time for organisations, communities and individuals to comment and contribute. In particular, the absence of public hearings by this current Inquiry is disappointing, considering the public consultation processes that were part of the first Besley Inquiry.

In preparing this submission, the Council has taken a broad 'whole of community' approach. This approach has involved community consultation through informal mechanisms, as well as a formal process focused around the *Regional Telecommunications Forum* initiated and facilitated by Council.

1.1 REGIONAL TELECOMMUNICATIONS FORUM

The *Regional Telecommunications Forum* was held on Thursday September 12, 2002 in Townsville and was open to all residents and organisations in Townsville. Major telecommunications stakeholders made formal presentations to the Forum, including:

- Telstra;
- James Cook University; and
- Commerce Queensland.

Council would like to thank all participants for their input, and are pleased to note the cooperation of Telstra in providing information on services, infrastructure and future plans.

Forum Attendees

| Name | Organisation | Name | Organisation | Name | Organisation |
|----------------|--|--------------------|-------------------------------|-----------------|---|
| Carl Van Wijk | J.C.U. | Malcolm Gregory | SDC Townsville | Allan Baldey | E.I.E./ Pagex |
| Mark Edgar | Scintellex | John Holt | | Peter Duffy | Townsville Chamber of Commerce |
| Sam Point | Private | Bill Lavery | J.C.U. School of IT | David Lynch | Commerce Queensland |
| Kevin Collier | Ergon Energy | Peter Marendy | J.C.U. School of IT | Joann Resing | DPI |
| John Spinaze | Qld Government | Denis Lambrose | Lambrose Electrical | David Johnson | |
| Colleen Kneipp | | Authur Tsakissiris | Telstra Country Wide | Steve Hawker | Peter Lindsay MP |
| Sean Edmonds | RAM Info Tech | Fred Annesley | | John Croft | JCU |
| Jeffery Bird | J.C.U. | Allan Vitale | Saint Margaret Mary's College | Michael Cloonan | Code Valley |
| Sharif Deen | Transpac Consulting | Noel Louisa | Code Valley | Barry Lollo | Townsville Division of General Practice |
| Owen Taylor | Telstra Country Wide | Eric Lawrey | Code Valley | David Lowe | J.C.U. |
| Scott Braiding | CWS | David Laing | Code Valley | | |
| John Errington | South West Pacific | Dane Llewellyn | Telstra | | |
| Damien Power | Office of the Minister for Innovation and Information Technology | Ian Atkinson | J.C.U. | | |

1.2 MAIN POINTS

The main points of this submission are that:

- Broadband Internet services are inadequate, insufficiently widespread and too expensive for business and household use – more needs to be done in this critical area of infrastructure rollout and service delivery;
- Significant investments in upgrading and maintaining the telecommunications network is essential to ensuring that Townsville residents and businesses have available to them broadband services (especially DSL services);
- ‘Future proofing’ of our community to ensure availability of new technologies and services is guaranteed into the future is essential. Full privatisation of Telstra would adversely affect the long-run provision of telephony and data services to regional Queensland, and present risk to ‘future proofing’ and is opposed by Council;
- Current basic telephony services are more or less satisfactory, but that maintaining service standards and reliability requires constant vigilance and investment of human and capital resources. Again, full privatisation of the network owner would jeopardise long-term investment in the network;
- Competition in long distance telephony over the last 5 years has led to some price reductions. However, it is believed that there remains room to move in relation to pricing, and more robust competition would facilitate this;
- Mobile telephony services in Townsville are improving, though reception in parts of the city remains unsatisfactory. Feedback from the community indicates particular concerns with mobile coverage on Magnetic Island; and
- Basic Internet (dial up) services (<64kbps data rates) are fairly reliable and on the whole satisfactory, however forced ‘time outs’ continue to frustrate local consumers.

2 TOWNSVILLE TELECOMMUNICATIONS CONTEXT

2.1 SIGNIFICANT SPEND

The Townsville region spends considerable sums of money on telecommunications services.

According to the 2001 *Queensland Customer Access Network Study (QCAN)* commissioned by the Queensland Government the annual telecommunications expenditure in Townsville for 2001 was in the order of \$138.3 million. This is expected to grow to between \$188.8 million and \$205.1 million in 2006.

2.2 HOUSEHOLDS

There are approximately 60,540 households in the Townsville region, with some 127,658 lines consisting of 69,751 fixed telephone lines and 57,907 mobile phone lines. The study found that:

- The average annual expenditure per household on telecommunications services is in the order of \$1,377;
- The average annual expenditure for home businesses is \$3,954; and
- Excluding home businesses, the average annual spend for households is \$1,063.

2.3 BUSINESS

There are approximately 8,432 businesses in the Townsville region (1998), with some 56,254 telephone lines comprising 39,337 fixed lines and 16,917 mobile phone lines.

