1 October 1998

Mrs Helen Owens
Presiding Commissioner
Progress in Rail Reform Inquiry
Productivity Commission
Locked Bag 2
Collins Street East Post Office
MELBOURNE VIC 8003

RE: Progress in Rail Reform Inquiry

I refer to the Productivity Commission's Progress in Rail Reform Inquiry and terms of reference announced by the Commonwealth Treasurer in August, along with the associated Issues Paper.

Sydney Ports Corporation is responsible for the management and operation of the twin port facilities of Botany Bay and Sydney Harbour.

Total volumes of cargo moving through the ports for the financial year 1997/98 exceeded 22 million mass tonnes, including 801,000 TEU's (Twenty foot Equivalent Units) of containerised cargo.

Of this total throughput, some 20% of the container traffic enter and leave the port precincts by rail. This cargo is destined to/from metropolitan Sydney, rural NSW and interstate.

This current figure of 20% represents an increase in rail mode share from around 13% in 1995 and 17% in 1995/96. The current volume of containers moving through Sydney ports by rail is around 150,000 TEUs.

Projected trade growth figures show this number increasing to 300,000 TEUs by the year 2002/3. In order to cope with this trade growth and assist with the increase in rail movements, the Corporation has been and continues to promote/facilitate the development of intermodal terminals, both in metropolitan Sydney and rural NSW.

Sydney Ports Corporation is actively encouraging/facilitating investment (public and private) in the development of such facilities in order to assist the increase of container cargo movement by rail.

To continue this facilitation process, the following items have been identified as fundamental to continued progress in rail reform, with the emphasis on movements through Sydney and NSW:

- Need to upgrade rail IT systems and incorporate EDI messaging systems
- There must be no impediments to Trade for Rail Freight Transport
- There must be no impediments to rail track access for new/existing rail operators
- Are rail access charges an accurate reflection of assets, maintenance and operational costs
- Need to promote intermodalism as an alternate efficient transport system
- Need parity of rail infrastructure investment and funding with road
- Need parity of rail access charges with road ie do trucks pay the correct charge for the damage they cause to roads? Is rail paying more than road in comparison?
- For Sydney Ports Corporation, in particular, there is a need for rail freight infrastructure improvements to support larger, more efficient metropolitan, intrastate and interstate intrastate trains. Also need a dedicated freight line through Sydney, East-West and North-South.
- At the ports, lack of contractual relationships between rail operators and stevedores impedes efficiency.
- In the future, with multiple rail operators and increasing cargo growth, it may be difficult to coordinate the planning and operation of train windows, both at the port, along the rail freight line path, at inland metropolitan terminals, along with rural and interstate services.

In order to further indicate how this is envisaged to work in practice, I enclose a paper from Mr Greg Martin (CEO of Sydney Ports Corporation) delivered to the recent International Conference of ICHCA in Sydney, outlining the importance of rail and intermodalism to the Sydney Ports community.

I trust the above will be of assistance to your inquiry. Should you require any further information, or wish to query any point, please do not hesitate to contact me directly on (02) 9296 4790 or fax (02) 9296 4742.

Yours sincerely

Phil Rosser

Commercial Services Manager

"Intermodal Transport Solution for Port Botany to 2020"

Presentation

to

ICHCA 98

XXIV INTERNATIONAL CONFERENCE

on

2nd June 1998

at

Sydney Hilton

G J Martin

Chief Executive

Sydney Ports Corporation

"Intermodal Transport Solution for Port Botany to 2020"

1. Introduction

The main aim of this paper is to suggest how freight will be managed in Sydney in the future – (within 5 years).

- This is an important topic because Sydney Ports Corporation (SPC) has widely promoted its views on expansion of marine facilities at Port Botany (2020 Plan). This Plan has been accepted by the Board of Sydney Ports Corporation and NSW Government approval is still pending. However there is some public scepticism about the ports' capacity to deal with the corresponding growth in road and rail traffic.

- Sydney will be able to handle the predicted cargo growth to 2020 BUT the solution relies on managing freight differently rather than by providing more and more infrastructure.

