

# **PUBLIC COMMENTS ON TRANSPORT VISION: Draft National Freight Strategy**

## **Preamble**

This document is mainly intended as a response to what appears to be a serious omission in that the Draft National Freight Strategy (“blueprint”) does not give sufficient attention to risk management, particularly geo-political, and disaster minimisation planning. Also freight infrastructure seems to have been viewed without sufficient regard to political vulnerability to public acceptance, particularly as regards the public sharing of facilities with large trucks.

Page numbers refer to those in the blueprint, unless otherwise stated.

## **THE PROBLEMS**

### **A) Risk Management and Disaster Minimisation Planning**

Recent geo-political events have shown the need for risk management as regards: 1. Physical damage to infrastructure; 2. Actual interruption to services; 3. Access to affected area or services; 4. Difficulty in the movement of goods and services; 5. Potential problems as regards interruptions; 6. Cost and price increases.

The Iceland volcanic ash cloud, the Global Financial Crisis and the Japanese earthquake and tsunami have all proved that flexibility is an essential for modern society (Australian Financial Review 2-4-2011 p34 and Sydney Morning Herald 31-3-2011 p6). Specifically, the Queensland floods and Japanese earthquake and tsunami showed the critical importance of transport infrastructure at times of disasters. There were severe difficulties in quickly transporting goods and equipment to the affected areas, such as heavy moving and lifting equipment, health services and supermarket items. An example is Woolworths Limited accessing northern Queensland via the Alice Springs to Darwin railway and then overland by truck. This is just one example of why flexibility in access, and the planning for future access and supply, is required.

A hypothetical, but concerning example of the need for flexibility would be if a major port, such as the Port of Melbourne, suffered a disaster and it was considered necessary that it close for a month or so. Possibly most of the imports and exports might have to be temporarily handled through such Ports as Adelaide and Sydney. It could be expected that those ports would experience difficulties handling the increased volumes and it is also difficult to see how that volume of freight could be transferred between Melbourne and those interstate ports, and vice versa.

Middle East political disturbances have again given warning about interruptions and pricing for supplies of goods, particularly oil products. An example would be the closing of the Suez and Panama Canals when oil shortages and price rises would be likely to be damaging to the Australian economy. There are at present worldwide currency pressures and these could cause sudden large changes in the availability of air and sea transport. Planning needs to be incorporated for these dangers as geo-political risk is not expected to go away.

As regards protection of infrastructure from floods and tsunamis, this would be a long and expensive project and probably never completely successful. However there does seem to be a need to assess the most worthy examples for attention, and particularly when new infrastructure is being planned.

## **B) Freight – Distance and Distribution**

The major difficulties with freight occur when they are oversized, heavy, time-critical, voluminous, transported over longer distances, or have access difficulty. Oversized items are usually ‘one offs’ and require special attention. Most freight falls into the other categories.

Long-distance freight seems to be at the top of the blueprint’s conceptual planning requirements. The Minister’s covering Media Release referred to possibly opening up roads to bigger vehicles, but the blueprint does not seem to have considered the important risk of public acceptance to such an action. The number of accidents involving trucks and cars seems to be increasing and the media images of these accidents raises the risk of public reaction. This is irrespective of the fact of which vehicle was at fault. Generally large trucks and family vehicles do not mix well and should be ‘sufficiently’ separated. However, it is noted that freight companies can be seeking their efficiencies and cost savings by increasing vehicle weight and size.

Generally, freight for mixed items seems to be developing towards distribution from a regional hub or sub-hub. This is an example where shared facilities may be most economical. For most items the logical bulk supplier of this service is rail, and yet rail is a neglected and usually inefficient service and therefore needs early attention. Delivery to the hub and sub-hubs should usually be by rail, with service to the user or retail area by smaller trucks suited for urban areas.

## **C) Freight – Rail versus Road**

Rail is most useful for long distance and bulk transport. One train with two drivers can be equivalent to 150 trucks and 45,000 litres of fuel (FROG – Freight Rail Operators Group website). Rail can be excellent as a prime transporter over distance, yet it seems to have been spectacularly unsuccessful for a long period (page 23). There seems to be three main reasons for this:

- a) lack of drive-on/drive-off facilities
- b) lack of financial risk/reward between rail supplier and user
- c) non-commercial and inefficiencies in rail facilities

Ships and aircraft have developed roll-on/roll-off type facilities but there has not been sufficient attention paid to it by the railways. A suggestion is made regarding this later.

