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## FREIGHT AND LOGISTICS COUNCIL OF WESTERN AUSTRALIA INC

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

### **INQUIRY INTO NATIONAL FREIGHT AND SUPPLY CHAIN PRIORITIES**

#### **1. Introduction**

The Freight and Logistics Council of Western Australia (FLCWA) appreciates the opportunity to input its views to this important national inquiry.

The Council was established in 2009 with the objective of providing the State Minister for Transport with independent advice on strategic policy issues impacting the provision of freight and logistics services across Western Australia. Members are senior decision-makers from both industry and Government with relevant responsibilities. Between them, they represent the major trades and the major modes active in this State.

The view of successive Governments has been that independent advice such as is provided by FLCWA is valuable in terms of establishing and implementing good policy. The views expressed in this submission reflect that understanding on behalf of the freight and logistics industry in Western Australia.

#### **2. Western Australia as a Trading State**

Any discussion on supply chains in Western Australia must take account of the State's unique geographic and economic circumstances. Occupying a large and remote area on the western side of the continent with a sparse population over most of its landmass, the focus of freight activity here is very firmly on international rather than interstate movements. Even in these relatively subdued world economic times, Western Australia is still responsible for more than 70 per cent of the country's exports. Most of the State's key supply chains are viewed through the prism of overseas competition rather than domestic, in many instances, a more exacting challenge. This has resulted in levels of efficiency at world's best practice in sectors such as resources. The supply chains underpinning the Pilbara iron ore industry, for example, set the bar at levels not seen with its global competitors. So while some other States and Territories may face some similar challenges relating to remote and regional supply chains, it is the export focus of Western Australia and the demands of international markets that drive an on-going push for ever-greater efficiencies. This circumstance impacts all modes, including air freight.

The distinctive nature of supply chain operation in Western Australia means that a one-size-fits-all approach to national freight and logistics policy is not always appropriate, especially in respect of the heavy road transport industry. Notwithstanding, this submission will endeavour to illustrate some of the current challenges in the State and suggest where Government input could result in higher levels of supply chain efficiency to the benefit of the country overall.

### 3. Key Areas of Focus

#### a) Infrastructure Capacity

Quite apart from the difficult budgetary implications of building new infrastructure in response to growing freight demands, greater supply chain efficiency suggests sweating the current assets that already exist. So investment of resources into soft infrastructure, productivity and systems improvements should be important to Governments, especially in current economic circumstances.

Not that there will be no need for new roads, railways and ports in this country going forward. Of course, there will be. But Governments have to be more creative about the way these are funded.

Traditional funding models are becoming dated because of budgetary pressures experienced by all levels of Government and there is growing recognition of a greater role for private sector investment. Recent port sales on the eastern seaboard have shown how deep industry's pockets can be for infrastructure that yields a stable and positive commercial return. The onus is on Governments to create the circumstances in which alternative funding models will be forthcoming if the public purse is under stress.

First and foremost among these circumstances is the need for long term planning and delivery of those plans, a practice where Governments' performance has been patchy at best. There have been plenty of plans, but there have also been plenty of instances of them not lasting longer than an electoral term. The private sector does not think in three or four year terms when it comes to investment. Twenty or twenty-five year periods are more likely to be the yardstick. So there is an onus on Governments to avoid the flip-flop approach to infrastructure planning and delivery that has tended to characterise such activity in Australia and to seek the adoption of long term bi-partisan positions.

Countries like the Netherlands plan, commit and fund major pieces of infrastructure years in advance of their commencement, distinct from the political cycle. Governments here should consider such enlightened approaches to meeting the country's future infrastructure needs. Infrastructure Australia, and its growing number of State counterparts (including the proposed Infrastructure WA) can assist if they are empowered to deliver truly independent advice to Government on infrastructure needs and the best way of delivering them.

*Recommendation: Governments to consider means of better delivering long term infrastructure plans and funding vital to supply chain efficiency.*

There are a number of current examples of new infrastructure plans requiring funding which impact on Western Australian supply chains, including:

- RAV Network Access Strategy: A Restricted Access Vehicle (RAV) is a freight vehicle of a certain length, height or width that requires approval to travel on the public road network. With that approval, the vehicle can move on any part of the relevant RAV network. However, roads comprising the RAV network have become so numerous over the years, that their condition is extremely variable, especially where small local governments face major maintenance outlays. The situation impacts detrimentally on agricultural supply chains in particular. In response, Main Roads WA, in consultation with Local Governments, is identifying strategic RAV networks which will carry the bulk of heavy vehicle freight transport. Appropriate funding will be required to maintain these strategic freight routes and the supply chains they support.

