

# Chapter 3 Strategic context and need for the Project





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## 3. Strategic context and need for the Project

Chapter 3 outlines the strategic context and need for the Moorebank Intermodal Terminal (IMT) Project (the Project), including the need for the import/export (IMEX) and interstate freight terminal infrastructure, and the anticipated benefits the Project would deliver. This chapter also details reasons for locating an IMT at Moorebank in south-western Sydney, other existing projects/strategies that would enhance or affect the viability of the Project, the identified freight catchment area and assumed 'mode split' (proportions of freight moved by rail and road) for the Project, and relevant government planning and policy objectives.

### 3.1 Need for the Project

Achieving an efficient and sustainable freight transport system is a challenge in two important Australian freight markets:

- the IMEX container market – which handles international freight; and
- the domestic container market (comprising interstate and intrastate cargo) – which handles a wide range of goods around Australia including agricultural produce, groceries, consumer goods and manufactured materials.

Improvements to the state's freight infrastructure and performance are key objectives for both the Australian and NSW Governments.

#### 3.1.1 The need for IMEX and interstate freight infrastructure

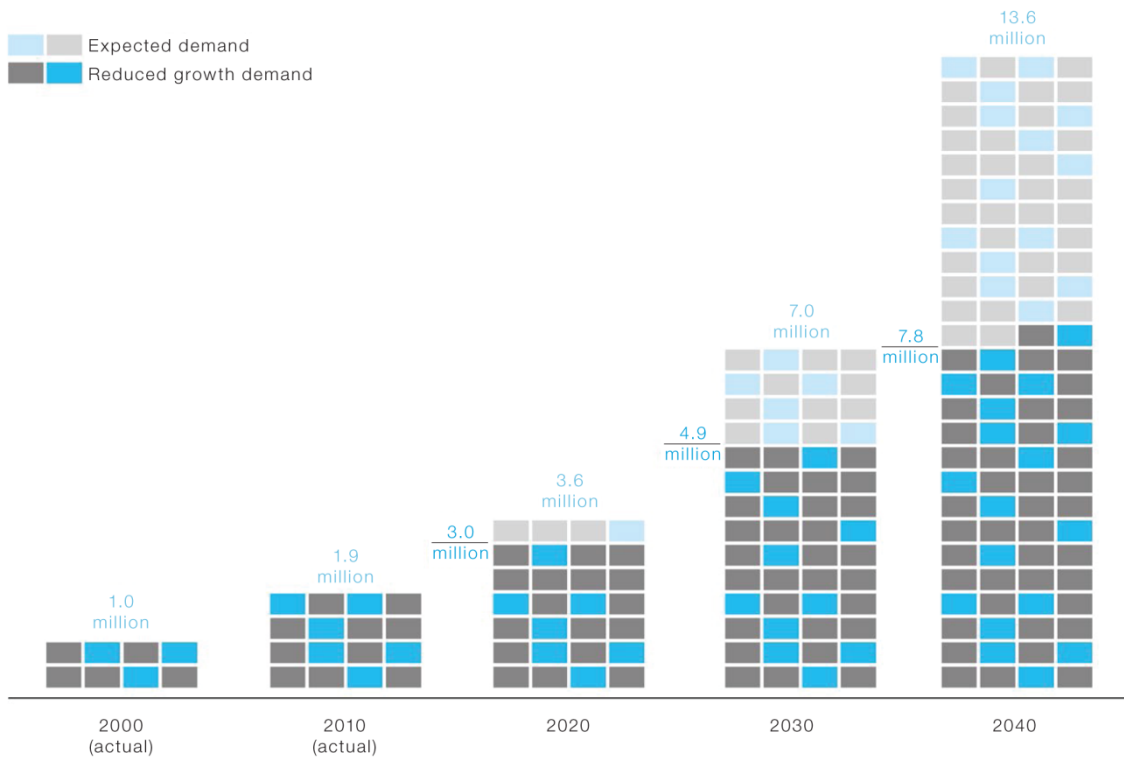
Sydney's need for additional IMT capacity in the IMEX and interstate markets is being driven by various factors, detailed below.

##### Strong growth in containerised IMEX freight

Growth in container movements in NSW has been rapid and sustained, averaging 7% growth annually over the last 15 years (NSW Government 2013). Over the last 11 years, container trade growth at Port Botany in Sydney has grown to more than two million twenty-foot equivalent unit (TEU) containers a year (Deloitte 2014). The latest reported (2013) throughput of 2.1 million TEU is projected to increase to a total of approximately 7 million TEU by 2031 (NSW Government 2013).

The Australian Government's Bureau of Infrastructure, Transport and Regional Economics (BITRE) has forecast that container trade through Port Botany will grow at a compound annual growth rate of 4.25% to 2030. This forecast growth is the consequence of an expanding population, changing consumer demands and increasing needs of business and industry.

