Title:

Facilitating a Competitive International Trading Environment in Australia through Effective Supply Chain Integration

Abstract:

The National Freight and Supply Chain Strategy is a welcome initiative from the federal government but not before time.

What is immediately evident from the discussion paper however is that the nature of the questions associated with the "National Freight and Supply Chain Priorities" presupposes where the key problems lie. Moreover, the context of the questioning does not adequately recognise or address some of the fundamental challenges in supply chain in, into and out of Australia. It is understood that the framework for such a strategy must work within appropriate terms of reference however the whole point of such a strategy is to set direction, objectives, investment and goals in the longer term......and needs to provide more agility than spending money on freight infrastructure; some very important initiatives but tactical in nature.

Also evident is the immediate determination to solving operational, tactical and infrastructure issues without first understanding the weaknesses of the supply chains in the markets where Australia competes.

Following are answers to the questions asked however please find following a narrative that looks to set themes for the development of supply chain, unpacks some of the key challenges associated with supply chain and provides some focus for resolution of these challenges.

While at face value Australia offers ready access to retail markets, agricultural markets and resource deposits, a stable political system, and a low risk environment in which to operate, in fact geographic remoteness and challenging distances prove significant barriers to facilitating competitive and economically viable supply chain solutions. These are the same sorts of challenges, without significant steps forward, as identified by Blainey in "The Tyranny of Distance....." as long ago as the 1960s. While it would be untrue to say that Australia has taken few steps forward over the past 5 decades, and for many years provided the skills to drive logistics and supply chain development in Asia and internationally, it appears to be true that Australia is in some ways lagging behind in global supply chain stakes.

The key challenge Australia needs to address is disaggregation of supply chain activities in the each sector trying to navigate 'mine to market' processes or 'farm to local and overseas markets', or even 'imports into Australian domestic consumption', where logistics and supply chain functions are disproportionately complex when compared with international best practice in each of these areas. The net result being that Australia is no more competitive or attractive a location when compared to international competitors with what would appear to be significant disadvantages; political unrest, poorly skilled workforces, limited infrastructure; and often less competitive.

While the infrastructure required to serve import and export markets should be entirely predictable, development of infrastructure, such as port and rail facilities, lag significantly behind demand. Moreover, connectivity between the various components of supply chain is quite fragmented.

So some of the key themes for Australia's supply chain strategy should include:

- Transformation Driving Productivity and Rationalising Infrastructure to ensure Global Competitiveness
- Ease of Use Smoothing the Flow of Supply Chain Transactions
- Managing Risk Eliminating Unnecessary Barriers to Entry, Operation and Exit
- Optimising Cost Supply Chain Connectivity as a means of Unlocking Avoidable Costs

Disaggregation of component supply chain activities leads to inefficiency, avoidable costs and, ultimately, lack of competitiveness. The characteristics of dysfunction in supply chain such as this include:

- Limited understanding of the nature and value of integration in supply chains
- Disconnected, or even adversarial, relationships between key stakeholders
- Disaggregation of logistics activities within supply chains
- Poor overall visibility of the flow of product through supply chain
- Disparate, reluctant capital inputs across supply chains

The areas of focus of the study to counter dysfunctional behaviours therefore include:

- **Developing more productive supply chain relationships**. For example in a typical coal or iron ore supply chain, the participation of mining contractors, rail and truck operators, port service providers and international carriers are not well aligned, funded separately at significant cost to the overall supply chain and compete for a share of the landed cost of products to destination.
- Defining executive leadership's role in establishing effective Supply Chain Integration
 Models. When describing the disaggregation of supply chain in the above example, the role
 of the miner should be to provide intelligence, capital and alignment to ensure optimum
 outcomes. Instead of which, the miner becomes another competitor...albeit with the
 prevalent position of controlling product price and sales.
 In another example, leading national transport and logistics companies appear incapable of
 aligning even their own services for the purposes of integration and productivity of their
 customers' supply chain activities. This is curious given that this form of integration is a clear
 point of differentiation from organisations without anything like the resources.
- Inclusion of competent supply chain personnel to oversee supply chain integration. There appears to be a dearth of experienced, intelligent supply chain personnel capable of ensuring adequate oversight, governance and technologies required for successful supply chain integration; and ultimately competitiveness.
- Establishing Effective governance hierarchy in supply chains to achieve commonality of purpose. Any supply chain network striving for effectiveness requires a higher power to ensure alignment and compliance to planned outcomes. This 'supreme being' with the

intelligence and benevolence to serve the supply chain community interests; and not just their own.

