Transport for NSW - Freight Policy Reform: Consultation Paper

April 2024

Thank you for the opportunity to provide comment on the Freight Policy Reform: Consultation Paper April 2024.

Harold Joseph Morowitz was an American biophysicist who studied the application of thermodynamics to living systems and laid out his central thesis that "the energy that flows through a system acts to organize that system." Such we believe is the case with the national transport system.

Simplistically, if the national transport system is designed to have all the bottlenecks removed, be they policy or physical, then the system, with the support of new ICT (Information, Communication Technology), has the chance to work optimally. For in-land areas that means removing impediments to road, rail, air and intermodal facilities.

Some of the direct inefficiencies which should be considered are such things as,

- The need to work with three (3) rail organisations to get a train from Parkes to Sydney.
- The need for country trains to stop at each stevedore to unload, versus full trains destined for a single stevedore.
- The massive congestion for freight through the eastern seaboard
- The government charges on rail versus road which influences modal shift.
- The AQIS regimes for Country trains, ie must be tailgated at ports creating cost and complexity.
- There is no bonding/de-bonding availability at inland ports.
- There are different rail gauges and different regulations between the states. Transporters therefore need to work to the lowest parameter (mass, width, height etc) when loading. These need to be harmonised.
- There appears to be limited data sharing between major freight companies and government.
- The complexity to manage the export task from inland Australia, detracts from inland value-adding for export. Around 65% of produce from the Central West region leaves the area with no value adding.
- There is never a whole-of-government approach. If the various departments of Federal, State and Local government could coordinate goals/strategies, massive improvements would result.

Further, a Parkes Council delegate was fortunate enough to attend Intermodal Europe and a tour of the Port of Rotterdam in 2016 as a then member of the Australia Logistic Council. Four (4) key concepts that were topical at that time were, (1) efficiently located intermodal-terminals, (2) the importance of landuse planning to integrate with logistics, (3) the "extended-gate" (or dry port) concept and coalescing them all the concept of (4) synchromodality supported by ICT. These remain directly applicable to Australia in our view.

Efficiently located intermodal-terminals & the importance of landuse planning to integrate with logistics, ie wholistic planning - The Parkes Special Activation Precinct (PSAP)

The location of Parkes on the national transport network is an unassailable fact and that has driven the NSW Government investment in the Parkes Special Activation Precinct (PSAP). The PSAP has four (4) aspirations, firstly, "To be Australia's largest inland freight and logistics HUB, with efficient access to the inland rail and the Parkes National Logistics HUB", secondly, "The Central West's newest and most advanced enterprise precinct, producing high-value food and manufactured products for global and national markets", thirdly, "Australia first UNIDO eco-industrial park, and the nation's leading circular

economy precinct" and finally, "Streamlined planning in NSW first Special Activation Precinct", ie land-use planning, economic development, circular economy and efficient transport harmoniously united.

We are enormously grateful that the NSW Government has invested over $300m in the PSAP, consequently we believe this will have a profound effect on the Region, particularly when accredited as the first Eco- Industrial Park. Linfox, SCT and Pacific National were early entrants at the precinct, an $80m pet food factory is just in production, while an e-waste recycling company, an end-of-life plastic recycling plant and an Energy from Waste plant are all progressing. Over $1b capital is expected in the next 5 years, and ultimately over 3000 jobs are predicted. This is a direct demonstration of how landuse planning and well-located intermodal terminals can drive investment.

Further, the aspiration of the PSAP to be "The Central West's newest and most advanced enterprise precinct, producing high-value food and manufactured products for global and national markets", and "Australia first UNIDO eco-industrial park, and the nation's leading circular economy precinct", creates very exciting opportunity for the youth of the region.

It is councils hope and aspiration that the jobs created are the jobs of the future, jobs that stand to create a renaissance in manufacturing, ie such things as artificial intelligence, automation, electrical, programable logic, robotics etc. Given the worker shortage, automation may just be the renascence of manufacturing.

Also, the Regional Growth NSW Development Corporation have kept Council informed of the market-based process to attract an Energy from Waste (EfW) facility to the PSAP, and we understand the State is in the process of identifying the preferred company.

Energy for the plant will need to be imported, most likely from Sydney. Initially some 400,000 tonnes of Sydney refuse will be transported by rail every year, and the success of the plant will be dependant on transport efficiency. Also, the logistics-chain established to optimise this freight movement, will inevitably create other opportunities.

Transport efficiency is inextricably linked to this aspiration, as is landuse planning, social planning etc, this is where a whole-of-government approach would be invaluable.

An example might be agricultural value adding, where multiple agency participation is needed to catalyse the change.

- Over 65% of produce from our region leaves with "no" value adding.
- Regional Fright Connectivity to the PSAP is important, however corridor strategies tend to link regions to cities, not to SAP's.
- There are intermodal hubs available but independently run, which can restrict access.
- There are no AQUIS facilities.
- A 10% shift in irrigation water use to High-value agriculture results in over $70m increase in GRP.
- As above, over $1b in development is scheduled, yet the bureau of statistics predicts only a very small population shift.
- Housed agriculture could be synergistic with the EfW plant (to heat and cool).
- The opportunities and impacts associated with the PSAP could be optimised with a Whole-of-Government approach to address, development opportunities such as Agricultural value adding, but also, housing, transport, health, water etc. This could also include creating pathways to a renaissance in manufacturing and building "jobs of the future" for our youth.

Another example might be the government summarily announcing renewable energy zones, for our region, specifically the Orana REZ.

