

DEPARTMENT OF TRANSPORT & URBAN PLANNING

TRANSPORT SA

EYRE PENINSULA GRAIN TRANSPORT
ISSUES PAPER

OCTOBER 2002



Government
of South Australia



TRANSPORT SA

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1. Introduction

1.1 Background

The South Australian Minister for Transport and Transport SA (TSA) have received various representations from the rail and grain industries on Eyre Peninsula, stating the rail system is in urgent need of an upgrade. Industry representatives claim that unless the State Government funds part, or all, of the upgrade, the continued operation of rail on the Eyre Peninsula is “at risk”.

In reply, the Minister and TSA sought clarification of the problems & issues relating to Eyre Peninsula grain transport. To this end, a workshop for selected key stakeholders was convened by TSA on June 4th, 2002. Representations at the workshop, and previously, have been used by TSA to consider whether some form of intervention (government and/or industry) would improve the efficiency/effectiveness of grain transport on Eyre Peninsula.

1.2 Submissions

This Issues Paper has been prepared by TSA and consolidates the contributions made by stakeholders at the workshop. In conjunction with previous industry submissions, and TSA research work, this paper encapsulates TSA’s understanding of the problems and issues facing the grain transport industry on Eyre Peninsula. The views expressed in this paper should not be taken to represent government policy. Short footnotes are provided throughout the paper to reflect the source of claims. Readers should refer to the bibliography for full citations. This paper is intended to be a starting point for further consideration and discussion of issues. Some questions are posed throughout the document as a thought provoker and do not represent any particular view or direction of government. TSA recognises there may be problems and issues that have not yet been brought to our attention.

Transport SA calls for response and feedback to this Issues Paper. The closing date for submissions is Friday 24th January 2003. Submissions may be made through any of the following media:

Postal:	Eyre Peninsula Grain Transport Submission C/- Transport SA 33 Warwick Street Walkerville SA 5081 Attention: Mr Paul McKinnon	
E-mail:	paul.mckinnon@transport.sa.gov.au	
Telephone:	Paul McKinnon (Transport SA):	8343 2195
	(Voice message from 7pm – 9am)	
Facsimile:	Transport Policy Group:	8343 2939

1.3 Distribution

The Issues Paper has been distributed to a range of stakeholders, which include (but is not limited to) representatives from the following groups:

- Local Government
- State Government
- Road Transport Operators
- Rail Transport Operators
- Grain Handlers
- Port Operators
- Farmers/Growers
- Members of Parliament
- Grain Marketers

A general call for submissions will be advertised in a local Eyre Peninsula newspaper. Transport SA supports wider secondary distribution through the primary recipients of the paper, such as the groups above. Alternatively, the Issues Paper will be available through the Transport SA Internet site at <http://www.transport.sa.gov.au/index.asp>.

1.4 Transport SA's Approach

Transport SA recognises that the production of grain on Eyre Peninsula is critically important to the region and the State. Not only is grain a key economic driver for the entire region, it is a significant State export earner. Eyre Peninsula produces around one third of South Australia's grain harvest. Transport SA is keen to ensure that any transport implications for the Eyre Peninsula grain-export industry are strategically managed and aligned with the broader social, environmental and economic objectives of government.

Accordingly, Transport SA has taken a broad approach. As well as considering the rail/grain industry's expressed needs, the investigation also considers the broader economic, social & environmental objectives of government. Specifically, the investigation:

- Covers all participants and functions in the grain-export chain on Eyre Peninsula;
- Is not limited to transport operations, but also touches on farming, grain storage & handling as they affect transport;
- Considers the impact of various transport modes for the task of moving grain from farm to export markets; and
- Considers the impact on a range of SA Government objectives, as they relate to the broader public interest of South Australia and its people.

Recent structural changes to the industry, as a result of micro-economic reforms, add complexity to the analysis. Transport SA is aware that some of the stakeholders may now have different needs and responsibilities and at times may have contradictory goals. Transport SA is seeking a clear understanding of stakeholder's expectations and intentions with respect to the export of Eyre Peninsula grain. This is seen as critical, prior to considering any possible interventions (government and/or industry) that may, or may not, be required.

2 Operational Overview

2.1 Grain Transport Task

There are two main components of the grain transport task on Eyre Peninsula:

- Farm to silo (or port) – transported by road, often by the farmers themselves or by a road transport operator; and
- Silo to port (or silo) – transported either by rail or road transport operators.

In 2001/2002 approximately 2.3m tonnes of Eyre Peninsula grain was transported to port for export.

2.2 Road Operations

Current access arrangements for road vehicles typically carting grain on Eyre Peninsula are:

- Short Road Train – 32-35m – restricted access (exemption) – payload \cong 52 tonnes;
- B-Double – 23m – restricted access (exemption) – payload \cong 39 tonnes; and
- Semi-trailer – 19m – general access – payload \cong 24 tonnes.

The latest restricted access routes available to Road Train and B-Double vehicles on Eyre Peninsula, as published in the Government Gazette, are shown in Appendix A. It should be noted that in addition to gazetted routes, restricted access vehicles also operate under permit. Permit vehicles also include Medium Articulated with Dog trailer (MAD 25m) and AB-Doubles (36.5m).

Many farmers still use their own small trucks (8-12 tonne payload) for carting grain to the nearest silo. Other farmers with semi-trailer combinations (24 tonne payload) choose to cart direct to port or to a strategic silo site, depending on their own analysis of distance and cost. Carting grain from the farm typically represents the largest unit cost for transport of export grain ¹.

Generally on Eyre Peninsula, there are no long-span bridges that impede the movement of short road trains (32-35m in length) and these vehicles have the advantage of being able to 'fit' almost as much of the road system as conventional semi-trailer combinations. There is considerable scope on Eyre Peninsula to use short road trains for the movement of grain from the farm gate to point of delivery ².

Silo-silo traffic on Eyre Peninsula is generally more constant throughout the year with peaks in January through to March and lesser traffic in October/November. The grower-direct traffic (farm-silo) generally consists of semi-trailers and dog trailers whereas larger vehicles such as Road Trains and AB-Doubles generally undertake the silo-silo carting. The latest harvest data indicates approximately 10% of export grain is transported by road, direct from farm to Port Lincoln ³. Historically, this has been closer to 40% of export grain delivered direct from farm to port. It is reasonable to assume that recent development of upstream strategic silo sites by AusBulk Ltd has enticed farmers to now deliver to silo, rather than direct to port.