- In making this presentation, it is proposed

  Ð to discuss the current situation at Port Botany and operational shortcomings, and

  Ð to discuss the concept for the future of coordinated freight movements by rail and road shuttles operating 24 hours/day from terminals throughout Sydney to/from Port Botany.

2. Current Position and Operational Shortcomings at Port Botany

2.1 Container Terminals

- Current throughput through both terminals – 700,000 teu/year.
- Current capacity at Port Botany is over 1M teu/year subject to Productivity.
- SPC's 2020 Port Strategic Plan proposes 3rd terminal – Port capacity around 2M teu/year.

So, Port Capacity – NOT A PROBLEM if 2020 Plan is approved and ultimately developed.

2.2 **Road Access**

Đ Road access has been a problem in the past and will always be an issue because of location of Port relative to major industrial areas in Western Suburbs. Location of Industrial Areas (purple) on attached map.

Đ It is estimated that some 70% of Sydney's cargo moves within about 40km radius of Port.

Rail Access Corporation/SPC and Roads & Traffic Authority have just undertaken an Origin/ Destination study for road traffic arriving at and leaving Port Botany which will test this assumption.

Đ Government decision to build Eastern Distributor and M5 East Extension will be a major benefit to Port Users – particularly in off-peak hours.

2.3 **Rail Access**

Đ Currently only one track to Port Botany

Current Usage 12 trains/day (12 in and 12 out)
Capacity Now 4-5 trains/hour (claimed – some doubt)

Đ Can be duplicated when required – probably needed by soon after 2000.

– Botany to Enfield is a dedicated freight link with no time restrictions, <u>but</u> from Flemington onwards, freight and passenger trains share the metropolitan network.

– Freight trains are restricted during morning and afternoon peak hours from crossing the Sate Rail/City Rail passenger system.

– As the number of trains increase, RAC will need to upgrade the signalling from mechanical to electrical between Cook's River and Botany.

Đ Currently around 15% of containers in and out of Port Botany is carried by Rail – 85% by Road.

Đ Objective is to increase this to around 30 to 35% by Rail within a few years.

Đ This means an increased number of containers from some 80 to 100,000 teus/year now to around 300,000 teus/year will be carried by rail in about 5 years.

– Rail infrastructure improvements should be done sooner rather than later but works are not major or controversial projects and WILL NOT be an impediment to rail freight growth.

2.4 Operational Inefficiencies

Đ Warehouse hours are normally between 7am to 4pm 5 days/week while the Container Terminals operate 24 hours per day, 7 days/week.
Because of the limited warehouse hours, R&D at the Terminals basically occurs principally between 7 and 11 a.m. and 1 to 5 p.m.

Clearly, this results in:
- Underutilised terminal R&D capacity;
- Congestion in peak hours on roads and at terminals;
- Inefficient use of capital by Container Terminals and by truck owners with trucks being used around 12 hours/day.

Đ Sydney has over 600 independent trucking operators, most of whom are not loaded on both legs to and from the Port.

– Overall, road transport is used inefficiently with only around 33% of available slots being used, ie. an average of 1.3 slots out of 2 in/2 out per truck are used.

Ð On occasions, a truck may make only one round trip to the Port in a day.

3.0 **The Solution for the Future**

- The problems are well known – What is the SOLUTION?

- In essence, the solution is not complex

  Ð it is a combination of basic concepts and changing the way freight is managed from the historical methods.

  Ð the solution for Sydney is not universally applicable to other ports. Sydney's urban sprawl, the distance to the Port relative to major industrial areas and road system lead to a specific solution.

- The Concept involves 4 components:

  (1) Development of Inland Rail hubs (Western and Southern Suburbs) –
  (already happening).

  (2) Development of Road Freight hubs
  relying on stack runs to/from Container Terminals
  (located close to Port and elsewhere throughout Sydney).

  (3) Integrated System with Electronic messaging between rail and road freight hubs and container terminals.

  (4) 24 hour per day operation of hubs and container terminals.

- This seems so simple as to be no solution, but it is well known that many of the best solutions are simple.

