



SOUTH AUSTRALIAN FREIGHT COUNCIL



28 July 2017

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Freight & Supply Chain Inquiry
Department of Infrastructure & Regional Development
GPO Box 594
CANBERRA CITY ACT 2601

Dear Sir / Madam

RE: Inquiry into National Freight & Supply Chain Priorities

On behalf of the South Australian Freight Council's (SAFC) Executive Committee and Membership I thank you for the opportunity to comment on the Inquiry into National Freight & Supply Chain Priorities, including the proposed National Freight Performance Framework.

As you may be aware, SAFC is the State's peak, multi-modal freight and logistics industry group that advises all levels of government on industry related issues. SAFC represents road, rail, sea and air freight modes and operations, freight services users and assists the industry on issues relating to freight logistics across all modes.

We note that many of the questions included in the discussion paper presuppose that the respondent is a member of a supply chain; rather than the representative of many such members. Nonetheless, we intend to provide as much detail as possible along the lines suggested.

What infrastructure is used, and how well does it perform?

South Australia has the full range of transport infrastructure one would expect from any state of Australia – roads (National Highway, arterials, local roads) Rail (interstate main lines [east-west and north-south], and several regional rail lines), Ports (Flinders Adelaide Container terminal and many bulk ports), Airports (Adelaide for International/Interstate; plus a linked regional airport network) and Intermodal Terminals.

Given the scope of our interest, we have no intention of naming every facility and network in this document.

Broadly, there are a number of key areas where infrastructure improvements could deliver gains for freight users and providers in SA:

- **The North South Corridor** in Adelaide, principally along South Road, is the most important freight corridor in the state, with routes leading from the corridor to both the Port of Adelaide and Adelaide Airport. The corridor is currently half built, with the Commonwealth failing to provide funds for new sections in recent budgets; despite previous promises to the contrary. The section most recently proposed for

construction, Regency Road to Pym Street has a CBR of 7.4 (P90 costs and discount rate of 4%) and is urgently required as it completes a link between two other constructed/under construction sections. Completion of this corridor is the most important infrastructure issue in SA.

- **Adelaide Airport** is one of the fastest growing airports in Australia. Long term requirements highlighted in the airport master plan indicate that freight facilities on airport will need to move to a new location to allow for expanding terminal facilities. This will in turn require new heavy vehicle capable road links between the North South Corridor and the airport, principally along Richmond road, and a new, dedicated freight entrance on the airport's eastern side.
- The **Eyre Peninsula Grain Rail Network** – track conditions on this rail network are sub-optimal, resulting in low axle load limits and significant track speed restrictions. Grain volumes naturally vary considerably year to year; however the region usually produces several million tonnes per annum. The track is in private control (GWA), but SAFC notes the difficulty of investing heavily in infrastructure with such variable volumes year to year. In recognition of the broader benefits of this network to the community and farmers, government investments have been made on some sections of track previously.
- **New Mining related infrastructure** – Before the GFC, South Australia was on the cusp of a mining boom with a large number of mines in the final stages of approval. While the drop in commodity prices following the GFC caused most of these projects to be shelved, several are now re-emerging with associated rail and port proposals/implications. Noting the item above, several of these mines are on the Eyre Peninsula, doubling down on the need for freight infrastructure improvements in this region.
- The far north of SA is 'outback' country – with similar characteristics to the Northern Territory, north of WA or western Queensland. Within this zone there are several **outback 'tracks' that provide critical long distance links** both within this zone and across state borders – particularly linking SA to Qld. There are also several prospective mines (see the earlier comment) along these tracks. While there are programs such as the Northern Australia Infrastructure Facility and Northern Australia Beef Roads Programme that are available for other areas of Australia with similar characteristics, SA is unable to access these funds to improve and maintain these critical tracks. We also note that Austroads (2016) has called for '*A dedicated remote and regional funding pool*' which '*could provide ongoing funding certainty to improve asset management*'. In essence, SAFC would like funding for remote areas to be provided on a non-discriminatory basis, with SA able to access these funds for maintenance and development of its remote infrastructure.
- **The Melbourne – Perth rail corridor** (through Adelaide) captures approximately 80% of freight on the route – far in excess of rail utilisation rates on the east coast's Brisbane – Sydney – Melbourne route. Over time, the economic need to double stack containers east west will emerge, however there are a large number of infrastructure height constraints that prevent double stack from occurring. As constraining infrastructure is redeveloped along the route, it is important that double stack capacity is added in, so that the ability will be within reach when the line starts to get close to capacity. The cross-jurisdictional nature of this route requires that all affected jurisdictions implement a similar approach – national leadership is required.
- **Re-rail Tarcoola to Kalgoorlie** – ARTC has undertaken a re-rail of the Adelaide to Tarcoola section of the Melbourne to Perth/Adelaide to Darwin Rail corridors to enable higher axle loads on this section. Noting the large number of current and future mines located near the Tarcoola to Kalgoorlie section, re-railing this element would provide enhanced load capability for all users. It would also further support Arrrium (the likely supplier of the steel) and the Whyalla region.

