

southernadelaide

knowledge · innovation · environment

The Secretary
House Standing Committee on Infrastructure and Communications
PO Box 6021, Parliament House
Canberra ACT 2600.

Dear Sir/Madam

Re: Inquiry into the role and potential of the National Broadband Network

The Southern Adelaide Economic Development Board ('the Board') was formed in early 2007 by the Cities of Onkaparinga and Marion to provide industry leadership in further developing the economy of Southern Adelaide in accordance with the Southern Adelaide Economic Development Plan (SAEDP). The Board is of the view that the Digital Economy is creating a new business paradigm in commerce that will be a key driver of our future economic growth. The Board is promoting an integrated response to the challenges that must be met to ensure our regional economy is a participant in this new global marketplace.

Australian and global demand, from both a consumer and business perspective has now moved online. The massive expected global growth in online business will be a significant catalyst for new business formation and transformation into the 21st century. The Board believes it is essential that an integrated policy and projects approach is implemented that supports the introduction of e-commerce skills, knowledge and business models in conjunction with online entrepreneurship education and development programs that permeate throughout our business community.

Broadband is seen as 'the' piece of hard infrastructure which will deliver a competitive advantage for Southern Adelaide. Transport infrastructure, whilst essential and in need of significant improvement, will not deliver the extra competitive edge the region is looking for. A more sustainable economy will be one that trades in ideas and knowledge and broadband is critical for this.

As part of this approach, the Board was active in lobbying for the roll-out of the Adelaide metropolitan broadband blackspot program supported by both the State and Australian Governments and Adam Internet has begun its WiMax implementation program in Southern Adelaide. As important as this program is, it remains a stop gap to service the almost 15,000 premises in the Cities of Onkaparinga and Marion that do not currently have access to ADSL services due to current cable inadequacies.

Reflecting the priority of broadband, the Board has been very active in advocating for the provision of larger capacity broadband services in the region;

In 2006 we prepared a broadband strategy for the southern region

- In 2006 the City of Onkaparinga entered into a Land Management Agreement with housing estate developers for the provision of broadband at Seaford Rise
- In 2007 the Board issued a request for proposal for the provision of a wireless broadband service for the region. The successful bidder designed a solution which required the support of the federal government's Metropolitan Broadband Connect scheme. This scheme was withdrawn prior to finalisation of the business case and the project lapsed
- Managed to secure one of the national pilot OPEL wireless and fibre optic broadband projects in the south which was providing services to a number of customers until the project was ended in June 2008
- In 2009 we successfully lobbied the State Government and Adam Internet to institute and commence its broadband blackspot program in the south
- In July 2009 provided a letter of support to Fleurieu Regional Development Board for its application to the federal government for the provision of backhaul fibre through the Fleurieu Peninsula in the knowledge that the fibre would connect the Fleurieu to Adelaide via Noarlunga with close access to Willunga
- The Board lodged a submission with NBNCo on 26 February 2010 outlining the case for the southern region to be considered for early roll out of the national broadband network. The essence of the submission was to demonstrate that the region:
 - > is a 'hotspot' of activity
 - > is performing well economically
 - > is working to a plan
 - > is well organised
 - > has strong underlying demand for broadband services
 - > has an easy roll out path
 - > is committed to building demand and making the roll out as easy as possible.

For your information I have attached the submission.

As the Committee would be aware, Willunga (located in the City of Onkaparinga) is one of the NBNCo's first release trial sites in Australia with the physical roll-out nearing completion.

We believe that the demand for high capacity broadband services will grow significantly and this is based on:

- the 'take-up' connection to the premises in Willunga exceeding 84%
- In 2008/09, the two councils, in partnership with the State Department of Further Education, Employment, Science and Technology ran a 'Fostering Online Entrepreneurship Program'. This was designed to lead a group of 30 businesses through a structured process over three months to establish their own online presence and marketing strategies. The program attracted considerable interest and 109 companies submitted expressions of interest from which 30 were selected. By the end of the three months 15 businesses had made online sales and another 8 were anticipating sales within a few months.