- There is massive freight impacts.
- Massive landuse planning impacts.
- There is massive workforce impacts.
- Initially there was no consideration for community impact or social licence.
- There appears to have been no discussion with transport operators or road authorities.
- There was no prior work with government authorities.
- There appears to be a one-state transport solution, ie is there an option to deliver to the Port of Darwin and rail components to Parkes, then a short road haul, versus the proposed massive disruption transporting them by road through the highly populated eastern seaboard.

Another example is the hiatus of the Melbourne-Brisbane inland railway, where national companies have invested on the back of the government decisions to build infrastructure only to find succeeding government renege on that decision. Businesses need confidence in government decisions, however currently decisions are highly dependant on the whim of succeeding governments.

These are typical examples where a whole-of-government approach could optimise and coalesce these opportunities. We do not suggest any of these are positive or negative, only that a whole-of-Government approach would yield a much better result. Infrastructure strategies need to be decided for the betterment of the nation and locked-in.

The Commonwealth City deals and regional deals methodology, seek to provide this unified approach and would be a positive means to draw together the tiers of government in a meaningful, structure way, which would include Transport as a critical component.

Synchromodality.

The freight company H Essers provides the following definition, "*Synchromodality is the efficient use of various modes of transport – road, rail, inland waterway, shortsea, ocean freight and air freight – along or combined, with a view to offering an optimal, flexible, sustainable and integrated supply chain solution for clients. It is a dynamic and proactive way to optimise the flow of goods. The combination of transport modes can vary depending on the goal (reducing costs, CO_2 emissions or lead times). Real-time changes can be made throughout the transport process to ensure the optimum transport solution.*" (H.Essers | Synchromodal transport).

Europe is moving to the concepts of synchromodality, which Parkes Council has promoted for nearly a decade, for both efficiency and decarbonisation. The improving driver for synchromodality is rapidly improving Information, Communication Technology (ICT). It is our understanding that there is very little data sharing between transporters in Australia, which make optimisation difficult, that is somewhat different to Europe.

> *For instance, the **European Gateway Services (EGS)** - part of Hutchison Ports ECT Rotterdam - is a pioneer in the creation of synchromodal solutions and has developed the Synchromodal Trip Optimizer (STO). With synchromodal transport the modes of transport and routes are consistently selected based on current circumstances and the customer's required delivery time. This planning system comprises all the variables for hinterland transport: for each transport order, the STO calculates the optimal synchromodal solution and, if a disruption is encountered enroute, EGS can pro-actively anticipate this by means of the STO. At all times, the goal is to deliver each container at the specified location at the agreed-upon time, at competitive costs and with lower CO2*

emissions. (from webpage https://www.feport.eu/media-corner-2/modal-shift-and-synchromodality#:~:text=The%20main%20purpose%20of%20synchromodality,delivery%20times%2C%20costs%20and%20emissions.)

In the example of Parkes, depending on load availability, back loading status, compatible load types, port availability, etcetera, there may be distinct advantage, on a load-by-load basis to transport product via say the port of Adelaide one day, the port of Darwin the next and eastern seaboard at other times. When a Synchromodality approach is adopted, then the same journey may incorporate various ports, various modes based on CO2, time, cost etcetera.

For the most efficient transport system, government needs to create the mechanisms for synchromodality using ICT.

Extended gate (Dry Port)

Looking at the European approach, a container loaded at Duisburg in Germany destined for export through the port of Rotterdam in the Netherlands, is treated no differently to a container delivered direct to the Port, that is, Duisburg acts as an "Extened-gate" to the Port of Rotterdam. While Europe can extend port gates to adjacent countries, Australia has not yet extended port gates inland or between States.

While it may not be seen as viable with current freight volumes, it should be considered as a catalysis to "step-change" the status quo and drive new inland industries. This might include international freight bonded/de-bonded inland, various types of manufacturing and agricultural value adding.

The PSAP would be an ideal opportunity to establish and demonstrate these opportunities.

In summary

Some of the inefficiencies which should be considered are such things as,

- The need to work with three (3) rail organisations to get a train from Parkes to Sydney.
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- The massive congestion for freight through the eastern seaboard
- The government charges on rail versus road which influences modal shift.
- The AQIS regimes for Country trains, ie must be tailgated at ports creating cost and complexity.
- There is no bonding/de-bonding availability at inland ports.
- There are different rail gauges and different regulations between the states. Transporters therefore need to work to the lowest parameter (mass, width, height etc) when loading. These need to be harmonised.
- There is limited data sharing between major freight companies and government.
- The complexity to manage the export task from inland Australia, detracts from inland value-adding for export. Around 65% of produce from the Central West region leaves the area with no value adding.
- There is never a whole-of-government approach. If the various departments of Federal, State and Local government could coordinate goals/strategies, massive improvements would result.

We believe there are 4 key concepts that will step-change the freight industry.

1. efficiently located intermodal-terminals (such as Parkes).
2. the importance of landuse planning to integrate with logistics, (Such as PSAP)

3. the "extended-gate" (or dry port) concept and, (we believe this should be introduced in Parkes)
4. synchromodality supported by ICT.

Finally, the greatest opportunity is the whole-of-government working together. If the various departments of Federal, State and Local government could coordinate goals/strategies, massive improvements would result.

The Commonwealth City deals and regional deals methodology, seek to provide this unified approach and would be a positive means to draw together the tiers of government in a meaningful, structured way, which would include Transport as a critical component.