The development of east-coast strategic silo sites, at Tumby Bay and Arno Bay, by AusBulk Ltd in 1998/99 has reduced traffic congestion within Port Lincoln during harvest period by spreading grain movement to port over a longer period of time (see Chart 1). Along with the west-coast strategic sites, at Streaky Bay and Witera, AusBulk Ltd has been able to strategically manage its future investment in grain storage and handling facilities on Eyre Peninsula. AusBulk's plan helps to contain future costs associated with upgrading handling equipment by focussing on fewer silo sites. Continual development of faster unloading rates at strategic

¹ "The Challenges and Benefits of moving Freight by Rail", Geoff Barker, Australian Bulk Alliance

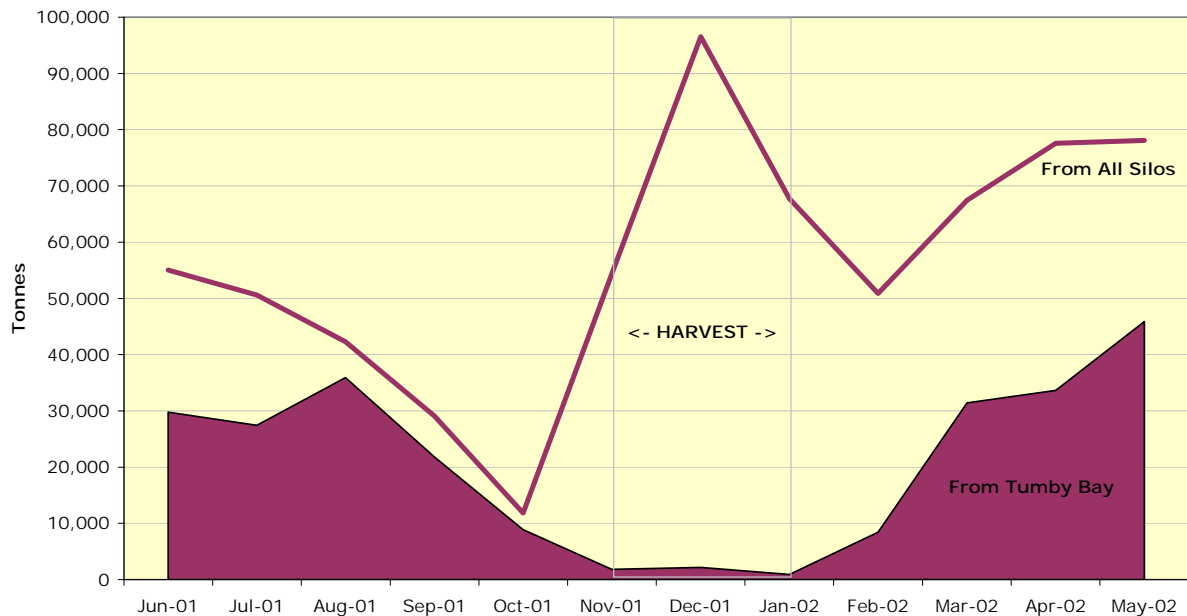
² Vehicle Policy Unit, Transport SA

³ AusBulk Ltd advice to Transport SA, 28 August 2002

sites will most likely increase the number of farmers using them for short distance haulage of grain direct from farms.

PORT LINCOLN GRAIN TERMINAL
EXPORT GRAIN RECEIVED BY ROAD FROM UPSTREAM SILOS

Chart 1



Source: Ausbulk Ltd

According to the Port Lincoln Freight Access Study conducted in 2000, the amount of grain transported direct from farm to Port Lincoln by road has been relatively constant since the 1995/96 season. Nearly all such movements occur during the November/December period of each year and the majority of movements utilise the western approach to Port Lincoln. Table 1 shows that during a period of increasing grain production, the latest grower-direct traffic (19,550 movements) increased marginally ($\approx 8\%$) over the 5-year average (18,150 movements). The latest silo-silo traffic with Port Lincoln (21,340 movements) shows 41% growth over the 5-year average (15,172 movements), which is greater than growth in grain production over the same period, and most likely reflects the development of strategic road silo sites by AusBulk Ltd. These figures represent two-way movements, one movement into Port Lincoln to deliver grain and one return movement out of Port Lincoln.

ANNUAL GRAIN TRUCK MOVEMENTS WITH PORT LINCOLN (TWO-WAY)

Table 1

Period	Eastern Approach (Lincoln Highway)			Western Approach (Flinders Highway)			Total
	Silo-Silo	Growers	Total	Silo-Silo	Growers	Total	
Apr'98-Mar'99	16,912	4,032	20,944	4,428	15,518	19,946	40,890
5 yr average	12,178	4,078	16,256	2,994	14,072	17,066	33,322

Source: QED Port Lincoln Freight Access Study

From Table 1, approximately 78% of the grower-direct traffic enters Port Lincoln via the western approach (Flinders Highway). Around 80% of silo-silo traffic enters Port Lincoln via the eastern approach (Lincoln Highway). Transport SA estimate that Tumby Bay accounts for around 43% of all grain traffic entering Port Lincoln via the eastern approach, based on the truck movement ratios above and AusBulk Ltd data from Jun'01-May'02.

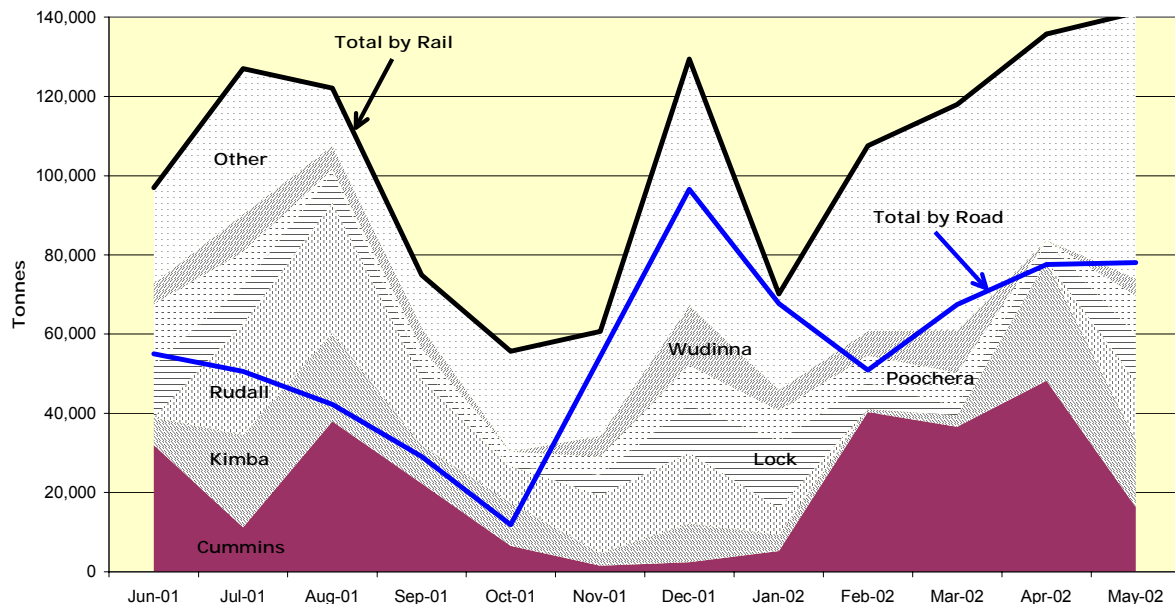
2.3 Rail Operations

Australia Southern Railroad (ASR) operates four trains (consists) for the grain transport task. The present capacity is about 5,500-6,000 tonnes of grain per day discharged into Port Lin-

coln using a total of 179 wagons. Wagon payloads vary from 24-36 tonnes and there are eight different types of wagon in the fleet, with four different bottom discharge mechanisms ⁴. It has been suggested that maximum rail capacity could be about 8,000 to 10,000 tonnes per day, under more favourable operational and infrastructure conditions ⁵ (eg. operating times, lighting facilities, fewer sites, loading rates).