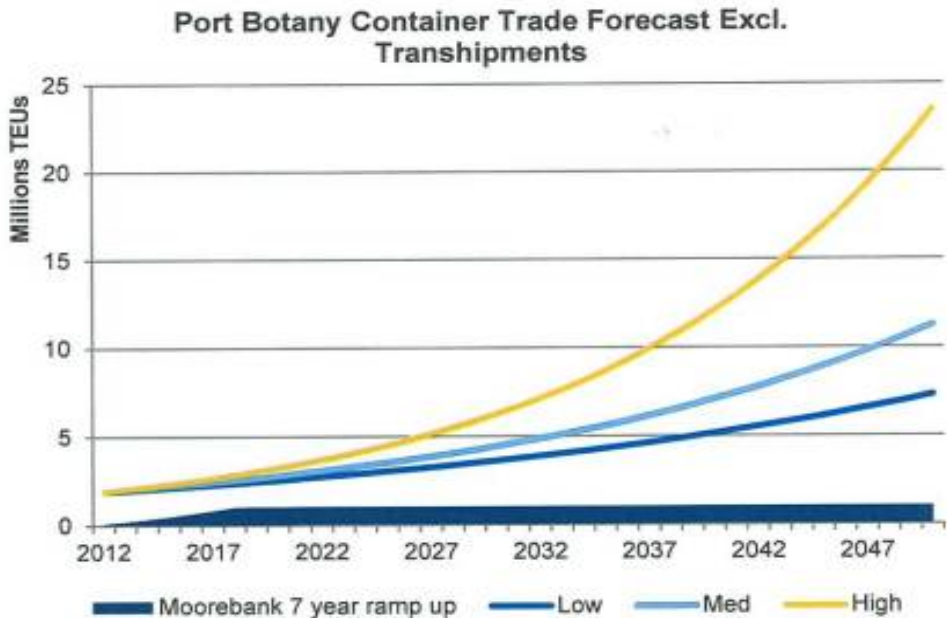
NSW container volume forecasts, as outlined by the NSW Government in late 2013, are shown in Figure 3.1 for the years 2020 and 2040. Port Botany container trade forecasts (excluding transshipments) are shown in Figure 3.2 for low, medium and high growth scenarios. The figures show that the growth in containerised freight is expected to continue at a steady rate, and it is likely that this will eventually reduce the effectiveness of Port Botany to handle future demand.



(Source: NSW Freight and Ports Strategy, NSW Government 2013)

Note: 'Expected demand' forecasts are the NSW Government's expectation as to the most likely growth forecast, and the 'reduced demand' scenario represents a scenario where growth is lower.

Figure 3.1 NSW container volume forecasts 2020–2040



(Source: MIC provided, 2014).

Notes: Low forecast based on CAGR from actual to 2013 (5 year volumes); medium forecast based on NSW Freight and Ports Strategy reduced growth forecast (NSW Government); high based on Sydney Ports Corporation 2010 forecast.

Figure 3.2 Port Botany container trade forecast (excluding transhipments)



### Easing the Port Botany bottleneck

Port Botany is Australia's second largest container freight port, and the major port in NSW. It serves as a vital gateway for the movement of freight, and is critical to the Australian economy as it handles more than \$60 billion in trade each year, contributes \$2.5 billion to the NSW economy and generates 17,000 jobs (Deloitte 2014). Until 2012, Port Botany was subject to a planning cap on throughput of 3.2 million TEU a year. With the entrance of a new stevedore (Hutchison Port Holdings) to the market and continued growth in container volumes, the NSW Government removed the cap, thereby removing restrictions on the number of containers handled and the frequency of transport movements to and from Port Botany.

Most of the containerised freight transported between Port Botany and other parts of Sydney is moved by road. It is estimated that only 14% of container freight through Port Botany is currently transported by rail. However, Sydney's freight handling capacity is increasingly constrained by a heavily congested road network. To cope with future growth, more freight needs to be moved to and from Port Botany by rail. If the current rail mode share is not improved, heavy vehicle traffic at Port Botany may have to increase by as much as 400% by 2029/30 to cope with demand (NSW Government 2011b, *Port Botany and Sydney Airport Transport Improvement Program, Submission to Infrastructure Australia*).

The *NSW Freight and Ports Strategy* (NSW Government 2013) notes that while there is currently spare capacity at Port Botany, growth of container movements at the port will depend on the productivity levels that can be achieved by the stevedores and overall optimisation of the port. Depending on the rate of growth, from a planning perspective, Port Botany looks likely to approach its natural capacity between 2030 and 2040. As well as new port infrastructure, significant land freight network improvements will be needed to ensure the freight system operates efficiently.

### Growth in containerised interstate freight

Only a small proportion of east coast interstate freight in NSW is currently transported by rail. For the Sydney–Melbourne corridor, the rail mode share is approximately 10%; for the Sydney–Brisbane corridor, the rail mode share is approximately 20% (Deloitte 2013). However, the volume of interstate freight moving through Sydney is expected to grow at a rate of 3.6% a year for the next 20 years (with road and rail freight at 3.8% and 3.5% a year, respectively) (BITRE 2010).