The average annual expenditure per business on telecommunications services is \$6,567.40 making a total spend of approximately \$54.9 million.

2.4 FUTURE GROWTH

The *QCAN Study* found that 34.8% of Townsville residents expected to add new fixed or mobile lines in the next five years. This compares with a State-wide average of 30.2% (p. 46).

Growth in home based business activity is one of the main drivers of future growth in line installation, which presents significant opportunities and need for ADSL access from homes.

3 RESPONSE TO TERMS OF REFERENCE

3.1 TERM 1

The extent to which the Government's response to the Telecommunications Service Inquiry (TSI), other Government initiatives and further commercial developments have so far addressed the community concerns identified in the TSI Report, particularly with regard to:

- *the timely installation, repair and reliability of basic telephone services;*
- *adequate mobile phone coverage at affordable prices; and*
- *reliable access to the Internet, and whether ongoing delivery of the Government's response will meet the TSI concerns within a reasonable timeframe.*

3.1.1 Basic telephony services

The provision of *basic telephony services* (i.e., fixed line voice services) is by and large of an acceptable standard.

The population density of Townsville, together with the size of the city's overall telecommunications spend, would warrant a comparable standard of service to that received in capital cities.

It should be noted that maintaining acceptable levels of service provision in terms of installation, repair and service reliability requires constant vigilance and investment of capital and human resources. In this context, it should be recognised that, according to a survey conducted as part of the 2001 *QCAN Study*, in 2000-2001:

- 17.4% of Townsville households indicated that they had experienced problems with their telephony carrier in the last 12 months;
- 13% of households indicated that they had experienced problems with telephone services in the last 12 months;

- 30.8% of businesses indicated that they had experienced problems with telephony carriers over the last 12 months; and
- 13.1% of businesses indicated that they had experienced problems with telephone services in the last 12 months.

Key problems included poor customer service, inaccurate billing, technical problems, poor reception and poor connections.

The extent of problems experienced is of concern, and service providers need to take strong note of consumer experiences. Enhanced competition would no doubt encourage service providers to be more responsive. However, the future of competition in traditional basic telephony services is doubtful.

Concerns in relation to Telstra's customer service and provision of service information (either via the call centre or online) were raised consistently by telecommunications users at the *Regional Telecommunications Forum* and echo the survey findings. Specific areas of concern in this regard relate to information on ADSL availability.

More generally, the official Australian Communications Authority (ACA) evidence of the major carriers' performance suggests there is still room for improvement and need for ongoing vigilance. For example, according to the June 2002 *Telecommunications Performance Monitoring Bulletin*:

- Telstra's national fault clearance performance for all areas declined by 4% to 87% - which represents 3 consecutive quarters of decline for urban performance; and
- Optus' fault clearance performance fell by 7% to 78% - the second consecutive quarter to see a fall.

To suggest that service performance has reached sustainable and satisfactory levels would be grossly misleading. More work is required from the major players.

Townsville City Council is concerned that the 'commercial imperatives' of prioritising 'shareholder value' is impacting on Telstra's ongoing preparedness to invest in maintaining and improving the core Public Switch Telephone Network (PSTN), which is the lifeblood of basic telephony services. Recent significant cuts to Telstra's CAPEX are placing the future standard of basic telecommunications services in the region at risk.

The emergence of competition in long distance telephony over the last 5 years has been an important factor in bringing down prices. However, there is concern in the community that:

- Competition is not sufficiently vibrant and robust for price reductions to be sustained into the future; but that
- With further competition, additional price reductions for long distance telephony should be available to telecommunications users in Townsville. Townsville residents and businesses believe that further downward movement in long distance telephony costs is pivotal to the region's ongoing push to improve its competitiveness. The fact that one of the largest telecommunications users in the region – QNI – has implemented a Voice-Over-IP environment strongly points to a belief that current long distance telephony costs remain too high.

3.1.2 Mobile Phone Coverage

In relation to *mobile phone coverage*, some in the Townsville community are concerned that reliability and service coverage remains patchy across the city. According to the *QCAN Study*:

- 2% of households across Queensland reported poor or no mobile telephone service or coverage; and
- 3.7% of businesses statewide reported the same.

This situation is manifest in Townsville specifically on Magnetic Island, where community feedback indicates mobile coverage to be more problematic than

in the remainder of Townsville. Council welcomes Telstra's advice that additional mobile towers are soon to be operational on Magnetic Island.

More broadly, in this connection, the ACA – as the agency responsible for supervising the technical quality of the national telecommunications network – should provide certified mobile service coverage maps so that a true and accurate picture of actual mobile coverage (in Townsville and elsewhere) can be gained. Coverage in areas that are not far outside the outer perimeter of Townsville City is in places poor, and black spots need to be attended to.

