



**Submission on Draft National Ports Strategy to Infrastructure Australia and
National Transport Commission
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May 2010

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1. NATIONAL APPROACH - COOPERATION BETWEEN STATES

After 194 submissions, 30 hearings and inspections, my colleagues and I were drawn inexorably to the conclusion that, if Australia was to meet this challenge, we needed to act decisively and soon, recognise emerging trends like double stacking and capital city basin inter-modal hubs, and jettison old thinking, especially at interstate borders. (Paul Neville, MP, in opening to Great Freight Task report, released August 2007).

There have been numerous inquiries into how we can do better as a nation to meet the freight task but it appears difficult to make progress when there are significant impediments. A number of these impediments are identified in the Draft Strategy. While I make reference in this submission to national themes, most of my submission concerns container trade on the eastern seaboard and more particularly NSW. Notwithstanding, I do have an appreciation of the broader issues and followed the House of Representatives Inquiry (2005-2007) with great interest. ⁱⁱⁱ

In mid- October 2005 the NSW Government announced its decision on the expansion of Port Botany and released the report of the Commission of Inquiry whose recommendation it had overruled. At the same time the Railing Port Botany Containers Report was released. Not long after I had a conversation with the author, Mr Laurie Brereton and suggested that a number of heavily populated communities would be unfairly impacted by both the expansion of Port Botany and the construction of the intermodal terminal at Enfield. I also said that the plan was short-term and that providing the supporting road and rail infrastructure in Sydney would be far more expensive than taking a fresh approach. Mr Brereton challenged me to suggest alternatives. I mentioned Port Kembla and the inland rail and said we needed a National Freight Strategy. He laughed and replied: ‘now you want to change the constitution regarding competition between the States.’ I have since come to understand his ‘cynicism’.

It sounds so easy, so rational to take a national approach, but in the recent past the trend has been not just to promote greater competition between the States but also to promote competition between Ports in the same state^{iv}.

We do need to establish what operations or parts of operations are better performed under pressure of competition, where this may or may not apply, and when this applies in what degrees. And we do need to see long-term coordinated planning in the process rather than an ad hoc approach. To illustrate my point on this I direct you to Appendix 1 which is a submission that NSW Treasury made to the Commission of Inquiry into the Port Botany Expansion. This submission was made after the Commission had already commenced hearings.

Figure 1: Australia's nationally significant port, road and rail links



The eastern seaboard ports are in direct competition with each other. The NSW State Government has repeatedly shown a lack of enthusiasm for the inland rail because Queensland and Victoria stand to benefit more.^v There is support for the Parkes hub but lukewarm compared to the effort put into getting something like the Enfield ‘intermodal’ in place.

Ideally the three premiers would establish where each State could ‘shine brightest’ and then support each other in doing this. It is suggested by many that it is obvious that Queensland should become Australia’s major container port/distribution hub.^{vi} In the report from the Commission of Inquiry into the Port Botany expansion, the Commissioner stated that Port Botany couldn’t be expanded like Melbourne and Brisbane because of the environmental impacts and Sydney Airport.

2. PLANNING – TRANSPARENCY, CERTAINTY, CLARITY

In the Draft Strategy and GHD supporting paper reference is made to forecasting and shortcomings are identified such as projections which don't reference future challenges (eg. peak oil, carbon pricing, slower economic and population growth). It is also suggested that BITRE reporting should be more comprehensive. It is obvious we can't plan properly if essential data is not being collected. When I was researching trade projections made in the Port Botany Expansion EIS I contacted the then NSW Department of State and Regional Development (DSRD) and asked for container trade figures for each of the regions (defined by DSRD) and for projections. I was told to contact Sydney Ports. I said that was unsatisfactory because Sydney Ports was a corporation concerned with its own business. It was not its business to be looking at trade opportunities for NSW particularly if those opportunities would be better realized through, for example, the Port Brisbane supply chain. I didn't get an answer to this but after a second and third phone call to the department I did find a staff member who agreed and said that it should have been the responsibility of the Department to collect the type of data I was seeking. I also found in my research that there were few studies conducted on destinations of containerized goods so while Sydney Ports could confidently state that 85% of containers were packed or unpacked within 40km of the Port they could not say where the goods went thereafter, eg. how many were repackaged at warehouses and sent off to destinations inter and intra-state. With the population of Sydney at that time growing at .8% per annum^{vii} and container imports at around 11% the figures regarding consumption didn't add up nor did they compute with some of the advertising which suggested that the Port was working for the whole state. The population of the Sydney Basin is more than half the State but that includes the Central Coast which is better served from the north at Newcastle, the South West which might be better served from Kembla and the west (defined at that time by DSRD as starting around Bankstown) which could be served if the inland rail were in place from Parkes. The population 'centre' of Sydney is west of Parramatta. Land closest to the CBD is more expensive and large areas of previous industrial land are undergoing residential development. It doesn't make sense to continue into the future reliant on a Port that is so poorly positioned. In one logistics study commissioned by what was then the NSW Sea Freight Council the author stated that an intermodal at Enfield was economically not viable given the value of surrounding real estate. Chris Corrigan at the Commission of Inquiry made a similar observation when he said that intermodals needed to be at least 40km from the Port for rail to be financially a better option over road.

The Draft Strategy does identify the need to align a Ports and Freight Strategy with the Major Cities Strategy but I would suggest it goes a step further and develops scenarios which align with a 'Future Cities Strategy' acknowledging that ports have traditionally been prime drivers in the creation of cities.

2.1 Calculating Capacity

It is difficult to make accurate projections, even for those committed to a 'business as usual approach' when scant regard is paid to the process.

When the Port Botany expansion was approved in October 2005 the cap was put at 3.2million TEU per annum. In the NSW Ports Growth Plan announced in 2003, the then Premier said that Newcastle would become the State's next container port when Botany reached capacity. Cap and capacity are very different. At the Commission of Inquiry Chris Corrigan backed by then P &O said that the expanded Port was capable of handling over 7million TEU. In the IPART terms of reference the figure considered was 3.9million TEU. I asked IPART to clarify this given the cap was approved at 3.2million but couldn't get an answer and every time I ask at Port Botany community meetings I am told that the cap is still 3.2million. When I mention the IPART Terms of Reference it is met with a blank.

It is easy to raise a cap and perhaps this has been part of the 'planning process' not to reveal the real agenda. Certainly the process has not met basic principles of transparency, clarity and certainty.

In the SPC Port Freight Logistics Plan 2008, referred to by GHD the following statement is made: *"Container volumes at Port Botany are anticipated to increase from 1.62 million in 2006/07 to over 3 million within 20 years."*

Yet in one of the GHD background papers the following statement is made: *Another example is the forecasts made in the 2003 Sydney Ports Corporation Port Botany Expansion Study. These forecast Sydney container throughput increasing to 1.92.5 million TEU in 2018/2019 (based on low/medium/high growth scenarios). In 2008/2009, Sydney container throughput has already reached 1.8 million TEU. Based on current trends, projections with a 7% annual growth rate suggest that the throughput is more likely to be around or exceeding 4 million TEU in 2018/2019.*

In the table(below) published in the Draft, the anticipated volume by 2030 is 3.579. This figure is over the cap and under the NSW Ports Growth Plan the excess should go to Newcastle. ^{viii} But it would be naïve to think that the largest Stevedore in the world would invest in the third terminal at Botany knowing that when 3.2million TEU were reached there would be no more. By the time Hutchison commence operations in 2012 DP World and Patrick will likely be handling over 2million TEU with capacity to go well beyond with 6 berths between them. Hutchison's 30 year lease is for 4 berths . After losing money on the Cross City Tunnel and the Lane Cove Tunnel does anyone expect Sir Li Ka-shing's operation to take on a 30 year lease of 4 berths on T3 and be limited to around 1 million TEU.

