A submission to the

National Competition Policy Inquiry

Effect on communications facilities availability to the community in Regional areas due to competition .

Effect on employment opportunities in Regional areas within the communications industry.

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This letter is a comment on the effects of the Deregulation of the Telecommunications industry in the Newcastle and Hunter region.

This comment is supplied through the Office of the Hunter Economic Development Corporation . I am the IT & T coordinator for the organisation.

The contents of this submission are gained from a combination of my own experience in the Communications industry within Telstra, and also from information gained from the community during my time with the HEDC.

The Comments are on two areas :

- Effect on communications facilities availability to the community in Regional areas due to competition .

- Effect on employment opportunities in Regional areas within the communications industry.

With both of these topics the affect of competition is shaded by the "natural" affects of the introduction of new technology .

It can be argued that competition is the main driver for the introduction of new technology , however other forces were involved within the community to direct Telstra to modernise its' network:

Government direction eg Make ISDN available in regional Australia. Evolve to Digital Mobile network.

World CCITT direction eg Adopt ETSI standard ISDN instead of American Standard.

Technical Maintainability of old network elements.

Augmentation Interworking issues of insitu equipment with that supplied to expand the network for growth.

Customer expectations Customers learn of new features in other networks around the world and expect them.

Effect on communications availability to the community
in Regional areas due to competition .

Regional Areas of Australia have seen little positive advantages so far from competition.

The Hunter Valley is a typical regional area that suffers high unemployment .
The same communications infrastructure should be available to developing businesses in regional areas at the same cost as metropolitan businesses so regional businesses can compete on an even footing.

Mobile Network.

The main concerns that customers have for mobiles is the coverage or availability of reception , followed by cost of calls and the cost of hardware and connection to the network.

The mobile network can be looked as both an Analogue network and a Digital network .

When Telstra set up its Analogue network in 1988 in the Hunter, the network was designed to give maximum coverage to the main towns CBDs ,and at the same time to cover as much of the New England and Pacific highways as possible to give constant coverage .
It was not designed to give constant coverage to all outer suburban areas and rural communities.

This was a business decision to gain maximum return on investment. The rule of thumb was (and probably still is) that returns on investment on installed hardware in the country was half to a quarter of that in the metro areas. Therefore careful consideration was given to the location of Analogue mobile Base stations in the country.

Although OPTUS has never owned or run its' own Analogue mobile network, it did resell airtime that it bought from Telstra .This practice enabled OPTUS to gain a share of the Mobiles market client base . An advantage to Mobile users all over Australia was that the overall price of Mobile calls dropped and special deals began to appear.

The coverage area did not improve.

As the lack of room in the available frequency spectrum did not allow competing networks to be established on the analogue network, a technology that allowed a more efficient use of the available frequency bandwidth had to be introduced.

The introduction to Digital technology gave an improvement in the facilities provided to the customers.It also allowed the introduction of truly competing networks.

Both OPTUS and Vodaphone have networks that cover the Hunter valley that compete with Telstra.

The coverage of a Digital base station is half the radius of the Analogue basestation , therefore a lot more Digital base stations are required to cover the same area as the Analogue network.

The Hunter has twice as many Digital base stations as Analogue ones, however the Digital coverage is poor in a lot of town CBD areas and non existent in outer regions.

The coverage footprints of the OPTUS & Vodaphone networks are very similar to the Telstra network as they often use the same infrastructure , or are competing for the customers in the same higher populated areas.

There is no community service obligation that forces any provider to supply mobile service to all regional customers.

The carrier only has to supply coverage to a set percentage of the overall population as part of there licence agreement.

Therefore competition has done little to enhance the Digital mobile coverage.

So it can be seen that competition has addressed to some extent, the issues of call costs ,the cost of a phone and the cost of connection to the network.

Costs cannot be reduced to any great extent at present in the mobiles ,as all carriers use the income from their mobile networks as "cashcows" to support other arms of their businesses.

Competition has not addressed the main concerns of regional areas which is that of Service coverage area.

Public Switched Telecommunications Network

The only competition in the telephony network in the regional Hunter is in STD & ISD calls.