The SAEDB is now in the process of preparing a digital economy strategy to ensure that we maximise the potential that the national broadband network has to offer. The strategy will address, at the regional level, the elements outlined in the Committee terms of reference. The Board and the two councils are also in discussion with Flinders University regarding a proposed research project which will look at the regional impact of the NBN on economic development and to help guide future activities in stimulating demand.

I would appreciate the opportunity to meet with the Committee to outline how we intend to maximise the national broadband network potential.

Yours sincerely

Tom Phillips
Chair
Southern Adelaide Economic Development Board



NATIONAL BROADBAND NETWORK ROLL-OUT SUBMISSION TO NBN Co

SOUTHERN ADELAIDE ECONOMIC DEVELOPMENT BOARD

FEBRUARY 2010

1. INTRODUCTION

The Southern Adelaide Economic Development Board ('the Board') was formed in early 2007 by the Cities of Marion and Onkaparinga to provide industry leadership in further developing the economy of Southern Adelaide. The Board wish to engage NBN Co with a view to seeking an early roll-out of the National Broadband Network in the Southern Adelaide region. The intent of this document is to present some preliminary information regarding the opportunities that the region presents as part of the case for early implementation.

2. BACKGROUND

The Cities of Marion and Onkaparinga together have a population of over 241,000, around 20% of metropolitan Adelaide's population and this is forecast to grow to over 262,000 by 2021. While around 60% of the regional population has access to the internet which compares reasonably well with the national average, only around 30% has broadband compared to almost 40% nationally. This is due mainly to cable inadequacies limiting the availability of ADSL services.

At the same time, the region has a substantial economy with an estimated gross regional product in 2006 of around \$6.1 billion. The economy is dominated by small business and the main sources of employment in the region are:

- retail 23.4%
- manufacturing 19.2%
- health and community services 11.6%
- education 8.8%

The region has proven remarkably resilient during the recent economic downturn which was preceded by the closure of the Mitsubishi Motors assembly plant at Tonsley Park in the City of Marion and the most recent unemployment figures show that the Cities of Marion and Onkaparinga have a combined jobless total of 5% compared to 5.7% for Adelaide as a whole.

3. SOUTHERN ADELAIDE ECONOMIC DEVELOPMENT PLAN

In 2007, the Board's first action was to release an economic development plan for the region focused on growing the Southern Adelaide's economy and building on its already diverse base. The Plan was developed following extensive consultation with the business community and other key stakeholders. It identifies six principles which are pivotal in achieving its objectives:

Economic Principles

- A focus on innovation
- An export orientation
- Commitment to environmental sustainability
- Recognition that business and its workforce are the key to success
- Business, Government and the community must work together in partnership
- The community must display leadership and self-reliance

A number of industry sectors were identified as offering growth potential and therefore priorities for action. This approach builds on the existing strengths of the region and recognises sectors that also display the principles of innovation, export orientation and sustainability. These sectors are:

Sectoral Opportunities

- Advanced manufacturing
- Cleantech (including water industry)
- Food, wine and tourism
- High value services education and health
- Medical technologies

However, the Board realised that there a number of key issues that need to be tackled to capitalise on the opportunities and it has been working in partnership with the two councils to address these issues:

Key Issues

- Access to world class broadband infrastructure
- Workforce and skills development
- Shortage of employment land
- Improved transport linkages
- Marketing the region

Since the release of the Plan, considerable progress has been made in achieving its objectives and excellent working relationships have been formed reflecting business, community, local, state and federal government partnerships. The Plan has been used as a basis for much of the response to the closure of the Mitsubishi Motors assembly plant announced in 2008 and it is still driving the Board's activities.

4. THE IMPORTANCE OF BROADBAND TO SOUTHERN ADELAIDE

The Board is of the view that the Digital Economy is creating a new business paradigm in commerce that will be a key driver of our future economy. The Board is promoting an integrated response to the challenges that must be met to ensure our economy is a participant in this new global marketplace.