At 1 million TEU, effectively the third terminal would account for the handling of Empties.

Table 2: Total container throughput

Port	000 TEU 2007-08 (000)	000 TEU 2029-2030	Average annual growth rate 2007-08 to 2029-30
Adelaide	302	536	2.65%
Brisbane	900	1958	3.60%
Fremantle	583	1640	4.81%
Melbourne	2257	6654	5.04%
Sydney	1778	3579	3.23%
Australia total	6300	15452	4.16%

Source: BITRE 2010

Poor ports/freight planning has had consequences for business in NSW. The Hunter Economic Zone(HEZ) recently went into receivership. The message from the Hunter during the assessment of the Port Botany expansion was the success of the HEZ depended on the rejection of Port Botany. I have yet to meet anyone, other than those whose job depended on the project, who thought that moving car imports from Sydney Harbour to Port Kembla was strategically sound. Containers at Kembla and cars at Botany may have been a better solution in the longer term but the longer term was never explored. At the meeting I had with David Richmond concerning the 5th berth at Port Botany, I referred to Port Kembla and the completion of the Dumbarton-Maldon connection and proposals for warehousing around Moss Vale. He gave a very sharp response saying the Southern Highlands were far too important as a recreational area for Sydney. In the Port Kembla^{ix} submission to the Draft Strategy I noted the following: *Regard needs to be given to inland ports or industrial hubs, such as Moss Vale (Wingecarribee) and Picton (Wollondilly)The opening of the M7 in Sydney has had a significant impact on freight growth corridors and resulting road freight movements. National freight network planning to date has paid scant regard to this shifting freight pattern. The drive appears to be to increase transport corridors serving major capital city ports rather than exploring how the freight congestion can be minimised by reallocating existing resources.*



At the Press Club Forum on Freight last December trucking magnate Lindsay Fox argued for greater use of coastal shipping, developing an inland rail network, transferring more of Sydney's trade activity to Newcastle or Wollongong, and shifting Melbourne's major port to Hastings on the southern peninsula.

"We do need to move away from running transport operations in the centre of the city, particularly on the east coast of Australia," he said

However, as already commented upon by Martin Feil (see footnote vi) there are vested interests for an ever expanding Port Botany. From the Infrastructure Partnerships Australia submission by Glenn Byres *“IPA is also mindful of the fact that given the Government’s announcement of Port Botany’s expansion, it will continue to remain the main port servicing NSW and previous proposals to transfer container operations to other ports like Newcastle or Port Kembla should not be considered in responding to the FIAB Report. We support the view that Port Botany should remain NSW’s main container port and any alternative arrangements would be incapable of servicing Sydney’s economic requirements.*

Taking a Business as Usual approach to future trade doesn’t make sound economic sense. The figures below deserve close analysis as do examples of how other global cities operate:

Table 1: Road transport charges for full and empty container movements

Parameters	Brisbane	Sydney	Melbourne	Adelaide	Fremantle
Full Import and Export Containers:					
Turnaround time at stevedoring terminal (hr)	1.00	1.00	1.00	1.00	1.00
Turnaround time at shipper (hr)	1.50	1.50	1.00	1.00	1.00
Transit time between shipper and terminal (hr)	1.50	2.50	2.50	2.00	1.00
Approximate total time (hr)	4.00	5.00	4.50	4.00	3.00
Road transport charge per TEU	\$364	\$495	\$471	\$275	\$360
Average road transport charge per hour	\$91	\$99	\$105	\$69	\$120
De-Hire of Empty Container:					
Transit time to de-hire empty (hr)	1.50	2.50	2.50	2.00	1.00
Turnaround time at empty container park (hr)	0.25	0.25	0.25	0.25	0.25
Total time for de-hire (hr)	1.75	2.75	2.75	2.25	1.25
Road transport charge for de-hire per TEU	\$159	\$272	\$288	\$155	\$150
Empty Container Released for Export:					
Transit time to pick up empty (hr)	1.50	2.50	2.50	2.00	1.00
Turnaround time at empty container park (hr)	0.25	0.25	0.25	0.25	0.25
Total time for release (hr)	1.75	2.75	2.75	2.25	1.25
Road transport charge for release per TEU	\$159	\$272	\$288	\$155	\$150

Source: Full import and export container estimates from the BITRE’s Port Interface Cost Index (Jul-Dec 2008). De-hire and release for export empty container estimates calculated by GHD.

2.2 Externalities

Sooner or later, we’re all going to have to cease our collective state of denial and accept that business and technology as usual is not an option. We simply can’t keep gorging ourselves on the world’s resources (even if 6 billion obese, inactive humans would sequester a lot of carbon). Civilisations exist by the grace of Earth, subject to change without notice. Let’s hope we all realise that in time.

Mike Archer, dean of science at the University of NSW, SMH 1/2/07.

As a representative of an environmental group it was assumed that I would 'place environmental concerns' ahead of 'economic'. But to suggest that our economy operates independently of our environment or to think that we don't all belong to 'community' is silly and dangerous. There is no 'them and us'. We are all part of the problem – and the solution. What we should be aiming for is absolute transparency, certainty, clarity as well as a commitment to best practice. If that means development in a 'greenfield' area then it needs to be properly assessed not automatically rejected. Environmental concerns (for want of a better expression) are far more complex than dividing the planet into brownfields and greenfields. Assessments need to be made based not only on existing biodiversity status but also on potential recovery status. We can do far more in our industrial areas eg. wildlife corridors which double as noise and pollution buffers and enhanced value for workers on-site and residential neighbours.

I would suggest that consideration be given to developing a new culture around Port management where precincts, in conjunction with neighbouring industries, are developed as interesting places to work and visit. There is a prevailing 'out of sight, out of mind' approach which ignores the potential of Ports. In the USA there is greater integration with the community and in some areas the local port authority may manage the local sailing club for instance. Port Brisbane has a valuable visitor centre but there is nothing comparable in Sydney, nor planned. And I suspect no desire to do so. Even attempting to get Sydney Ports to support pedestrian crossings(at traffic lights) and footpaths for workers in the precinct as well as residents is met with at best indifference.



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I refer to the following from a Jillian W who wrote in her submission to you: *While politically unpalatable, it could be argued that the community should accept a reasonable level of social and environmental impact associated with container trucks, on the basis that the community benefits from the imports and exports transported by those trucks. Furthermore, it is often overlooked that cars make the major contributions to road network congestion and, in the transport sector, to green house gas emission.*

Jillian, unfortunately, didn't explain which community benefited and which bore the negative externalities. In any system we agree on as a nation all the externalities (eg, air and noise pollution, traffic congestion and increased risks, and loss of amenity) should be fully accounted for. No-one has the right to a cheaper product at the expense of the health of other members in the society nor should there be cost-shifting to other providers/levels of government(eg. health providers). The market is distorted when externalities are left uncoded. At the following footnotes I have added correspondence I sent to Mr Meyrick ^{xi} after reading a comment he made about 'community expectations and another reference is to a comment made by Mr Hirst ^{xii}

The recent dredging of 20 million cubic metres from the shipping channel in Port Phillip Bay resulted in a third party case under the EPBC Act. The representative for the Federal Minister was obliged to support a toxic dump in the Bay and admit to higher tides as a result of dredging. Whatever the long-term outcome for Port Phillip Bay the process did not allow for a proper valuation of the Bay, a proper risk assessment, and this was argued by Ian Willis. ^{xiii}In Botany Bay seagrass, avian habitat and saltmarsh have been given values in Penrhyn Estuary in the eventuality that the 'enhancement' will not be successful but there has been no discussion on how these values were calculated. The marine environment, prompting Cook to originally name the Bay 'Stingrays Harbour' ^{xiv} compares poorly with an average block of land in the adjoining Botany municipality. So low in fact that when the values are matched against mapped seagrass and saltmarsh areas of the Bay (with the lowest value at avian habitat) the total value for the whole Bay is just below \$1billion, less than the cost of the 3rd terminal. This is a ridiculously low amenity, commercial (diving, fishing) and biodiversity value applied to the Bay. Hypothetically, if we were to experience an oil spill that left the Bay completely dead - no avian habitat, no seagrass, no marine life whatsoever- the loss would be calculated at less than \$1billion. It makes a nonsense of principles of intergenerational equity and environmental justice.