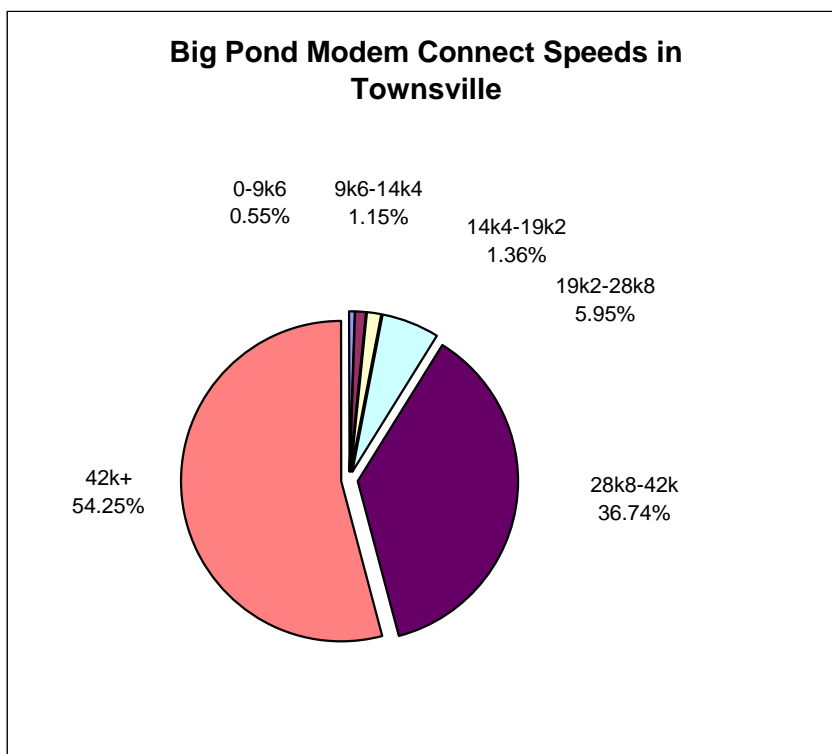
Additionally, the community is concerned that the limited nature of mobile competition will mean carriers will continue to have significant (and otherwise unjustifiable) margins on services like roaming, termination fees, SMS and international interconnection.

3.1.3 Reliable Access to the Internet

Council acknowledges that the PSTN has been progressively upgraded across the country to improve the quality of especially voice services, and to a certain extent accommodate the growing demand for data services. However, as noted above, Council is concerned that CAPEX cuts will lead to the long run decline in the quality of the PSTN asset, to the detriment of consumers.

Australian Internet use, particularly *narrowband* access (up to 56kbps) via a dial-up connection, is reasonable by international standards. According to information provided by Telstra CountryWide, in terms of download speeds, the situation in Townsville for narrowband services is reasonable if unspectacular.

Telstra CountryWide data indicates that over 90% of Telstra BigPond connect speeds are in excess of 28kbps, with 54.4% in excess of 42kbps (Chart, next page).



However, while the dial-up service appears reasonable, the existence of a four hour hard timeout policy for Internet connection is angering customers, particularly those who have subscribed to an unlimited usage Internet access account. It is seen as merely another way for carriers to get more money from its customers.

3.1.4 The Broadband Situation

While narrowband Internet use is improving, Australia lags other advanced economies in its adoption of *broadband*.

According to ACNielsen/NetRatings, as of September 2001 approximately 5% of Australians accessing the Internet at home did so at 'high speed' (e.g. DSL, Cable, LAN etc.). This placed Australia 16th out of 28 OECD countries benchmarked.¹

Since July 2001, Australian broadband uptake has increased significantly in response mainly to Telstra's rollout of ADSL services and the emergence of competition in the domestic broadband market. ADSL is now the most popular broadband platform, and most readily available across the country.

However, regional centres continue to lag capital city take-up activity. In Townsville, data provided by Telstra CountryWide indicate that ADSL take-up is in the order of 1.8% as of August 2002.

This is of considerable concern, and it is vital that the take-up rate in Townsville be increased.

Council believes that the lack of affordable bandwidth in Townsville is a significant drag on the future economic growth opportunities of the region, as well as impacting adversely on the quality of life of the city's residents.

The need to access Information and Communication Technology (ICT) is very important to future industry development in the region. It enhances the region's ability to compete domestically and actively participate in the global economy.

The fact is that bandwidth is a critical determinant of the capacity of business to gain access to and disseminate large amounts of data quickly and cheaply. Bandwidth determines the speed of e-mail, Internet connectivity, video conferencing and other critical e-business functions.

The inability to access ICT will impede businesses, both large and small, affecting in turn Australia's competitive position in the global marketplace.

