PUBLIC WORKS COMMITTEE

IMPACT OF PORT OF NEWCASTLE SALE ARRANGEMENTS ON PUBLIC WORKS EXPENDITURE IN NEW SOUTH WALES

Responses to Supplementary Questions

Hearing – 31 January 2019

1. How many vacant pathings are there currently on the Northern Line?

2. How would this line accommodate the increased use of the PON proposed 2 million TEU container facility?

3. What infrastructure would be required?

4. What is the estimated cost of delivering that infrastructure?

Response:

As noted in the NSW Government Submission, the development of any new and sizeable container terminal outside Sydney would have significant implications for landside transport networks and would necessitate investment to increase capacity and improve access and connectivity.

Rail movements of containerised freight to a terminal at the site proposed for the Newcastle Port would have to travel on lines currently used by other rail operators within the Mayfield and Carrington precincts including Liberty OneSteel, Port Waratah Coal Services, Newcastle Agri Terminal, GrainCorp and CBH Newcastle Shiploader (concentrates export). Any new and significant user of these lines would impact on existing rail path allocation and would require multi-lateral discussion and negotiation.

Regarding the rail link between Newcastle Port and terminals in Sydney, the capacity of the Main North Rail Line is constrained by the mix of trains operating on the corridor and the infrastructure to support the different types of trains using the line. Capacity for freight is limited by passenger operations and the infrastructure available.

- The January 2019 freight timetable for the Main North Rail line has 12 unallocated (spare) train paths northbound between North Strathfield and Broadmeadow and 10 unallocated train paths southbound between Broadmeadow and North Strathfield for freight services[1].
- The actual number of spare paths would be less than the unallocated paths as a number are used for seasonal freight (e.g. harvest crops), late running or out-of-course train movements (freight or passenger), short notice freight movements and to accommodate future rail freight growth.
- The number of spare paths will reduce each year as they are consumed by growing needs from passenger and other services. The actual number available when a container terminal is opened would be expected to be lower.
- Whether or not these paths are suitable to support the needs of container operations such as scheduling to meet access times to terminals in Sydney, cycle times back to the port etc would be a matter requiring a detailed study.
- It should be noted that there are 13 northbound and 12 southbound rail paths between North Strathfield and Broadmeadow which are contracted to the Commonwealth Government and the ARTC to meet the forecast needs of interstate freight. These paths have been enabled through the Commonwealth funded Northern Sydney Freight Corridor (NSFC) Program and are not available for intrastate freight services.

Given that parts of the Main North Rail Line are already close to capacity limits during periods of greatest freight demand, increased demand by PON for rail paths to

[1] This assessment has been made using Wednesday as an indicative weekday in the freight working timetable.

accommodate a 2 million TEU container facility is likely to mean significant investment in new infrastructure. This includes duplicating existing sections of the network (i.e. amplify two track sections to four tracks) in order to provide efficient and reliable access to freight trains between Newcastle Port and intermodal terminals in Sydney. The specific upgrades to the Main North Line that would be required in response to a container terminal developed at Newcastle Port would be influenced by many factors including growth in freight at Newcastle Port and Port Botany, the timing of freight movements along the corridor, configurations of trains and growth in passenger services and other freight traffic.

My response provided at the hearing on 31 January 2019 described the challenges of moving freight along this corridor and the significant investment made by the NSW and Australian Governments to improve freight capacity. This includes a combined investment of around $1 billion in Stage 1 of the Northern Sydney Freight Corridor, which included the Epping to Thornleigh Third Track and projects at North Strathfield, Gosford and Hexham. Similar or greater levels of investment will be required to deliver further stages of the Northern Sydney Freight Corridor Program in the future.

5. In your expert opinion what are your estimates for container freight in the Newcastle region and how does this compare to Port of Newcastle estimates?

Response:

As discussed in the NSW Government submission, various claims have been made regarding the potential market for a containerised freight terminal at Newcastle Port. Recent studies undertaken on behalf of the Port of Newcastle imply that Newcastle Port could initially attract between 459,000 and 575,000 TEU by 2020[2], representing approximately 25-30% of total loaded NSW container movements. These estimates assume that all the goods that are generated and consumed in the Newcastle region could and would be shipped in containers through Newcastle Port.