## **D) Rail - Users**

Whilst rail bulk transport is generally handled by coal and iron ore companies, bulk agricultural produce and non-bulk transport, such as intermodal, is poorly handled. The reason for this seems to be that coal and iron ore is handled by concentrated users with know-how and financial resources. However, agriculture and non-bulk items tend to have diffused users without a single voice and consequent limited financial ability. This creates a situation

where the large users can look after themselves, while the diffused users need recognition and assistance.

## **E) Rail – Standardisation**

Report, after report, after report, mentions the need for rail standardisation (Page 28) and yet exceedingly little has been done. Having regard to risk management, and being pro-active, this would seem to be something which should not be left any longer. Cost of standardisation is highly likely to continue to increase, and importantly the different gauges delay or prevent development of new connections. Productivity, speed and cost efficiencies would increase with a national uniform gauge and the freeing up of national rolling stock for use as and when required, both generally and in case of emergency.

Standardisation can create new opportunities at a lower unit cost. High speed rail is most desirable but is not mentioned in the blueprint, possibly because of cost and it is seen as more for passenger than freight transport. However Europe and the United Kingdom show its benefits. Most high speed rail proposals are hard to financially justify at present, but without standardisation and the access to the other parts of the rail network, they have even less chance of being viable in Australia in the foreseeable future.

## **POSSIBLE SOLUTIONS**

### **1) Finance and Administration**

In many ways operational activities are naturally outside the expertise and experience of public servants, who tend to be better at policy and administration. It is suggested that COAG agree to the setting up of a corporation to administer national infrastructure, perhaps as a national transport authority (Page 30). This corporation could be formed on the basis of the Commonwealth and each State and Territory appointing a representative (Director), approved by their parliament, with their infrastructure Minister's nominee being the default. A further executive director would be the corporation's Chief Executive Officer. An independent chairman would need specialist skills and knowledge and could be elected by the directors from a list of suitable candidates submitted by each representative. For convenience this corporation will be referred to as *Infrastructure Australia Inc.* (IAI).

IAI's administration could comprise a small general administration staff, a planning and risk management team, and a separate project management team. The planning and risk management team should have one or more advisory and working committees, with commercial and other interested body representatives so that their voice and needs are taken into account, and they are a part of the process. For each major project there should be considered a similar committee of interested parties.

Finance for IAI is of long-term importance and needs certainty. Whilst this should initially be a matter for COAG, the principles, including future funding, need to be pre-determined. It is suggested there should be two separate payment streams; one for administration and one for projects, with suitable statistics data collection built into the systems to monitor the efficiency.

A general administration funding formula could be something like  $AF = r\{C + (a \div p)\}$  where “AF” is the \$ amount budgeted, “r” is the rate necessary for the total amount to meet the funding required, “C” is the funding proportion for the Commonwealth as initially set or agreed from time to time, “a” is population area of the State or Territory, “p” is last census total of the population of the State or Territory.

For projects, a funding formula could be something like  $PF = r\{C + (a \div p)\} + G + N + B$  where “G” is the amount of any specific grant amount provided by the Commonwealth or a beneficiary State or Territory; “N” could be an amount provided by a proposed or actual beneficiary or user, such as a corporation or association; and B would be any amount from borrowings and profits available from any previous projects.

Infrastructure is generally considered as an ‘essential service’, but freight is also seen as part of commerce and industry, and therefore the facilities should be paid for (Page 48). However because of its effect on the national economy, costs must be reasonable with only a small profit margin over cost recovery. What is important for the long term is that the profit-stream is ongoing from each program.

Without funding it is unlikely that any progress will be made, so the funding needs to be secure and ongoing, particularly having regard that infrastructure projects are long term. The AF amount would be set in advance and that would leave any negotiations to concentrate on PF where G and, if applicable, N, and B would be the areas of negotiation. The concept of this is “one in, all in” (the Commonwealth principle) and the carrot is that States or Territories will miss out on their future grant benefit if they do not cooperate for the common good. Every party needs to have some ‘skin in the game’.