The Allen Consulting Group estimates that widespread business involvement in the information economy could delivery an extra 2.6% GDP growth by 2004-2005, but this would be reduced to 2% if broadband Internet access did not become widely available. The missing 0.6% is estimated to be worth some \$12 billion nationally in the peak year.²

The inability to access bandwidth in key regional centres such as Townsville is of particular concern in Queensland, the only state in which a majority of residents reside outside the capital city. This situation is not only an impost to business growth but, as stated by Commerce Queensland's Interim Manager

¹ OECD (2001) *The Development of Broadband Access in OECD Countries* p. 14.

² NOIE *Australia's Information Economy: The Big Picture*

in North Queensland David Lynch at the *Regional Telecommunications Forum*, also considerable concern to successful development of this region.

The opportunity-costs for a regional economy like Townsville are considerable. A recent survey showed that in Townsville the ICT sector alone – comprising some 110 businesses, employing around 800 people – generates revenues of \$90 million a year.³

Already, 15% of these businesses are selling products and services interstate and 15% are involved in international export activity. Access to affordable broadband infrastructure and services could assist these firms grow their export activities, and strengthen the region's overall competitiveness.

The need for affordable broadband services was identified as one of the key issues impacting on ICT development in North Queensland.⁴

Some communities associated with the Townsville region (e.g. remote mining locations and small businesses in remote and even metropolitan areas) have no broadband access. In areas that do have access, the cost of this access (especially for business) creates substantial development barriers and adds to the cost of doing business in the region. These costs create anti-competitive forces and even prevent the ability to access infrastructure available to businesses.⁵

Both the education and health sectors in the region require high bandwidth and the lack of accessibility impacts on the provision of these services, points emphasised by speakers and participants at the *Regional Telecommunications Forum*.

The ability of James Cook University and research institutions such as AIMS to participate in international and national leading edge research and development is impacted significantly by the cost of additional bandwidth.

³ Queensland Government Department of State Development (September 2002) *Tropical ICT, North Queensland Industry Development Plan for Information and Communications Technology*

⁴ Queensland Government (September 2002), *Tropical ICT*, p. 6.

⁵ Queensland Confederation of Industry (Commerce Queensland) – David Lynch Interim Manager, *Regional Telecommunications Forum*

Competitive access to bandwidth is imperative to their ability to grow and compete with other educational organisations; despite this these Townsville institutions do not have the same ability to access affordable broadband as their Southern counterparts. Further to this the bandwidth they access comes at a significantly higher cost, in excess of \$1 million each year, again far greater than their Southern counterparts.⁶

JCU has a turnover of \$150,000,000 each year with most of this income derived from exporting the educational product to international students and income generated by research carried out at the university. As such, JCU in Townsville would be one of the heaviest users of communications technology.

JCU's connection capacity to Cairns and Brisbane is only 20mbps, consequently the connection is constantly used a peak levels, all day, everyday. To be an effective provider of education services and educational business activities, JCU actually needs bandwidth of a capacity of at least 100mbps. JCU currently cannot afford the high rates charged for bandwidth in the Townsville region. This service is cost prohibitive as JCU has to compete with universities in capital cities as well as internationally. The cost to these universities to get the link into the educational network is considerably lower due to their proximity to the POP connection whereas JCU has to pay a significant amount for the 20mbps connection to Brisbane to link into the educational network.

Every year JCU needs to be doing more; it needs to be offering higher speed access to the Internet for students and other regional services (e.g. video online learning and conferencing for online meetings, grid computing to support research by sending data to multiple computers etc).

The opportunities for broadband-supported educational products are extensive, and have been identified in research reports such as *The Business of Borderless Education*.⁷ However these activities cannot be undertaken

⁶ Queensland Confederation of Industry (Commerce Queensland) – David Lynch Interim Manager, *Regional Telecommunications Forum*

⁷ Cunningham, S., et al., (June 2000) *The Business of Borderless Education* (Commonwealth Government, Department of Education, Training and Youth Affairs)

because the bandwidth needed is too expensive and thus makes them not viable. JCU's need for bandwidth is growing at a rate of 2-3 times each year, but the cost of meeting these needs is prohibitive and adversely impacts the institution's ability to deliver education services and products. Unless a solution is found to address this need and keeping the bandwidth costs down, JCU will not be able to compete with other universities in the future, to the region's detriment.⁸

According to Commerce Queensland in Townsville, the inadequate availability of affordable broadband services as well as competitively priced long distance telephony, have seen some potential business ventures choose Brisbane or another capital city over Townsville as a base. The comparative cost of telecommunications was the decisive issue.

This is despite Townsville meeting or exceeding the business requirements on the needs of the proponents, such as skilled labour, property costs and lifestyle and location. The ability for these organisations to gain access to bandwidth is important to recruitment and the money spent on accessing bandwidth could be better spent on business operations. The impacts of these decisions have meant a loss of potential employment to the region, as well as a loss of opportunities to improve Townsville's corner stone of innovation and development through the supply of skilled labour.⁹

3.1.5 Broadband Issues

A number of factors are contributing to this unsatisfactory situation. These are:

- The state of the Network Infrastructure;
- Status of competition (or lack of it); and
- Inappropriate Pricing.