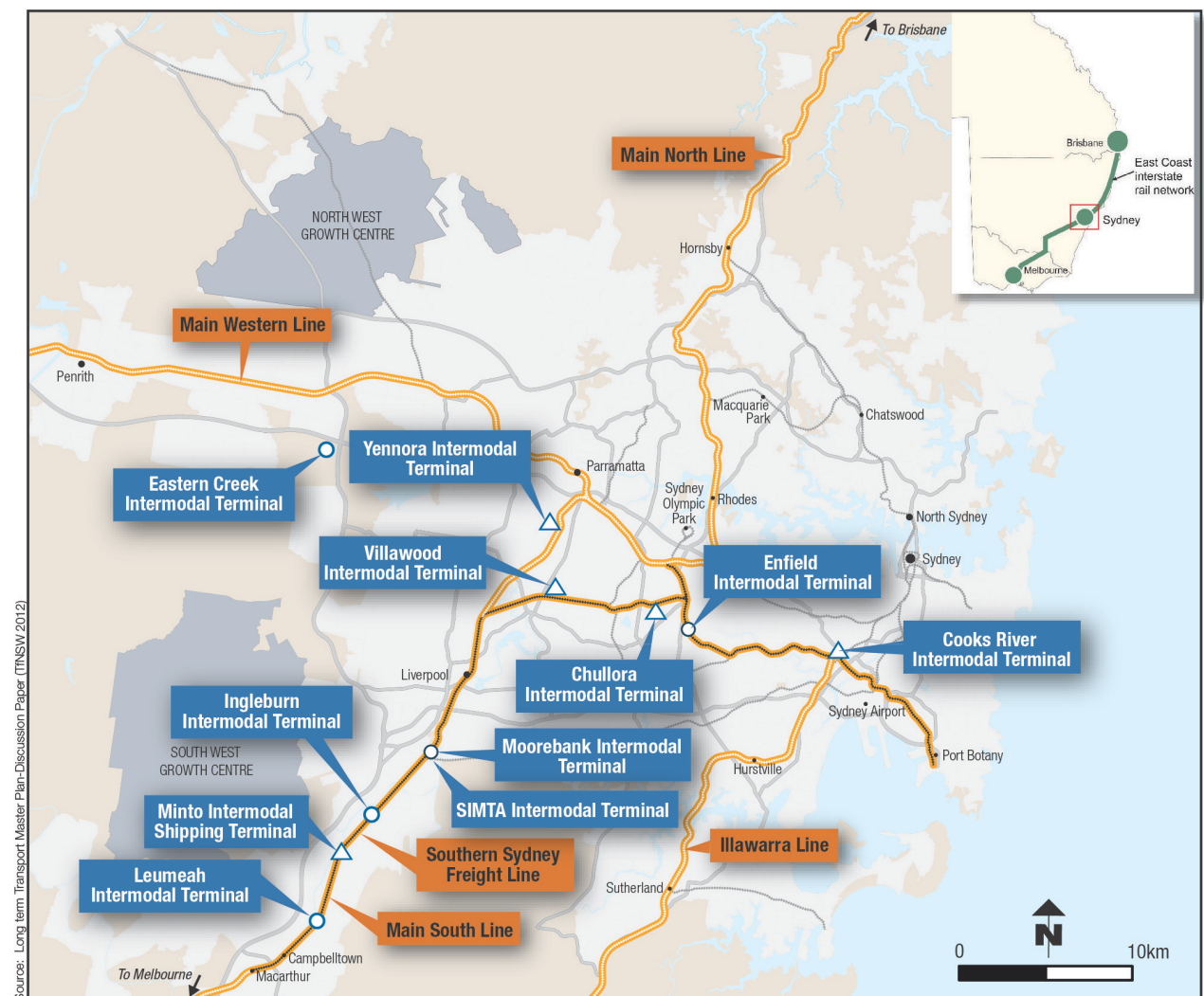
### Limited capacity within the existing and already planned IMT network

The current Sydney IMT network (see Figure 3.3) is fragmented and its capacity and effectiveness are constrained by a number of factors including space limitations, access to rail paths on rail lines that are shared with passenger rail, and limited proximity to urban growth areas. At present there are only a handful of frequently used IMTs servicing IMEX cargoes in Sydney, including the Macarthur Intermodal Shipping Terminal (MIST) at Minto in south-west Sydney and the facility at Yennora, near Campbelltown, in western Sydney. Even with the current development at Enfield (refer Table 3.4 for details), these existing IMTs are too small and constrained to be able to move a major proportion of the expected container demand for Port Botany by rail. At the same time, the dedicated Metropolitan Freight Network (MFN), which comprises the network of dedicated rail freight lines in the Sydney metropolitan area, has significant spare capacity between Port Botany and Enfield. It currently carries around 300,000 TEU, compared with an assessed throughput capacity of 1.1 million TEU (NSW Government 2013).






Constraints associated with existing IMTs and plans to develop new or expanded IMTs are discussed in detail in Chapter 6 – *Project development and alternatives* (section 6.3.2). In summary, there are three large-scale IMTs proposed for the Sydney region: two proposals at Moorebank (the Moorebank IMT Project, with an IMEX throughput of 1.05 million TEU a year and an interstate throughput of 500,000 TEU a year; and the Sydney Intermodal Terminal Alliance (SIMTA) Project, with a proposed IMEX throughput of 1 million TEU a year, but with a capacity cap of 500,000 TEU a year); and another IMT at Enfield, which is due to be completed in late 2014 and will be operated by Hutchison Port Holdings with an IMEX-only throughput of up to 300,000 TEU a year.

Either of the IMT proposals at Moorebank would partially cater for the strong predicted growth in IMEX container demand in the western regions of Sydney, as a significant proportion of container movements are expected to occur within this region. Container freight demand is discussed further below.

The approved capacity of the Enfield IMT under development is still small relative to the expected growth in containers through Port Botany. Also, Enfield is expected to primarily serve a localised market and would not make a major contribution to freight movements in south-western Sydney.



**Figure 3.3 Planned and existing IMT network**

-  Dedicated freight rail
-  Shared freight/passenger rail
-  Major freight road
-  Proposed or possible intermodal terminal
-  Existing intermodal terminal



Another proposed location for a new IMT is Eastern Creek in north-west Sydney, with a possible throughput of 500,000 to 1 million TEU a year. The Eastern Creek IMT proposal is largely undefined, but if developed, would primarily service its localised market around the west and north-west of Sydney. It is unlikely to be developed in the near future and would require significant investment in transport infrastructure to connect it to the rail network.

