EYRE PENINSULA
NATIONAL BROADBAND NEWTORK SUBMISSION

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1 INTRODUCTION

This paper is a submission to The House Infrastructure and Communications Committee prepared by Regional Development Australia – Whyalla and Eyre Peninsula Inc [RDA WEP] on behalf of the Eyre Peninsula Region in South Australia.

RDA WEP is the key economic agency in assisting economic activity and employment in the area of Eyre Peninsula. In simple terms "Developing an Eyre of Prosperity". RDAWEP has the responsibility to support entrepreneurial and innovative investment that will ensure that this region maintains its global competitive industries, which include the following:

- Agriculture
- Fishing and Aquaculture
- Tourism
- Mining
- Manufacturing
- Business Services
- Renewable Energy (emerging industry)

The objectives in preparing this submission are to:

- Provide a background to Eyre Peninsula's present infrastructure impediments and constraints that impact on maximising the region's economic capacity.

- Demonstrate the need for capital investment to ensure the region's growing economy can maximise its true economic potential and compete within the global market through the provision of essential strategic infrastructure.

- Provide a recommended solution to key infrastructure priorities across the entire region.

2 BACKGROUND

2.1 DEMOGRAPHY OF EYRE PENINSULA

The region of Eyre Peninsula is primarily a rural community, triangular in shape and bound at its corners by the larger cities of Whyalla, Port Lincoln and Ceduna. In comparison, the Eyre Peninsula is similar in geographic size to Tasmania. Distances are significant, with highways stretching 300-400km between each of these main regional centres.

The Peninsula's economy relies mainly on its agriculture, aquaculture, fishing, tourism, manufacturing, mining and renewable energy industries. While the agricultural and fishing sectors are well established, aquaculture and tourism have developed more recently as major sources of employment and revenue for the community. Whyalla is unique on the Peninsula in having a substantial industrial base, focussed on its mining and steel production facilities.

In economic terms the region is one of the State's most productive areas, yielding 35% of South Australia's total grain crop and 70% of its seafood produce, and has a well established steel manufacturing base in Whyalla. Collectively these sectors inject in excess of $2 billion into the Australian economy, mainly in export related industries on an annual basis.

Although mining has not previously dominated Eyre Peninsula's economy, existing mining operations are already significant contributors at the national level. Situated in the provinces of Gawler Craton and Eucla Basin, the Eyre Peninsula is rapidly becoming one of Australia's most promising emerging mineral frontiers. Exploration activity has already identified significant prospects in recent years including:
- heavy mineral sands, kaolin, gold, silver, nickel, copper and iron ore in the northern and western parts of the region.

- iron ore and coal on eastern and lower Eyre Peninsula.

Current exploration activity is also investigating opportunities for petroleum and gas in the far west.

One Steel steel manufacturing operations produces 1. 1 million tonnes of value add steel products, in addition to the export of excess of 6 million tonnes of hematite annually.

Gypsum Resources Australia's, Kevin Mine located 60km west of Ceduna is a nationally significant operation supplying nearly 90% of Australia's plasterboard and cement supplies with an estimated 1.9 million tonnes being mined and sold to domestic and international markets in 2007.

The Iluka Resources Ltd emerging Jacinth and Ambrosia mineral sands operation is a world class deposit, with exceptionally high grades of zircon and a mining value estimated at $2 billion.

Renewable energy is also a developing industry, presently supplying 130MW of renewable energy through 2 large scale wind farms. Bound by the Great Australian Bight the region's west coast has been identified as one of the top ten worldwide locations for renewable energy for both wind and wave technology, with the potential production of 1000MW renewable energy supplies.