⁸ Professor Bill Lavery – JCU, *Regional Telecommunications Forum*

⁹ Queensland Confederation of Industry (Commerce Queensland) – David Lynch Interim Manager, *Regional Telecommunications Forum*

3.1.5.1 Network Infrastructure

Firstly the nature of the *existing network infrastructure* is a concern, a point noted by the Productivity Commission when it said that, “the level of data services has been constrained by limitations to the Customer Access Network”.¹⁰

In terms of availability, Telstra CountryWide advises that in Townsville ADSL availability is in the region of 69,000 customers out of a total customer base of 86,500 (80%).

As of end August 2002, Telstra CountryWide had approximately 1,250 ADSL customers (including wholesale).

Some Townsville residents and businesses simply cannot access ADSL services. According to Telstra CountryWide, approximately 420 customers in Townsville are connected to SPGS or SCADS. In addition to these customers, approximately 500-600 customers are reported to be outside the transmission limits for ADSL (around 5km from an ADSL equipped exchange).

In response to queries on this matter, Telstra CountryWide advised that:

“Telstra is working on a process conforming to all regulatory requirements which allow us to use spare copper pairs where they exist to avoid pair gain systems. We hope to be able to make an announcement on this in the near future. Depending on the area, this will allow in most cases some 10-20% of customers currently blocked by pair gain to be able to be provided with ADSL on request.”

Council is concerned that the situation may be worse than indicated by these figures. Information provided by Telstra to a recent Senate Estimates Committee suggests that pair gain systems impact at least 9% of telephony customers across the country. This would translate to at least 6,000 customers in the Townsville region that are excluded from ADSL because of the deployment of pair gain systems.

¹⁰ Productivity Commission (July 2001) *International Benchmarking of Remote, Rural and Urban Telecommunications Services*, p. 105

Limits to availability are also caused by the use of RIM technology that is not compatible with ADSL. At present, Telstra CountryWide advises that of the 6 ESA's in Townsville that are equipped with ADSL infrastructure, approximately 17,500 customers are connected via RIM. Of these, around 8,000 have alternative path options for ADSL, and the remainder would most likely not get ADSL. That is, at least 9,500 customers cannot get residential ADSL because of the deployment of RIM technology.

Telstra CountryWide advises that there are no plans to replace existing RIM technology, though two recent developments are noteworthy in terms of improving availability into the future. These are:

- The development of a small ADSL system called a 'Minimux', which is packaged to be able to fit into a RIM housing; and
- The development of a version of the CMUX to replace RIMS for new installations. These will be ADSL compatible, and are expected to be introduced soon (early 2003).

Where ADSL is not available, alternative platforms can support broadband services. Specifically in Townsville Telstra CountryWide offers ISDN and satellite broadband services.

ISDN is available to over 99% of Townsville customers, however ISDN is not readily offered by Telstra as a fast Internet option. Moreover, the \$190.30 conversion from existing standard phone service and \$42.50 per month charge for Telstra's ISDN HOME service to Townsville residents was perceived to be cost-prohibitive to at least some sections of the community.

It should also be noted that the ISDN service is not equivalent to the ADSL service – especially in terms of data transmission rates. ISDN supports data transmission rates of 64 or 128kbps; however simultaneous voice and data transmission reduces data transmission rates to 64kbps. ADSL on the other hand provides downstream options that range from 256kbps to about 2mbps and upstream range of 64kbps to 680kbps.

In this sense, ISDN and ADSL are not perfect substitutes and should not be promoted as such.

There have also been criticisms of an apparent lack of customer service provided by Telstra and the comprehensiveness of the information made available by the corporation about ISDN. In particular, inadequate information is made available from Telstra's web site and its customer service centres on why customers cannot access ADSL or ISDN.

Residents make important life decisions, such as moving to new areas and are increasingly influenced by factors like whether or not an area has ADSL ISDN coverage. The absence of accurate information is adversely impacting on the lifestyle and residential decisions of many people.

There are serious questions about the reliability and age of the Telstra copper CAN, particularly the ability of the network to handle new technology advances. The current CAN is prone to service difficulties with the old copper wire, or copper wire in disrepair (quality of joints, etc).

Council also notes with concern the impact of the use from the mid-1990s of a supposedly protective gel to encase the CAN. According to the CEPU:

“The initiative was intended to reduce the fault rate and hence allow ongoing labour shedding without jeopardising network reliability. The effect has been the opposite.