In submissions to inquiries into Marine Reserves, Ports Australia have argued for special treatment. In a commercial environment there should be no special treatment. We all depend on the environment to support us as well as the generations that follow. One Earth, one chance – it is priceless but when assessing impacts we do need realistic values imposed so that commercial operations are put on a true commercial footing. While it is accepted that the profits accrue to the corporation, equally the costs for poor risk assessment should also be borne by the

Corporation. Exxon, for example, was fortunate that the original \$5billion claim for damage to Port William Sound was limited by the US Supreme Court to less than \$500million but we live in different times and it is unlikely that BP will be treated as generously. ^{xv}

2.3 Best Practice

Mr Meyrick is still suggesting Enfield is viable in one of the background papers to this Draft Strategy: *Sydney Ports Corporation's establishment of the Enfield Logistics Centre 18 kilometres inland from Port Botany, which will enable containers to be railed between the port and the intermodal facility and then trucked to distribution centres, thus reducing congestion generated by trucks on Sydney's inner metropolitan road.* Enfield/Strathfield are 'inner metropolitan roads', intermodals in Sydney should be at least 40km from the Port it is not viable to rail containers 18km and then truck out the contents from this already congested area. Meyrick's analysis shows a lack of on the ground knowledge. Reference has been made to double-stacking as a better practice option and yet to do this in Sydney using Port Botany would involve expensive modification of a significant amount of infrastructure (overhead bridges etc). Sydney Ports admit it is not on their agenda.



Part of the problem in planning has been the reluctance to fully cost impacts not just those labeled environmental but also impacts such as higher congestion and in the case particularly of heavy vehicles the increases in road accidents and degradation of roads^{xvi}. In response to such impacts governments are then asked for road/rail enhancements and even dedicated freight roads/tunnels. In the 17kg EIS for the Port Botany expansion the proponent argued that Port Kembla wasn't viable because of higher costs. It was argued that \$40 would be added to the handling of each container even though the CEO of Port Kembla in 2003 had demonstrated that

with some rail/road enhancements the distribution centres in Sydney's South West could be reached within a similar timeframe. NSW Treasury, which fully backed the Sydney Ports proposal (even though it was a shareholder in Kembla as well) never did proper cost comparisons. So now to get Port Botany workable \$billions have to be found to fund what were identified in the EIS as essential projects – M5 'amplification', F6, M4East etc. And the begging bowl has been thrust in the direction of the Federal government:

From Infrastructure Partnerships submission to Infrastructure Australia:
In Sydney, major road upgrades such as the M5 East Duplication, and an M4 East are urgently required to ensure road freight to and from Port Botany is not caught in avoidable urban congestion. Sydney also needs to accelerate grade separation of its passenger and freight rail networks if it is to meet its ambitious modal share target for rail. These developments must also be linked to the development of a strategic network of intermodal terminals.

In a coordination/auditing role and as a dispenser of Auslink money, the Federal government has some clout . It doesn't have to reward those who have ignored best practice principles. It doesn't have to bail them out and if it does, then it should be in a position to set the terms.



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2.4 Decision-Making

I took the time to read a number of submissions made to the Commission of Inquiry into Port Botany. One that impressed came from a traffic engineer writing on behalf of Sydney Buses. The author had left the public service by the time I read the submission but I tracked him down to a consulting firm. His first response

when I asked about the submission was to relate the planning of a port in ancient Greece. The roads, he said had been put in first – unlike Port Botany. On further investigation I found out that the original plan was to rail 90% of the containers from the port. When the M5East was opened in 2002 it was over capacity within a few months. There have been many problems since and as early as 2005 reference was made to ‘amplifying’ it.^{xviii} This begs the question who decided on 2 lanes instead of 3. On the whole the public servants, consultants and politicians I’ve spoken to about the port over the past 8 years have been aware of the shortcomings - but not the full extent because accurate data on how the Port Botany Supply operates is not available. At critical points there must have been opportunities to take bold decisions which would have been better for the long-term.

It was suggested to me by the David Richmond, Coordinator-General of NSW under Premier Iemma, that ‘governments can only follow trends’ but if there is to be the “Sea Change’ that the NTC and IA think is required then following trends will not do. A close examination of how decisions have been made to date is required with both good and bad decisions detailed and recommendations on how to avoid the bad decisions in the future eg. while apologists laud the proximity of Sydney Airport to the CBD it is absurd to suggest that this is ideal.

2.5 Addressing key problems

An example which is growing particularly in Sydney is how to deal with Empties:



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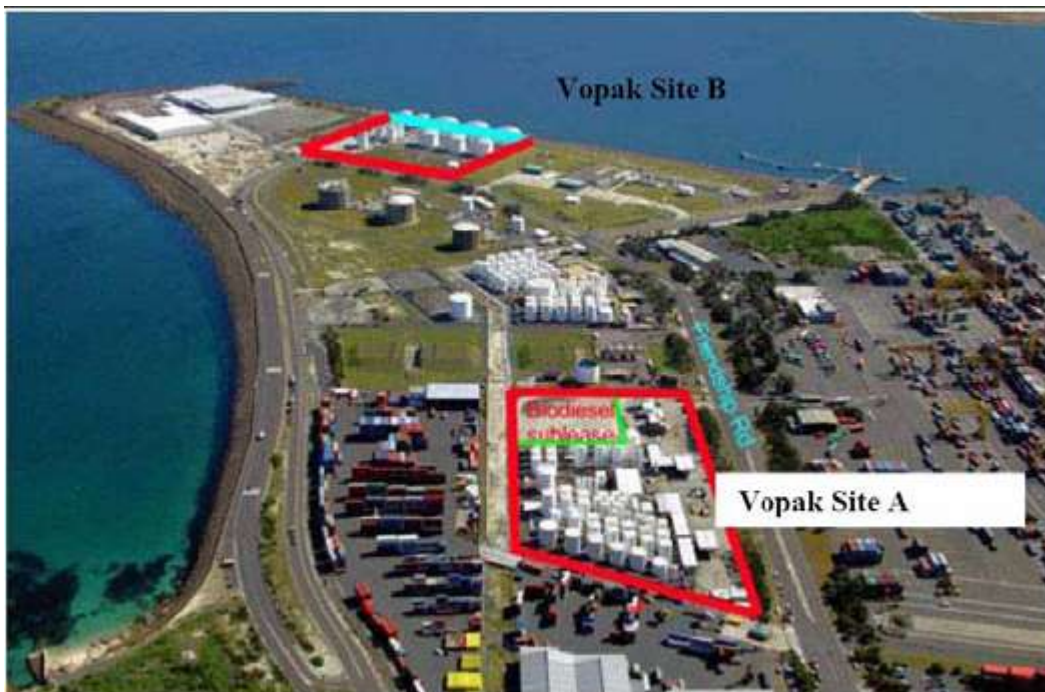
In the December 2007 issue of WME⁷, Richard Collins wrote^{xx}:

“More than a quarter of the nine billion kilometers in truck travel in Australia each year are empty, churning out 1.2-1.4kg of CO2 for every kilometer, no matter how productive.”

