

2014-2015 Assessment Brief

Recommended rating:	Threshold
Current rating on the Infrastructure Priority List:	Real Potential
Initiative Name:	Moorebank Intermodal Terminal
Geography:	Sydney, NSW
Proponent:	Moorebank Intermodal Company Limited
Project description:	

The Moorebank Intermodal Terminal is an important part of the Australian Government's commitment to increase national and state productivity by improving efficiency and freight throughput at Port Botany, and subsequently across Australia. It will enable more containerised freight to be moved by rail, instead of road, both locally and nationally.

The project involves the private sector financing, building and operating:

- an import/export terminal (IMEX) with a direct freight rail link to Port Botany, bypassing a large part of Sydney's constrained road network; an interstate freight terminal, connecting with the national freight rail network; and
- associated warehousing that drives container throughput through the terminals.

The project also includes Commonwealth financial support.

The project was initially submitted to IA by the Australian and NSW Governments and was placed at Threshold on the Infrastructure Priority List in 2010. The Australian Government committed to funding the project in April 2012 and as a result it was removed from the priority list in June 2012.

Moorebank Intermodal Company Limited (MIC) sought reinclusion on the Infrastructure Priority List in February 2014 in order to access the Infrastructure Tax Incentive and to highlight the improvements required to local arterial roads to support the terminal.

At its May 2014 meeting, the Infrastructure Australia Council agreed to defer advancing the project beyond Real Potential until negotiations with the shortlisted developer/operator, the Sydney Intermodal Terminal Alliance (SIMTA), a joint venture between Qube Holdings Limited and Aurizon Holdings Limited, were further advanced.

At the end of November 2014, MIC concluded its negotiations with SIMTA and recommended the transaction to its shareholder Ministers for approval. MIC is hoping to receive Commonwealth approval in early 2015 and reach contractual close shortly after. Financial close (which is subject to a set of conditions precedent) is expected to occur in July 2015.

The analysis in this paper relies on information provided to Infrastructure Australia through the formal submissions (including MIC's *Transaction Summary* of November 2014) as well as through meetings with company representatives and financial information provided following the November 2014 agreement with SIMTA.

The project outlined in the *Transaction Summary* involves the development of an intermodal freight precinct in Moorebank in Sydney's south west on 240 ha of developable land on the Commonwealth-owned School of Military Engineering site and SIMTA's neighbouring site. The whole-of-precinct development is subject to an agreed master plan, comprising:

- an IMEX with an ultimate capacity of 1.05 million TEU p.a.;
- an interstate terminal with an ultimate capacity of 0.5 million TEU p.a.;
- up to approximately 850,000 sqm of associated warehousing; and
- ancillary facilities to support the freight precinct.

Under the terms of the transaction negotiated with SIMTA, the IMEX is expected to be operational by

the end of 2017, with an initial capacity of 250,000 TEU p.a., and the interstate terminal is expected to be operational by the end of 2019, also with an initial capacity of 250,000 TEU p.a. Under the commercial transaction, capacity expansion beyond this first stage occurs on the basis of agreed demand-driven capacity expansion triggers (rather than fixed dates).

The IMEX throughput capacity of the current proposal is 1.05 million TEU per year, revised from the 1.2 million used in the then Department of Finance & Deregulation's 2012 Business Case.

Objective:

The objectives of the project are: to improve freight productivity, in export and import of containers through Port Botany and nationally via the interstate freight network; to alleviate road congestion around Port Botany through increasing the share of freight moved into and out of Port Botany via rail; and to provide both import/export capacity and interstate capacity on an 'open access' basis.

Problem:

The problems the project is addressing are:

- the limited capacity for expansion of road-based freight access into and out of Port Botany, in the face of a rapid historical and projected expansion of container throughput;
- current and projected urban congestion impacts from the use of road for freight transport in and around Port Botany. Road freight is a cause of congestion. Lower road freight productivity is also a consequence of congestion.
- limited open access IMEX terminal capacity in Sydney to service at Port Botany; and
- the lack of interstate freight terminal capacity that is efficient, well connected to the rail freight network and available to all rail operators and freight transport companies.

Solution:

The proposed solution is an intermodal terminal at Moorebank in south west Sydney. This terminal can access the M5 and the M7 motorways, is immediately adjacent to the Southern Sydney Rail Freight Line and the site is of sufficient scale to provide for both the terminals and the on-site warehousing that is integral to driving throughput through the terminal.