PORT LINCOLN GRAIN TERMINAL
Export Grain Received by Rail

Chart 2



Source: AusBulk Ltd

Chart 2 shows that rail handles the bulk of the transport task to Port Lincoln, although this is less so during the harvest period (Nov, Dec, Jan), where road and rail handle similar amounts. Outside of harvest period, rail moves significantly larger amounts of grain into Port Lincoln than does road. The bulk of the rail movement, during this period, appears to be from sites other than the strategic silo site at Cummins. A significant percentage of the road movement appears to be from Tumby Bay during the same period (based on TSA estimates above).

In order to meet loading requirements, ASR advise that loaded rakes are normally replaced with empty rakes at key silo sites ⁶ due to poor out load rates from those silos. In ASR's submission to Transport SA, they suggest that, to date, the rail system has been maintained in a 'fit-for-purpose' state, through a combination of spot maintenance and where necessary reducing axle loads or train speeds.⁷

Charts that summarise the grain freight task for road and rail are in Appendix B.

2.4 Port Operations

Port Lincoln is a natural deepwater harbour (deepest draft – 14.7 m) and is attractive to large bulk grain carriers – grain is the main export and phosphate is the major import. The other public commercial port on Eyre Peninsula is Thevenard, which is located 3 kilometres from the centre of Ceduna township with major commodities exported being gypsum, salt and grain. Thevenard jetty is 392m long with a berth on either side. Each berth can accommodate vessels up to 180m in length, 28m beam and 9.8m draft (lowest water 8m). Grain loading rates into ship vary from 550 to 750 tonnes per hour.

⁴ "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

⁵ Stakeholder Workshop, Transport SA, Stakeholder Comments, June 4, 2002

⁶ "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

⁷ "ASR Submission Paper to Transport Minister", Australia Southern Railroad, September 2001

There is a significant difference in capacities between the two ports, with Port Lincoln capable of servicing the larger Panamax ships, in which grain is increasingly being carried.

Both Thevenard and Port Lincoln are owned and operated by a commercial consortium known as Flinders Ports. The wharf facilities are in a satisfactory to good condition. Any future expansion of Port Lincoln is limited due to surrounding developments.

AusBulk have significant investments at Port Lincoln, No. 4 and 5 berths, which include two travelling grain loaders. These loaders have a gross loading rate for wheat of 2,000tph, barley 1,750tph and oats 1,250tph. The maximum loading rate is 3,600tph using two loaders.

A chart showing the distribution over time of grain vessels arriving at Port Lincoln and Thevenard is attached at Appendix C.

2.5 Grain Storage & Handling

AusBulk Ltd, previously known as the South Australian Co-operative Bulk Handling (SACBH) Ltd, is the major grain storage and handling company in South Australia and the only provider of these services on Eyre Peninsula. It is estimated that they have storage, plant and equipment with a replacement value in excess of \$1.5 billion.

AusBulk Ltd currently stores and handles over 70 segregations of cereal grains, pulses and oil seeds and it has the capacity in South Australia to store 8.4 million tonnes of commodities at one time. Storage capacity is provided by:

- Concrete vertical cells 2.8 m tonnes
- Steel bins 1.0 m tonnes
- Horizontal sheds 1.2 m tonnes
- Bunkers 3.4 m tonnes

AusBulk Ltd offers a freight service to clients and growers who wish to move grain or other granular commodities. The service operates in both harvest and non-harvest periods. AusBulk Ltd suggests that the use of its strategic silos can achieve less silo-silo movement during harvest, less double handling during harvest and better control of grain flows. The South Australian Farmers Federation has positively endorsed the use of strategic silos as it delivers lower freight costs and faster turnaround times to farmers⁸.

AusBulk strategies to encourage grain flows to strategic sites include:

- Freight rate reductions;
- Longer hours of operation;
- More storage capacity;
- Multiple and high capacity intake;
- Multiple segregation; and
- On farm pick up service.

Not including the silo facilities at Port Lincoln terminal, AusBulk Ltd own 32 silos on Eyre Peninsula. Of these, there are 7 strategic silos located on the rail network (3 between the Thevenard and Wudinna section, and one each at Lock, Cummins, Rudall and Kimba). There are 4 strategic silos on the road network (2 on the Flinders Hwy at Witera and Streaky Bay and 2 on the Lincoln Hwy at Arno Bay and Tumby Bay).

Changes to farming practices and increasing diversification and expansion of products on Eyre Peninsula have an impact on AusBulk Ltd strategies for the region as a whole. Approximately 850,000 tonnes of these various products were received in Eyre Peninsula silos over the last year (with approximately 50% being received at strategic silos)⁹.

⁸ "Eyre Peninsula Grain Transport Workshop", Transport SA, June 4, 2002

⁹ AusBulk Data supplied to Transport SA

Grain harvest generally occurs in the period November through to January, during which grain is stored either inland or at ports. In the lead up to the harvest period, AusBulk Ltd:

- Liaise with clients and growers;
- Monitor estimates and shipping;
- Plan storage location of carryover;
- Identify where receivals exceeded storage;
- Contingency plan for storage, transport and segregation issues; and
- Plan with transport providers.

Grain exports are maintained throughout the year, but a major part of the grain harvest is exported during, and immediately following, harvest. Movements of grain to port for shipping are usually done at short notice just prior to the vessel's arrival. This leads to the need for rapid movement of grain from inland storage to port, to meet ship-loading requirements.

2.6 Grain Marketing & Supply Chain Management ¹⁰

AWB Ltd is, under legislation, the sole marketer of Australian wheat on international markets. Similarly, ABB Grain Ltd is the sole marketer of Australian barley on international markets. AWB's role in managing the wheat supply chain on behalf of growers who deliver to AWB's National Pool, represents the greater part of grain supply chain arrangements on Eyre Peninsula.

AWB negotiates with service providers and manages the grain flow to ensure wheat destined for export travels along the least cost pathway to customers, to meet AWB's constitutional obligation to maximise returns for growers. Australia's total wheat supply chain costs are in the order of \$1.6 billion p.a. and represent a significant cost to the nation's wheat growers. In attempting to lower these costs to growers, AWB's National Pool requires transparent pricing from service providers. This can prove difficult where there is no competition in service provision and this often reflects itself in the provider's unwillingness to reduce charges.

AWB Ltd has adopted a comprehensive strategy to manage grain flows, conduct collective negotiations with service providers on behalf of all wheat growers, and developed a program of encouraging competition along the supply chain. AWB's strategy in relation to rail transport within Australia is reflected in:

- Negotiated long term contracts that encourage investment – the long term sustainability of rail transport is possible only if investment is made to improve supply chain infrastructure. Consequently, haulage contracts for AWB's National Pool aim to provide the volume for supply chain participants to invest in improvements that enhance supply chain efficiency;
- Using third party rail access regimes to encourage above rail competition. This initiative has delivered significant benefits to grain growers for export wheat in New South Wales and Victoria. Whilst rail operators have attempted to gain access for grain haulage in South Australia, these efforts have failed due to an inability to achieve access outcomes that would generate a commercial position for the access seeker; and
- As part of its obligations to reduce supply chain costs to growers, AWB Limited has on occasions invested in infrastructure. These investments are made by AWB Ltd on the basis that applicable rates of return must be achieved. Investments to date include numerous country grain receival centres (in NSW, Victoria and SA), high capacity grain wagons in New South Wales and also a 50% ownership of Melbourne Port Terminal, a facility also owned jointly by GrainCo and AusBulk.