Eyre Peninsula Regional Map

Regional Development Australia – Whyalla and Eyre Peninsula
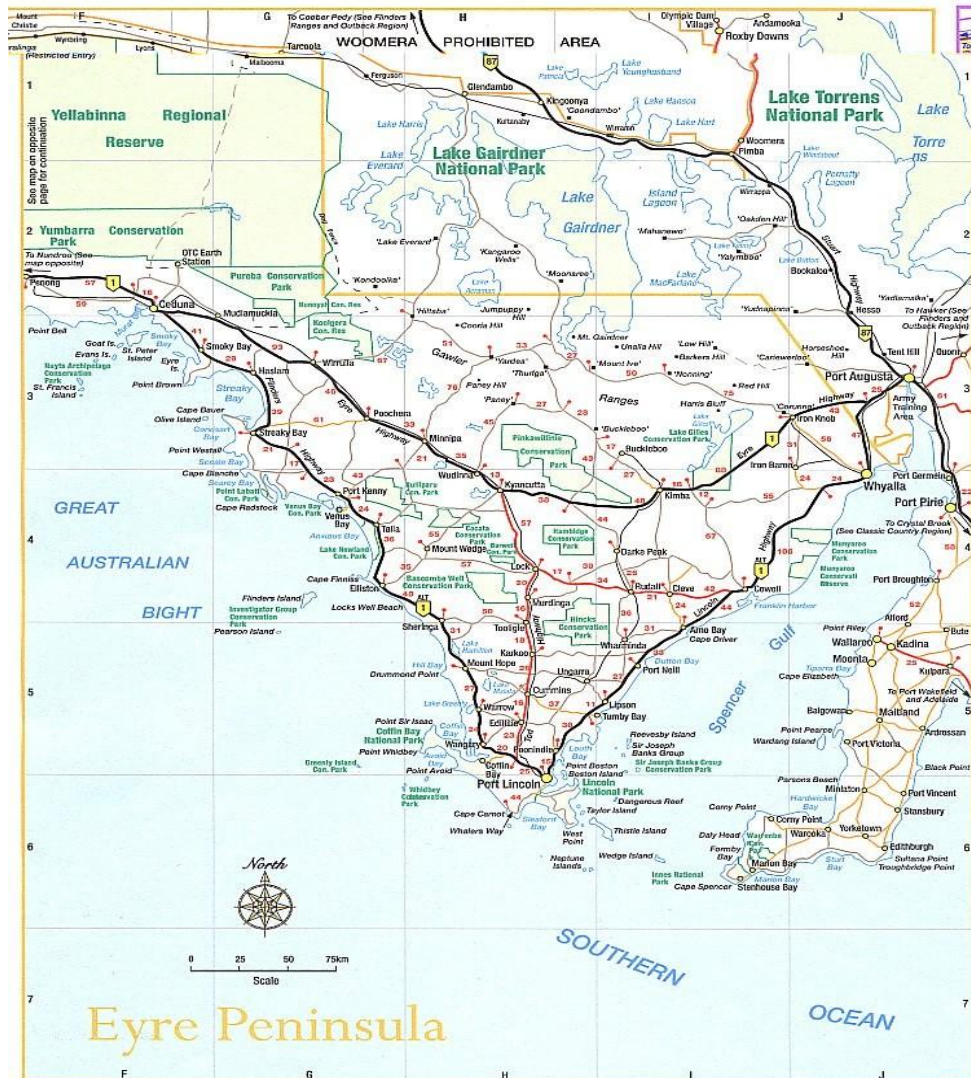
3   Communication Infrastructure Priorities

Communication infrastructure is a key requirement for businesses and industries that operate in rural and regional areas of Australia, and breaking down the tyranny of distance is a key factor in ensuring that these business enterprises are able to maintain global competitiveness on a daily basis.

Whilst the majority of the region's products are exported and traded internationally the barriers in communication infrastructure are a key restraint and impediment to the future growth and competiveness of the region.

The majority of the region's townships have access to ADSL – 12,000 kbps within a radius of 4km of the town.

However this service can only be accessed to half of the region's population, with businesses and families restricted to the wireless technology or dial up connection depending on access to mobile communications and line of site.

- ISDN dial up – 104 kbps.
- Wireless – average 7200 kbps to 3,000 kbps.

Whilst satellite is a option for access, the experience that many of the users being that the service is unreliable with continued drop outs, slow upload speeds and expensive for both families and businesses. Satellite is only a last resort option, and not considered as a solution for the Eyre Peninsula.

BROADBAND

High speed Backbone Infrastructure

The Eyre Peninsula Region has been identified under a Commonwealth report "Telecommunications Infrastructure Report Card 2007" as one of 3 regions in Australia to have the worst level of communications infrastructure. Eyre Peninsula is rated alongside the Northern Territory, and western New South Wales.