Central to the question of infrastructure performance is the design or 'true maximum' capacity versus the utilised capacity – these are instances where these two do not match for a variety of reasons (including political). For example, the duplicated portion of the Sturt Highway leading to the Barossa Valley is designed for Double Road Train use, but is not gazetted at this level.

Changes to make supply chains work better

For any cross border freight movement, regulatory harmony is key to improving supply chain productivity. Great strides have been made in recent years with the advent of the National Regulators, but there are still gaps that cause issues. For example, South Australia borders onto both of the jurisdictions that have so far refused to join the 'National' Heavy Vehicle Regulator and pass the National Heavy Vehicle Law. This causes issues with trucks that cross these borders, particularly in relation to fatigue management. As a general principle, SAFC urges that every opportunity for further harmonisation that appears is taken, across all modes.

Competitiveness in the Australian Freight Sector

The Australian freight sector appears to be broadly internationally competitive, however there are sectors where this is not true – Coastal Shipping is one such area. We note the quote from the former Deputy Prime Minister and Minister for Transport and Infrastructure, the Hon Warren Truss:

“When it is cheaper to buy product in New Zealand and land it in Brisbane for blending than it is to purchase the equivalent Australian raw material from Victoria and ship to Brisbane, or indeed when it is cheaper to ship product in containers from Melbourne to Singapore than it is to ship the same from Melbourne to Brisbane, it is not hard to realize that our Australian exports, who are competing with Singapore based companies for the same export market are finding it tough to do so.”¹

Given Australia's position as an Island continent, far from its primary export markets, such supply chain cost inefficiencies are clearly untenable. SAFC urges swift action to improve the current situation.

SAFC also notes that one of the most important elements in maintaining Australia's freight competitiveness in the long term will be freight corridor and facility protection. Infrastructure Australia has just released a publication on the topic '*Freight Corridor Protection: Planning and Investing for the Long Term*' which makes many valid points (while unfortunately focussing entirely on east coast examples). We note that while corridor protection is currently under discussion, key freight facility protection is just as important and must be a part of this conversation. Facilities that are constrained by planning laws, curfews or other operational restrictions are a genuine risk to our industry – particularly the 'gentrification' and increase in high density living near ports.

Regulatory Factors affecting productivity

- **Coastal Shipping** restrictions (see above)
- **High Productivity Vehicle (HPV) Access** – Access for HPVs can be restricted for a number of reasons – both reasonable and unreasonable. One of the primary issues in achieving HPV access is the sheer number of different decision makers. Each of the more than 500 Local Councils in Australia is a road manager with the ability to make decisions regarding HPV access on local roads, and these organisations vary

¹ http://minister.infrastructure.gov.au/wt/speeches/2014/wts022_2014.aspx accessed 28/4/17

considerably in their interpretations, views, priorities etc regarding HPV access. Of particular note, councils are often the arbiters of First and Last mile access, which results in significant disparity in outcomes across each jurisdiction and the nation as a whole.

- **Curfews & similar restrictions** – In particular the Adelaide Airport Curfew. While SAFC recognises that the Adelaide Airport curfew is here to stay, its existence is a brake on increased productivity and landing freight in target markets at the times that those markets require arrival.

Key issues for freight in major cities

- **Congestion**, which increases cost and lowers productivity. This is a well-studied and understood issue.
- **Freight corridor and freight facility protection**. In particular through planning laws – by restricting inappropriate development, particularly high density living near key facilities and banning rezoning to residential or mixed use near key freight facilities and corridors.
- **Community acceptance and understanding of the importance of freight logistics activities**. A lack of understanding and awareness of the role freight plays in underpinning modern lifestyles, community wellbeing and quality of life leads to objections to freight activities and regulatory imposts that hamper efficient freight movement.