In south-western Sydney, the existing MIST at Minto is being expanded from 45,000 TEU to an estimated 150,000 TEU a year for a combination of IMEX and interstate services. There are also plans for new IMTs at Ingleburn (40,000 to 70,000 TEU a year) and Leumeah (less than 50,000 TEU a year), as discussed further in Chapter 6 – *Project development and alternatives*. Together, these IMTs (if developed) would likely have a combined capacity of approximately 240,000 TEU a year for IMEX services, which would not be sufficient to meet the needs of south-western Sydney or make up the overall shortfall in forecast demand for container transport to and from this sub-region.

The current interstate IMT network is dominated by the Asciano-owned terminal at Chullora and a limited number of small and out-dated terminals as detailed above. Chullora, located close to the Enfield IMT, handles the majority of interstate and regional rail services in Sydney. It is a constrained site with some operational challenges and has limited future capacity. Additional IMT capacity would be required to enable Sydney to cope with continuing growth in interstate container freight volumes, and to fully utilise its investment in rail infrastructure.

#### Increasing freight demand in Sydney and interstate

As shown in Figure 3.1, demand in container freight in NSW is forecast to grow at a consistent and sustained rate until at least 2040.

A detailed 'bottom up' transport cost model was prepared by Deloitte (2013, on behalf of MIC) to assess the potential IMEX demand for the Project. The model assessed end to end transport costs (for both road and rail) and cost competitiveness, taking account of allocation of the rail network capacity and potential catchment volumes for the terminal.

Total IMEX rail demand in Sydney in 2025 is estimated at 1.656 million TEU a year. A significant proportion of this demand is from western Sydney. In fact, almost two-thirds of port container freight is currently transported to or from markets in western Sydney, where industrial areas are concentrated. As discussed further in section 3.3, population and economic growth in south-western Sydney are also expected to continue to generate major increases in freight activity in this region in coming years. However, as a result of anticipated rail network capacity constraints (particularly on the Southern Sydney Freight Line (SSFL)), it is estimated that demand for IMEX containers through a terminal at Moorebank would be limited to approximately 1.05 million TEU a year. This estimate of demand was confirmed as reliable by Transport for NSW (TfNSW) in July 2013. Importantly, the estimates also confirm that there is insufficient demand (and rail network capacity on the SSFL) for the development of both the Moorebank and SIMTA IMT projects.

Based on the cost of transport from Port Botany to the customer, MIC has predicted that the Moorebank IMT would be competitive for up to two-thirds of Sydney's container traffic in 2020 (subject to freight network capacity constraints).

Strategic planning in the freight sector is also placing renewed emphasis on interstate rail transportation. It is anticipated that in coming years, demand for interstate freight will continue to grow consistently, requiring additional IMT facilities at key points of the freight network. Interstate rail demand is estimated by Deloitte (2013) to be approximately 328,000 TEU a year by 2030 and 363,000 TEU a year (volumes going directly to/from Sydney, excluding transit traffic) by 2040.

## Road congestion

Heavy congestion is already being experienced at Port Botany and on the M5 Motorway. This would be aggravated by future growth in port volumes and associated truck movements. It is estimated that truck traffic at Port Botany would increase by 400% by 2029/30 if the current rail mode share is not improved (NSW Government 2011b). If containers moving between Port Botany and south-west Sydney could be transported by rail (due to development of an IMT in south-west Sydney), this would reduce the projected growth in road freight traffic from Port Botany, resulting in 1,500 fewer truck journeys to and from Port Botany each day, or 1.1 million truck trips a year, once the IMT is operating at capacity.

Recognising the constraints on the road network and the impacts of road congestion, the NSW Government mode share target is to double the proportion of containers carried by rail in NSW by 2020 (NSW 2021, Goal 19).

Road congestion at Port Botany is expected to become a more significant problem in coming years for various reasons, including the expansion of Port Botany and the growth in passenger traffic associated with other major trip generators in the area, such as Sydney Airport. Ensuring that rail provides a cost-effective option for moving containers to freight destinations within the Sydney metropolitan area will be important for managing road congestion and growth within the containerised freight market and optimising future freight movements through Port Botany.

The Project would also reduce the amount of interstate freight being transferred by road through Sydney and on the national highway network.

## Environmental and social impacts of road freight

Road freight produces higher externality costs per tonne (in terms of social and environmental costs) relative to rail and shipping. An additional IMEX and interstate IMT would help to alleviate some of the existing negative environmental and social impacts associated with road freight container transport between Port Botany, Moorebank and interstate, including air pollution and greenhouse gas emissions, fuel consumption and waste generation, noise and vibration, time delays and other congestion costs, and fatalities and injuries from road accidents.

Moving more containers by rail would save an estimated 7,300 tonnes of CO<sub>2-e</sub> a year from transport by 2030 as a result of the use of trains rather than trucks for transport between Port Botany and the Project site for IMEX operations.

### 3.1.2 Current capacity and forecast shortfall

Table 3.1 summarises the estimated current capacity and forecast shortfall for IMEX in Sydney, accounting for other existing IMEX IMTs and planned upgrades, excluding the Moorebank and SIMTA IMT projects. The table also excludes possible IMTs at Leumeah, Ingleburn and Eastern Creek, as there are no confirmed plans to develop these sites in the near future. In addition, the IMT facility at Cooks River, managed by Maritime Container Services, provides only for the handling of empty containers and has no associated warehousing. Therefore, the Cooks River IMT has been excluded from Table 3.1 on the basis that it does not contribute to freight capacity within Sydney.