The private sector will finance, construct and operate the terminal. MIC's role will be limited to:

- funding the works to remediate and provide the SME site in a state suitable for industrial use;
- funding and owning the rail connection from the SSFL to the terminals;
- obtaining a concept planning approval for the development on the Commonwealth-owned land; and
- monitoring and enforcing open access requirements on the terminal developer/operator.

The School of Military Engineering site will be accessible by July 2015, after Defence has relocated from the site. Subject to negotiations with Defence, the SIMTA site is also expected to be accessible from July 2015. Initial operation of the terminal is anticipated to commence at the end of 2017.

Proponent's capital cost estimate (\$M, real, \$2015:

\$1,505 million (2015) comprising:

- ~\$340 million for terminals
- ~\$265 million for shared precinct infrastructure
- ~\$645 million for warehousing

<p>Proponent's capital cost estimate (\$M, nominal):</p>	<p>\$1,767 million comprising:</p> <ul style="list-style-type: none"> • ~\$395 million for terminals • ~\$300 million for shared precinct infrastructure • ~\$790 million for warehousing
<p>Contribution sought by Proponent including requests for project development funding (\$M nominal):</p>	<p>The proponent is not seeking additional Commonwealth funding support beyond the previous Australian Government funding commitment.</p>
<p>Project timing Start/Completion by Proponent (month/year):</p>	<p>Mid-2015 to late-2017 for import export terminal, 2018 to late-2019 commencement of operations for the interstate terminal</p>
<p>BCR stated by proponent:</p>	<p>1.72:1 (MPO's Business Case estimate 2012; MIC is updating the cost benefit analysis)</p>

Strategic alignment summary

Alignment with Infrastructure Australia's strategic priorities

Alignment with Infrastructure Australia's seven strategic priorities is a key step to a project demonstrating its strategic merits. The objectives of the project are aligned with Infrastructure Australia's strategic priorities of 'increasing Australia's productivity' and 'expanding Australia's productive capacity'.

Alignment with state strategies

Infrastructure Australia also seeks to understand the extent to which projects align with the strategic plans of the jurisdiction in which they will be developed.

The project is aligned to NSW Government objectives, as set out in NSW Freights and Ports Strategy in particular. The NSW Government is aiming to increase the share of containers on rail to and from Port Botany from a current 14% to 28%. The NSW Long Term Transport Masterplan sets out developing intermodal freight facilities, including Enfield and Moorebank, as a short to medium term priority.

Problem assessment summary

The problems that have led to the development of the Moorebank Intermodal Terminal option are:

- high growth rates for import and export of containers through Port Botany. Freight volumes through Port Botany have increased by 7% per year for the past five years and are anticipated to increase by 3 to 4% per year for the next 25 years¹. These growth rates lead to the problems as discussed below;
- insufficient intermodal capacity (both IMEX and interstate) within Sydney – the existing terminals are generally small and poorly located, with limited or no ability to expand;
- general road congestion in and around Port Botany and Sydney Airport and the attendant reduction in road freight productivity. Speeds on these roads in peak times are one fifth to one third of the speed limit in some parts, and congestion and its economic impacts are amongst the worst in Australia. Congestion is a problem throughout the day, rather than just at peak times, with the major road links congested for over half the day². There is also congestion on associated arterial and minor roads.
- road freight congestion impacts in and around Port Botany. For example, the M5 East carries more than 8000 trucks per day, and truck traffic at Port Botany is estimated to increase by 400% by 2029/30 if the current rail mode share is not increased³. The major road system around Port Botany is under heavy strain, although only a part of this reflects road freight⁴. Heavy vehicle traffic can have significant congestion impacts on minor roads and also an over-proportionate impact on major roads because of heavy vehicle acceleration limitations
- a declining share of freight volumes transported via rail from Port Botany – which is exacerbating the above problems,
- an increasing share of Sydney's industrial activity occurring in west and south-west Sydney, which is outside the areas best served by the existing smaller intermodal freight terminals.

¹ Moorebank Intermodal Company, Demand Refresh Study, 13 June 2014

² Ernst and Young 2011, Port Botany Sydney Airport Precinct Scoping Study, prepared for Infrastructure NSW, December, p. 9, 16.

³ NSW Government 2011, Infrastructure Australia submission — Port Botany and Sydney Airport Transport Improvement Program.