¹⁰ Industry advice to Transport SA, 9 September 2002

3 Historical Overview

3.1 *Royal Commission into Grain Storage, Handling & Transport*

In 1988, the Commonwealth Government published its report from the Royal Commission into Grain Storage, Handling and Transport. Recommendations included:

- Removal of sole receival rights for all grains and the commercialisation of the bulk handling agencies;
- Continue with the commercialising of port authorities with the aim of encouraging greater competition in the provision of port services;
- Greater competition be encouraged in the provision of land transport for grain by the removal of restrictions precluding the use of road transport for grains and by the “commercialisation” of rail freight services, and specifically:
 - Remove the AN surcharge on road movements of grain between rail served silos in South Australia; and
 - Remove restrictions on the use of alternative types of road vehicles if the restrictions cannot be justified on social cost grounds.

Within South Australia, the Commission estimated the reforms would result in a net benefit of \$7 per tonne of export grain.

It is worth noting that changes in grain handling and transport on Eyre Peninsula that occurred during the 1990's are considered to have been largely in accordance with the recommendations of the Commission. It should also be noted that the Commission's recommendations were framed at a time when contemporary issues such as greenhouse gas emissions, non-renewable energy consumption, and community amenity did not have the same profile as they do today.

3.2 *Grain Infrastructure Planning Group*

A workgroup was established (in June 1997) with membership from Ports Corp, Transport SA and SACBH to initiate the development of an integrated plan for grain storage, handling and transport infrastructure in South Australia.

Some of the key recommendations of this working group were:

- The need for all three organisations to formally exchange information and plans on a regular basis to understand the impact of their actions on each other;
- Organisations investigate the inter-relationship of their pricing policies and ensure that decisions on prices and charges made by one organisation are made in consultation with the other two;
- The organisations need to work together to resolve and develop land use plans;
- Full road transport costs (including social costs) should be used when assessing mode choice options throughout the State.

While some components of these recommendations may have been reflected in the contract for service provision subsequently negotiated between the three parties (AN, SACBH, Grain Boards), it has not been ascertained as to what degree these recommendations have manifested themselves in the current thinking and planning of key industry participants.

3.3 *Road Transport Reform*

The National Road Transport Commission (NRTC) was formed in 1991 to overcome the plethora of multi-jurisdictional standards and operating conditions for heavy vehicles. NRTC's aim was to make road transport more efficient by introducing nationally consistent transport policies and laws. The NRTC's aims for road transport are to:

- Make it more innovative, efficient and safer;
- Make transport regulation more consistent and effective; and
- Reduce road transport's environmental impacts.

Road trains began operating on Eyre Peninsula in the 1970's initially carting grain and superphosphate. At first, they were short combinations of about 27m in length because they were derived from short trailers already in use for grain carting. In time, as vehicle technology and regulations changed, the length of the most common vehicle type on the Eyre Peninsula (double road train) has evolved to about 32m today. This is still shorter than the overall length of 36.5m that generally applies to double road trains. However, 32m maximum length road trains have access to a more extensive network of routes than do the 36.5m units.

These medium and heavy vehicle combinations operate under the terms of exemption (permit or gazette) that prescribe vehicle specifications and operating conditions. To operate under the scheme, all vehicles must comply with the technical requirements specified in the exemption and pass annual inspections after which an inspection label is affixed to the vehicle. Owners, operators or drivers found to be breaching operating terms and conditions, or placing the safety of other road users at risk, are suspended from operating under the scheme. Anecdotal evidence suggests the level of enforcement on Eyre Peninsula maybe insufficient to act as a deterrent to non-compliant operation.

Additional mass is available to operators travelling on specified routes, who have gained the necessary approvals (eg. accreditation) and whose vehicles are fitted with road friendly suspension.

3.4 Grain Research & Development

The Grains Research & Development Corporation (GRDC) is responsible for planning, investing and overseeing research and development, delivering improvements in production, sustainability and profitability across the Australian grains industry. GRDC is a statutory corporation, founded in 1990 under the Primary Industries and Energy Research and Development 1989 Act, and it is subject to accountability and reporting obligations set out in the Commonwealth Authorities and Company Act 1997.

The GRDC's mission is to invest in research and development for the greatest benefit to its stakeholders - grain growers and the Commonwealth. The Corporation links innovative research with industry needs. The GRDC's vision is for a profitable, internationally competitive and ecologically sustainable grains industry.

Funding is provided through a levy on grain growers. This is determined each year by the grains industry's peak body, the Grains Council of Australia (GCA). The Commonwealth Government matches this funding, up to an agreed ceiling.

3.5 Micro-Economic Reform

Grain marketing legislation currently mandates single-desk marketing (sole export rights) for the main export commodities of wheat and barley.

The restructuring of AWB preserved its single-desk status for all export wheat until July 1999. This was then extended until 2010, with an agreement that the AWB performance be reviewed in 2004. Barley export rights have been granted under the Barley Marketing Acts of SA and Victoria. These rights expired in Victoria in July 1999 and since that time Victoria has operated under a deregulated system, whereas in SA the Barley Marketing Act rights have not expired but are to be reviewed at the end of 2002. In contrast all domestic grain sales have been deregulated and are now traded by a multitude of parties.

The Australian Barley Board changed from a Government owned statutory authority to a grower-owned and controlled private company on July 1, 1999. The new organisation, ABB Grain Ltd, now operates under Corporations Law. ABB Grain Export Ltd, a wholly owned subsidiary of ABB Grain Ltd is now responsible for the marketing functions associated with the single-desk export of barley. All other activities are performed by ABB Grain Ltd.

The Commonwealth Government established the Australian Wheat Board as a statutory authority in 1939. It continued as a Government controlled marketing authority until July 1999.

In 1989, the Government established the Wheat Industry Fund through compulsory levies on wheat sales. This fund was held and managed by the Australian Wheat Board, and by July 1999, the fund was worth approximately \$600 million. In June 1998, the assets and liabilities of the statutory authority (other than the Wheat Industry Fund) were transferred to AWB Ltd, then a wholly owned subsidiary of the statutory authority.

In July 1999, the Wheat Industry Fund was transferred to AWB Ltd and B-class shares were issued to the holders of units in that fund. A-class shares were issued to growers. By issuing A-class and B-class shares, AWB Ltd became a grower-owned and controlled corporation. As part of the restructure, AWB Ltd began directly financing pooling and commercial activities. On August 22, 2001, AWB Ltd completed its process of privatisation by listing on the Australian Stock Exchange.

AusBulk Ltd was formed in 1954 to facilitate South Australia's transition from bag to bulk handling of grain. The formation of the company, at the time named South Australian Co-operative Bulk Handling Ltd, was largely a co-operative initiative of the State's grain growers.