The table shows that considering the potential demand of 1.656 million TEU a year for rail IMEX container transport in the Sydney region, and other existing and planned IMEX capacity, there is an IMEX capacity shortfall of 1.046 million TEU a year. In the absence of an IMT at Moorebank, this shortfall volume would need to be transported by road.

The table also confirms that there is insufficient demand for both the Moorebank and SIMTA IMT projects, as the notional combined capacity of these IMTs would be up to 2.046 million TEU a year by 2025.

Table 3.1 Sydney IMEX capacity and forecast shortfall

Terminal	Estimated IMEX capacity (TEU a year)
Yennora	110,000
MIST (Minto)	150,000
Villawood	50,000
Enfield	300,000
<i>Total estimated IMEX IMT capacity</i>	<i>610,000</i>
<b>Total IMEX rail demand at 2025</b>	<b>1,656,000</b>
<b>IMEX capacity shortfall at 2025</b>	<b>1,046,000</b>

Source: Deloitte 2014

It should be noted that a proportion of the total throughput at Port Botany would be transported by road regardless of intermodal capacity where road freight is the most economical or logistically effective option.

Table 3.2 outlines the estimated interstate capacity of existing and other planned IMTs in Sydney (excluding the Moorebank IMT Project). As indicated in the table, there is potential interstate rail demand of 328,000 TEU a year at 2030 (volumes going directly to and from Sydney) growing to 363,000 by 2040. In addition there is transit cargo between Brisbane and Melbourne, Adelaide and Perth. It has been assumed that services between Brisbane and Melbourne would bypass the terminal; however, services between Brisbane and Adelaide and between Brisbane and Perth may utilise a Sydney terminal to consolidate and tranship cargo between services. The volume on these services is estimated to remain stable at approximately 104,000 TEU a year.

Asciano's facility at Chullora is currently the primary interstate terminal in Sydney and has an estimated annual throughput of 200,000 TEU (TfNSW Freight Strategy – <http://freight.transport.nsw.gov.au/strategy/action-programs/casestudies/case-study-11.html>) and an estimated current capacity of 350,000 TEU a year (Deloitte 2013). The future plans for Chullora as an interstate terminal (i.e. whether it closes, expands or continues in line with its existing operations) are likely to have a major impact on the timing of development of an interstate facility at the Moorebank IMT. The freight estimates used in Table 3.2 assume closure of Chullora by 2030, based on the assumption that market interests would transfer from Chullora to a state of the art terminal at the Moorebank IMT site (if approved). Notwithstanding this assumption, sensitivity testing undertaken as part of the demand forecasting reported by Deloitte (2013), predicted that with rail network constraints and if Chullora remains operational with a capacity of approximately 350,000 TEU, there would still be demand for handling up to 107,000 TEU for the interstate market through the Moorebank IMT in the short to medium term.

Recent media releases by Asciano (refer <http://asciano.com.au/investors/presentations>, 19 June 2014) have highlighted investment by Asciano to upgrade the Chullora terminal to handle 600,000 TEU a year by 2015. The split of this capacity between Interstate and IMEX is unknown. At this stage, MIC is seeking concept approval for a future interstate terminal. As identified in section 8.2 (project staging), the interstate facility may not be required until around 2030. A development application at that time (subsequent SSD application) would be required prior to construction of an interstate terminal, and detailed demand analysis would be undertaken in support of that application at that time, which would consider the contribution of other terminals to meeting that demand, and confirm the demand for the development of the interstate terminal at Moorebank.

Table 3.2 Sydney interstate capacity and forecast shortfall

Terminal	Estimated interstate capacity (TEU a year)	
	2030	2040
Chullora <sup>1</sup>	Assumed Closed	Assumed Closed
Total interstate capacity	0	0
<b>Total interstate rail demand<sup>2</sup></b>	<b>328,000</b>	<b>363,000</b>
Additional transit volume through terminal <sup>3</sup>	104,000	104,000
<b>Interstate capacity shortfall</b>	<b>432,000</b>	<b>467,000</b>

Source: Deloitte 2014

1. It is assumed that the Chullora terminal would close for interstate services in 2029.
2. Interstate rail demand includes cargo with either its origin or destination in Sydney.
3. Transit volumes for Brisbane–Perth and Brisbane–Adelaide are assumed to berth and potentially trans ship between services at a Sydney IMT. Volumes between Brisbane and Melbourne are assumed to bypass the terminal and have been excluded from these figures.

## 3.2 Project benefits

The Project is expected to generate a number of economic, social and environmental benefits for the community and economy, as outlined below:

- *Economic benefits* – close to \$9 billion in economic benefits (before costs and in net present value terms), over a 30-year operational period of the Project, including \$120 million a year for the south-western Sydney economy through improved productivity; reduced operating costs; reduced costs associated with road damage, congestion and accidents; and better environmental outcomes;
- *Job creation* – 1,247 jobs (typical workforce) during construction of the IMEX terminal and warehousing and 275 jobs (typical workforce) during the construction for the interstate terminal. Operation of the Project is expected to generate approximately 2,174 jobs;
- *Better environment through reduced road congestion* – up to 1,500 fewer truck journeys to and from Port Botany each day, with associated reductions in greenhouse gas emissions and other air pollutants;
- *Social benefits of reducing road traffic and associated noise* along key road freight routes between Moorebank and Port Botany and interstate;
- *Easing the Port Botany bottleneck* to enable the Port to cope with future growth and provide large-scale freight capacity; and
- *Enabling the movement of freight around Australia* – interstate freight is expected to grow by 3.6% a year over the next 20 years.