IPART in its draft report stated: “Because shipping lines often want quick access to empty containers for loading, most empty container parks are near the port.” The truth is most empty containers WILL NOT BE LOADED. The empties that are exported outnumber the full containers. Almost 1/3rd of the so called Freight Task at Port Botany concerns the repositioning of empty containers. This is a world wide phenomenon. In the 25/10/07 issue of Lloyd’s List, Donald Crighton wrote: *The UK’s south coast Port of Poole is exploiting a niche market for handling empty containers. Since July, the fast developing port – which this year increased profits by 80% to a record 1.85million pound(US\$3.8m) – has been providing a service for transporting empty containers. These are being shipped out in smaller feeder containerships to help alleviate congestion at larger hub ports such as Southampton and Felixstowe, and possibly in future, near continental ports including Amsterdam, Rotterdam and L’Havre. Since Clive Lane, who was responsible for creating Southampton’s container terminal, joined the port as port manager in February, he has developed an ambitious strategy to corner the market for handling empty containers, generally a problem for larger container terminals.....The empty containers come to Poole from all over the UK and are handled in a fraction of the time taken at the larger busier container terminals.*

2.6 Strategic Positioning of Other Industries

There needs to be planning for optimizing the use of terminals.

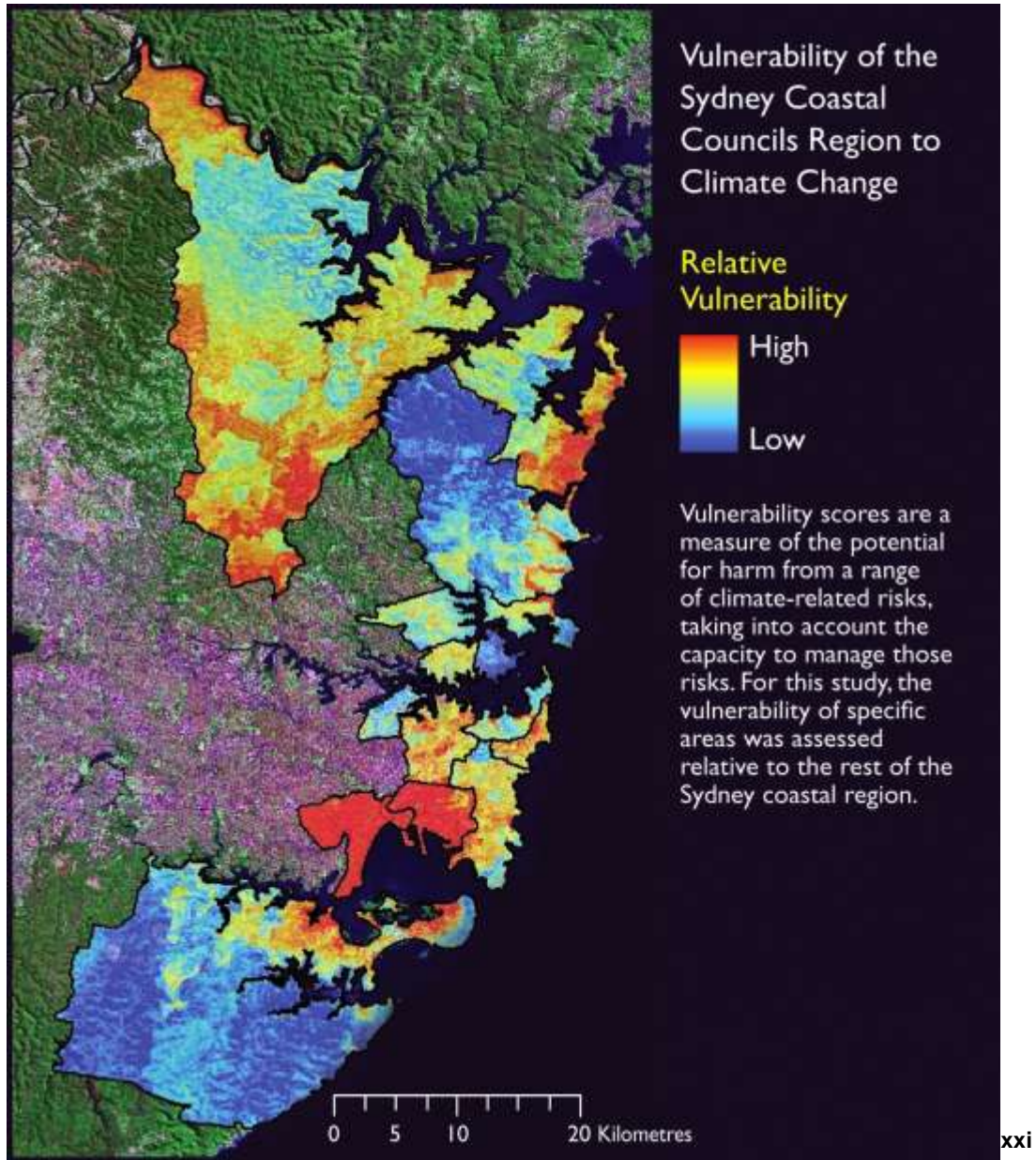


DP World for example may require additional siding/sidings as well as increasing lengths of the current sidings but the NSW government recently approved an additional Bulk Liquids Berth. VOPAK require further capacity for the import of palm oil from Malaysia. The greatest single threat to the Orangutan is the loss of

habitat and the most significant contributor - the conversion of rainforest into Palm Oil plantations. The project is touted as 'green' because of the word biodiesel but it is not green, it is not sustainable, it adds to the congestion at Port Botany and could be sited elsewhere. Where appropriate the raw products for biodiesel should be grown in Australia and processing plants sited nearby, similar to mining. Warehousing at a Port Terminal and within the precinct can also impede traffic flows as smaller vehicles compete for road space.

3.0 Strategic Placement of Ports for Long-term Security

3.1 Considering the Impact of the Environment on Critical Infrastructure Developments



In 2006 the Principal Scientist for URS , Matt Coetzee, who oversaw the Sydney Ports Corporation EIS for the expansion had this to say at a conference titled: **Critical Transportation Infrastructure in a Global Warming Future:Protecting NSW Seaports and their Hinterland,Working Paper 2,Report on Workshop Held 25th May, 2006, The University of Sydney** “Matt spoke specifically on the EIS process for the expansion of Port Botany seaport. He noted that for the purposes of the EIS, spatial and temporal boundaries were tightly defined around the physical

infrastructure and less on deeper connections with other structures. The alternatives considered are most often at the scale of the development (ie alternative structural solutions), and if other scales were examined other alternatives might come into play. This was certainly the case with assessing the alternative to develop Newcastle Port instead of augmenting Port Botany. This was rejected because of unsatisfactory transportation links between Newcastle and Sydney, given that the majority of container trade was sourced from or destined to the Sydney Basin. However from a climate change perspective, the Newcastle option might have more weight. Impacts that are well defined, quantified and certain are most easy to define mitigation measures for and are therefore the ones that are prioritised for attention. Consequently impacts of Climate Change are not usually considered in the EIS process. The EIS process focused on assessing the impact of a development on the environment, not that of the peculiarities of the environment on the development.”