However, the existing Sydney based investment in container freight distribution supply chains means that industry participants would be very likely to continue to bring containers in via Botany, break the containers down in existing facilities located in Western Sydney and distribute from that point to regions including Newcastle.

Based on data recently released with the NSW Freight and Ports Plan and considering the regions served by other ports and the potential impact of the Inland Rail project, we expect that significantly fewer loaded TEU of containerised export freight would be produced in the regions near Newcastle which could be served by Newcastle Port. In addition, as noted above, the large majority of imports are likely to continue to pass through distribution centres in Sydney prior to delivery to end customers (these are presently handled through Port Botany).

Newcastle Port currently handles around 10,000 TEU per annum and volumes have been around this level for some time.

[2] See p.xiii of Deloitte Access Economics (2018), NSW Container and Port Policy and p.9 of AlphaBeta (2018) Global Gateway for NSW: the economic impact of a container terminal at the Port of Newcastle

6. What have been container volumes through NSW over the past 20 years year on year, and what are your container forecast volumes for the next 20 years?

Response:

The table below shows container volumes through NSW over the past 20 years and forecast volumes based on NSW Freight Commodity Demand Forecasts released with the NSW Freight and Ports Plan 2018-2023. For further detail, see https://www.transport.nsw.gov.au/data-and-research/freight-data/strategic-freight-forecasts

Source	Year	Imports (empty + full)	Exports (empty + full)	Trans-shipments	Total	y-o-y growth	Compound Annual Growth Rate
Ports Australia[3] & NSW Ports[4] reported throughput (TEU)	1999	459,216	419,963		879,179		
	2000	540,214	476,187		1,016,401	15.6%	
	2001	512,867	477,787		990,654	-2.5%	
	2002	529,238	480,104		1,009,342	1.9%	
	2003	601,039	559,708		1,160,747	15.0%	
	2004	654,797	615,419		1,270,216	9.4%	
	2005	700,281	676,084		1,376,365	8.4%	
	2006	740,086	705,379		1,445,465	5.0%	
	2007	819,218	800,903		1,620,121	12.1%	
	2008	906,582	871,860		1,778,442	9.8%	5.9%
	2009	902,533	881,484		1,784,017	0.3%	
	2010	976,215	951,292		1,927,507	8.0%	
	2011	1,020,560	999,526		2,020,086	4.8%	
	2012	1,027,445	1,008,697		2,036,142	0.8%	
	2013	1,074,291	1,051,977		2,126,268	4.4%	
	2014	1,110,105	1,096,264		2,206,369	3.8%	
	2015	1,157,294	1,132,735		2,290,029	3.8%	
	2016	1,173,709	1,151,133	-	2,324,842	1.5%	
	2017	1,231,127	1,200,610	-	2,431,737	4.6%	
	2018	1,320,972	1,292,734	-	2,613,706	7.5%	
TfNSW Freight Forecasts[5] (TEU)	2019	1,245,611	1,213,269	154,700	2,613,580	0.0%	
	2020	1,320,824	1,286,170	162,730	2,769,723	6.0%	
	2021	1,399,965	1,362,786	170,844	2,933,594	5.9%	
	2022	1,457,526	1,418,585	177,016	3,053,126	4.1%	
	2023	1,513,271	1,472,637	183,042	3,168,950	3.8%	
	2024	1,567,679	1,525,402	188,960	3,282,041	3.6%	
	2025	1,624,286	1,580,293	195,094	3,399,673	3.6%	
	2026	1,683,337	1,637,549	201,469	3,522,355	3.6%	
	2027	1,740,463	1,692,950	207,687	3,641,100	3.4%	3.6%
	2028	1,798,220	1,748,966	213,978	3,761,164	3.3%	
	2029	1,856,500	1,805,491	220,333	3,882,324	3.2%	
	2030	1,915,570	1,862,784	226,778	4,005,132	3.2%	
	2031	1,975,356	1,920,767	233,290	4,129,413	3.1%	
	2032	2,036,221	1,979,796	239,916	4,255,933	3.1%	
	2033	2,098,134	2,039,840	246,653	4,384,627	3.0%	
	2034	2,160,926	2,100,737	253,487	4,515,150	3.0%	
	2035	2,224,814	2,162,697	260,438	4,647,949	2.9%	
	2036	2,289,581	2,225,509	267,484	4,782,575	2.9%	

[3] http://www.portsaustralia.com.au/aus-ports-industry/trade-statistics/?archive
[4] https://www.nswports.com.au/resources/trade-results
[5] https://www.transport.nsw.gov.au/system/files/media/documents/2018/NSW%20Freight%20Commodity%20Demand%20Forecasts%202016-56%5Baccessible%5D_0.pdf

7. What are the container volume of exports moved by rail through Port Botany?

Response:

The numbers of export containers (TEU) moved by rail through Port Botany are as follows.