The construction of AusBulk's storage network has been almost completely funded by grower contributions through membership fees and the company's own cash surpluses. Recent changes in the Australian grain industry, introduced a more competitive operating environment, and AusBulk Ltd was formed through demutualisation of its funding.

In 1997, Commonwealth legislation governing the previous operation of Australia National (AN) rail on Eyre Peninsula was rescinded and AN assets were sold to private sector rail operators. Genesee & Wyoming Inc acquired the assets of Australian National's freight rail business in the state of South Australia from the Commonwealth of Australia and created Australia Southern Railroad (ASR), a wholly owned subsidiary of GWinc.

Australia Southern Railroad (ASR) is part of the Australian Railroad Group Pty Ltd - one of Australia's largest private rail owner/operators operating across almost 10,000 kilometres of track.

State legislation governing the previous operation of South Australia's port authority (Dept. of Marine & Harbors to 1995, then Ports Corp) has been rescinded and commercial port assets sold to a private sector operator (Flinders Ports).

4 Issues

A range of problems associated with the transport of Eyre Peninsula grain for export have been presented to, or identified by, Transport SA. The discussion below, groups these problems into common issues. The questions at the end of each issue are provided as a guide to promote thought and discussion about any implications and/or consequences of each issue. The reader is encouraged not to confine themselves to the questions raised in this paper, as there may be other questions that are more relevant from the reader's point of view. The reader's view on each issue is sought through the submission process outlined in Section 1.2 of this report.

4.1 Grain Product Diversification

Grain research and development has resulted in a larger variety of grain types available for growing on Eyre Peninsula. In particular, drought-tolerant grains have improved cropping in northern areas of the peninsula¹¹. Various trials of Prime Hard grains have been successful in the more consistent rainfall areas on the peninsula¹².

The majority of grain produced on Eyre Peninsula is for export to the Middle East¹³. While this is currently a bulk market requiring little in terms of product segregation¹⁴, the trend to a greater variety of grain types on Eyre Peninsula and increasing world demand for identity-preserved grains¹⁵, may lead to changes in the way grain is stored, handled and transported. Eyre Peninsula growers may generate significant benefits from the trend to more diverse products and markets. The implications for transport infrastructure, facilities and services may be significant.

Growers are increasingly considering alternative crops as a means of achieving consistent returns throughout periods of climatic variation¹⁶. Improved information about world markets and climate expectations provide growers with more comprehensive and accurate information on which to base their crop decisions¹⁷. This may lead to greater variation in crops grown from season to season.

How significant are these trends on Eyre Peninsula ? Is the transport sector on Eyre Peninsula adequately equipped to cater for these trends ? Will trends favour one particular transport mode over another ? How should transport services respond to diversified market requirements ?

4.2 Continued Growth in Grain Production

Crop production on Eyre Peninsula has continued to increase, as new grain technology and farming practices are introduced¹⁸. Grain production has shown an increase of better than 30% over the past 5 years¹⁹. The decline in the wool industry has seen a greater total area under crop²⁰, particularly in the southeast of Eyre Peninsula²¹. Additionally, annual variations in yields due to climate have reduced through development of drought-tolerant species of grain and disease control²².

Historically, the slow increase in yield for Eyre Peninsula grains has been of some concern to producers in the region²³. As a result, there has been a recent trend to more high yielding

11 "Eyre Peninsula Farming Systems 2000 Summary", PIRSA Rural Section, Cleve Field Crop Consultant

12 "Producing Prime Hard in SA is possible", Grains Research & Development Corporation, 28 Feb 2001

13 Industry advice to Transport SA

14 Industry advice to Transport SA

15 "Supply Chain Design for Identity Preserved Agricultural Products", Robert P.King, January 21, 2000

16 "The changing face of agriculture" from Australian Agricultural Assessment 2001 at audit.ea.gov.au

17 "Value of Improved Information in Agriculture: Weather and Climate Forecasts", James W. Mjelde, May 1999

18 "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

19 Industry advice to Transport SA, 28 August 2002

20 "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

21 "The changing face of agriculture" from Australian Agricultural Assessment 2001 at audit.ea.gov.au

22 "The changing face of agriculture" from Australian Agricultural Assessment 2001 at audit.ea.gov.au

23 "Agronomy and Farming Systems at Minnipa Agricultural Centre" at www.roseworthy.adelaide.edu.au

grains rather than high quality grains²⁴. The loss in product price is more than offset by the increase in product volume.

In the five years to 2001/2002, grain production on Eyre Peninsula has shown steady increase with a record tonnage last year (2001/2002)²⁵. This production trend is expected to continue²⁶ and perhaps increase over the next 15 years, by as much as 30%.²⁷

Harvest normally occurs during a 5-7 week period from November through to January. The greater percentage of export shipments also occurs during this period. This creates an intense period of transport from farm to silo and silo-to-port. The ability to spread this transport task over longer periods of time is limited due to the small harvest window and the priority to sell grain on international markets.

Will grain production on Eyre Peninsula continue to increase ? Will the current transport system on Eyre Peninsula accommodate increasing grain tonnages ? Will large grain tonnages lead to delays or congestion at silos and terminals on Eyre Peninsula ? What changes in transport practices and equipment (if any) will be required to accommodate larger grain tonnages ?

4.3 Operational Efficiency of Eyre Peninsula Rail

The efficiency of the rail operation on Eyre Peninsula is constrained by a number of factors, including²⁸:

- Summer heat restrictions (when harvest is at its peak);
- Poor out-load rates into wagons at strategic inland silos;
- Low track speeds;
- Low axle loadings;
- Low wagon capacity;
- Limited track space in Port Lincoln;
- Low wagon discharge rates in Port Lincoln;
- Short crossing loops;
- Inadequate operating times for grain receipt at Port Lincoln;
- Inadequate lighting at some inland silos; and
- Inability of some inland silos to handle deliveries and out-load simultaneously.

Rail infrastructure is in poor condition and has high-cost reactive maintenance. While there has been natural attrition since purchased by ASR, the current condition of the rail network was largely evident at the time of sale by Australian National (AN) Ltd. Some sections have 31kg light rail, open-deck bridges with low load-bearing capacity and life-expired sleepers. The rail track can often buckle in certain sections of the line between Wuddina and Thevenard²⁹. The condition of a large percentage of the rail network is now at a stage that it will degrade quite quickly and further restrictions will have to be applied to train operations unless funding is made available for track remediation³⁰.

Rolling stock is low capacity with multiple discharge mechanisms on wagons. Low loading rates at inland silos requires loaded rakes to be replaced with empty rakes³¹. Inefficient performance in grain storage and handling facilities does not allow rail to achieve its full potential³². Turn-around times are poor and therefore utilisation of rolling stock is poor. The

²⁴ "Eyre Peninsula Farming Systems 2000 Summary", PIRSA Rural Section, Cleve Field Crop Consultant

²⁵ Industry advice to Transport SA

²⁶ "Just how big can SA grains crop get ?", Cathy Parker, ABC Online; also

"ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

²⁷ "Port Lincoln Freight Access Study" QED Ltd, Dec 2000.

²⁸ "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

²⁹ "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

³⁰ "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

³¹ "ASR – Grain Business", Australia Southern Railroad, 11 June 2001

³² "ASR – Grain Business", Australia Southern Railroad, 11 June 2001

wagons recently hired from ASR's sister company, Australia Western Railroad, will not fit under 60% of AusBulk's loading facilities.