Engineers of Australia provided a comprehensive report card on each state and associated regions on both fixed communication infrastructure and mobile communications systems. On both accounts the Eyre Peninsula was rated in the worst category.

Our estimate (based on 2006 census data) is that around 30% of the population of Eyre Peninsula does not currently have access to a terrestrial broadband service, which represents approximately 17,250 out of a total population of almost 57,500.

Rural and regional areas should not be disadvantaged by the "service obligation" when comparing to city counterparts. The responsibility on the service providers to supply connection and to address faults should require the same level of delivery of service and timeframes as in all areas of Australia.

RDA WEP has sought to establish a competitive alternative communication network over a number of years and has been frustrated by the criteria and constant changes in Government programs that truly do not meet the needs to establish a core network which has the ability to service the Eyre Peninsula Region of South Australia.

The Australian Broadband Guarantee Program did not provide the ability of an ISP company to build the required infrastructure backbone, with only an allowance of subsidy on a per user basis. ABG does not provide for solutions for large scale situations such as the Eyre Peninsula.

The Commonwealth Communications Infrastructure Fund CCIF has provided the region with the ability to secure a high speed microwave system linking Port Augusta and Port Lincoln. This new infrastructure is essentially to service the government departments within the regional centres and key businesses in the central CBD of the city of Port Lincoln.

RDA WEP previously sought to develop a partnership approach, whereby government funding from both the Commonwealth and the State government could be invested in underpinning the development of essential core broadband backbone infrastructure, which could leverage off the existing microwave system from Port Augusta to Port Lincoln. This would provide the incentive for the region to secure a high level ISP communications provider to service the region's communities and industry enterprises.

The following plan provides the linkage to the region's communities through a microwave system, which has been installed linking Port Augusta to Port Lincoln.

Regional Development Australia – Whyalla and Eyre Peninsula

The following plan provides the bases on the high speed broadband backbone that the region is seeking as a solution to the majority of the region's and industries problems with high speed issues that are an impediment to the communities.

Cost Estimates

Backhaul Network + Base station equipment (26 Mic links + 14 Base Stations)	$3,200,000
Hot Spot (portable computing) in each community (14 Sites @ $15k)	$ 210,000
Customer Premise equipment 1400 cust @ $1183	$1,656,200
Total Project Costs	**$4,066,200**

Funding Solution

Commonwealth	Backhaul Network + Base station equipment (26 Mic links + 14 Base Stations)	$2,000,000
State (BDF Program)	Backhaul Network + Base station equipment (26 Mic links + 14 Base Stations)	$1,200,000
Communications Provider - ISP	Hot Spots (14 Sites @ $15k) Customer Premise equipment 1400 cust @ $1183	$1,656,200
Total Cost		**$4,066,200**

National Broadband Network

With the impending rollout of the National Broadband Network, there will be direct benefits for the Eyre Peninsula community, following examination of the maps for both fibre and next generation wireless services, however this will service less than half of the region's population base.

Townships – Nominated NBN Fibre

Ceduna
Cleve
Cowell
Kimba
Tumby Bay
Port Lincoln
Whyalla

Townships – Nominated Next Generation Wireless

Cummins

Service Gap

The following townships have been excluded from access to fibre or next generation wireless and include

Streaky Bay
Wudinna
Elliston
Lock
Arno Bay
Port Neill
Coffin Bay
Smoky Bay
Minnipa
Poochera
Darke Peak

The proposed NBN rollout proposed for the region whilst providing direct benefits to communities that are planned to have access, will increase the "digital divide" within the region, for both business enterprises and households.

This divide is based on access of proposed speeds of 100 Mb compared to the wireless and satellite speed of 12Mb.

With the planned rollout of the NBN across Australia and the initial budget estimate of $43 billion, being reduced to $37 billion the Federal government needs to expand the proposed network as part of a "service obligation" to 98% of the nation's population.

In consideration of the extension of service, the government needs to include the communities of Wudinna, Minnipa and Poochera as the service will be going directly past these communities on the national highway, with the cost of connection being negligible in comparison to the cost entailed in installation of the cable away from these communities.

In addition the Federal government needs to delivery a greater coverage throughout the region with the installation of several essential next generation wireless systems at key locations that have been excluded from fibre access, such as

Streaky Bay
Elliston
Coffin Bay
Lock
Smoky Bay
Arno Bay