Australian and global demand, from both a consumer and business perspective has now moved online. The massive expected global growth in online business will be a significant catalyst for new business formation and transformation into the 21st century. The Board believes it is essential that an integrated policy and projects approach is implemented that supports the introduction of e-commerce skills, knowledge and business models in conjunction with online entrepreneurship education and development programs that permeate throughout our business community.

Broadband is seen as 'the' piece of hard infrastructure which will deliver a competitive advantage for Southern Adelaide. Transport infrastructure, whilst essential and in need of significant improvement, will not deliver the competitive edge the region is looking for. A more sustainable economy will be one that trades in ideas and knowledge and broadband is critical for this.

As part of this approach, the Board was active in lobbying for the roll-out of the Adelaide metropolitan broadband blackspot program supported by both the State and Australian Governments and Adam Internet has begun its WiMax implementation program in Southern Adelaide. As important as this program is, it remains a stop gap to service the almost 15,000 premises in the Cities of Marion and Onkaparinga that do not currently have access to ADSL services.

5. WORKFORCE PLANNING AND SKILLS DEVELOPMENT

All regions are facing skills and labour deficits particularly when there are significant adjustment pressures. We have put in place a regional model which is recognised as leading edge and focuses on those skills that support our target industry sectors which in turn will require high capacity broadband.

6. OPPORTUNITIES FOR BROADBAND DEVELOPMENT IN SOUTHERN ADELAIDE

The recently released 30 Year Plan for Greater Adelaide has set a number of targets for Southern Adelaide which are:

- 82,000 additional population
- 40,500 additional dwellings
- 43,000 additional jobs

To accommodate these increases, a major feature of the 30 Year Plan is the establishment of 13 major transit oriented developments (TODs) across the metropolitan area. Three of these have been identified in Southern Adelaide, Oaklands Park (Marion Centre), Noarlunga Centre and Bedford Park (adjacent to Tonsley Park).

Coupled with this there are a range of other major developments in the region, either established, under construction or planned which will both drive demand for high band-width broadband services and be facilitated by the availability of such infrastructure. The following table indicates the most significant of these:

Employment Land

With the State Government's net additional population and employment growth targets over the next 30 years, the provision of employment land is critical. The principle being pursued is to give residents the opportunity to work close to home. The Board is developing an employment land strategy which will consider all possible employment land options. They include:

- Tonsley Park 61 hectares (see below)
- Port Stanvac 234 hectares (see below)
- Better utilisation of existing industrial land such as Lonsdale and Edwardstown. Many uses owe their existence to outmoded industrial facilities etc. and this is reflected in the low utilisation rate
- Attracting more intensive commercial land use
- Better use of existing Centre zones
- Encouraging more home based/work from home— this is a feature in our economy at present. New urban development has stimulated the opportunity for more home based business—likely to be in the high value-add end of the market requiring high capacity broadband
- Expanded tourism opportunities in rural areas
- Transit Oriented Developments (TODs) these will have employment targets and broadband will be vital infrastructure

Tonsley Park (former Mitsubishi Motors assembly plant):

- 61 hectare site acquired by State Government
- To be developed as advanced manufacturing and clean technologies centre
- Opportunity to establish large mixed use precinct and TOD incorporating the nearby Flinders University, Flinders Medical Centre and Science Park (over 7,000 people currently work in Flinders/Science Park area)
- Rail link servicing the site to be electrified as part of State Government's \$2bn rail revitalisation program
- State Government to develop South Road as a non-stop road corridor

Port Stanvac (former Mobil oil refinery):

- 234 hectare site identified by the State Government as an area for long term industrial use
- Remediation agreement established between Mobil and State Government

Renewable Energy Precinct (Lonsdale)