It has now become apparent that the gel used by Telstra reacts with moisture to break down cable insulation. Moisture is always likely to be present in underground cable to some degree, as over time even modern sheathing is permeable. Moreover the older the cable, the more likelihood there is of leaks occurring along it (i.e. at places other than the joints). This will result in increased fault levels not only at the joints but at other points of the network as the gel seeps along the cables and encounters moisture further along the cable run. The

problem is being exacerbated by the air pressure maintenance difficulties ...”¹¹

What is the situation in terms of the state of the copper cabling in Townsville?

The quality of the DSL service for users is limited in many respects by the performance (data rate) capabilities of the customer access parts of the existing PSTN and the newer technologies. The data transmission rate is affected by:

- The age of the copper line;
- The material used in the line’s installation;
- The quality of the joints;
- The proximity of the line to electrical interference; and
- Distance from exchanges (length of line).

There is not much available data on the regional complexion of the quality of network issues. It is, however, worth noting the following:

- The Productivity Commission’s benchmarking study pointed out that over 30% of Australia’s PSTN network is over 30 years old and over 5% predates 1950;
- The same study also noted that Australia’s CAN is based on a tapered design that means that the multi-pair cables that leave an exchange are broken down in ever smaller groups of copper pairs as they approach the user’s premise; and that the tapering introduces the need for the use of joints; and
- A recent Australian Communications Authority (ACA) report made it clear that in the Boulding family case a combination of cable degradation and the use of digital pair gain systems had affected network reliability.¹²

¹¹Communications, Electrical and Plumbing Union (August 2002) Submission to the Senate Committee Inquiry into the Australian Telecommunications Network p. 19.

According to one Queensland Government representative at the *Regional Telecommunications Forum*, the CAN simply cannot deliver the technology required to do what you need to do.¹³

Council is concerned that the quality of service received by Townsville residents and businesses is adversely impacted by the quality and nature of the copper networks in the City. Taking the Productivity Commission's estimates at face value, it could be extrapolated that some 35% of Townsville customers' may be affected in terms of their ADSL service level – that is, over 30,000 customers.

3.1.5.2 Status of Competition

Secondly, the *extent of genuine competition* in the broadband market remains constrained. Competition between different providers and networks with different technologies is crucial to improved services, competitive pricing and greater end-user uptake.

An OECD study found that there is a significant correlation between the growth of cable modems and DSL services.¹⁴ The study noted that in some countries the main competition to DSL comes from other technologies:

“This is because either cable networks have not been developed or because incumbent telecommunications carriers own a large part of the cable television infrastructure. In these countries competition is sometimes emerging on alternative platforms and technologies.”

In Townsville competition to DSL services will not come from cable networks (e.g. TransACT, Neighbourhood Cable), as no cable infrastructure has been deployed and it is highly unlikely that it will in the future.

Vibrant competition in Townsville will only come about in terms of either competing retailers of DSL services (i.e., Telstra and re-sellers) or alternative

¹² ACA (March 2002), *Investigation into the Provision and Maintenance of Telephone Services to the Boulding Family*

¹³ John Spinaze – Department of Innovation and Information Economy, *Regional Telecommunications Forum*

¹⁴ OECD (2001) *The Development of Broadband Access in OECD Countries* p. 9

platforms and technologies such as smaller DSL or cable networks, or fibre to the home, broadband fixed wireless etc. In the short term, the most likely area of competition will arise through growth in market entrants retailing DSL over Telstra's network.

The recent *ACCC declaration of line or spectrum sharing services* in Telstra's national PSTN is welcomed by Townsville City Council, as an important and positive step towards ensuring genuine competition in the DSL services market.

As well, Council supports robust regulatory regimes to ensure third party access to the local loop, and which is made available at cost-based pricing, as this would encourage competition by reducing the financial barriers to entry and encouraging new market entrants. Cost-based pricing principles would not create disincentives for new entrants to invest in their own infrastructure and facilities. Instead it would allow new entrants to deploy infrastructure in a demand-driven fashion, and offer services to a wider range of consumers from the commencement of service.

In this regard, Council notes with concern that there appears to be limited competition in the Townsville residential DSL market with Telstra CountryWide apparently being the only significant provider servicing this sector.

3.1.5.3 Pricing

Thirdly, *pricing of broadband services* remains unacceptably high and unattractive to many Townsville consumers. At present, the entry price level for domestic broadband services is around \$60 per month. For many residents and businesses, this price is simply prohibitive or at the very least unjustifiable. The *QCAN Study* found that:

- Households were prepared to pay on average \$18.65 per month for the new (broadband) service – for the Townsville region the figure increased to \$28;

- Households that were likely or very likely to use the service would be prepared to pay \$31 per month;
- “Results [of the householders survey] show that a service priced above \$50 is unlikely to receive significant support with only 8.4% of consumers being prepared to pay \$60 a month or more for the new service”; and
- Only 15.2% of Townsville residents would be prepared to pay \$50 a month for a new fast speed Internet service.¹⁵