The following has been extracted from the Australian Government Publication “About the House”, September 2008:

*In 2006, the Insurance Council of Australia assessed the number of Australian addresses within three kilometres of the coast and with baseline elevations below four, five and six metres. It estimated that more than 425,000 Australian addresses are below four metres above mean sea level and within three kilometres of the current shoreline. “The potential impacts on the Australian community arising from sea level rise when combined with the current exposures to inland flooding are therefore likely to be significant,” the Insurance Council states in its submission to the inquiry. “It is in this context that the general insurance industry considers that **urgent adaptive measures are required**. We submit that the significant implications for the Australian economy that flow from this hazard require significant consideration and treatment.”.....*

.....Professor Thom raises a series of pertinent questions in his submission, pointing to low-lying areas in Australia he believes could be at risk. “When will barrages be needed at Port Philip or Botany Bay? When will the very low runway at Sydney Airport need to be elevated?”

3.2 Location for Growth

In Melbourne the Port is located on a Bay 26 times the size of Botany Bay. It’s airport is located the other side of the city. In Brisbane the port is east of the city centre and major growth north-east and south-east. There are issues with rail to Port Brisbane to overcome. But the Queensland government has already identified Gladstone as a future container port with potential to become the northern terminus of the Inland Freight Line. By contrast in NSW the largest container port is a short bike ride from the CBD in a corridor experiencing high urban residential renewal (eg. Green Square) and it is so close to Australia’s largest airport that on the first day of the Commission of Inquiry into its expansion a caveat was put on the development by Air Services because ships docked at the proposed new terminal would interfere with airport flight operations.

There are aspirations for Sydney to become an Alpha global city. But major global cities don't develop freight hubs so close to their CBDs because of the opportunity costs. The major container port servicing London is at Felixstowe over 80km south of the city. Los Angeles' Port is over 40 km from the CBD and 20km to the airport.

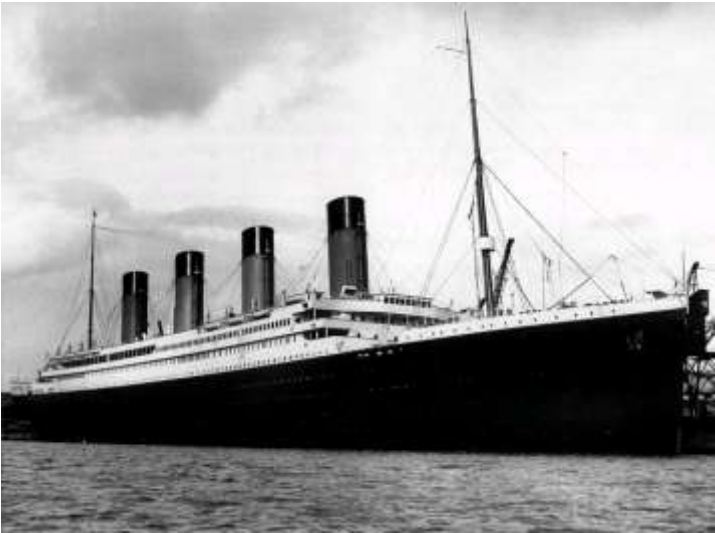


- Motorways
- Main roads
- Dedicated freight rail lines
- - - Shared passenger/freight rail lines
- - - Dedicated passenger rail lines
- - - Southern Sydney Freight Line (planned)
- ▲ Intermodal Terminals
- Industrial zones
- Port facilities
- ▲ Enfield Intermodal Logistics Centre (planned)
- ▲ Moorebank Intermodal Terminal (proposed)
- ▼ Port Botany development area

Top – Bottom: Heads of Botany Bay



Top – Bottom: Repositioned container post-peak oil; Burnley Tunnel; Titanic



APPENDIX 1

From: "Ziggi Lejins" <Ziggi.Lejins@mail.treasury.nsw.gov.au>
Sent: Tuesday, October 19, 2004 10:07 AM
To: <COI@coi.nsw.gov.au>; "Paula Poon" <Paula.Poon@coi.nsw.gov.au>
Cc: "Alf Cocco" <Alf.Cocco@mail.treasury.nsw.gov.au>
Subject: Port Botany

Please find attached for your information a copy of a letter which was sent yesterday evening.

Ziggi Lejins
Director
Transport & Ports
NSW Treasury
ph 02 9228 5685
fax. 9228 5748

Treasurer of New South Wales

Australia

Treasurer, Minister for State Development, Leader of the Government in the Legislative Council and Vice-President of the Executive Council.

Level 33, Governor Macquarie Tower, 1 Farrer Place, Sydney 2000. Telephone: (61 2) 9228 3535 Facsimile: (61 2) 9228 3476

Commissioner Kevin Cleland
Office of the Commissioners of Inquiry for Environment and Planning
Level 13
301 George Street
SYDNEY NSW 2000
Ziggi Lejins
9228 5685
142987

Dear Commissioner

I refer to your call for submissions dated 30 August 2004 on the supplementary report by Sydney Ports Corporation in response to the additional terms of reference announced by the Minister for Infrastructure Planning and Natural Resources in May 2004.

I note the new term specifically referred to potentially feasible alternatives (to Sydney Port's proposal) at Port Botany. However, in relation to this term, and the listed matters (i), (viii) and (xi) in the original terms of reference, I anticipate you will receive submissions that deal with the Government's announced Port Growth Plan. A key component of the Plan is selecting Newcastle as the long term site for container expansion once Port Botany reaches capacity. Port Kembla will also take over from Port Jackson as the principal port for handling general cargos. I attach a comprehensive explanation of the Plan provided by the Government to the Legislative Council Standing Committee on State Development Inquiry into Port Infrastructure in NSW. To be of assistance to the Commission I am happy to provide the following additional explanation of the processes followed in developing the Plan, and the underlying policy rationale.

As the Commission is aware, NSW has enjoyed, and looks likely to enjoy for a sustained period, robust economic growth which in turn will fuel ongoing growth in containerised trade. The

growth in container trade is also affected by higher levels of international trade. Container growth in NSW may be restricted by the capability of existing infrastructure, including port infrastructure. This in turn could significantly increase transport and handling costs for NSW businesses and increase the cost of doing business, and ultimately constrain growth of the NSW economy.

The Government was presented with several potential alternatives to deal with this challenge. This included new container ports at Newcastle and Port Kembla and expansion of the existing port at Port Botany. In addition, the Government was also confronted with the historic decline of general cargo and container shipping in Port Jackson.

The Government therefore developed an over-arching framework policy. This will provide strategic guidance to Government agencies, and the private sector, for the development of major long term transport infrastructure and for urban planning. A key requirement is that the framework is sufficiently flexible to deal with potentially widely divergent future scenarios for trade growth and transport productivity (including, but not limited to, port productivity). It was in this context a detailed and strategic evaluation of the alternatives was undertaken. Matters considered included:

- Future growth projections for container trades and for stevedoring productivity;
- The cost of port, road and rail infrastructure;
- The transport cost from both a customer's and the Government's perspective (as providers of the road and rail network);
- The environmental impact (particularly of transport); and
- The impact on employment and regional development.