- Demonstrating how technology is fundamental to supply chain planning, visibility and decision-making. While readily available, the successful application of supply chain technologies is rare and yet such technologies are paramount to achieving visibility and governance in supply chain. The intelligence to understand and execute these tools once again seems to be the gap.
- Consider collective funding arrangements for supply chain infrastructure as a means of facilitating easier entry to new opportunities. It seems each participant in supply chain are left to arrange appropriate funding themselves when the cost of capital for many of the participants is materially higher than that of funding sourced across such projects. Once again, these sorts of funding facilities are available to a properly organised and integrated supply chain. The additional net cost of capital may represent a substantial number of percentage points sufficient to determining whether the project is viable or not viable.

The Role of Innovation in Supply Chain:

The entry of international port operators, the use of new generation, more productive rail operations, the development of high-yield road trains, all point to increasingly competent logistics operations; so the picture of supply chain operations is not bleak by any means.

Never the less, Australia's international competitiveness is hampered by 'disaggregation' in supply chains. So it's the antithesis of disaggregation in supply chain that will help deliver a competitive model.

The key enablers of a more competitive, world class model are:

- Overarching supply chain integration skills as the means ensuring cooperation and alignment of purpose in the supply chain
- Understanding the relative value of key cost drivers in supply chain and, of course, opportunities to *eliminate avoidable costs* through alignment of purpose
- **Technology as the driver of visibility** across the supply chain enabling better decision-making
- New reality capital funding arrangements to alleviate fragmented, unproductive capital inputs

So, the focus of Research and Development initiatives should consider international best practice in each of these areas, and perhaps develop some new paradigms to enable a more competitive Australian environment.

Policy Framework Development:

- World Class international solutions leading to globally competitive supply chains. What are they? Benchmarking necessary.
- Development of leadership to effect world class solutions and cooperative supply chain relationships – Service users, service providers, end users and capital providers. Who are they? Scarce skills requiring nurturing in an international environment.

- Deployment of appropriate technologies for the purposes of overseeing end to end supply chain activities for the purposes of increasing velocity and reducing cost. What is the technology and how do stakeholders operate on a common platform? Available but often avoided.
- Assignment of infrastructure appropriate to long term, end to end needs in supply chain.
 What is the long term plan that will rationalise capital inputs across supply chain while delivering appropriate ROI? Vision necessary for real value.

The reality is that, while Australia was amongst the leaders in the logistics and supply chain field in many respects 3 decades ago, best in class practices have passed Australia by through the developments of leading supply chain companies and globally branded companies. While best in class practices have not necessarily been adopted universally globally, supply chain integration practices in Asia, Europe and the Americas now, in general, surpasses Australian ability to leverage supply chain as a competitive advantage.

In summary, focus on an overarching supply chain strategy is critical for Australia's internal productivity and international competitiveness. While tactical infrastructure and operational initiatives will be important elements within the strategy, development of the strategy framework is critical to the long term relevance of Australia in the global marketplace. Focus on infrastructure targets alone will deliver better infrastructure but not necessarily the international competitiveness.

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2.1

What infrastructure is used in your supply chain and how well does it perform?

- 70 Branch network supported by 6 Distribution Centres ANZ with supply from overseas and domestic sources

What changes would you like to see to make your supply chain work better?

- The degree of difficulty in coordinating integrated logistics operations within Australia and from our international supply sources is extremely high. There is just no understanding of the power of supply chain visibility and integration in spite of the fact that there are organisations with many of the key elements of logistics. The intelligence and systems are found wanting.

What data gaps are you aware of in relation to Australia's freight and supply chains?

- There is very little ability to integrate logistics activities even within service organisations. The governing supply chain integration tools seem non-existent; at least for a mid-sized company.

In your view, is Australia's freight system internationally competitive?

- NO. Whichever sector I look at, not only is there significant disaggregation of the components of supply chain, as described above, the ability of Australian business is severely hampered in competing for global markets, or even importing for that matter, when compared with equivalent 1st world economies, such as the Canada and the USA, and even developing countries, such as Brazil.

What are the key indicators which tell us this?

- Since the advent of contract manufacturing of textiles, electronics etc., in China and wider Asia 20 years, the ability to plan and execute the flow of materials to manufacturing and the distributed flow of finished goods globally has steadily integrated and become highly visible. In relation to the competitiveness of grain into world markets the comparative costs of Australia to Canada are something like 2 to 1.

How important is freight movement to your business competitiveness?