⁴ Ernst and Young 2011, Port Botany Sydney Airport Precinct Scoping Study, prepared for Infrastructure NSW, December, p. 16.

Solution assessment summary

Broad options that could address the problems outlined above include investment in road infrastructure, shifting throughput from Port Botany to other locations such as Port of Newcastle or Port Kembla, larger loads for heavy vehicles and shifting freight onto the rail system. A number of these options are being pursued by government simultaneously:

- WestConnex (anticipated completion by 2020 for M5 East component) and the widening of the M5 West (completed in 2014) will expand road capacity and alleviate congestion impacts to some extent. The NSW Government is also considering specific “pinch point” projects in and around Port Botany.⁵
- An intermodal terminal at Enfield, 18 kilometres west of Port Botany, with a capacity of 300,000 TEU per annum⁶.

Our analysis shows that an intermodal terminal could be economically viable in conjunction with the above options, particularly given growth potential of Port Botany, the long timeframes for alternatives such as WestConnex and the likely continued congestion in the immediate Port Botany area.

The use of alternative ports to Port Botany is not likely to be commercially viable because of the greater distances to the Sydney metropolitan destinations and economies of scale in stevedoring.⁷ Even if Port Kembla were to be used for container import/export (either instead of or in addition to Port Botany), additional intermodal capacity would be needed in Sydney, given that over 80% of Port Botany imports are Sydney-bound.

The Moorebank site was chosen as no other potential terminal site in the Sydney basin has the same locational advantages, size, short-term availability, existing road and rail connections and ability to meet long-term industry needs at this time.⁸ Furthermore, south-west Sydney is where much of the freight is destined.

Within the general Moorebank area, Infrastructure Australia previously assessed nine possible sites for an intermodal terminal. It recommended the site proposed by SIMTA plus a small adjacent parcel of Commonwealth land.⁹ It recommended that this 83 Hectare site could subsequently be expanded onto Commonwealth land if required. The site is currently leased to Department of Defence and owned by SIMTA.

The current proposal outlined in the *Transaction Summary* is a whole-of-precinct development on the larger adjacent Commonwealth owned site combined with the SIMTA site.¹⁰ The *Transaction Summary* indicates that the project is likely to generate a rate of return for the Commonwealth through ground rent on the developable part of the SME site, and a rail access charge (calculated on the capital cost of the rail works, not its usage volumes).

⁵ NSW Government 2011, Infrastructure Australia submission — Port Botany and Sydney Airport Transport Improvement Program

⁶ <http://www.hutchisonports.com.au/enfield-intermodal-terminal>

⁷ Infrastructure Coordinator 2009, Development of an Intermodal Freight Terminal at Moorebank: A way forward, prepared for the Minister for Infrastructure, Transport, Regional Development and Local Government, March, p. 4.

⁸ Infrastructure Coordinator 2009, Development of an Intermodal Freight Terminal at Moorebank: A way forward, prepared for the Minister for Infrastructure, Transport, Regional Development and Local Government, March, p. 5.

⁹ Infrastructure Coordinator 2009, Development of an Intermodal Freight Terminal at Moorebank: A way forward, prepared for the Minister for Infrastructure, Transport, Regional Development and Local Government, March, p. 5.

¹⁰ Greenhill Caliburn has advised the Department of Finance and Deregulation that the Commonwealth owned site is preferable because of its access to the Southern Sydney Freight Line and larger size.

There is a strong rationale for infrastructure investment in an intermodal facility at Moorebank. Below a number of potentially significant issues are discussed in further detail.

Management of risks

The MPO's business case for the project and a review undertaken by Booz & Co for MIC noted the complexity of the environment for this project. The project is heavily reliant on investments made by others, including the following.