These components are covered in more detail below.

3.1 **Inland Rail Hubs**

Đ In 1995, and again in 1996, SPC investigated the development of Common User Rail Terminal at Botany.

Đ The 1996 Maunsell study confirmed the view that a common user multimodal terminal was not commercially viable, as

- It would add an unnecessary cargo handling operation to the system
- Additional cost of around $80 per box to the cost would be incurred
- Existing Container Terminals could be much more efficient in handling rail cargo, and should give higher priority to rail cargo than at present.

Đ As a result, SPC suggested the best solution would be distributed Rail hubs in Western Suburbs with short haul Shuttle Trains to Port as frequently as necessary.

Đ This concept, which has been around for many years, has been adopted and promoted by FreightCorp.

Đ Already in operation are FreightCorp's daily metropolitan shuttles from the CRT operation at Yennora to Port and from Seaton's operation at Camellia.

– Other metropolitan rail depots exist at
  - Clyde
  - Villawood (BHP) and

– Campbelltown has been mooted as a future rail hub site.

– NRC has received approval and has commenced activities in the short haul shuttle business from Chullora to the Port as well – just won contract to transport 1000 boxes to Port Botany.

Đ SPC is undertaking a study with RAC to identify other metropolitan intermodal terminals.

With these developments, it can safely be said that the rail hub component of the Model is well under way, but rail infrastructure improvements, as mentioned earlier, will be required as volume grows.

3.2 **Road Freight Hubs**

Road freight hubs using stack runs to/from the Port are the second essential component of the proposed solution.

Đ This component of model is in the embryonic stage.

– Will not become a major force until M5 East and Eastern Distributor are completed.

Đ These Road freight hubs will rely on containers being delivered to and collected from them by truck (presumably small operators working the local area).

Đ Coordinated stack runs to and from Port will be made by truck fleets from these Hubs using B-doubles and, when approved, B-triples on major roads (M5 East, etc).

Đ These Centres and R&D function at container terminals should be operational 24 hours per day as need be to meet demand.

This will result in:

(i) More efficient use of container terminals and their equipment
(ii) The capacity for trucks to be used around the clock
(iii) Higher use of available truck slots.
(iv) Better use of uncongested road system with night time, off-peak operations.

Đ These Road Freight Hubs can be located either near the Port (eg. could operate from Smiths, PBCP, Sydney Haulage and MCS), and anywhere else in the Sydney region, eg. Campbelltown or along the Cumberland Highway.

Đ The Road freight terminals may be purely transport terminals or they may include warehousing and full container depot activities – however, the end objective is stack runs to/from the container terminals any time of the day or night.

3.3 3rd Component – **Electronic Messaging**

Đ Coordination of movements by electronic messaging from the Rail and Road freight hubs to container terminals will be essential for maximum efficiency.

- This will include full customs clearance by the time boxes leave the hubs for the Port, etc. and transponder, non-stop identification of truck and containers for delivery straight into the nominated position in the container terminals.

  (This technology is now almost old hat).

- Small truck operators running through traffic in peak hours will have great difficulty in being able to compete commercially with larger operators doing stack runs to the Port. It will be far more efficient and profitable for smaller operators to make multiple trips to the local Rail hub or Road Freight centre.

– With proper information transfer, Container Terminals will be able to operate more efficiently with export cargo able to be held off-site until shortly before loading on ship. This reduction in containers in the container terminal yard will help reduce congestion and increase efficiency.

Summary

- The individual concepts expressed in this paper are not new but combined together they represent a freight transport solution for Port Botany.

- The combination of

  Inland Rail Hubs
  Road Freight hubs throughout Sydney
  Integrated messaging between hubs and CTs
  24 hour R&D operations at CTs and hubs

  will provide the basis of the solution for Sydney, rather than infrastructure reliant alternatives.

Conclusion

Sydney will be able to cope with volume growth to 2020 and beyond in regard to both Port Capacity and Land transport arrangements. The solution relies on managing freight differently rather than relying on more Road and Rail infrastructure.