This is a conceptual plan suggestion to start with and has regard to the Ministers’ indication that the Commonwealth was not prepared to become an asset owner (Page 30). Federal Treasury should be able to develop fairer and more relevant formulae.

## **2) Rail Carrying Road Trucks**

A very early project for IAI probably should be the commission of concept ideas for drive-on/drive-off truck carrying rail wagons. Such an item may already exist but are obviously not satisfactory. Certainly there are some tricky design problems for such a scheme with such things as access and exit means, height and wind resistance. An early start on a solution could be a competition, run for engineering and design university students. This would be cost effective whilst providing educational benefits in the community. However, an alternative could be an international competition (“Data analysis hits big time”: Australian Financial Review 5-4-2011 p8).

Without such wagons, smaller size trucks often would not be viable and there would be a demand for use of bigger trucks with consequent public objection. Demands on long-distance roads could also be expected to increase. With such a combination of well managed drive-on/drive-off wagons and smaller delivery trucks, there could be a “door-to-door” seamless facility with reasonable speed at lower cost, and the possibility of incremental improvements in speed and cost.

### **3) Australian Entry Points and Distribution Hubs and Sub-Hubs**

Map 2 on page 13 depicts major import and export movements. As mentioned earlier, Australia is very vulnerable to any disruption of this trade. Any shortage of fuel, large price rises, or other results from geo-political events could be difficult if they affect the availability of ships and planes. From a geographic perspective, at present the logical Australian entry points would presumably be Cairns from the north-east and Darwin from the north-west. Whilst Darwin is at last connected to the rest of the country by standard gauge rail link to the south, this link is poorly interconnected with the rest of the country's transport network. Connection to Cairns is from the south by rail, but this is narrow gauge and requires expensive and time delaying transfer to standard gauge. Cairns port has particular appeal from the east from both its North East continental position and the location northerly of most of the environmentally important Great Barrier Reef.

Cairns and Darwin may be good distribution hubs, but probably not good sub-hubs, because of their distances from the main population centres. Geographic choices for any prime distribution hub would seem to be areas like Mt. Isa and the Northern Territory near Tennant Creek, although Parkes NSW has made a claim for at least some of this function. After Japan's experience, the prime distribution hub should not be near the coast, or subject to flooding. Wherever is chosen, better interconnection with the remainder of the country is essential, together with adequate land for a specialist freight international airport and distribution facilities, as well as National Broadband Network access.

It is the question of a specialist 24/7 freight international airport that will possibly decide where the prime distribution hub should be. Such a hub could conceivably become an important city, so the choice of its location is critical. Anticipating the future, it seems likely that important population centres will develop on the Kimberley coast, requiring connections. This would appear to make the choice near the centre of the continent, but with a bias to the north so that international planes do not have as far to fly, which would be important to carriers from both time and fuel cost considerations. Also a more northern location would be closer to the Cairns and Darwin Ports. It is envisaged that the airport would have runways suitable for all normal weather conditions and with sufficient land reserved for very extensive expansion. Such a facility must be available twenty-four hours every day and this would probably reduce the pressure on capacity and curfew restrictions at other airports, with associated public and future financial benefits regarding the need for new or expanded airports in urban areas.

Such a distribution hub must have plenty of non-agriculture land reserved for unloading, sorting and storage facilities for different users. Rail access would need to be developed between the distribution hub and the regional sub-hubs, designed to be upgraded to high speed rail when economically feasible. It is noted that China is finding its high-speed lines not always financially viable (Australian Financial Review 8-4-2011 p16), and Australia should not therefore rush in financially.

#### **4) Rail Standardisation - Queensland**

Rail standardisation must receive high priority for financial, productivity, risk management and future development reasons.