- Triple Road Train Access to Muchea: The Great Northern Highway forms a critical strategic link between Perth and the north of the State and on into the Northern Territory. The Highway is of fundamental importance to a number of agricultural supply chains, especially with the movement of livestock. Considerable efficiencies are available the further south triple road trains can move before having to transfer their loads to smaller vehicles. Muchea is seen as a key destination in that respect. While funding has been identified as available for upgrading most of the Highway south to Muchea, the final section from Wubin remains unfunded.
- Support for Regional Roads: Key road network improvements which could have a positive impact on regional supply chains, supporting the economic development of the region through industries such as resources, agriculture and tourism have been proposed. Future plans for strategic road freight corridors and sealing of strategic road freight routes have been identified to accommodate the growing freight task in several regions. A clear understanding of how Government prioritises and funds such strategic freight corridors in regional areas to support local industries and economic development would be useful.
- East-West Interstate Rail Line: This rail line carries a significant volume of food and grocery products between the two sides of the country. It is a key component of the supply chains for these products. There have been instances in the past where weather and operational events have caused delays in the freight rail service using the line. Rail authorities have proposed a number of investments in infrastructure to improve the reliability, productivity and capacity of interstate rail freight services. Support from the Federal Government for the proposed investments would be useful.
- New Fremantle Port Facilities: The proposed development of additional port terminal facilities in the Fremantle Outer Harbour to meet the needs of a growing population and an export-based local economy will require complimentary investment in mainline freight rail and key feeder road infrastructure to service this precinct. Significant investment will also be required to re-engineer current freight rail and road infrastructure to meet the operational needs of modern port terminals for at least the next fifty years.
- Bulk Export Grain Supply Chains: While both Federal and State Governments have in the past provided funding for rail and road infrastructure to support bulk export grain supply chains in this country, this has tended to be ad-hoc and without the benefit of a clear medium to long term development plan. Industry stakeholders have been left with considerable uncertainty in respect of related business decision-making. Ideally the Commonwealth and States should agree to a nationally-consistent set of principles to underpin decisions around rail and road infrastructure upgrades and establish a level of investment certainty that supports the international competitiveness of the country's bulk export grain supply chains.

*Recommendation: Governments should consider how funding for major regional strategic freight corridors is prioritised to assist key industries and their supportive supply chains*

When it comes to extracting greater capacity from existing infrastructure, many of the barriers are last mile issues, especially in urban areas. A high proportion of these barriers relate to the community's attitude towards freight, be it complaints about freight train noise at night time, supermarket trucks making deliveries or removalists trying to access narrow suburban streets with vans full of furniture. Despite it being just as pivotal to everyday lives as power, water and communications, freight does not enjoy the social license afforded those activities by the community.

The high visibility and impact of trucks and trains is the obvious reason for this, but a better and broader understanding of the contribution made by freight to everyday life could go some way to addressing this unhelpful perception. There have been sporadic attempts over the years by industry to put out positive freight messages, but these have generally not resonated with an increasingly unsympathetic community.

It may be time for a more coordinated, sustained and thoughtful programme with serious Government/industry backing. This would not be so much along the lines of the traditional campaigns which have focussed on the contribution of freight to the national economy, important though that may be, but more about the way in which freight sustains daily lives, be it the morning coffee, the outfit for the day, the device that provides the social media platform or the vehicle carrying busy people to work or play.

The message probably should not come from freight providers, which could be construed as self-serving, but from freight users and Governments who have a strong interest in reducing community push-back. It may be time that Governments took the issue seriously and started to think about ways in which current community attitudes that impede efficient use of freight infrastructure can be addressed.

*Recommendation: Governments should consider a partnership approach with industry to develop a community social license for freight to enhance the efficiency of supply chains.*

First mile issues can be as damaging to the efficiency of supply chains as last mile ones. A longstanding difficulty in the export grain supply chain, for example, relates to the movement of larger trucks on routes between farm and bin yet to be examined and classified by Main Roads WA, which has resulted in longer delivery times and higher costs than are necessary. In an innovative approach recently introduced by the agency for the harvest season, larger trucks are now allowed access to roads between farm and bin that have not been assessed, providing a strict set of operational conditions are met. Results suggest a more efficient and cost-effective supply chain has resulted, illustrating the benefits of sensible and practical application of Government policy to industry.

### **b) Technology**

Technology in the freight and logistics sector is evolving at a rapid pace and observers will continue to see change to traditional business practices as the supply chain becomes more connected, automated and digitised. Research out of the United States refers to an “intelligent revolution” in trucking with new technologies driving as much as 50-70 per cent reduction in operating costs within the next 10 years (Morgan Stanley Research, Freight Transportation, February 2017).