2017 (calendar year) 284,751

2018 (calendar year) 259,272

Source: Transport for NSW Cargo Movement Coordination Centre

8. What modelling does Transport for NSW and RMS use regarding the long term outlook for coal to the Port of Newcastle?

a. When was this modelling commissioned?

b. Who paid for this modelling?

c. What does this modelling suggest?

d. What specific emission trajectories or scenarios (for instance, IPCC scenarios) were used for this modelling?

e. What are the assumptions these scenarios are based on, including trends in global coal demand?

f. What is the projected share of coal tonnage to other commodities at Newcastle Port in 2030 and 2050?

Response:

The main data source used to develop the NSW Freight and Ports Plan 2018-2023 was NSW Freight Commodity Demand Forecasts prepared in 2017-18 by the Transport Performance and Analytics (TPA) team within Transport for NSW. These provide 40-year forecasts (2016-2056) for around 20 commodities including coal. Feedback was sought on the Draft Freight and Ports Plan to verify the assumptions being used for commodity projections. These forecasts focus on growth for key commodities rather than the composition of freight handled by specific freight terminals and ports. Further information about the forecasts is available at https://www.transport.nsw.gov.au/data-and-research/freight-data/strategic-freight-forecasts

Coal forecasts were prepared based on available information on international coal markets and forecasting scenarios used by the Institute of Energy Economics of Japan (IEEJ) 2015. These take into account a variety of factors and assumptions relating to future economic growth, energy intensity of industry and government energy policy mix (such as government incentives for industry to invest in and adopt clean energy sources, construction of more coal efficient power stations). In preparing coal forecasts, TPA considered various international and domestic drivers of demand for NSW coal. See Table 1.

Table 1: NSW Coal demand forecasts 2016 to 2056 (million tonnes per annum). *CAGR (compound annual growth rate) is annualised growth rate for the indicated timeframe, and Total increase is the simple growth rate.*

Type of coal	End user market demand driver	2016	2036 (f)	2056 (f)	CAGR % (2016-2056)	Total increase % (2016-2056)
Thermal	Domestic electricity generation	23	24	21	-0.3%	-10%
Thermal	International electricity generation	139	149	158	0.3%	13%
Coking	Domestic steel production	3	3	5	1.5%	81%
Coking	International steel production	25	33	47	1.6%	90%
Total	**All end user demands**	**189**	**210**	**230**	**0.5%**	**21%**

Source: TPA analysis

9. The NSW Freights and Ports Plan states that "Coal freight volumes, however, are expected to grow less rapidly than other regional commodities over the next 20 years." What is the projection for this long-term outlook for coal based on?

Response:

See response to previous questions.

10. In his evidence to the committee, the CEO of the Port of Newcastle Mr Craig Carmody said it will be "devastating" for the port and the economy of the Hunter if the Port of Newcastle is not able to diversify as a result of the inevitable global reduction in the demand for coal.

a. Do you agree with Mr Carmody's evidence?

b. What is Transport for NSW and RMS doing to ensure that the port and the economy of the Hunter are not devastated by the inevitable global reduction in demand for coal?

Response:

The NSW Government is already investing heavily in new infrastructure to support growth of the Newcastle region. A total of $842 million has been committed into the Hunter region's infrastructure from the Restart NSW Fund.