The conclusions which were drawn from the evaluation, undertaken in 2003, were broadly as follows:

- The current container capacity at Port Botany (roughly up to 2 million twenty foot containers ("teus") per annum) could be exceeded in the next eight to ten years. Growth could continue at an average exceeding 5% pa, effectively doubling demand every 10 or so years. This could mean that in around 20 years time container traffic could be around 4 million teus per annum;
- The incremental throughput opportunities presented by all three NSW ports could be required to satisfy this demand (and certainly will be required to meet demand beyond this time). Significant new port and transport capacity will also be required to meet the expanded requirements of the coal industry in the Hunter, and possibly the Illawarra, and to accommodate the shift of trades, including general cargos and motor vehicles, away from Port Jackson (and the growth in those trades);
- There is considerable uncertainty concerning each of the future potential container port developments and the restrictions which may be placed upon them which may limit their achieving a theoretical capacity; and
- Similarly, expectations about the future productivity of current and new container facilities are not certain and depend upon a series of assumptions about future port and

off port operations and the financial case for future investment by private stevedores.

The Government therefore decided not to prematurely close off any option for future container expansion at any port. The key issue was not where increased container capacity will be provided but in what order and in what timeframe it should be brought on line.

Major elements of the Plan subsequently developed included:

- The identification of Newcastle as the next major container Port following the exhaustion of the capacity available at Port Botany and the reservation of land for that purpose (at the former BHP site).
- The continuation of a current proposal to develop a container terminal at Newcastle, leveraging off local and some specialist trades. This development could utilise existing transport and other infrastructure while facilitating a smoother transition to a much larger container shipping chain in the Hunter.
- An ongoing shipping emphasis in the Hunter on bulk trades, especially coal and grain. Export coal, where Newcastle is already one of the world's largest export ports, continues to make increasing calls on both rail and potential port infrastructure. The economy of the Hunter, and the State, remains crucially dependent on meeting this trade which may exceed 100 million tonnes per annum in the near future;
- Proceeding with the Commission of Inquiry to investigate the proposed Port Botany expansion. The long lead times required to deliver the an expansion, combined with a level of uncertainty about future growth and productivity rates meant, responsibly, it should be bought forward as soon as practicable; and
- The current available port development capacity at Port Kembla will be dedicated to meeting the requirements of the trades which currently utilise Port Jackson (including containers, general cargos and motor vehicles as leases expire).

The Government considered several alternative proposals to manage container growth (given a notional expansion target of 1 million teus as a benchmark). These included:

- **Newcastle solely** - The estimated total cost of expanding Newcastle solely (including road and rail costs) was materially higher than for the proposed Port Botany expansion and had higher transport costs both in environmental and customer terms. Lower port development costs (given the availability of a site) were more than offset by the significantly higher cost of road and rail upgrades. Thus, subject to the findings of the Commission, an expansion of Port Botany should occur before a similar capacity expansion at Newcastle.
- **Dispersed development** - An alternative, of dispersing the expansion target between the three ports, and leveraging as much as possible off existing latent capacity (both in port and transport infrastructure) was also considered. However, this would conflict with the need to accommodate ex Port Jackson trades at Port Kembla and the current demands of the coal industry, in both Newcastle (and possibly Port Kembla) for increased port and rail access and does not have any cost advantages.

There were also considered to be significantly different risks associated with the dispersed options (and of Newcastle alone) compared to expanding Port Botany:

- Port Botany is currently a commercially viable container port and is expecting throughput, and productivity, to increase strongly. It could be expected to enjoy the economies of scale and scope associated with extending an existing capital intensive facility. It avoids (or defers) the potentially significant ramp up penalties in attracting business to a new facility and achieving an efficient scale of operations; and
- The strong preference of the shipping and stevedoring industries would be to maintain existing logistic arrangements at Port Botany (other than trades locally sourced) until Port Botany's capacity were reached. There is therefore uncertainty as to whether Port Kembla or Newcastle could grow quickly to become major container ports.

A major consideration for Government in setting the Ports Growth Plan was the promotion of a competitive shipping and logistics industry in New South Wales, which assists a strong and growing state economy and job creation by holding prices down.

The Government believes the growth in container capacity should be delivered in a way that advances this objective. In particular, the Government is keen to provide opportunities for additional competition in stevedoring and the logistics chain generally. This interest does not necessarily align with the desires of existing industry incumbents.

The Government supports a terminal design at Port Botany that facilitates the entry of a new stevedore and/or an increase in the level of competition between existing market participants. In this regard the Government is mindful that stevedoring lease arrangements may vary considerably over the next decades. Indeed, the level of growth forecast will provide significant opportunities, and incentives, for new entrants.

A new entrant at the same location as its competitors may be more viable than a start up at a regional port, particularly in the short term. For example, a new entrant at Port Botany could directly pitch for existing Sydney based customers with local logistic infrastructure (transport, warehousing and distribution).

I trust this information assists.

Yours sincerely
Michael Egan
Treasurer

ⁱ Truck Approaching a City, Jeffrey Smart 1973, Art Gallery of NSW

ⁱⁱ Declaration of Interest: My interest in a National Ports Strategy began in 2001 with the announcement of the expansion of Port Botany. I was active in my local community in bushcare and water quality testing and also attended meetings held to scrutinise legacy contamination from ICI/Orica at Botany. In addition I was a founding member of the Botany Bay and Catchment Alliance(BBACA), an umbrella group of environmental NGOs located in the Botany Bay catchment. BBACA is the peak Community NGO representing community and environmental interests in Botany Bay and throughout the catchment. BBACA was formed as part of the Botany Bay Plan which was an SSROC(Southern Sydney Region Organisation of Councils) and DEH (Department of Environment and Heritage) funded project. To date there have been four major outcomes of that Plan: the report and Plan of Action on Botany Bay and catchment titled *The Tide is Turning*; the formation of a peak community alliance – BBACA; the Botany Bay Trail –The Great Kai’mia Way; and a Botany Bay Strategy for the study and management of Botany Bay - this embraced a diverse range of stakeholders from Industry, Universities, Government and Community. Although promised for release in 2006, the Botany Bay Strategy has not been finalised but there is a document available titled *Towards a Strategy for Botany Bay*. BBACA has been represented at and/or made submissions to the Review of Enfield as an Inland Port (undertaken by Mr M. Morris);The NSW State Development Committee Inquiry into Ports in NSW; Commission of Inquiry into the Port Botany Expansion(Kevin Cleland, Commissioner); Independent Hearing into Enfield Intermodal Terminal; Upper House Inquiry into Health Impacts of Air Pollution in the Sydney Basin; Review of Freight Infrastructure Board report *Railing Port Botany Containers* (Mr L.Brereton), IPART Review of Interface between Land Transport Industries and the Stevedores at Port Botany. As part of research into the Port Botany expansion, BBACA members travelled to Port Newcastle and the Hunter Economic Zone, Port Kembla, Parkes, Port Brisbane, and Gladstone and engaged in dialogue with logistics and infrastructure experts in Australia as well as Europe. I am also a community representative on the Port Botany Neighbourhood Consultative Committee.

ⁱⁱⁱ On the final day of the Commission of Inquiry into the Expansion of Port Botany (2005) the then CEO of Sydney Ports Greg Martin displayed a slide showing the queue of ships outside Dalrymple. It was intended to impress upon the Commissioners the importance of the Sydney Ports claim.