- Proposed establishment of 5 megawatts (5MW) of renewable energy generating capacity through a combination of solar (photovoltaic or thermal), wind and landfill gas energy (LFG) technologies
- the potential of yield is around 20,000 MWh per annum an equivalent electricity demand of around 3000 homes
- \$50 million project for which private sector partners will be sought in 2010

Carbon Park (Lonsdale)

- Carbon Park seeks to meet growing demand for industrial land for the generation of low carbon industries (generally referred to as Cleantech or Greentech industries), and brand Southern Adelaide as the new destination for investment within this sector.
- The six key components are
 - New industrial land for low carbon industries
 - Marketing and branding Australia's new nexus for low carbon industries
 - Incentive packages for inward investors
 - o Skill development and training in new technologies
 - Low carbon product showcase to inform and raise consumer awareness
 - Engagement of industry leaders to adapt and mitigate for climate change

Water Projects

Adelaide Desalination Plant (Port Stanvac)

- \$1.8 billion investment
- 50% of Adelaide metro water demand (100Gl)
- Completion December 2010

Waterproofing the South - Stages 1 and 2

- \$130+ million investment
- Additional 4GL treated wastewater and stormwater for reuse in viticulture and urban developments in the City of Onkaparinga

Oaklands Park Wetlands (City of Marion)

- Proposed aquifer storage and recovery complex
- Annual capture and reuse of 200Ml of stormwater
- Estimated cost \$9 million

National Centre for Groundwater Research and Training

- Established in 2009 based at Flinders University
- Collaboration between 12 universities and 8 industry and government organisations
- Total budget \$55 million

Infrastructure Projects

Southern Expressway

- State Government recently announced intention to duplicate the current one-way road improving access to the southern part of the region including Port Stanvac
- Cost \$445 million
- Completion 2014

Seaford Rail Extension

- 5.5 km extension from Noarlunga Centre to new urban growth centre of Seaford
- Project cost \$291 million

Darlington Project

- Plan to improve South/Sturt Roads intersection
- Feasibility of extending rail line to Flinders Medical Centre
- Investigate transport interchange
- Investigate TOD opportunity incorporating Tonsley Park, Flinders University, Flinders Medical Centre and Science Park
- Study expected to be completed 2010

State Aquatic Centre and GP Plus Centre (Oaklands Park)

- International standard competition and leisure swimming complex
- 4,500 sq. m. building accommodating regional health services
- Total cost \$100 million
- Completion 2010

Urban Development

Greenfield Development

The State Government owned Land Management
Corporation owns 542 hectares of residentially zoned
land which will make a significant contribution to the
region's population targets under the State Government's
30 Year Plan. As part of their land release strategy the
contracted developer is required to provide pits and pipes
to accommodate fibre to the home

Noarlunga TOD

- Noarlunga Regional Centre TOD is one of the state's 13
 recognised TODs. The Land Management Corporation
 lead a governance group of state agencies and the City of
 Onkaparinga that will oversee mixed use development
 over the next 30 years to build on the 4,000 existing jobs
 and create a vibrant heart for the south.
- It will include 6,000 new residents (3,000 new dwellings), a new rail/transit station, medical precinct redevelopment, new civic facilities, a focus on education, learning and innovation and shopping facilities that move away from an enclosed mall and car parks to active pedestrian oriented streets. Four to six storey buildings are envisaged in the area around the rail station, moving to 2-4 storey in the more residentially focussed outer areas.

Castle Plaza Redevelopment (Edwardstown)

- Former Hills Industries industrial site of approx. 11 hectares
- Proposed expansion of adjacent shopping centre and establishment of mixed use development incorporating retail, commercial and medium density residential uses
- Serviced by adjacent Noarlunga Rail line which is scheduled for early electrification
- Development Plan Amendment under preparation