To ensure that these savings are realised, regulatory bodies need to be agile and responsive to emerging technological trends and Governments and industry need to work together to understand and capture the impact technology can and will have on the efficiency of supply chains.

#### *Connectivity*

In-vehicle technology is increasingly available and has enabled improved fleet and driver management through the collection of real-time data. In-vehicle technology also provides for connectivity, where vehicles can communicate with other vehicles (V2V) and with infrastructure (V2I). Communication between vehicles and with infrastructure provides opportunities to improve safety, through more informed drivers and efficiency and through the implementation of intelligent transport systems (ITS), such as freight prioritisation on key freight routes. It is important that

Governments recognise the increasing role that technology plays in improving safety and efficiency through connectivity and ITS and the benefits and potential applications that could flow from its increasing use.

### *Automation*

A significant uptake of automation in the resource sector in Western Australia has been apparent over recent year, firstly with autonomous mine-haul trucks and then with work underway to transition to driverless trains in the next eighteen months.

In the road freight sector, research conducted by Morgan Stanley indicates that the return on investment in advanced driver-assistance systems, platooning and fully autonomous trucks could be as little as three months per vehicle suggesting enormous efficiency benefits for relatively modest outlay.

Given the opportunities that automation presents for safety and efficiency, there is a strong demand from the industry in this State to leverage these benefits with a view to driving and sustaining economic growth. Western Australia has some of the longest road freight routes in the world and is ideally situated to use technology to capitalise on the rapid population and economic growth of nearby Asian markets. Efficient and productive freight mobility is imperative in enabling the State to diversify its economy and identify new areas for jobs growth.

Low cost transport and logistics supply chains achieved through automation and technology will allow exporters to profitably reach key markets and will help local industry remain cost-competitive in the face of cheap imports, both developments of major significance to the State and to its people.

The age demographic of truck drivers has been going up for years and will continue to worsen over the next decade. Connected and autonomous technologies will provide the opportunity to attract a new generation of younger and digitally-literate truck drivers. Collaboration between Governments, industry and academic institutions could create renewed interest in the heavy road transport sector employment and deliver sustainable jobs growth.

The adoption of autonomous technologies would provide a significant opportunity to diversify and grow the State's economy in a sustainable manner that allows for trade, investment and new fields of employment growth. A partnering approach between Government, industry and academia to understand the impact of new technologies and to safely introduce an outcomes-based approach to regulation would encourage these results.

Governments must also consider now what changes are required when planning and building new infrastructure to accommodate the vehicles of the future.

### *Digitisation*

Increasingly analogue information is becoming digital. In many cases, every aspect of the transport task is now captured digitally. This results in data which is extremely valuable for understanding supply chains, for informing the planning of future freight networks and for providing improved services and information to the transport sector. There is a role for Governments in understanding what data is available, where it is available, who owns it and in working with industry to determine means of securely sharing data to optimise freight and supply chain outcomes.

### *Freight Rail Network Control Technology*

Productivity improvements and effective technological development and implementation is critical to ensure the freight rail sector continues to be an efficient and effective transportation mode. Over the past decade, technological improvements within the freight rail sector have helped improve reliance, safety and automation capability. These improvements have introduced smarter workplaces and supported ICT system upgrades that have allowed greater agility and interoperability.

Further investments in communications technology that drive efficiency and improve safety are important to promote positive gains for rail in productivity. Given the high-cost outlay required to adopt new technologies, government support is required to ensure uptake and investment continues.

A nationally consistent approach to digital Communications Based Train Control (CBTC) has the capacity to provide the industry and economy with better transport outcomes by:

- improving the capacity of the rail network
- enhancing operational flexibility
- increasing train service availability
- improving transit times and rail safety, and
- upgrading system reliability.

An important component of any CBTC system is the availability of reliable communications. A successful and cost effective CBTC standard must achieve safety and efficiency specifications in a whole system approach. The most cost-effective communications method is to leverage existing 3G and 4G (and in the future 5G) communications combined with other options such as discrete network and satellite, as well as specific Service Level Agreements (SLAs) agreed upon with service providers to guarantee specific system performance.

Federal government funding support is required for the development and implementation phases of a national CBTC standard and to boost supporting 3G/4G coverage, reduce blackspots, and ensure sufficient capacity in dense areas and sufficient redundancy and overlap to mitigate failure of a communications base station.