^{iv} Sydney Ports for instance is not concerned about the prosperity of NSW let alone the prosperity of Australia. SPC executives often state that SPC is in competition with other ports – particularly Melbourne and Brisbane but also Port Kembla and Newcastle. For instance, it is not interested in grain exporters in Northern NSW and the problems they have faced with rail closures. It is not interested in unemployment in regional NSW and the social costs of commuting into Sydney. SPC is focused like any other corporation on maximizing its market share and profit. Nevertheless the figures that SPC produces are used for planning by the NSW government. When I was researching exports and imports from various regions of NSW I contacted the Department of State and Regional Development and was told to contact SPC. How could they input to the planning for NSW if they didn’t hold such basic information. When I met with Mr Eyers and Dr Richmond (then Coordinator General of NSW) I mentioned this and both laughed and Mr Eyers said they(State and Regional Development) would be the last people to contact.

^v Steve Lewis,*National correspondent | The Australian Business August 11, 2007*

High-level business support is getting behind the \$3 billion-plus inland rail project, with leading retail and transport firms predicting it will slash freight costs and stem grocery price rises. Federal Labor has so far backed the Government over the rail scheme. But the NSW Government has emerged as a critic, with the state’s Transport Minister John Watkins arguing it would be a waste of money unless it ran through Sydney. Retail giant Woolworths has told the Howard Government the ambitious project must be a “top priority” for the country’s future — and a way to reverse its decision to abandon transporting its goods by rail. Paul Little, managing director of transport giant Toll Holdings, has also backed the rail plan, saying it had a “huge amount of potential” to drive down freight prices.Woolworths and its main retail rival, Coles, challenge the NSW view, both endorsing the inland rail link as a means of improving freight times. Mr Luscombe, who was in Canberra on Thursday for talks with Kevin Rudd and other MPs over grocery prices, said the retailer had recently been forced to ditch rail transport due to its “unreliability”. “This has not been an easy decision for our company but it was one which had become unavoidable

when considering the long-term cost impacts on our transporting our goods to stores,” he wrote in his letter to Mr Vaile. In an indictment of Australia’s rail systems, Mr Luscombe argued Woolworths could no longer rely on “inefficiencies and delays”, even for slow-moving grocery lines. This has resulted in Woolworths’ transport contractors having to source “at least 100 extra trucks in the short-term to manage our daily operations”.

I attended Country week mid 2007 and had the opportunity to talk to the Mayor of Moree about the Inland Rail. He commented that the States were too parochial about their capital city ports and then went on to talk about Darwin and Gladstone. I also spoke to Simon Crean (Shadow Minister for Regional Affairs) and he said the inland rail had federal bi-partisan support. He suggested I talk to Martin Ferguson (Shadow Minister for Transport). I did and the message was the same but expressed more emphatically. The following week I was at the “New Ideas for NSW Planning Forum” moderated by Quentin Dempster. The speakers included Frank Sartor, Genia McCaffery, Geoff Gallop, Ken Morrison, Sam Haddad. I attended a workshop, along with 200 others, on Strategic Planning and was at a table discussing population growth and sustainability. Our table included the Deputy Mayor of Parkes and a Council staff member. We focused on decentralisation strategies. The moderator for our session was Gail Connolly, a senior executive in the Department of Planning. She chose a number of tables to report on their discussions and gave feedback after each report. The table that reported on Population Growth and Sustainability focused on construction projects in Sydney. The representative from that table worked for Mirvac. The Parkes person sitting next to me was muttering ‘typical Sydneycentric’. At that point I put up my hand to comment and Gail looked away. So I called out ‘those comments were Sydneycentric’. Without missing a beat Gail crisply replied ‘what do you expect at a planning forum held in Sydney’.

^{vi} This article by Martin Feil, author of “The Failure of Free Market Economics”, comes courtesy of the BRISBANE BUSINESS NEWS May 2010. Mr Feil represented a coalition of transport operators at the IPART Inquiry.

.....Everyone down south knows that Queensland has a natural logistics advantage in imports and exports, that it is closer to the rest of the world. But it does not maximise its advantage and hasn’t been able to cement its position, often because ‘who you know’ type scenarios have led to contracts going to Sydney or Melbourne ports when they would have gone to Brisbane - if economic efficiency were the only factor.....Queensland should be the point of entry and exit from the east coast of Australia, because the logistics industry is, in 2010, all about the duration of the supply chain. Extra days cost money and the major importers are heavily focused on cost savings in the supply chain. The politics, in Sydney particularly, are all about congestion in the face of inner city roads and housing, as well as a mirage of intermodal rail hubs that are at least 10 years away. Shipping along the coast from Brisbane to Sydney takes two days, with a day at least in Botany Bay and another two further days to the Port of Melbourne, which can add five days to a voyage and another four to return to home port. There is no common sense in the pre-eminence of Melbourne as the largest container port in Australia. The stevedores are more efficient there and the city has really managed to sell its port to exporters in contested regional areas. Queensland needs to create a major intermodal east coast rail and a storage and repackaging facility close to the Port of Brisbane. There has to be an open access, shared services rail connection at the terminals which rails all containers straight out of the port and connects to rail services down the east coast. The intermodal terminal can’t be owned by the stevedores or a conglomerate of shipping companies. The Federal Government’s Auslink policy has languished for the past eight years, with the central government argument that rail had to increase its land transport market share from 20 per cent to 40 per cent by 2020. Billions of dollars were spent improving the speed of the rail link from Brisbane to Sydney but did nothing about the other major problems moving containers from ship to land and from the port to the importers’ warehouses..... Don’t sell the farm Anna Bligh. Make sure that the Port of Brisbane becomes the heart of intermodal movements of containers in Australia. You have the natural advantage now, so all you need is the will to make it happen.

^{vii} This was .3% below Treasury projections

^{viii} There are occasional media releases about Newcastle going ahead but the recent demise of the HEZ indicates otherwise.

^{ix} It was notable that the CEO of Port Kembla made a submission to Infrastructure Australia but not the NSW Treasury or CEOs from Newcastle and Sydney Ports.

^x Truck turning on Bunnerong Road at entry to Botany Cemetery (largest in Southern Sydney), located 4km from Terminal 2. Truck queues impact amenity, cause damage to roads and compromise safety.

^{xi} Meyrick and Associates describe themselves as economics, policy and management consultants specialising in infrastructure industries, in particular, the transport, energy, telecommunications, postal and water sectors. The firm was established in 1991 to provide independent advice to government agencies and state owned and private corporations in Australia, Asia-Pacific and beyond, focusing on the maritime transport sector. (www.meyrick.com.au) They have undertaken transport and intermodal studies which include aspects of the Port Botany expansion. I read one such report and responded to Mr Steve Meyrick:

Dear Mr Meyrick,

I have been reading your [National Intermodal Terminal Study undertaken for DOTARS](#). I was particularly interested to read your comments on the Port Botany (footprint) expansion. You say the Port Botany development also demonstrates the sort of commitment required to impose efficient transport on a community which may come to enjoy its benefits, but also holds other values and privileges dear. I would be interested to know what particular privileges you think citizens living near Port Botany enjoy. Would that include the privilege of having 62 noxious substances in their air (www.npi.gov.au) while most Sydney suburbs endure around 26 - and in much lower concentrations. Or perhaps you include the privilege of enduring the worst chemical spill in Australia and wondering whether the bore water they can no longer use has already affected their families. Would the values include a concern for the biodiversity of Botany Bay in an area where Sir Joseph Banks recorded hauling stingrays over 200lb in weight. You have referred to reports issued by Sydney Ports Corporation but unfortunately you neglected to include in your research the many documents that were presented to the Port Botany Expansion Commission of Inquiry. I can assure you, Mr Meyrick that the community knows nothing of the jetties, nor the extra car park/s and boat ramp/s. The 'range' of environmental protection plans do not exist. We have just recorded one of the most successful breeding seasons for one of NSW's most endangered birds. The breeding site was right next to the Patrick/Toll terminal but under the so called Environmental 'Enhancement' Plan there are no plans to see this particular species of bird accommodated. We will be losing sea grasses and the 'new' bird habitat will most likely become a gross pollutant trap. It is so likely that an 'offsets' site is already being spoken of. The beach that will be lost is the closest available for one of the largest urban consolidation projects in Australia - Green Square. The jetty that is lost and not replaced is the only one on the northside of Botany Bay. You mention Port Brisbane but the Port there does not impact the local residents of Manly and Wynnum like Port Botany impacts residents in the municipalities of Randwick and Botany Bay. It should also be noted that Brisbane itself does not impact the operations of the Port as Sydney impacts Port Botany. Sydney is already choking this Port and there have been no independent studies to show how the congestion will diminish with expansion. It is far cheaper for northern NSW businesses to work through Port Brisbane rather than Port Botany. Peter Beattie has already signalled a move to develop Gladstone as Queensland's next container port and has committed to the rail infrastructure to link it to Brisbane, Toowoomba and the southern states.