Education Noarlunga TAFE – Educational Learning Centre **Projects** Noarlunga TAFE accommodates 18,000 students (of the State's 80,000 TAFE students = 22.5%) and this intake is growing at 10% pa \$9 million federally funded project Computer based open learning centre to meet the growing demand in health and community courses and trade (on-line design) courses The new urban developments linked to the rail extension are expected to generate a higher rate of student in-take and demand for the services of the Centre Flinders University – Watermark Planned Watermark building hosting the recently established School of the Environment and National Centre for Groundwater Research and Training Estimated cost of \$61 million Flinders University – Medical Teaching Facilities Current facilities at Repatriation Hospital (Daw Park) and Victor Harbor Planned facility at Noarlunga Centre Nursing/paramedic teaching facilities currently at Mount Gambier and the Riverland **SABRENET** Existing high speed broadband fibre optic network linking major research institutions across Adelaide Network services Flinders University and adjacent Science Park Currently running 1Gbs and 10Gbs ethernet services **Health Projects Flinders Medical Centre Redevelopment** Construction of new south wing Three storey building incorporating new birthing, maternity, critical care, emergency and day surgery facilities Largest solar hot water system in South Australia Rainwater capture and harvesting system \$162 million investment South South Australian Innovation and Investment Fund Australian \$35 million Federal and State Government assistance Innovation and program to attract investment in response to closure of Investment Mitsubishi Tonsley Park assembly plant **Fund** Program almost fully subscribed with expectation that it will lead to additional investment of approx. \$116 million and around 776 jobs Regional **Victor Harbor** Broadband 129 km of fibre optic cable Backbone Three local access points in Southern Adelaide - McLaren **Project** Vale, Willunga and Old Noarlunga

7. STIMULATING DEMAND FOR BROADBAND

The Board, together with the Cities of Marion and Onkaparinga, has been undertaking a number of projects aimed at stimulating demand within the region.

Fostering Online Entrepreneurship Program

In 2008, the two councils, in partnership with the State Department of Further Education, Employment, Science and Technology ran a 'Fostering Online Entrepreneurship Program'. This was designed to lead a group of 30 businesses through a structured process over three months to establish their own online presence and marketing strategies. The program attracted considerable interest and 109 companies submitted expressions of interest from which 30 were selected. By the end of the three months 15 businesses had made online sales and another 8 were anticipating sales within a few months.

Due to its success, a Stage 2 has been commenced and is currently underway with a high level of interest again being displayed. The purpose of this initiative is to demonstrate the methodologies to create a permanent fundamental increase in online business. This will be achieved through the delivery of education incorporating new innovative online business methodologies and models via the application, practical utilisation and awareness of internet technologies.

Digital Economy Project

Given the success to date of the Fostering Online Entrepreneurship Program, we believe that a significantly expanded program is now justified to yield a more substantial dividend through the building of demand for broadband related services. A proposal is being developed for a two year project which could deliver an education program incorporating coaching and support to 500-600 companies in the region together with the establishment of an Internet Training Lab to act as a focus for the program. It is intended to approach the Australian Government separately to discuss interest in funding such a program.

Developing Businesses

The region has a very strong track record in working with local businesses to build their capacity to grow. The following organisations are the key players in this support infrastructure:

- Southern Success Business Enterprise Centre
- Inner Southern Business Enterprise Centre
- Innovate SA
- Onkaparinga Exporters Club
- Enterprise Connect

There is very close cooperation between these bodies as members of the Southern Adelaide Economic Development Coordination Group (a subset of the Board) which also includes the Cities of Onkaparinga and Marion, Office of the Southern Suburbs (State Government) and Flinders University. The group meets monthly to coordinate business support activities across the region. One of the priority activities of these organisations is to promote the use of the broadband and the internet as a medium for improving business efficiency and increasing sales.

Health and Education

These sectors are an important part of the Southern Adelaide economy being the 3rd and 4th largest employers in the region. Discussions have commenced with representatives from each of these sectors with regard to the opportunities that can be facilitated by high speed broadband. The Board is proposing to work in partnership with Amanda Rishworth, MP, Federal Member for Kingston to establish a taskforce in each sector to stimulate demand and explore opportunities.