Present conditions indicate a high priority for IAI should be the standardisation of the Queensland rail track system (Page 28). The reasons for this are desired construction, on a progressive basis, of:

- a) an inland rail link from New South Wales to Brisbane using standard gauge converted existing Queensland narrow gauge track
- b) facilitation of delivery of tropical produce to the southern States
- c) inland standard gauge freight away from the risk of tsunamis and coastal flooding
- d) full standardisation of the Brisbane to Cairns rail link
- e) standardisation of the link to Mt. Isa which then would enable construction of a standard gauge link to the Alice Springs to Darwin rail track and the suggested prime hub
- f) initiation of the full standardisation of the Queensland network, first the remaining non-metropolitan network and then the urban network.

The above items can be varied in order and the actual sequence of the conversions would be dependent on the desirability of minimising disruptions for existing traffic. Most users can be expected to cope with disruptions, as long as they know and it is only for a reasonably short period and for the common good. To achieve as much as possible for the money, there should be a mixture of temporary dual track conversions and immediate full conversions, but generally not new track. A very desirable exception is the short connection to the existing standard gauge railway to the Gulf of Carpentaria. Full standardisation is necessary to “finish the job” before it gets any more expensive, and so that the full range of national rolling stock can be accessed, as and when required.

The recent Woolworths Ltd.’s difficulty in supplying urgent supermarket stock to Queensland disaster areas has reinforced the need for a rail link from the Alice Springs to Darwin rail line to the Queensland coast; Cairns Port was suggested previously under Australian Entry Points. The connection to Brisbane from inland New South Wales has been long sought but has suffered from lack of inland access to Brisbane; standardisation of the existing rail track would help solve this problem at a cheaper cost. The standardisation could enhance the possibility of a national east-west railway being viable in the future.

The cost of temporary dual track conversions and immediate full conversions would be expected to reduce per kilometre with specialist equipment and experience. The specialist track conversion machines should have the ability to vacate the rail tracks easily at times so as to minimise disruption to services as much as practical. One machine would be the minimum, but it is likely that at least three machines would be desirable, depending on finance and time-frames.

One difficulty which would present is which State should be the next to be standardised after Queensland. South Australia and Tasmania were left off page 4, although South Australia apparently has some triple gauge track. Most States have very important reasons for standardisation, which is another reason why full standardisation must be commenced.

## **5) Infrastructure and the Public**

The construction of transport infrastructure is hard to charge for in advance and should probably be recovered afterwards from its use. This is particularly applicable for the amount of environmental and repair costs caused by long distance road freight use. Reduction of large-unit long-haul truck use would be of considerable benefit. If efficient use is made using drive-on/drive-off trucks on the rail wagons, considerable cost benefit, particularly to the user, is obtained. Another important benefit is the reduction of truck size and use in urban areas.

Infrastructure is an essential service and is not normally of interest to the public in itself, only in its results. Electricity and gas are to be used and the manner of their arrival is not seen as relevant for the user, unless there are environmental reasons; the same applies to freight transport. Increased use of a distribution hub, and sub-hubs, connected to precincts and terminals (page 49) can help keep trucks to more human scale (Pages 19 & 39), out of sight and reduce or eliminate competition for transport resources with the general public. This is good for safety reasons and can be politically good.

Psychologically, people are not naturally rational and the needs of infrastructure must politically take this into account. The comment has been made “Widespread populist objections can’t be resolved. There is ‘no recourse’” (Sydney Morning Herald 7-4-2011 p2). Whilst this was in the context of the proposed takeover of the Australian Stock Exchange, politicians need to be careful when the public is unhappy with them. There are no direct votes in freight, only from the beneficial effect on the economy and the services available to the voters.

### **RECOMMENDATIONS**

Page 51 of the blueprint sets out the vision, objectives and priorities for a National Land Freight Network and yet the high level long term goals are those in a 1997 document. To avoid this new blueprint suffering the same inaction, it is recommended that:

- a) This submission be considered as regards its concepts’ integration into the blueprint
- b) Federal Treasury’s assistance be sought regarding the suggested formulae
- c) The question of the drive-on/drive-off rail wagons be progressed
- d) COAG’s approval be sought for the overall concept
- e) Detailed planning be started for the route of the inland standard gauge Brisbane link
- f) Tenders be sought for the first of the rail conversion machines
- g) Commencement be made on progressive rail standardisation
- h) The formation of IAI, dependant on the procedural and financial approval processes

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