- Critical. The costs associated with holding significant contingent inventories and the coordination of supply from overseas sources to customers throughout ANZ are substantially higher than is competitive and sustainable. Freight and logistics activities and the coordination of supply chain need to improve radically. At present the organisation, a mid-sized organisation, is building it's own supply chain integration in lieu of organisations purporting to understand and supply these solutions being actually able to help.

Are regulatory factors affecting productivity for your business? How could this be improved?

- Not particularly. Duties have declined over time. Regulations in China do hamper operations to some degree.

3.1

What are the key issues for freight in Australia's major cities?

- Congestion. Adequate freight infrastructure for road and rail. Connections between cities. Cost of freight and logistics services in Australia.

How can Australia's urban networks better prioritise passenger and freight services in the most effective manner possible?

- Planning. Planning and execution for transport, and passenger services, runs decades behind demand. Governments only act when forced to. Lack of investment in logical pathways is rife.

How are our cities and supply chains being impacted by changing consumer behaviours such as online shopping?

- Not sure about online however the advent of disruptive practices challenging traditional shopping models will offer advantages to those organisations who can cope with this type of change. The issue will be that international companies with extensive resources will have distinct advantages. Given the poor understanding of contemporary practices in supply chain, it is very likely that Australian companies and their freight service providers will not adapt.

What are the critical last mile issues you face in urban areas?

- Congestion. Speed of delivery. Cost of delivery.

3.2

Do you face, or expect in the future to face, problems moving your freight through Australian air, land or sea ports?

- How can Australia's maritime channels be appropriately maintained and able to accommodate bigger ships?
- How are other countries dealing with the landside implications related to distributing cargo from bigger ships?
- See 3.1. These matters are all about design level which should be consistent regardless of which flavour of politics is in government.

3.3

How effective is your supply chain at transitioning your freight between modes and across boundaries?

- Poor. The business is designing it's supply chain integration solutions. Attempts to work with local and international companies to help build these networks have failed.

What regulations do you have to deal with in your supply chains?

- Building Standards. Importing. Origin country regulations.

How could any of them be simplified?

- Yes but good progress made already. Other areas of supply chain are more of a burden.

Are empty containers a problem for you?

- Yes....but for the usual reasons of outbound in no way matching outbound.

3.4

N/A

3.5

What emerging technological trends do you think will impact on your supply chain?

- Disruptive online sales behaviours changing the nature of supply.

When are these impacts likely to be felt and how does Australia's freight infrastructure need to be adapted to make best use of likely changes?

- Companies, particularly small and medium sized companies, are crying out for freight and logistics' partners to help with the simplification of supply chain.

Do you feel you can make use of the technology you need?

- The competitiveness of these business lies with ability of their partners to adopt technologies that aid with alignment of supply chain and associated costs. Further, much of Australia's Agricultural, Mining and import / export infrastructure is tired. The alignment of supply chain assets is poorly understood. See abstract above.
- The reality is that many companies are crying out the use of technology to provide visibility, enable planning and facility real supply chain integration. The technology is available. The understanding and adoption of this technology is slow and in pockets.

4.1

Any data or insights you are willing to contribute to assist in capacity forecasting assessment would be appreciated

- Much of the Australian internal, import / export dynamics is entirely predictable

The Inquiry welcomes views on what factors and key drivers of change should be considered in the scenario planning analysis.

- Australia really needs an overarching supply chain strategy. The movement of freight in, into and out of Australia is actually quite clearly understood, whichever sector being considered, because of the nature of population, agriculture and resources. The problem is the disaggregation of supply chain components as described above. The nature of change then is actually having a plan that considers current activities and longer term growth.

Benchmarking international best practice will demonstrate the gaps and lags in Australia. Supply chain intelligence and technology provides the means through which a helicopter view of Australia's supply chain dynamics can be attained.

The Inquiry is also keen to identify key functional elements of supply chains through case studies demonstrating how Australia's freight system is working on the ground, including case studies about things working well, as well as examples of the problems and where improvements can be made. Identification of potential future trends in supply chains would be valuable.

- See Abstract above.

4.3

The Inquiry is particularly interested in views on the potential need for a national freight performance framework and the likely key indicators.

- The disaggregation of supply chain activities demands a freight performance framework......but under the umbrella of supply chain strategy and goals. There are many significant parties in each sector of supply chain each with their own perspective of supply chain in Australia; often with their own agenda at the heart of decision making. Objectivity in oversight is critical in ensuring Australia's competitiveness in supply chain.

International benchmarking of best practice in each sector, in each logistics activity, capital cost and, ultimately, just how competitive supply chain is versus competitors.