Local Government

A local government working group has been formed to identify potential opportunities arising from the high speed broadband rollout (including areas affecting Council business). Preliminary work has identified the following:

Asset management

- Improved reporting on the condition of infrastructure (live updates with infield data collection) to better plan, manage and operate our infrastructure
- Live feeds from maintenance and operational staff out in the field back to the depot. This will allow for improved efficiencies in relation to reporting of incidents/issues and response times
- Improved access to data on-site remotely by operations staff
- Creating options into the future in relation to managing infrastructure

Smart Infrastructure

- Smart infrastructure encompasses networked infrastructure that uses sensors and communications technologies to better utilise or sustain resources. Examples of smart infrastructure include electricity grids which improve grid reliability and better utilise energy; transport systems which optimise traffic flows; and water networks which improve water productivity in agriculture. Emerging uses of smart infrastructure have the potential to reduce costs, enhance safety and reduce environmental footprint
- o Innovation in relation to hazard warning systems, eg. floods, bush fires
- Smart metering providing customers with the ability to monitor and manage consumption eg better use of electricity
- Smart metering and its application to Waterproofing the South, i.e. more efficient use of recycled water, and potable water

Service Delivery

- An ability to increase the scope of information access and service delivery through the use of kiosk based technologies for tourism, business and community information needs throughout the region. This technology would deliver information and services at a convenient location rather than requiring people to have a computer or to travel to individual sites
- Libraries require a robust and high bandwidth network infrastructure to be able to deliver effective library and information services. Such a rollout as proposed by NBN would ensure that councils and their communities were well placed to take advantage of the efficiencies that come with sharing technology and resources. An example of this is the 'One Card One Library System' proposal from Public Libraries SA which is looking at a consortia approach from Councils (including Onkaparinga) to the purchase and implementation of a new library system
- Education opportunities would be provided by the rollout of high speed broadband by allowing schools and universities to share teaching and other learning resources such as real time video-conferencing and the expanded use of interactive whiteboards

 Social networking using the internet is increasingly important for people of all ages and in particular the ability to access high speed broadband would mean that people from areas where broadband is currently unavailable, slow or too expensive would be able to participate equally with other members of global communities

The Board can facilitate further development of these opportunities with the organisations in the region that have responsibility in these areas.

8. PLANNING AND INFRASTRUCTURE

Regulatory planning - 30 year planning

With the release of the 30 Year Plan by the State Government in February 2010 there is now the opportunity for the region to collaborate with the State Government to prepare implementation plans which will define spatial outcomes and the infrastructure requirements to achieve the Plan's objectives. The Councils will be working with the State to align statutory planning with broadband requirements.

Public infrastructure

The State and local governments own or control an array of assets in the region which would be useful in the efficient roll out of a broadband network. We would work with these organisations and NBN Co to identify the relevant assets and facilitate discussions with the asset owners to determine availability.

9. PARTNERSHIP TO DELIVER

The Board has developed a series of strong partnerships in the Southern Adelaide region to achieve its aims. As well as the Cities of Marion and Onkaparinga, close working relationships exist with Flinders University and the State Government, through the Office for the Southern Suburbs.

The Minister for the Southern Suburbs, the Hon. John Hill, MP has also formed the Southern Suburbs Coordination Group which brings together major stakeholders in the region, the Board, the Councils, Flinders University and the Chief Executives of key State Government agencies to address significant issues impacting economic growth in Southern Adelaide.

There is therefore an existing framework which could greatly assist with implementation of the National Broadband Network in the region.

10. CONCLUSION

This document has sought to highlight the tremendous opportunities that exist in Southern Adelaide for economic growth and that this future is based on a knowledge-based digital economy. The Board believes that the region is well placed to take early advantage of the opportunities presented by the National Broadband Network and therefore encourage NBN Co to consider Southern Adelaide as an area for early implementation. We would welcome the opportunity to discuss this further and explore how we might partner with you to achieve our shared aims.

Tom Phillips, AM Chair Southern Adelaide Economic Development Board 26 February 2010