The benefit–cost ratio for the project is estimated at 1.57, which is considered a strong positive economic evaluation for an infrastructure project of this type.

The development of the Project is intended to increase intermodal capacity in Sydney, and will have a number of flow-on benefits across the freight sector and NSW economy. By providing increased intermodal capacity in Sydney, it is envisaged that the unit costs of transporting containers by rail for IMEX and interstate markets would be reduced, which would lead to an increase in the share of freight movements by rail.

The contributing factors to the total economic benefits of the Project include:

- savings in operating costs in the freight transport sector, through productivity improvements associated with rail freight movement;
- improved reliability and availability of freight services, relative to road services;
- reductions in road damage, and associated savings;
- reductions in costs associated with road congestion and road accidents;
- increased reliability in journey times;
- reductions in operating cost resulting from the economies of scale provided by rail transport;
- incremental revenues resulting from operating surplus;
- the residual value of the Project physical assets, following the end of the indicative 30 year operational period;
- increased employment in south-west Sydney during construction and operation; and
- reductions in environmental and social costs associated with road transport (i.e. the use of truck rather than trains for transport between Port Botany and the Project site), including reductions in noise, greenhouse gas emissions, fuel consumption and other air pollution.

A summary of the key economic benefits of the Project is included in Table 3.3.

Table 3.3 Key economic benefits of the Project

Measure	Value
Net gain of project benefits to NSW economy	\$690 million net project benefits over the 30-year assessment period (2010/11 dollars, discounted at a rate of 7%)
Lower truck volumes at Port Botany	From 2024, truck volumes would be 1,500 vehicles a day lower as a result of a transfer of container traffic from road to rail
Fuel savings of TEU containers transported by rail instead of road	2.7 million litres of fuel would be saved 7,300 tonnes of CO <sub>2</sub> greenhouse gases a year would not be emitted
Job impact	1,247 jobs (typical workforce) realised during the construction of the IMEX terminal and warehousing, and 275 jobs (typical workforce) during the construction for the interstate terminal 2,174 jobs realised with the operation of both terminals together with warehousing

Source: Deloitte 2014 (as amended by *Traffic and Transport Impact Assessment*)



### 3.3 Why Moorebank?

The Australian and NSW Governments have identified Moorebank as the location for additional intermodal capacity in Sydney, because it is:

- next to the Southern Sydney Freight Line (SSFL), a dedicated freight rail line providing a direct link to the interstate freight network and, together with the MFN, a direct link to Port Botany;
- located a sufficient distance from Port Botany to make rail a commercially viable alternative to road for movements to and from Port Botany;
- next to the M5 Motorway and near to the M7 Motorway and Hume Highway, which are all key freight corridors;
- adjacent to existing industrial areas, and centrally located relative to major freight markets, considering almost two-thirds of port container freight is transported to or from markets in western Sydney;
- long enough to handle interstate freight trains, which can be 1,500 to 1,800 m long;
- large enough to handle the number of containers expected (up to 1.05 million TEU a year of IMEX freight and another 500,000 TEU a year of interstate freight);
- located near to the South West Growth Centre; and
- owned by the Australian Government and available for an alternative use, as the current occupant of the site, the Department of Defence's School of Military Engineering, is moving to new, purpose-built facilities in mid-2015.

Freight catchment area analysis reflects that much container trade is directed to the western Sydney regional area (refer section 3.4 below). Hence locating a major IMT in western Sydney is efficient.

The Project site is one of the last remaining parcels of suitable land for an IMT in south-western Sydney with easy access to road and rail infrastructure. While additional IMT capacity will be required in the future, other potential IMT sites in Sydney require substantial investment in additional infrastructure to connect to the road and rail networks, and some are currently not considered viable alternatives in the short term, as explained in Chapter 6 – *Project development and alternatives*.

Population and economic growth are expected to continue to generate major increases in freight activity in south-western Sydney in coming years. For example, the population in south-western Sydney – which would be primarily served by the Project – is expected to increase by 113% between 2006 and 2036 (NSW Department of Planning 2010). In April 2014, the Australian Government announced the *Western Sydney Infrastructure Plan: More Jobs, better roads*, which includes transport links to capitalise on the economic gains from developing a second Sydney airport at Badgerys Creek. This is expected to boost the local economy of western Sydney.

Population increases in western Sydney as a whole are expected to comprise almost half of the total population increase within the Sydney metropolitan area over the next 20 years. A number of major projects in and around south-western Sydney would also drive demand for and complement the development of the Project. These are detailed in section 3.5.

### 3.4 Freight catchment area and freight split for the Project

The throughput demand forecasts for the Project (Deloitte 2013) were derived by examining the growth in IMEX and interstate demand, and the current and possible future distribution of containers in Sydney, as well as the likely comparative road and rail transport costs for each trip (taking into account road and rail infrastructure capacity constraints).

Information on landside movements of containers from Port Botany was sourced from the Australian Customs and Border Protection Service (ACBPS), which provided the origin and destination of containers to and from Port Botany by postcode. Analysis indicated that approximately 93% of import containers traded through Port Botany are destined for locations within the Sydney greater metropolitan area (GMA).

The analysis considered potential changes in the baseline freight distribution pattern over time, by indexing data provided by ACBPS against demographic data. Specifically, estimates of changes in distribution patterns were based on assumptions from the NSW Bureau of Transport Statistics' employment forecasts (BTS 2013). These forecasts included future employment in the transport and warehousing sector, which was considered to be the best available indicator of future freight activity and more appropriate than other more general indicators, such as population growth. In light of forecast increases in employment in the transport and warehousing sectors in the region, it was assumed that there would be modest increases over time in the relative importance of western Sydney as a freight market.