OPTUS, Vodaphone , AAPT & PRIMUS all have interconnect points at New Lambton & Hamilton Telephone exchanges that give them access to the STD market in the Hunter Valley.

Only Telstra provides the Customer Access Network to most businesses & households in the Hunter due to the Community Service Obligations that are imposed by the government.

Telstra will provide a wide range of cost cutting options for businesses eg Spectrum & VPN.When the infrastructure has to be provided, however, the cost is high and often negates the option.

Telstra will also provide Basic & Primary rate ISDN to regional customers through its' Onramp Services. This provision was not forced through competition, but through government direction.

Telstra will provide Optical fibre to residences or businesses in some areas of the Hunter, as they have the Optical fibre in place at a large number of sites as part of their Inter Exchange Network provided under Telstras' Future Mode Of Operation project. This provision of broadband data services comes again at a large cost to customers.

OPTUS is installing an Optical Fibre loop around the CBD of Newcastle, however, that is the extent of their CAN network at present.

Other carriers are now beginning to offer broadband services via microwave radio links , however this is only cost effective for larger installations.

In Sydney & Melbourne, were both OPTUS & TELSTRA have a large Optical Fibre CAN infrastructure , prices are quite competitive for the delivery of broadband services.

It can be seen that in regional areas were it would be an advantage to have lower costs to allow the setting up & developing of business & industry, that competition is not assisting.

It can also be argued that the competitive role out of the Optical Fibre CAN in Sydney & Melbourne drained funds from other parts of the Telstra & OPTUS providers. Each company is said to have spent two billion dollars on the role out before they agreed to halt the projects.

The largest criticism of Telstra as a service provider, is how long it takes to connect new services & repair faults. Perhaps if competition had taken a different direction, money could have been put into upgrading the existing copper CAN network throughout Australia. This could allow the cheaper & more affective delivery of broadband services via ASDL technology, at the same time improving the reliability of the existing network to those people just wanting a phone service that does not let them down in adverse climatic conditions.

I mention pay TV in this discussion as both of the main carriers are associated with Pay TV companies, and pay TV promises to give broadband data access with its' arrival in regional areas.

It was never going to be feasible to role Optical fibre or even Hybrid Optical fibre and COAX cable throughout regional Australia due to the cost associated with distances.The direction taken by the two main carriers was always going to be Cable delivery in the cities & either Satellite or microwave technology in the regional

areas.Again we see that competition was not going to give equal quality service delivery to city & country dwellers.

Affect on employment opportunities in Regional areas within the communications industry.

This section is a case study on myself and the last 7 years of my employment with Telstra.

This 7 year period starts in 1991 and covers the time that Telstra began to gear up for the competitive environment. It only involves one business unit within Telstra ,namely the Network Operations Unit ,and describes the affect on employment of a group of highly specialised & skilled technical people who maintained the new digital switching technology that had been introduced into the network from 1985 in northern NSW.

For the discussion , the number of people is important , as well as the fact that these mentioned people are highly skilled. It should be remembered that not only employment prospects , but quality of employment are factors to consider when talking of employing people.

In 1991 , there were 15 telephone exchange sites in NSW country North that housed digital "nodes" or main exchanges.

Each one of these exchanges had a Technical Officer who maintained the node and liaised with installation staff who extended or modified the equipment.
Each of these technical officers had an "understudy" or person who could do the job when the main technical officer was not available.

Also in several districts was a small group of people who did quality work: Performance reports on the network and monitoring the network for congestion & requesting upgrades or network reconfigurations.

In 1991 approximately 38 people were involved in these activities in NSW country north.

NOU then underwent a restructure were, by using a new data network, technical staff could maintain these nodes from remote sites. This re-organisation was called the Country Exchange Maintenance Organisation.

Instead of having a person at each nodal site, 5 groups of 5 people were set up in Maintenance groups. They were located as follows:

Tamworth   looking after Tamworth & Armidale.

Limore   looking after Lismore , Banora Point , Grafton & Coffs Harbour.

Hamilton looking after Hamilton , Taree & Port Macquaire.

New Lambton looking after New Lambton ,Charlestown & Maitland.

Gosford looking after Gosford & Wyong.

Staff were outposted were necessary so that they did not have to relocate.