Prior to June 2018, the NSW Government invested more than $700 million into the Hunter region's infrastructure from the Restart NSW Fund including the following projects:

- $150 million committed and reserved towards building the Newcastle Inner City Bypass missing link between Rankin Park and Jesmond
- More than $470 million committed and reserved under the Regional Road Freight Corridor program including:
  - $200 million towards the Pacific Motorway extension to Raymond Terrace
  - $92 million towards the Singleton Bypass
  - $85 million for the New England Highway upgrade between Belford and the Golden Highway
  - $68 million towards the Muswellbrook Bypass
- $24 million committed to redevelop the Muswellbrook Hospital
- $18 million committed to update the John Hunter Neonatal ICU
- $17 million committed to the Water Security for Regions program including
- $11.5 million committed for the Pipeline from Scone to Murrurundi
- $10 million committed for the Newcastle International Hockey Redevelopment
- $7 million committed for the Singleton Hospital (Imaging, Ambulatory & Primary Health Care Redevelopment)

The NSW Government has committed $12.7 million towards a new multi-purpose cruise ship terminal in Newcastle Harbour. The facility will enable a significant expansion of the cruise industry in the Hunter which is a contributor to the regional economy.

https://www.nsw.gov.au/your-government/the-premier/media-releases-from-the-premier/new-cruise-terminal-to-boost-hunter-tourism/

The 2018-19 budget then committed a further $134 million to the redevelopment the Maitland Hospital – taking the current total of $842 million committed into the Hunter region's infrastructure from the Restart NSW Fund.

Restart NSW is also providing $543 million for Fixing Country Roads and $400 million for Fixing Country Rail.

The NSW Freight and Ports Plan 2018-2023 recognises the interest of the Port of Newcastle in diversifying and expanding the port's trade base. An initiative has been included in the Plan to support the Port of Newcastle, as the commercial operator of the port, to explore other trade opportunities as they deliver their Master Plan, such as examining landside capacity constraints that may need to be addressed beyond the timeframe of the NSW Freight and Ports Plan.

11. Has there been any study conducted or commissioned by Transport for NSW or RMS of the benefit of a freight rail bypass of Sydney?

a. If so, can the study be provided to the committee?

b. What was the cost benefit of the project?

Response:

Future Transport 2056, the NSW Freight and Ports Strategy (2013) and NSW Freight and Ports Plan 2018-2023 identify the need for an Outer Sydney Orbital between the Illawarra region, Western Sydney and the Central Coast. The proposed corridor will provide a road and freight rail link. Further information about the Outer Sydney Orbital corridor identification project is available at https://www.transport.nsw.gov.au/corridors/oso

12. Has Transport for NSW or RMS conducted or commissioned any study or modelling of the economic impact of allowing the Port of Newcastle to become a significant container port?

a. If so, can the study be provided to the committee?

b. When was the study conducted?

c. What were the conclusions of the study?

13. Has a study ever been conducted or commissioned by Transport for NSW or RMS to examine the alternatives to expanding the container capacity at Port Botany?

a. If so, can the study be provided to the committee?

b. What alternatives were considered?

c. What was the cost-benefit ratio of these alternatives?

14. What financial modelling has been conducted to determine the optimal arrangements for container transport using all three ports?

Response:

The NSW Government policy position is that Port Kembla has been identified as the location for the development of a future container terminal to augment capacity of Port Botany when required. Port Kembla is closer than Newcastle to the existing warehouses in Sydney and closer to the expanding populations in Western Sydney. This has been a consistent position in strategies including the draft NSW Freight and Ports Strategy 2012, NSW Freight and Ports Strategy 2013, NSW Freight and Ports Plan 2018-2023, State Infrastructure Strategy 2018-2038 and Future Transport 2056.

The rationale behind this policy, as discussed in the NSW Government submission, is to maximise efficiency and minimise the total cost of container movements to the community, including transport and logistics costs to industry and, importantly, landside infrastructure costs to Government and ultimately to taxpayers.

Provisional cost and investment analysis was conducted by an independent analyst for TfNSW in 2012 which compared capital investment costs and freight transport costs for the road and rail task associated with the operation of additional container port capacity locations in NSW, in particular Newcastle and Port Kembla. The preliminary assessment identified that the Port Kembla site had cost, access and likely demand advantages compared to the Newcastle site. (Report attached.)

The subsequent NSW Freight and Ports Strategy 2013, NSW Freight and Ports Plan 2018-2023, State Infrastructure Strategy 2018-2038 and Future Transport 2056, which builds a vision for the NSW freight network as an integrated component of the overall transport network are based on extensive industry input and consultation. Transport for NSW carefully considers all proposals put forward to the NSW Government by the freight industry, including the Port of Newcastle. Over 110 submissions were received from the industry during the development of the NSW Freight and Ports Plan 2018-2023 and consultation events were held across NSW.