Better prioritisation of passenger and freight services in the most efficient manner

The triple challenges of urban congestion, increasing productivity and road safety suggest that some further specialisation of the road network is required. Natural pressures have dictated that this already occurs to some extent, but mostly in an ad-hoc manner. A more strategic view and an enhanced level of specialisation can assist.

Imagine for a moment a road corridor that includes public transport (both trams and busses), has a bicycle lane (which has reduced road lane widths), has significant numbers of shops and pedestrian crossings, and allows roadside parking (to serve the shops); however is also a primary freight route and caters for major traffic movements both on and off peak. Such a corridor would be a major safety risk, would be congested and would fail to serve any sector well. Given the pressures facing our road system, some level of specialisation of each road corridor is required to assist it in delivering on its primary functions.

In SAFC's view, the SA Department of Planning, Transport and Infrastructure's document '*A Functional Hierarchy for South Australia's Land Transport Network*' is one of the most valuable pieces of work undertaken in regards to categorising a road network by primary function(s), and attempting to set standards based upon those functions. As far as we are aware, this has not been attempted in other jurisdictions.

The document maps key metro and regional corridors, and classifies them based on their primary uses. 'Desired outcomes' are then set for each type of corridor – from mass transit, pedestrian access, cycling routes, high frequency corridors, major traffic routes, key freight corridors, peak hour routes etc. Multiple uses are possible, and even desirable, but some are mutually exclusive (a high priority pedestrian area and major freight route, for example).

This system is not perfect, and SAFC would like to see greater progress towards achieving the 'desired outcomes' for freight corridors in particular – such as removing roadside parking. However it is the best example we have seen to date in attempting to protect road space for the primary purpose(s) of the road; and stopping competing pressures from rendering road space unusable for all.

On a separate issue, SAFC and its rail members have noted an increase in level crossing safety issues – near misses, pedestrians walking through/around stopped trains etc. There are also a few key points on the interstate main line through Adelaide where congestion caused by the slow movement of freight trains is causing considerable community angst – particularly the Cross Road/Interstate main line rail crossing. At this point it is likely that grade separation is the only viable solution where these two important transport corridors meet.

Last Mile issues in Urban Areas

SAFC produced *Moving Freight: The First and Last Mile* on this topic. It notes specific urban and regional last mile issues in Adelaide/South Australia. See http://www.safreightcouncil.com.au/safcreportsandsubmissions_safcreports.html

Current/future problems moving freight through ports (air, land, sea)

In the South Australian context, there are currently few if any problems in moving freight through ports, other than the previously noted Adelaide Airport Curfew restriction (which we accept is not going to be eliminated entirely).

South Australian concerns are primarily about moving freight to sea, air and land ports. The level of investment in such links is concerning, particularly due to a lack of Commonwealth funding to SA in the past, which current budgets indicate will be replicated (and worsened) in the future.

Maritime channels and the challenges of bigger ships

Trends in shipping are towards larger ships – however dimension increases are primarily in width and length as opposed to depth. Between the Panamax class and the largest ships entering service there has only been an increase in required depth from 14m to 15.5m.

This will still have depth implications for some ports in Australia. In particular, Melbourne has a channel depth at the Port Phillip heads of only 14m, which is an issue as Australia's busiest container port, and the determinant of the maximum draft of container vessels trading in Australia.

Looking forward in the long term, 40 or 50 years into the future, as an industry we may need to ask whether we will allow the Port Phillip heads to determine the maximum size of vessels that can call to Australia.

In the more immediate term, increases in vessel width and length will lead to the need to widen channels and increase the diameter of swinging basins. Port Authorities have been aware of these trends for many years, and we expect that they will already have plans in place to undertake the required works.

Simplifying Regulation

The primary area that SAFC sees opportunities for simplifying regulation is in relation to heavy vehicle access.

Unfortunately, there are separate PBS networks and standard combination networks in SA. For example, Double Road Trains have access permissions separate from the equivalent PBS3 network, and have greater access to the road network than the equivalent PBS3 vehicles that perform as well as, or better than a DRT. This directly contradicts the

underlying principle of PBS – that a vehicle should be judged based on performance, not looks.

Higher Mass Limits (HML) is a national scheme that allows additional mass for vehicles fitted with certified road friendly suspension systems and operators accredited under the Mass Management Module of the National Heavy Vehicle Accreditation Scheme (NHVAS).

HML combinations should only be denied access if there is a specific weight limitation on specific infrastructure (eg: a bridge mass limit), and SAFC contends that these limitations should be dealt with using specific restrictions.