Two other support staff were added to do the network administration and quality functions.

In 1994 approximately 27 people were involved in these activities.

In 1994 an extra work group was developed called the Network Administration Centre.
This was located at Hamilton and employed 24 technical staff who performed an upgraded quality function for the whole of country NSW,and monitored the network during the expansion of the digital switching network and the total replacement of the older Analogue electro mechanical switching network.This replacement of the old network was called Telstras' Future Mode of Operation.
This NAC employed many of the people who were displaced by the role out of new technology in NSW country northern and southern country areas .
This was the first time that a major group of people were relocated to a new place of employment.

In August 1995 NOU underwent another reorganisation. This was called Operations & Maintenance One.

Instead of the 5 groups of 5 staff, the new organisation consisted of the one group of 12 staff located at Hamilton.This was the Newcastle switching maintenance group.

The new organisation was located in the one building at Hamilton and consisted of 24 people in the Newcastle NAC and 12 people in the Newcastle switching maintenance group.

In 1995 36 people were involved in these activities in NSW country north based in Newcastle.

During these reorganisations , I was only affected as far as gaining promotions on each occasion ,and moving my place of employment from Hamilton to New Lambton and back to Hamilton again. A two kilometre shuffle.

My switching group employed 12 people, mostly Newcastle people, however two moved from Maitland & one from Port Macquaire.

All the other people from the maintenance groups in Tamworth ,Lismore, Gosford & New Lambton who did not take up a position in the new centre, moved to less skilled

jobs to fill the positions of staff in other business groups who had volunteered for redundancy or took redundancy themselves.

In late 1997 the functions of the Newcastle NAC located at Hamilton were taken over by the Sydney NAC as the Future Mode of Operation program wound towards completion in NSW country. The 24 staff members of the Newcastle NAC were offered employment in Sydney ,Melbourne or Newcastle if a redundancy swap could be found . Redundancy was the final option.

Also in late 1997 , NOU informed all staff that Telstra was setting up a "one centre concept" to maintain the complete Australian telephone network from Clayton in Melbourne Victoria.

This reorganisation called the Global Operations Centre will be fully operational by January 2000 , and has started taking functions from various groups around the country.

I was given the option in late 1997 to move to Sydney for a period of less than 2 years and to then move to Melbourne. I declined and tried to have the GOC concept turned around by political pressure from the Newcastle member of Federal Parliament.
I was unsuccessful.

In 1998 a monetary incentive was offered for people to move to Melbourne, however non of the switching staff accepted the offer.
Of the 36 staff who were employed in Newcastle , only one person from the NAC took up the offer of relocation to Melbourne.

By September of 1998 there were no longer any NOU staff in NSW country. All functions from the NAC & the switching group have been taken over by Sydney and Melbourne operations centres.
Some people have been absorbed by other business units, others have taken redundancy.

None of the new carriers employ a significant number of people out side of the metropolitan areas.

It can be argued that new technology, and not competition has driven these changes over the past 7 years, as I discussed in the opening paragraphs, however this is why I have focused on my employment history and not that of all the people who were equally skilled as myself, but chose to work in any of the other technology streams .

As the old network was replaced by the new technologies, the amount of new technology equipment being maintained by a deminishing number of technicians was expanding rapidly.No new innovations were introduced to maintain the new equipment since the data network that allowed the first reorganisation to occur in 1991. This demonstrates that the only driving force that was at work on our group was that of competition.

During the period from 1991, OPTUS moved into the STD&ISD market which eroded the profitability of the network maintained by the Network Operations Group . It is common (superficial) business sense that if profits drop ,then costs have to be curtailed.

The move to the GOC in Melbourne allows Telstra to cut back further on the cost of Maintaining the network .
This also puts the Operations group in a position to tender for the maintenance of other Telecommunications networks around the world.
This will give a whole new income stream to the Network Operations Group.

This can be seen as a positive effect on employment in Melbourne , however it is a backward step for regional Australia.

As can be seen by this case study , a number of highly skilled jobs were removed from regional areas.The only technical staff that Telstra wants to keep in regional areas are deskilled technicians who are controlled from the a centralised organisation to perform tasks as directed by highly skilled people located in Melbourne.