These findings are reflected in the *Queensland Household Survey – Computer and Internet Usage* (May 2001), which found that 23.3% of Queensland householders did not intend to obtain Internet access in the next 12-months because it was “too costly”.¹⁶

As for business consumers, the survey found that:

- Businesses across Queensland would be prepared to pay on average \$25.37 per month for the new fast Internet service;
- Businesses that were likely or very likely to use the service would be prepared to pay \$61 a month;
- A service priced above \$70 would be unlikely to receive significant support, with only 9.9% of businesses being prepared to pay more than this amount; and
- 10.1% of Townsville businesses surveyed were prepared to pay \$100 a month.¹⁷

The apparent absence of genuine broadband competition in the household market segment is of concern to Council, as competition can be expected to lead to some price reductions. It is believed that one constraint to effective household competition is that Optus did not place sufficient switches along the

¹⁵ QCAN Study, Part 2 Appendix B, p. 69-71.

¹⁶ Queensland Government, Department of Innovation and Information Economy (May 2001) *Queensland Internet Ready: May 2001 Queensland Household Survey – Computer and Internet Usage*, p. 13.

¹⁷ QCAN Study, Part 2 Appendix B, p. 138.

Reef Network to support domestic market entry, with the Network being predominantly used to support Optus' mobile network.

Furthermore, the cost of bandwidth (and Internet access) in Australia is significantly impacted by the price paid to access global fibre. Telstra indicates that this cost contributes approximately 50% of the total cost of Internet access. The current glut of global fibre optic capacity is causing a reduction in the price charged for access to these networks. These savings should be passed through to consumers in the form of reduced monthly access/subscription fees.

3.2 TERM 2

The performance of Telstra, as the primary Universal Service Provider, in meeting Customer Service Guarantee (CSG) standards on the timely installation, repair and reliability of basic telephone services in regional, rural and remote Australia, compared with its performance in metropolitan markets and with overseas carriers in reasonably equivalent markets.

3.2.1 Response

As noted above, the general level of service for basic telephony in Townsville is considered reasonable. However, there remain considerable concerns about the ongoing status, sustainability and reliability of the PSTN and CAN, which will impact the future state of basic telephony services.

Council supports the ongoing role of the ACA, the ACCC and the Telecommunications Industry Ombudsman to monitor and regulate the performance of telecommunications industry service providers.

3.3 TERM 3

Additional Government action that may be taken to remove impediments to the delivery of internet services at 64Kb/s or better and wireless-based technologies in regional, rural and remote Australia.

3.3.1 Response

As previously stated the availability of quality, affordable broadband is a critical issue for the Townsville region.

Wireless broadband services e.g. WiFi,¹⁸ Bluetooth and 3G are not considered to be able to support mainstream mass broadband needs. Wireless technologies and applications will have niche opportunities to meet industry and domestic needs – they can fill in some holes; however, Council does not see wireless as *the* pivotal platform to ensuring the region can effectively participate in the information economy.

Affordable and accessible DSL services will be the main delivery platform into the foreseeable future, and should be the focus of policy and commercial considerations. Discussion of wireless technologies should be seen in this context, and not be allowed to distract decision-makers from the ‘main broadband game’.

Actions required to improve the availability of broadband services in Townsville include:

Network Management and Improvements

- As the agency responsible for supervising the technical quality of the national telecommunications network, a proper assessment and mapping of broadband availability should be undertaken by the ACA – taking account of pair gain, RIM and distance related difficulties. A ‘true’ picture of the current situation is imperative for proper policy decision-making;

¹⁸ Even with fairly high speed capacity, the new 802.11a standard has severe limitations in terms of range, the number of access points that are consequently needed and ‘penetration’. These limitations will dramatically restrict the interest in the technology.

- Additional investment in the CAN are required to ensure the availability of broadband is not jeopardised by network incapacity e.g. decaying copper;
- Back-installation of ADSL-compatible RIM technology (e.g. Minimux) to replace all existing ADSL-incompatible RIM technology is central to ensuring universal availability of the service;
- CAN upgrades are required to ensure pair gain systems do not impede consumer access to ADSL services – existing pair gain systems should be replaced; and
- Additional investments in optical fibre connectivity for major research and education institutions in the region to southern POPs, so that these institutions can gain affordable access to significant bandwidth to support commercial, education and research/development activities. The inequitable distribution of Networking the Nation funding and Commonwealth Government failure to fund the IQ Net Initiative through the National Communications Fund sets negative precedents for expanding and upgrading the region's telecommunications infrastructure and connectivity.