Unfortunately, this is not the case. Individual road managers (including State governments and particularly local councils) unilaterally determining road access issues has resulted in the HML and the general mass limits networks varying significantly. Expanded HML access for RAV's on local roads will deliver significant productivity benefits to the State's agricultural producers in particular.

Currently, 'commodity networks' (roads where RAV access is provided for a few weeks every year, such as around harvest) are gazetted at General Mass Limits (GML) only. This is an issue, particularly for comparatively heavy commodities such as grain. Where operators also qualify for HML Access there is no valid reason why they should be restricted from accessing the commodity network at HML.

Airport's Integration into Freight Networks.

Currently, Adelaide Airport is adequately integrated into local freight networks, noting that we expect freight facilities on-airport to move in the near future which will change freight dynamics. A new link on the extension of Richmond Road leading to a new freight only entrance to the airport grounds is expected.

The prioritisation of freight leading from the North South Corridor to this new link will then need to be considered, with possible priority changes at the Richmond Road/Marion Road intersection required.

SAFC, AAL, and DPTI are all aware of these issues now, and are taking steps to ensure that off airport developments proceed in lock step with on-airport developments.

Can Australia be making greater use of air freight?

Cost dynamics ensure that where time is not an issue, international freight will usually move by sea.

However with the rise of the middle class in Asia, there are ever increasing opportunities for the sale of premium goods that are often time critical (such as seafood or horticulture). These are growth markets that are expected to continue growing in the medium term, which indicates there is certainly room for growth in air freight.

Changing technology

Emerging technological trends:

- **Ever increasing Automation** – trucks, ships, ports etc
 - While not yet a primary consideration, interoperability in automation between modes and at the nexus between modes (intermodals, ports, etc) is a possible future consideration
- **Blockchain in logistics**, for security, verification and payments

- **Drones** – for use within the industry for deliveries etc, but also raising issues of airspace protection, security and regulation of access/use
- Expansion of the use of **location based technology** – into areas such as mass-distance-location charging, compliance, real time tracking etc
- Technology allowing for **greater utilisation of current infrastructure** – such as the ARTC's Advanced Train Management System (ATMS) which allows trains to run safely closer together, increasing the utilisation of the line.
 - **'Platooning' of trucks** – an early level of automation – is a similar concept for the road freight industry which is currently being trialled in Europe.
- **Integration of cyber protection into all technology (not just transport specific)**.
 - Any device with a connection to the internet can be subverted into a 'bot net' – it does not need to be a 'computer'. Examples include internet connected security cameras and home automation systems.
 - Further protection and/or 'hardening' against risks that raise business continuity concerns, such as ransomware, hacking, denial of service attacks etc
 - Protection of automated systems against misuse and/or terrorist type activity; i.e. recent 'trucks as weapons' attacks that in a world with automated trucks could be mounted without a suicide-ready driver.

Drivers of Change for Scenario Planning

SAFC considers that the drivers used in the NTC's *Scenarios for Land Transport in 2040* would be worth reviewing for this project, with some assessment of whether these drivers can be adapted to look at sea and air issues as well.

'Automation' and 'data availability & sharing' should certainly be included.

National Freight Performance Framework

SAFC supports the introduction of a national freight performance framework, and the mode specific performance indicators (both old and new) indicated in the working paper. We suggest that the land use/encroachment category also considers encroachment around airports.

Given the important part that freight infrastructure plays in determining freight performance, development and inclusion of a series of indicators regarding infrastructure maintenance may have value. We have observed a number of freight system interruptions due to maintenance issues recently.

However we hold significant reservations regarding the creation of 'indicative supply chains'. All supply chains are **individual** – there are limited learnings that can be gleaned from a grain supply chain in WA for SA grain supply chains, for example.

We also note that there is a natural bias towards focussing solutions and funding upon those supply chains that are studied – when the need may well be higher elsewhere. Further encapsulating this fear, we note that (as per usual) none of the suggested supply chains are South Australian.

SAFC would only support a supply chain indicators package if:

- **An equal number of supply chains are chosen in each jurisdiction.**
- Each supply chain is studied for three years (to develop a baseline and trends), then again in the sixth year (to determine the efficacy of any changes made). After three years a new set of supply chains would be chosen for study.

Again, I thank you for the opportunity to provide a submission on this important topic. Should you wish to discuss any element of this submission further, please feel free to contact me on (08) 8447 0664 or via email knapp.evan@safreightcouncil.com.au.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'E. Knapp', written in a cursive style.

Evan Knapp

Executive Officer, SA Freight Council.