- The NSW Government will need to ensure adequate connections between Moorebank Avenue and the M5 Motorway. This includes addressing potential congestion issues where the M5 crosses over the Georges River — the same point where heavy vehicles from the terminal would enter the traffic stream heading west. The current M5 West widening project does not widen between Moorebank Avenue and the Hume Highway (the Georges River Bridge), which will lead to a further increase in the bottleneck at that point.¹¹ MIC has advised that solving this congestion problem is not necessary for the Moorebank terminal to operate, but will assist truck movements and other road users as background traffic volumes grow and congestion on the M5 worsens.
- Stevedores at Port Botany, particularly DP World, would be required to invest in longer rail sidings in order to achieve throughput forecasts used in the business case.¹² MIC has indicated that issues around the port/rail interface are being considered through a process led by the new leaseholder for Port Botany, NSW Ports.
- Australian Rail Track Corporation will need to deliver additional capacity (train paths) on the Southern Sydney Freight Line, for throughput projections to be realised.¹³ MIC has indicated that this would reflect commercial incentives as demand increases. ARTC is currently undertaking work to consider options to expand capacity on the rail network. A study by Indec for MIC in 2014 concluded that an additional passing loop at Warwick Farm and an extension of the existing loop at Leightonfield would be required in about 2021 enable the capacity available for Moorebank to increase from about 500,000 TEU p.a. today to about 1.05 million TEU p.a.

Level of Government involvement

A large part of the success or otherwise of the intermodal terminal will reflect the *private* benefits and costs of the project. These costs and benefits will guide commercial viability and whether the facility can be part of a supply chain that is preferred on price and quality grounds to the movement of containers by road. The rationale for Government involvement rests on the anticipated *public* benefits, which are largely reduced growth in congestion and improved productivity. There is no rationale for the Government to subsidise the rail freight sector beyond these anticipated public benefits.

The MPO's 2012 business case indicated that anticipated public benefits could be between \$550 and \$600 million (present value), comprising externality cost reductions of \$30 million, road crash cost reductions of \$16 million and decongestion savings of \$519 million.¹⁴

Based on the November 2014 negotiated commercial transaction with SIMTA, the level of Government contribution is likely to be about \$300 million, considerably below the level of public benefit.

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http://www.rms.nsw.gov.au/roadprojects/projects/building_sydney_motorways/m5/m5_west_widening/documents/m_west_ea_overview_0910.pdf

¹² Booz & Co 2013, Review of aspects of the business case demand forecasts, prepared for the Moorebank Intermodal Company Limited, July.

¹³ Booz & Co 2013, Review of aspects of the business case demand forecasts, prepared for the Moorebank Intermodal Company Limited, July.

¹⁴ MIC is currently updating the cost benefit analysis.

BCR appraisal conclusion

The Benefit Cost Ratio for the project was estimated by the MPO in 2012 at 1.72:1. This excludes some costs that are project-related, such as infrastructure outside of the site. Booz & Co noted in its review of the BCR analysis that the supply chain might cap throughput at a lower level than assumed would be achieved in the benefit cost analysis¹⁵. The transaction summary also indicates that project ramp up for the IMEX will be slightly longer also reducing project benefits. However, the interstate terminal will commence earlier than assumed in the MPO.

Notwithstanding these downside risks to the BCR, MIC has provided sufficient information to provide confidence that the BCR is likely to exceed 1:1. This is a key criterion for a project advancing to Threshold status. MIC is currently updating the cost benefit analysis.

Infrastructure Australia Priority List Recommendation

The Acting CEO recommends that the board agree:

- That the project be included in the Infrastructure Priority List at **Threshold**
- In order to move to Ready to Proceed, the proponent should:
 - provide an updated Cost Benefit Analysis incorporating up to date demand projections, cost estimates (including a broader consideration of project-related infrastructure outside the site) and staging, so that the net benefits of the project can be confirmed.

This brief was approved by the IA Board in February 2015 and reflects data available at that time. As part of the usual process for the preparation of assessment briefs for publication, Infrastructure Australia has provided the project proponent with an opportunity to identify any factual corrections or issues of commercial-in-confidence.

Since the assessment was undertaken the Moorebank Intermodal Company (MIC) has commissioned work to update the Cost Benefit Analysis for the concluded agreement between the MIC and the Sydney Intermodal Terminal Alliance. The terms of the agreement are substantially different from the implementation earlier considered by the Australian Government Department of Finance under a Detailed Business Case prepared in 2012 that forms the basis of this assessment. MIC's updated Cost Benefit Analysis is currently being assessed by IA.

Capital cost estimates relating to the rail link to the Southern Sydney Freight Line and costs associated with land remediation and planning approvals have been removed from the brief at MIC's request because their publication may impact on current tender processes. In addition, estimates of the ramp up period for the IMEX have been removed from the brief at the request of MIC due to the commercial-in-confidence nature of this information.

¹⁵ Booz & Co (2013), *Review of key aspects of the Business Case demand forecasts*, prepared for Moorebank Intermodal Company Limited, July.