Competition

- It is imperative to ensure effective competition can take place in the retail market for broadband services, particularly in the provision of DSL services to business and household consumers;
- Central to competition is the need to ensure wholesale pricing transparency, so that genuine and fair competition can take place over the PSTN and CAN. The ability of the network owner to distort the retail market through cross-subsidies to its own or a limited number of 3rd party retailers must be regulated through clear separation and publication of wholesale and retail pricing principles and methodologies;
- Townsville-based data service retailers (e.g. local ISP's) should be encouraged to retail ADSL services to the household sector. Opportunities

to foster their involvement can be developed around the 'on demand' threshold approach to ADSL rollout (a la British Telecom) that is being considered presently by Telstra; and

- Enhanced competition is central to achieving affordable pricing regimes. It should be noted again that current pricing levels are too high to support high levels of end-user uptake of broadband services.

3.4 TERM 4

The current provision of legislated consumer safeguards including the Universal Service Obligation, the Customer Service Guarantee, untimed local calls and the Telecommunications Industry Ombudsman and whether further action is required to ensure these safeguards are enforced into the future.

3.4.1 Response

Council supports the provision of untimed local calls. Any moves to lift this requirement would be strenuously opposed.

Consumer protection safeguards are meaningless unless resources are provided to ensure they are policed and enforced. Council supports the principles behind the USO and Customer Service Guarantee (CSG), and believes the TIO and other regulatory bodies need to be properly resourced to ensure USO and CSG requirements are delivered by all carriers and retailers.

Additionally, as indicated above Council believes that more effective competition is an important feature of a consumer-friendly telecommunications environment. Service standards and pricing are strongly affected by the extent to which there is genuine competition in the supply market.

3.5 TERM 5

The ongoing commitment of Telstra to a local presence (such as Telstra Country Wide) in regional, rural and remote Australia.

3.5.1 Response

Most observers believe that Telstra CountryWide has been a successful public relations initiative. Council's experience with Telstra CountryWide personnel has been relatively positive; they endeavour to understand and provide quality services to local end users.

We do not have major issues with the dedication of local staff.

The issues of ongoing service standards in basic telephony, inadequate broadband availability and patchy mobile phone coverage are constant features of the Townsville landscape. These exist independently of whether or not Telstra CountryWide was created and continues into the future.

From Council's point of view, the issue of an ongoing commitment to a "local presence" is all to do with the future management and investment in the PSTN and CAN to ensure vibrant competition and universal broadband availability across the city, than it is to do with a question of 'branding' and 'positioning'.

A genuine presence in the local market by the national network provider (whatever it is called) would be reflected in decisions to upgrade and invest in the network, and to provide competitive 3rd party access to the network to ensure effective and robust competition. Council believes that such a situation can best be achieved if the network remains in majority public ownership.

Public investment in the telecommunications network is central to ensuring equity of access is achieved. That is the responsibility of the Government.

3.6 TERM 6

The most effective means by which the Government can ensure that people in regional, rural and remote Australia can share reasonably equitably - in terms of availability and cost - with residents in metropolitan Australia in the benefits of future advances in telecommunications services resulting from competition and new technologies.

3.6.1 Response

This submission has earlier outlined key actions Council believes are central to improving the availability of broadband services to regional consumers. This section will address issues not previously raised or considered in detail.

3.6.1.1 Privatisation

Council is concerned that a fully privatised vertically-integrated Telstra would place 'shareholder value' imperatives ahead of the need for significant investments to upgrade and maintain the copper and fibre network, to ensure broadband services are available to all.

Council is concerned that a change to Telstra's current majority public ownership status will further diminish the region's ability to access new technologies. Council believes that a fully privatised Telstra does not 'future proof' the region in terms of service standards and access to new technologies; in fact, the reverse is likely to be the case.

Council does not support further moves to privatise the remaining 50.1% of Telstra. A national network can best meet the needs of regional communities if it is majority owned by the public. Furthermore, genuine and effective competition can best be developed and sustained under conditions of fair and equitable access to critical 'universal' infrastructure such as the PSTN and CAN.

However, should moves be made to sell the Commonwealth's remaining share in Telstra, Council believes that sale proceeds should be committed to

upgrading and maintaining the telecommunications network and to supporting regional economic development.

3.6.1.2 Competition

Competition is insufficiently robust in the local market, particularly in domestic broadband services. Council also is concerned about the future of competition in voice services, and believes ongoing competition in long distance and mobile voice services is critical to the region 'getting a fair go'.

Council believes the Government must actively regulate to ensure effective competition. Effective regulation is a function of transparency and information, as well as the provision of sufficient enforcement resources.

The 'accounting separation' of Telstra is an important initiative to provide pricing transparency so that all service providers are treated in a non-discriminatory manner. Effective competition depends on a regulatory and legislative environment that promotes and enforces neutrality of pricing and access to key delivery infrastructure.

The ACCC's role in regulating telecommunications behaviour should not be watered down, but strengthened. The ACCC is in a position to access information from all players to ensure transparency and proper and timely disclosure.