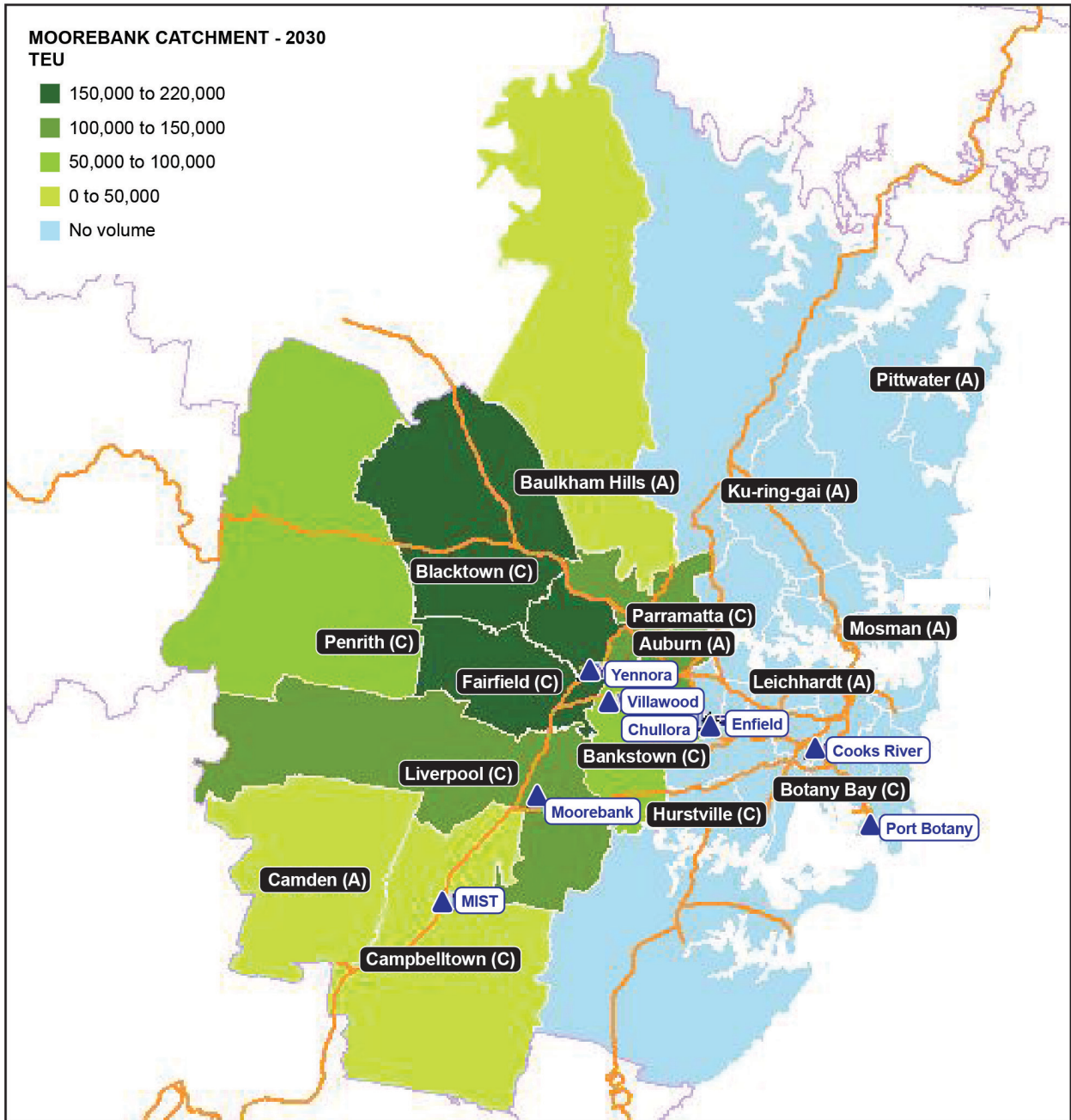
Figure 3.4 shows the estimated freight catchment area for the Project (IMEX facility) in year 2030, including the anticipated distribution of containers between different regions of Sydney. Assuming that the Enfield, Yennora and MIST intermodal terminals are successful in attracting or continuing to attract volumes in their catchments and reaching their capacity, the rail mode share for IMEX traffic (the freight split) could be as follows:

- in 2018 the rail mode share could be as high as 32%; and
- in 2030 the rail mode share could be as high as 43%.

In the longer term, as port volumes continue to grow more quickly relative to rail capacity, rail mode share is anticipated to stabilise then decline to approximately 26% by 2050.

The figure also indicates that the Project's catchment area is predominantly in south-west and western Sydney. This reflects the growth in port IMEX freight that has an origin or destination within each area and the relative cost advantage that transport via the Moorebank Terminal can offer to these locations. Deloitte's demand analysis (2013) determined that rail transport via Moorebank should be cost competitive compared to road<sup>2</sup> and also compared with rail via other IMEX terminals in Sydney. Moorebank does not attract a significant volume of containers destined for or originating in the inner west; in many cases road is more competitive, or delivery via the Enfield or Yennora IMT can be achieved at a lower cost. In the far south-west, Moorebank's impact is less pronounced, as it is more cost effective to use rail via the Minto IMT. Moorebank's main catchment area is seen to be in the Liverpool LGA and further north towards Fairfield and Holroyd. For these areas, the modelling indicates that it should be cost competitive to move containers by rail to Moorebank, with a final short road movement to the north or west using the M5 and M7 Motorways.