An inefficient rail system is likely to result in more grain being transported by road. This prospect is further reinforced by the development of alternative crops, the development of storage sites away from rail, larger bulk-grain vessels, and continued productivity gains in road transport. The competitive position of road will be strengthened, while that of rail will be weakened. The resulting modal shift in freight to road will shift a greater cost burden to the community (see Section 4.5). Rail operators are unlikely to favour long-term capital commitments in such a commercial climate. Without investment, rail's future operation on Eyre Peninsula would appear to be under threat of severe contraction or complete demise. It is estimated that heavy vehicle traffic through Port Lincoln would more than double if rail operations cease³³.

Should rail be used to move grain on Eyre Peninsula ? Does the current rail operation on Eyre Peninsula meet expectations ? What would the impact be, if rail operations ceased ? What would the impact be, if rail operated no further north than Lock and Rudall ? Should current rail infrastructure on Eyre Peninsula be upgraded to a better, common standard ? If so, what should receive priority attention ?

4.4 Security in Grain Supply to Export Shipping

Bulk vessels used for grain transport are being built longer and deeper in order to gain economies-of-scale and reduce the unit cost of grain transport³⁴. New ship building standards, introduced in 2002, encourage this trend³⁵. South Australian port statistics to May 2002 show an increasing number of Panamax vessels calling at Port Lincoln, either for top-up (from another SA port) or full load³⁶. Panamax vessels are the larger of the dry-bulk grain carriers at about 50,000 to 80,000 dead-weight tonnes (payload, fuel and stores).

Appendix C shows the individual arrival of grain vessels at South Australian ports from June 2000 to May 2002. The following interpretations have been drawn from Appendix C:

- More Panamax vessels and fewer Handysize vessels are calling at Wallaroo;
- Thevenard almost exclusively receives Handysize vessel calls only;
- Port Pirie is receiving fewer grain vessel calls;
- More Panamax vessels and fewer Handysize vessels are calling at Port Lincoln;
- More Panamax vessels are calling at Port Giles; and
- Port Adelaide receives a steady stream of calls from Handymax vessels and Handysize vessels, with perhaps a slight trend to Handymax.

A trend to larger vessels at South Australian grain ports is evident, and is expected to continue³⁷. This is likely to result in greater concentration of grain for export through Panamax capable ports (Port Lincoln, in the case of Eyre Peninsula).

To minimise vessel and port costs, there is strong preference from ship owners and charterers to single-port load. As vessels become larger and more grain is purchased in overseas markets at c.i.f rates (cost, insurance and freight) rather than f.o.b. rates (free on board), grain marketers are expected to push more strongly for single-port load³⁸. Hence, a greater percentage of Panamax vessels calling at Port Lincoln in the future are likely to require full-load, rather than part-load. This will be reinforced by development of Panamax capability in other South Australian ports (eg. Port Giles, Port Adelaide), thereby reducing the need for top-up at Port Lincoln.

³³ Industry advice to Transport SA, 28 August 2002

³⁴ "Shipping Trends Analysis", by Jennifer K. Waters, Robert H. Mayer, David L. Kriebel, Sept 2000

³⁵ "Chapter six: The Need for the Port of Southampton to Expand", Dibden Terminal, September 2000

³⁶ "EP Grain Shipping Data", Flinders Ports, July 2002 as supplied to Transport SA

³⁷ Industry advice to Transport SA

³⁸ Industry advice to Transport SA

A full-load for a Panamax vessel can be around 80,000 tonnes of grain and may attain a ship's draft in excess of 12 metres³⁹. To minimise buffer storage requirements at port and to guarantee continuous ship loading for these larger vessels, an increasing amount of grain must move from inland silos quickly and efficiently in the days before, and during, the ship's stay in port. Land transport must be structured in such a way that meets this ship-loading requirement⁴⁰.

Currently, Port Lincoln receives grain at about 10,500 tonnes per day from road and rail. The site has the capacity to receive up to 20,000 tonnes per day⁴¹. This relatively poor receipt rate, increases the amount of forward planning required to meet ship loading requirements and increases the buffer storage needed in port. The simultaneous arrival at port of a number of Panamax vessels, as can happen during summer months, will exacerbate this problem.

Ideally, the grain supply-chain to ship should be rationalised and synchronised to meet ship-loading requirements⁴². Unless this is achieved, the supply-chain may be overcapitalised⁴³. This may result in increasing unit costs, reducing overseas sales and decreasing returns to the producer (grower).

How significant are these shipping trends for Eyre Peninsula ? Will the current land transport system cope with future shipping demands ? What land transport arrangements will best cater for these shipping trends ? What are the implications for grain transport to Thevenard and its role as a grain export port ?

4.5 The True Cost of Road Transport

Road infrastructure on Eyre Peninsula is publicly funded from a combination of local, state and commonwealth government funds. Rail infrastructure on Eyre Peninsula, is privately funded by the owners, Australia Southern Railroad (ASR). Rail corridor land is owned by the South Australian Government and leased to ASR, in accordance with the Australian National sale agreement.

Rail infrastructure costs on Eyre Peninsula are, presumably, recovered in a normal commercial manner through ASR's rates and charges. The user ultimately pays. However, it has been suggested that the real cost of changes to road infrastructure, including maintenance, is not directly apportioned to those that caused the need for its modification⁴⁴, particularly heavy vehicle combinations that increase maintenance needs. There are claims that in terms of recovery of capital and maintenance costs, it is not a level playing field between road and rail⁴⁵.

Road operators have generally passed on the savings from new and improved infrastructure (ie. productivity gains) as reductions in freight rates to users of the road transport service⁴⁶, making road more competitive against rail. Any savings through productivity gains in rail, therefore, have also been passed on to users (rather than invested back into infrastructure) in order to compete with road rate reductions⁴⁷.

The different funding arrangements for infrastructure between road and rail are a significant block to the attainment of competitive-neutrality between the two transport modes. The Bureau of Transport Economics estimated that an increase in infrastructure-use fees for road transport (0.33¢/ntk) represented the bulk (54%) of changes to input costs needed to attain

39 "EP Grain Shipping Data", Flinders Ports, July 2002 as supplied to Transport SA

40 "Trains and Grains in South Australia: A brief report on the role of rail in grain transport in South Australia", D J Maunsell, November 1996, report for the SA Govt., p.3

41 Industry advice to Transport SA

42 "Grain Infrastructure Planning: Issues and Recommendations", February 1998

43 "Submission by Goodman Fielder Limited", Peter Flottmann, December 1998

44 "ASR – Grain Business", Australia Southern Railroad, 11 June 2001

45 "ASR – Grain Business", Australia Southern Railroad, 11 June 2001

46 "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

47 "ASR – Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

competitive-neutrality between road and rail⁴⁸. A government research paper for the Parliament of Australia (2000), advised that "...infrastructure funding and investment arrangements, may be more important than charges and taxes in trying to attain competitive neutrality"⁴⁹.

Given the same freight task for road and rail, the operations of rail are estimated to⁵⁰:

- Produce less air pollutants;
- Produce less greenhouse gases;
- Produce less noise;
- Consume less non-renewable fuel;
- Cause fewer transport collisions, injuries, fatalities; and
- Cause less congestion⁵¹.