You do say that IMTs have the potential for greatest positive impact in regional areas particularly if a 'value-adding' model is adopted. This is precisely what has been argued by proponents for the MPT in Newcastle. You also mention Government assistance for regional IMTs. When the NSW ports were corporatised, Sydney Ports Corporation acquired the greater share of the State's port assets. SPC have since enjoyed significant growth and have been in a position to use their public funds to acquire sites such as Enfield and the Cooks River Container Park. It is questionable whether a state corporation should be running an empty container park and the projected returns for the Enfield site suggest cross subsidies. SPC will embark on a massive expansion project that in 2002 was costed at \$240million yet by 2004 had increased to \$560million. It is highly probable that the final cost will be over \$1billion in addition to the \$billions that will be poured into supporting infrastructure, including the expansion of the M5, construction of the F6 and M4 east and ramps to the M1. Reports such as yours feed into the decision-making process and it appears you have placed a positive face on the Port Botany footprint expansion. Nowhere have you explored externalities relative to impacts on communities and cost-shifting to other areas of state and municipal budgets. You have not acknowledged the fact that enormous injections of capital will be required to make port and landside operations workable throughout already congested areas of southern Sydney. And of course 'sustainability' and 'environmental justice' make no appearance. I recognise that your approach has been the normal way to appraise such proposals but in a carbon-constrained, post peak oil environment where we recognise the importance of maintaining healthy communities this 'normal way' has to change and make way for a 'sustainable' way forward. When the expansion of the Port Botany footprint was approved there was to be a cap of 3.2million TEUs by 2025. In the terms of reference for IPART, set in mid-February 2007, the figure had moved to 3.9million by 2025. SPC's largest competitor, Melbourne Ports are talking 7million TEU by 2035 (The Age, 24/3/07) Could you answer just two questions. If Newcastle is to be the State's next major container port (NSW PORTS GROWTH PLAN) why can't this move take place over the next 5 years using money committed for increasing the Port Botany footprint. How can NSW compete with Queensland if the State Government delays the expansion north and fails to proactively support 'value-adding' IMT developments along the inland rail route. With regards, Lynda Newnam, March 2007

^{xii} At the 'Great Freight Task' (House of Reps) hearing in Sydney 21/11/05, Mr Hirst, the Executive Director of the Association of Australian Ports and Marine Authorities(AAPMA) stated: *I think the damage has been done, so to speak. Once land has become urbanized it is not going to be returned to industrial use. You have very vocal people sitting there and saying: 'There is noise, there is dust. Do something about it.'* So, effectively, ports in urban areas are being neutralized by the effect of urbanization and you have to look at other areas where you can expand the port. Luckily in Botany, for example, there is really no urbanization around that area. The effect of urbanization is one of the reasons why we have seen the demise of the Balmain wharves in Sydney.....

Mr Hirst is wrong when he comments on Botany and the rest of the suburbs impacted and the volume of petitions and submissions to the Commission of Inquiry testify to the fact that there are externalities which are not being addressed.

^{xiii} **Privatise channel deepening environmental risks**, The Age, August 12, 2005 *The Port Phillip Bay channel deepening promises large economic gains to shipping companies, due to lower transport costs. On the other hand, there is the possibility of severe damage to bay ecosystems, which would impose major costs on people who use the bay for recreation and industries — such as tourism — that depend on the ecosystems. Because of the complexity of bay ecosystems, the nature and size of the environmental costs are extremely difficult to predict. Given the inevitable uncertainty about the commercial benefits and environmental costs of channel deepening, how can the State Government best balance the two? By ensuring that the primary beneficiaries of the project bear the risks of any environmental damage. If the Port of Melbourne Corporation, directly, and shipping companies, indirectly, via shipping charges, bear the costs of environmental damage, they will have strong incentives to carefully assess possible environmental damage, and to research and act to implement methods of avoiding major damage. This is less likely to be the case if future environmental damage costs are borne by others, in particular Victorian taxpayers, recreational users and bay-dependent industries. Having the beneficiaries of channel deepening research and bear the costs of environmental risks will also reduce the monitoring and policing burden placed on the already*

stretched EPA. Requiring the beneficiaries of channel deepening to bear the environmental risks would, in effect, require them to take out insurance against consequent environmental damage. Given the unpredictability of ecosystem changes, no such insurance is commercially available. However, the required risk assignment can be achieved by requiring the Port of Melbourne to post an environmental performance bond, similar to the bonds required of mining companies to guarantee that mine sites will be restored when mining ceases. The size of the bond might be based, for example, on the cost of artificial denitrification of the bay in the event that dredging leads to major algal blooms. The proposed environmental insurance would be appropriately funded by increasing container charges. Shipping companies would then pass these on to Victorian exporters and importers, and thereby to consumers and producers. This privatisation of the environmental risks would be both more efficient and more equitable than expecting Victorian taxpayers to bear the environmental risks involved in the project.

Ian Wills, associate professor and lecturer in environmental economics, department of economics, Monash University

^{xiv} *"While we were employd in this walk the people hawld the Seine upon a sandy beach(Botany) and caught a great plenty of small fish. On our return to the ship we found also that our 2nd lieutenant who had gone out striking had met with great success: he had obsrvd that the large sting rays of which there are abundance in the bay followd the flowing tide into very shallow water; he therefore took the opportunity of flood and struck several in not more than 2 or 3 feet water(between the 3rd runway and port); one that was larger than the rest weigh'd when his gutts were taken out 239 pounds. Sir Joseph Banks, 4th May 1770*

^{xv} ICI(now Orica) was responsible for the biggest chemical spill in Australia into the Botany Aquifer. Plumes from that spill have already entered Botany Bay where Sydney Ports has recently dredged. Orica is paying to cleanup the contamination – the cleanup is estimated to take hundreds of years – but the fine for the spill issues in 2003 was less than \$1000.

^{xvi} Philip Laird from University of Wollongong has argued for more accurate costing.

^{xvii} Times change. Vancouver now the premier container port and Halifax diminishing in importance. The future in Australia is in Queensland.

^{xviii} In 'Railing Port Botany Containers Report'

^{xix} Anzac Day 2004: MSC Fabienne, sails past Cook's landing place loaded with more than 5000 EMPTY containers.

^{xx} WME Environment Business Magazine, Volume 18 Number 11: pages 22-23 Cover Story

^{xxi} Mapping Sydney's vulnerability to climate change CSIRO Media Release – 29 April 2008