*Recommendation: Governments need to be agile and responsive in response to emerging technological trends and work in partnership with industry and academia to facilitate the introduction of new technologies which can improve the efficiency of supply chains.*

Advancements in technology are seeing the availability of ever-more efficient heavy vehicles delivering improved productivity, safety and environmental outcomes. To facilitate the use of these trucks across supply chains, consideration should be given to possible Government incentives. Rebate schemes and pricing policies have been successful in both Europe and the United States, leading to the increasing adoption of safer, greener and more efficient trucks with cost savings from a safety, productivity and environmental perspective.

Where suitable for the freight task, consideration should also be given to the benefits of adopting alternate fuel source trucks for improved productivity and environmental outcomes.

*Recommendation: Governments need to encourage the adoption of safer, greener and more efficient vehicles through appropriate policy mechanisms.*

### **c) Regulation and Policy**

Government intervention in the form of regulation or policy can have a significant impact on supply chain efficiency. Illustrative of this is the issue of volume. The freight industry is highly capital intensive, generally dependent for efficiency on expensive kit and large land holdings. Many freight sectors in Australia, such as the movement of containers, do not generate volumes that are large by international standards. Some in industry argue that these volumes are insufficient, when spread across a number of participants, to justify investment sufficient for world's best practice. Critical mass can remain elusive under Government competition policy and consideration needs to be given to whether outcomes are improved by strong commitment to market forces or whether some form of regulatory regime that protects existing participants offers greater supply chain efficiency.

Similarly, current Government competition policy opposes vertical integration and discourages if not outright bans competing businesses discussing common strategies and approaches even where the outcomes promise greater overall efficiency in related supply chains. For example, the two major stevedoring companies in this country could use the Vehicle Booking System common to some of their terminals to encourage greater two-way loading of trucks and after-hours operations. Notwithstanding the greater supply chain efficiencies that could result, under present competition policy, the companies would be extremely reluctant to enter into related discussion.

*Recommendation: Government competition policy should be mindful of potential supply chain efficiencies resulting from a level of integration and cooperation between businesses.*

The treatment of Intellectual Property under Government competition policy can also constrain supply chain efficiency as illustrated by a recent case in Western Australia. A major freight company revealed that it has a strong business case and available capital to progress a significant project with the capability to deliver key Government policy objectives around supply chain impacts. However, the company has not progressed the project because it does not want to risk its intellectual property being the subject of an open public tendering process. In instances like this, there should be greater ability to judge projects on their merits and, if justified, progress them on a sole supplier basis.

*Recommendation: Government competition policy should recognise that the preservation of Intellectual Property in pursuit of beneficial supply chain outcomes may require some flexibility in respect of traditional supply processes.*

Government intervention into the freight market can take a number of forms in pursuit of good supply chain outcomes. For example, the Western Australian Government subsidises the freight rail service into Fremantle Port to contain truck impacts on the community and enhance the container supply chain, present volumes on the service being insufficient to sustain its existence unassisted. The presumption is that with the passage of time, a critical mass will be reached that allows freight rail to compete with road transport on a level playing field without support from Government. In the interim, however, the subsidy intervention is critical to maintaining a modal alternative and optimising the overall supply chain.

So funding support is one form of Government intervention. Regulation is another. The Western Australian road transport industry is going through difficult times at present, consistent with a post-boom domestic economy. Industry feedback suggests that competition for business is driving rates

down, in the eyes of some to unsustainable levels. In this market, cost cutting is inevitable and there is suggestion that vehicle maintenance can be a casualty of the circumstances. If confirmed, this should be of major concern to the Government because of the road safety and environmental implications. A response may be the establishment of an accreditation or licensing regime that suggests entry level standards for vehicles and their maintenance in certain susceptible sectors such as metropolitan port operations. To the extent that newer vehicles and more professional practices are encouraged as a result, this approach would also enhance the efficiency of related supply chains.

*Recommendation: Governments should be aware that market forces do not always deliver outcomes consistent with best practice and be prepared to intervene as appropriate, especially where negative community attitudes are present and supply chain efficiency is at stake.*

A longstanding request of Governments by industry is that they better protect freight corridors and precincts from encroachment by incompatible land uses, particularly residential. A sustainable balance between industry efficiency and community amenity is necessary to protect the interests of each. To many in industry, that balance is yet to be achieved. That recognition is increasingly supported, with influential bodies such as Infrastructure Australia recently not only arguing the general case for corridor protection, but also presenting the business case for that to occur. FLCWA has been heavily involved with the issue for some time, especially in respect of freight rail corridors. The view of industry members is that Government land use planning policy still fails to adequately take account of the need to protect freight corridors and precincts and underestimates the resulting potential for conflict between industry and the community. Supply chain efficiency is often at risk in these circumstances.