These costs, known as externalities, are generally not recovered from transport operations, but become costs to the community. "Road freight imposes substantially higher external costs ... than rail in relation to task performed"⁵². External costs of road transport are estimated to be between 7 -11 times that for rail transport⁵³. As rail produces fewer external costs than road⁵⁴, there is an additional road cost to the community that is not recovered through road transport pricing.

"The main changes needed to attain competitive neutrality are to impose charges on heavy vehicles that more fully reflect the cost of their use of roads, and to ensure that both rail and road face the full cost of externalities, with road in particular having to pay more"⁵⁵.

For Eyre Peninsula, improvements in road transport efficiency in recent times have outstripped corresponding improvements in rail transport. The use of B-Doubles, Road Trains, B-Triples and AB Road Trains, combined with higher mass limits, has seen payloads more than double for road transport combinations. Rail wagon payloads on Eyre Peninsula are now, on average, less than road transport units⁵⁶. Productivity gains in road transport have contributed to lower road freight rates. While this may be of immediate benefit to users of grain transport services, it encourages a shift in freight from rail to road. Such a shift, not only multiplies the costs of road externalities but also accelerates road damage, particularly to local roads. It is likely that a complete shift in grain from rail to road on Eyre Peninsula, would produce external costs that far outweigh the costs of any rail upgrade⁵⁷.

The damage to national highways and state arterial roads, while increased, is arguably more sustainable than for local roads. The increasing concentration of larger heavy vehicles around fewer silos, railheads and ports creates an impact on local road infrastructure that may be difficult to sustain. Particularly given local road funding is largely dependent on Commonwealth grants and some restricted revenue-raising capacity of local government. The accelerated damage to local roads could be considered a transitional cost of Commonwealth reforms relating to road transport, national competition and grain storage/handling. These may prove to be temporary should rail services improve, and there is a shift back to using rail as the primary transport means for bulk grain.

The use of rail transport by grain marketers has always been on the understanding that rail rates will be competitive with road rates. Currently, road freight rates on Eyre Peninsula are

48 "Competitive Neutrality Between Road and Rail", Bureau of Transport Economics, 1999

49 "Cost Recovery in Road and Rail Transport", Richard Webb, June 2000

50 "External Costs of Road, Rail and Air Transport - a Bottom-Up Approach", 1998, Mannheim, Germany

51 "Rail Network Strategy for Queensland, Appendix B: The Benefits of Rail", July 2001

52 "Rail in Sustainable Transport", ACIL Consulting, October 2000

53 "External Costs of Road, Rail and Air Transport - a Bottom-Up Approach", 1998, Mannheim, Germany

54 "Cost Recovery in Road and Rail Transport", Richard Webb, June 2000

55 "Cost Recovery in Road and Rail Transport", Richard Webb, June 2000

56 "ASR - Eyre Peninsula Grain Business", Wayne James, Australia Southern Railroad, 1 May 2001

57 Industry advice to Transport SA, 28 August 2002

below those for rail. AWB Ltd. has indicated they may not be able to continue their support of rail due to the disparity in rates ⁵⁸.

A number of other factors reinforce the shift in grain away from rail to road transport:

- The positioning of some strategic silo sites away from rail lines;
- Rail line closures due to degraded infrastructure;
- Low volume, alternative grain products are normally transported by road;
- Difficulty accessing intake-grids at some rail-silo sites;
- Pricing policy of some industry participants;
- Larger bulk-grain vessels, demanding higher grain receival rates at port.

As more grain shifts to road transport, the costs to government and community are likely to rise due to accelerated road damage and unrecovered externalities.

Should the state government subsidise rail operations on Eyre Peninsula as a means of preserving the lower community costs of rail operation? Should road pricing for heavy vehicles on Eyre Peninsula be increased to reflect the true cost of road transport? Should heavy vehicle movements of grain on Eyre Peninsula be more restricted?

4.6 Co-operation in a Networked Industry

The Eyre Peninsula grain-export industry is a networked industry. "Networks operate as sets of connections built for the benefit of those connected, and by their nature they are cooperative constructs ... (that) allow them to obtain more of a scarce resource than they could obtain on their own through competitive interaction" ⁵⁹.

Each participant in the Eyre Peninsula grain-export supply chain has traditionally relied on the cooperation of other participants. This co-dependence appears to have been fostered by years of government regulation and lack of competition at various functional levels in the grain supply-chain.

Given the level of co-dependence, it is reasonable to expect some integration in planning and operational activities between industry participants ⁶⁰. For example:

- Long-term industry plans;
- Agreed business practices;
- Agreed Industry standards;
- Industry communication strategies, including information sharing; and
- Decision transfer.

While there has been some evidence of co-operation in the past (eg. Grain Infrastructure Planning Workgroup, Deep Sea Port Investigation), the grain-export industry on Eyre Peninsula now appears to show little evidence of integrated supply-chain thinking.

Rather, there appear to be signs of competition between participants. "When some parts of a network perceive that they can get what they want without cooperating with the rest, they are likely to leave and perhaps compete with the old network for scarce resources" ⁶¹. Within a networked industry, "competition can ... reduce cooperation in a network, fragmenting a unified network into several smaller, competing ones. The resultant duplication of infrastructure can be costly for consumers" ⁶².

⁵⁸ Industry advice to Transport SA

⁵⁹ "Competition In Networks: Moving Forward By Going Back To The Basics", P.H. Longstaff, 2001

⁶⁰ "Supply Chain Design for Identity Preserved Agricultural Products", Robert P.King, January 2000

⁶¹ "Competition In Networks: Moving Forward By Going Back To The Basics", P.H. Longstaff, 2001

⁶² "Competition In Networks: Moving Forward By Going Back To The Basics", P.H. Longstaff, 2001

Major fixed capital used in the grain export supply-chain includes:

- Rail infrastructure;
- Road infrastructure;
- Storage facilities;
- Handling facilities; and
- Port infrastructure.

In recent times, most of these assets have moved from public to private ownership. This has brought a strong commercial (and competitive) focus to their provision and management. Community benefits and costs in relation to these assets (considered when under public management), are now less likely to form part of the commercial decision-making process.

The permanent nature of these assets dictates that investment is usually on a long-term basis and generally requires some certainty about future operations. The potential for capital exposure is high, should operations not be sustained⁶³. For example, the grain rail network on Eyre Peninsula covers large distances (670km of track), has low freight volume (0.7m to 1.2m tonnes p.a.), is self-contained and is dependent on one seasonal commodity (grain) for its long-term viability⁶⁴. This leaves rail operations on Eyre Peninsula highly exposed to the continued co-operation of producers, handlers and marketers.

Organisations may reduce exposure by vertically integrating in order to control the upstream lines of supply, or downstream markets. Such actions are likely to erode the co-operation needed for efficient investment. The USA Dept. of Justice notes that, “vertical mergers can create or raise entry barriers that result in significant and enduring costs in the affected markets. This is particularly important now with respect to certain networked industries ... where certain firms possess existing market power through ownership of established networks”⁶⁵.