The $1 billion investment in the Port Botany Expansion in 2009 reflects the longstanding policy strategy to use Port Botany for long-term container movement growth. The evidence base for the NSW Freight and Ports Plan[6] indicates that there is sufficient terminal capacity at Port Botany to meet the demand for containerised freight in NSW until at least 2045 to 2050. The decision to develop a third container terminal at Port Botany predates the establishment of Transport for NSW and the creation of RMS through the merger of the NSW Roads and Traffic Authority and NSW Maritime.

[6] Data, performance measures and other statistics underpinning the NSW Freight and Ports Plan are published at https://www.transport.nsw.gov.au/data-and-research/freight-data and at https://opendata.transport.nsw.gov.au/

15. Has a review been conducted to assess or evaluate an integrated rail freight system that takes into consideration all three ports?

Response:

Various plans and strategies have been developed for freight in NSW which have considered the integration of rail freight with other modes and major trade gateways including ports. These include:

- NSW Freight and Ports Plan 2018-2023 – Transport for NSW, 2018
- Future Transport 2056 – Transport for NSW, 2018
- Transport NSW Freight and Ports Strategy – Transport for NSW, 2013
- NSW Long Term Transport Masterplan – Transport for NSW, 2012
- Railing Port Botany's Containers - Freight Infrastructure Advisory Board, 2005

Various investment strategies for Sydney, Newcastle and the broader east coast rail network have also been published by the Australian Rail Tack Corporation (ARTC). These are available at https://www.artc.com.au/projects/

Master Plans for major ports in NSW are available at https://www.nswports.com.au/about-us/what-we-do/30-year-master-plan/ and https://www.portofnewcastle.com.au/News-and-Media/Publications.aspx

16. Are there targets for modal share of container movements for each of the Ports?

a. What is the target for rail freight for containers overall?

Response:

The NSW Government has a target to increase the share of rail freight at Port Botany to 28 per cent by 2020. This target is about:

- making the most of existing infrastructure capacity including the $1 billion investment in the third terminal at Port Botany
- making the most of Sydney's unique rail freight network – the envy of other cities around Australia – to reduce the growth of trucks on our roads

The NSW Freight and Ports Plan 2018-2023 has a 'Goal (5)' to improve rail access and flows. A key initiative to effect this improvement includes working with freight operators and owners to increase rail freight efficiency to consider introducing targets for increasing rail mode share on other rail corridors (in addition to the Port Botany rail corridor mode share target), where this could increase the productivity of the network and industry shares the required data.

The NSW government submission provides a timeline of freight policy and investment in NSW and demonstrates the consistent policy of maximising the use of rail for the movement of freight over the past two decades.

Transport for NSW is interested in establishing rail targets at other ports and is working with the freight industry to access to the data that would be required to do this.

17. What proportion of traffic congestion in Sydney is attributable to the container terminal at Port Botany?

a. How much of this is container trucks?

b. How much of this is non-heavy vehicle congestion?

Response:

While Roads and Maritime Services conducts traffic analysis and modelling for specific projects and areas, it has not assessed on a Sydney-wide basis the proportion of congestion attributable to container terminal operations at Port Botany. Container trucks currently represent less than 3 per cent of traffic on Sydney's motorway network.

18. The NSW Freight and Ports Plan 2018-2023 states that "the NSW Government will encourage improved environmental performance of vehicles through a number of policies and programs" (p74).

a. What policies and programs does this refer to?

b. What are the greenhouse gas emissions reduction targets associated with each of these policies and programs?

19. How has climate change mitigation been considered in the NSW Freight and Ports Plan 2018-2023?

a. How does this plan reflect the Government's stated objective achieving net-zero emissions by 2050?

20. On p.11 of the NSW Freight and Ports Plan 2018-2023 there is a Sustainability objective to reduce emissions and health impacts of freight.

b. What targets have been set to achieve this?

c. What policies and programs have been developed or are in place to achieve this?

Response:

Please refer to my response provided at the hearing on 31 January 2019, and the NSW Freight and Ports Plan 2018-2023.

The Department of Planning and Environment and the NSW Environment Protection Authority are the appropriate agencies for any further information.