While the discussion on protecting freight corridors generally focusses on land-side access, the blue-water equivalent can be equally important. Shipping channels leading into ports must be kept clear of encroachment as they are a vital component of supply chain efficiency. A range of threats are relevant including recreation, aquaculture and environmental considerations. Related Government policy is equally broad.

*Recommendation: Government planning policy needs clarity, consistency and enforceability to protect both land and sea freight corridors from encroachment in the interests of industry, the community and supply chain efficiency.*

Road pricing is an area of micro-economic reform long under consideration by Governments. The complexity of the issue and its delivery in practice sees continuing consideration among policy makers without an apparent end in sight. Notwithstanding, there may be instances where charging road users can be progressed without finalisation of the overall policy. For example, the resources sector in Western Australia often conducts its operations in remote regional locations with poor access arrangements related to high cost and low traffic demand, difficulties that may confound traditional road funding policy. A partnership approach between industry and Government that sees funding of works and remuneration of costs through specific access charges may yield good project outcomes and certainly more efficient supply chains in these circumstances. As a means of achieving enhanced road access in remote and regional areas, this approach could have application in sectors like agriculture as well as resources.

*Recommendation: Government should be prepared to seek alternative approaches to developing road access in remote and regional areas based on partnerships with industry around capital funding and road charging.*



#### **d) Productivity**

Road transport is the major mode of transport for the majority of commodities produced and consumed in Western Australia. Roads are a vital enabler of the State's way of life, connecting the population to industry, agriculture and employment across vast distances. Large geographic area, low population density, huge commodity demand and major seasonality in freight movements all impact the Western Australian road network. The other factor of note is the strong export focus of the State, which sees interstate road freight movements in low single digits as a proportion of the overall task. Because of all of these circumstances, Western Australia has developed a road access regime which allows larger vehicles than are found elsewhere in the country. Use of these high productivity vehicles adds significantly to the efficiency of the supply chains whose product they carry. While successive Federal Governments have sought national uniformity in transport regulation around the country, the productivity levels achieved by heavy road transport in this State strongly support a stand-alone Western Australian policy approach.

*Recommendation: Governments should not accept uniform national transport standards where valid productivity and supply chain efficiency outcomes suggest otherwise.*

The iron ore supply chains in Western Australia's Pilbara region exhibit world's best practice when it comes to productivity. This is because they have volume, are vertically integrated and enjoy unconstrained land access to ports. By contrast, container supply chains further south in the State handle relatively small volumes by international standards, have a large number of participants and suffer from community attitudes that can constrain efficient operations.

The current Western Australian State Government has a policy position of establishing new container handling facilities in Cockburn Sound south of Fremantle with a view to this ultimately becoming the major focus of the trade. However, that outcome is some years away and it is necessary to enhance the productivity of the present container supply chain to ensure adequate performance across the interim period. The initiatives supported in this submission are fundamental to that occurring, namely:

- long term plans must be developed and shared with industry to enhance the availability of private sector infrastructure investment;
- Government funding should continue to be available, especially for road and rail infrastructure;
- greater social licence should be sought from the community for related transport operations;
- industry and Government partnerships should be established to encourage the identification and adoption of emerging technologies;
- Government should play a role in encouraging the adoption of safer, greener and more efficient vehicles;
- Government policy should be conscious of volume efficiencies;
- the input of industry Intellectual Property should not be constrained;
- Government should be aware of threats to safety, environment or productivity outcomes along the supply chain; and
- strategic freight corridors should be defined and appropriately protected by Government policy.

FLCWA is developing a range of suggestions as to container supply chain productivity that embrace these general principles including:

- progressing selective road network upgrades at particular congestion points;
- suggesting policies for the growth of freight rail movement of containers;
- developing inland intermodal facilities as hub and spoke operations;
- encouraging the introduction of new technology along the chain; and
- addressing particular inefficiencies that manifest at the Port such as one-way truck running and lack of after-hours operations.

*Recommendation: Governments should be particularly conscious of the need for funding, policy and regulatory support to encourage greater efficiency in important supply chains that have relatively low volumes, are fragmented and suffer from negative community attitudes.*

#### **4. Conclusion**

This submission highlights a number of areas where Government action could assist the development of more efficient supply chains in this country. The recommendations contained here represent the views of industry in Western Australia through the FLCWA.

FLCWA appreciated the opportunity to present these views and is available for further related discussion as appropriate.