The current circumstances within the Eyre Peninsula grain industry are not conducive to efficient investment in infrastructure⁶⁶, which underpins industry reform and intervention⁶⁷. Industry participants have expressed a reluctance to invest, knowing that the value and return from their investment is largely dependent on corresponding investment from other participants. Combine this with a lack of competitive-neutrality between road and rail, and there may be inefficient and unsustainable allocation of transport resources⁶⁸ on Eyre Peninsula.

Other factors that now “raise the bar” for private investment in grain related infrastructure include:

- Competition in storage & handling services;
- Competition in transport services;
- Short-term or soon-to-expire contract arrangements;
- A three year fix on port pricing;
- Passing-on of transport productivity gains;
- Uncertainty about the future role of key participants; and
- No transitional arrangements to deal with the stranded costs of unproductive assets (i.e. asset rationalisation).

Does the level of co-dependence leave Eyre Peninsula transport services exposed ? Are current physical assets on Eyre Peninsula sufficient to meet the grain transport task ? Does transport investment (and possibly other investment) need to be coordinated industry-wide for Eyre Peninsula ? Is there duplication of physical capital in the grain export supply-chain on Eyre Peninsula ?

⁶³ “Eyre Peninsula Grain Transport Workshop”, convened by Transport SA on 4 June 2002

⁶⁴ “ASR – Eyre Peninsula Grain Business”, Australia Southern Railroad, 1 May 2001

⁶⁵ “Vertical Merger Enforcement Policy”, Address by Steven C. Sunshine, May 11, 1995

⁶⁶ “ASR – Grain Business”, Australia Southern Railroad, 11 June 2001

⁶⁷ “Network industry regulation and convergence in service delivery: challenges for suppliers, users and regulators”, Allan Asher, 1998

⁶⁸ “Submission by Goodman Fielder Limited”, Peter Flottmann, March 2000, Canberra

4.7 Structure of the Eyre Peninsula Grain Export Industry

Deregulation to allow market forces alone to apply, does not necessarily make networked industries (such as grain export) efficient and successful without workable regulatory and legal frameworks in place ⁶⁹.

The grain export industry is a networked industry, where its members are co-dependent on each other's operations ⁷⁰. In such circumstances, it may be better to separate the commercial entities that own infrastructure from those that provide a service ⁷¹.

In this way, it may be possible to achieve a more transparent level of competition in service provision. It also requires the establishment of explicit and efficient access regimes to infrastructure. Where competition is not feasible, there is a case for regulating infrastructure at bottleneck points in the supply-chain ⁷².

The Eyre Peninsula grain export industry exhibits some structural deficiencies resulting from:

- Concentration of market share (eg. rail, storage, port, marketing);
- Barriers to entry (high fixed capital costs, lack of competition); and
- Inefficient access regimes.

Access regimes on Eyre Peninsula (port terminals, rail services, storage) may be inefficient because:

- They lack regulatory independence in applying access protocols – i.e. infrastructure owners are also the first point of access negotiation;
- Contractual rights and other incumbencies are weakening under vertical integration;
- There is no independent tendering, licensing or franchising of service provision;
- There are no warranties to deal with the standard of service provided; and
- There is no compulsion to use cost-reflective pricing for access (except for rail).

Some organisations in the Eyre Peninsula grain industry may hold positions of market power, as:

- Users (of grain export services) may not be able to exercise sufficient bargaining power;
- Regulation prevents entry of other industry participants (although this is weakening);
- It is uneconomic to duplicate infrastructure due to economies of scale;
- Access arrangements are negotiated, in the first instance, by infrastructure owners;
- There is no independent industry regulation of access or pricing (except for rail);
- There are non-competitive components in the supply-chain that potentially may be used for cross-subsidisation of competitive components (eg. port loading facilities).

Where there is not yet sufficient competition in the provision of services, there may be a case for price control in the transition from monopoly supply ⁷³. Such intervention is likely to include the fair and equitable distribution of gains from supply-chain improvements ⁷⁴.

Should the Eyre Peninsula grain export industry be reviewed by the South Australian Independent Industry Regulator (SAIIR) ? Should potential transport interventions on Eyre Peninsula await such a review ? Should the SA Government seek to regulate immediately on pricing and access regimes in the grain export industry ?

69 "Doubts at World Bank on Infrastructure Sell-Off", Financial Times, 27 July 1999

70 "ASR – Eyre Peninsula Grain Business", Australia Southern Railroad, 1 May 2001

71 "Structural Separation In Regulated Industries", OECD, 10 Apr 2001

72 "Network industry regulation and convergence in service delivery: challenges for suppliers, users and regulators", Allan Asher, 1998

73 "Network industry regulation and convergence in service delivery: challenges for suppliers, users and regulators", Allan Asher, 1998

74 "Supply Chain Design for Identity Preserved Agricultural Products", Robert P.King, January 2000

4.8 Sustainable Grain Transport Operations

Eyre Peninsula produces one third of South Australia's grain harvest. The value of the agricultural industry on Eyre Peninsula is estimated at \$400m per annum ⁷⁵. Security in the supply of grain for export from Eyre Peninsula is critical to regional and state prosperity. In this context, plans for future land use should provide for adequate reserve to sustain current supply and cater for future supply-chain developments.

Rail infrastructure on Eyre Peninsula is privately owned. The land corridor is owned by the South Australian government and leased to Australia Southern Railroad (ASR). The track (rails, sleepers, ballast) is fully owned by ASR and may be sold by the owner at the end of the current lease. The long-term vision for rail infrastructure, therefore, is largely at the mercy of its own commercial viability.

Productivity gains in road transport operations on Eyre Peninsula are not locked-in. The operation of high-productivity heavy vehicles requires exemption (permit or gazette) from current legislation. Exemptions are administered by Transport SA and are individually assessed at the time of issue or renewal. Each assessment considers the impact on transport infrastructure, road safety, environment, community amenity and economic development. All of which are dynamic and may vary the decision to grant or renew an exemption. The potential loss of rail service on Eyre Peninsula is likely to have a significant impact on such assessments.

Industry rationalisation of land-based storage sites increases the concentration of heavy traffic at those sites. The impact on local road infrastructure, noise, environment and public amenity through such rationalisation may be significant and unsustainable in the long-term.

The shift in road transport of grain from Flinders to Lincoln Hwy (as discussed in Section 2.2) presents some road safety concerns. Statistical information on recent road counts for the three highways on the Eyre Peninsula indicates the Lincoln Hwy carries more non-commercial vehicles, by a figure of 5½ to 1 when compared with the Flinders Hwy ⁷⁶. This increases the level of commercial / non-commercial vehicle interaction and therefore the exposure level for road safety risk.

Should the Eyre Peninsula grain-export industry operate to an agreed long-term transport plan with defined roles and functions for participants ? Should competitive market forces decide future roles and functions ? Should the state government intervene to provide some security in the supply of grain to export markets ?

⁷⁵ "Regional Profile – All about Eyre Peninsula", ERDB, 11 June 2002

⁷⁶ Transport SA, Road Counts 1996 - 2001

5 Appendices

Appendix A – Gazetted Route Network for Road Train and B-Double Vehicles

Appendix B – Eyre Peninsula Grain Freight Task Summaries

Appendix C – Shipping Operations

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