2 Road costs reflected a composite of direct movements to customer and movements that were staged via a depot to customer from Port Botany.



**Figure 3.4 Freight catchment area for the Project in 2030**

Source: Deloitte 2014

### 3.5 Existing projects/strategies that enhance the viability of the Project

The Moorebank IMT Project is separate from, but has important inter-dependencies with, a number of major strategies and projects that are underway or planned by the Australian and NSW Governments and private sector entities. A number of these related projects/strategies support the strategic need for the Project. These are summarised in Table 3.4.

Table 3.4 Projects/strategies that enhance the viability of the Moorebank IMT Project

Project/strategy	Description	Relationship with Moorebank IMT Project	Indicative project date
Australian Rail Track Corporation (ARTC) North-South Strategy	<p>Strategy to increase utilisation of the interstate rail network. Includes various projects that release more track capacity and improve the reliability of freight journeys between Melbourne, Sydney and Brisbane, including:</p> <ul style="list-style-type: none"> <li>Northern Sydney Freight Corridor (NSFC) Upgrade</li> <li>Port Botany Rail Line Project (two stages) – described separately below</li> <li>SSFL – described separately below</li> <li>Integration of MFN with SSFL and ARTC's main Sydney–Melbourne Rail Line (includes signalling works for continuous network control for rail operators travelling from Melbourne and southern NSW to Chullora and Port Botany).</li> </ul>	This strategy would support the Moorebank IMT by enhancing the capacity of the Sydney and interstate rail freight networks.	<p>NSFC due for completion by mid-2016.</p> <p>See below for Port Botany Rail Line and SSFL.</p> <p>Integration of MFN to be completed over the next two years.</p>
Port Botany Expansion	NSW Ports has increased the capacity of Port Botany through the construction of a third terminal to be operated by Hutchison Port Holdings.	The IMEX facilities associated with the Moorebank IMT Project would facilitate Port Botany's throughput growth by establishing IMEX freight IMT capacity in the Sydney region.	Completed in 2014.
Removal of the Port Botany planning cap	Until 2012, Port Botany was subject to a planning cap on throughput of 3.2 million TEU a year. With the entrance of a new stevedore (Hutchison Port Holdings) in the market and continued growth in container volumes, the NSW Government removed the cap (and thereby removed any restrictions on the number of containers handled or the frequency of transport movements to and from Port Botany).	The Moorebank IMT Project would complement the removal of the planning cap by facilitating the increased use of rail freight transport and reducing container growth impacts on the local road network around Port Botany.	Completed in 2012.
Port Botany Landside Improvement Strategy (PBLIS)	The key objective of the PBLIS is to 'improve the competitive access and service arrangements of container movements between stevedores and transport carriers' (Sydney Ports 2011). It will govern access and performance of road and rail operators using Port Botany, monitor demand and regulate access pricing.	The PBLIS is a critical component to the continued future success of efficient operations at Port Botany and therefore is important to the overall viability of the Moorebank IMT Project.	Ongoing project.

Project/ strategy	Description	Relationship with Moorebank IMT Project	Indicative project date
Enfield Intermodal Logistics Centre	Hutchison Port Holdings has been appointed to develop, operate and maintain a new IMT at Enfield.	The Enfield IMT is planned to have a maximum capacity of 300,000 TEU a year for IMEX and would provide additional IMT capacity on the NSW freight network, complementing the development of the Moorebank IMT Project.	It is anticipated that the Enfield IMT will be operating by late 2014.
Southern Sydney Freight Line (SSFL)	The SSFL is a dedicated freight rail line that forms part of the Main South Rail Line corridor to the west of the Project site.	The SSFL is close to the Project site. Connection to the SSFL would provide dedicated freight rail access between Port Botany and the Moorebank IMT Project, by the MFN.	Commenced operation in January 2013.
Port Botany Rail Line Project	The Port Botany Rail Line is a dedicated freight railway between Port Botany and Enfield/Chullora in central-west Sydney. The proposed upgrade comprises upgrade and reconfiguration of the rail yard at Port Botany (completed); expansion of Enfield rail yard to add additional capacity, increasing the number of containers which can be transported along the line from 700,000 to approximately 1,000,000 a year (under construction); and signalling improvements on the section between the Cooks River and Mascot (ARTC, 2012).	All IMEX freight going to and from the Project site would use the Port Botany Rail Line. The Project would improve capacity and efficiency of the MFN and the Port Botany Rail Line to support increasing freight volumes on rail.	Stage 1 complete.  Stage 2 due for completion in 2014.
Moorebank Units Relocation (MUR) Project	Defence will be relocating its existing SME functions to a new site within the nearby Holsworthy Barracks.	The MUR Project will facilitate the vacation of the site and provide land for the Moorebank IMT Project.	The MUR Project commenced in 2012 and is expected to be completed in late 2015 (with SME site vacated by mid-2015).
M5 Motorway West Widening Project	The NSW Roads and Maritime Services (RMS) proposes to widen around 20 km of the M5 Motorway between King Georges Road, Beverly Hills and Camden Valley Way, Casula.	The M5 Motorway Widening Project involves widening of the M5 Motorway from two to three lanes in each direction for the majority of its length. The M5 Motorway would be heavily used by Project-related traffic (as described further in Chapter 11 – <i>Traffic, transport and access</i> ).	RMS anticipates that the project will be completed in late 2014.
South West Growth Centre	The South West Growth Centre comprises 18 precincts within the local government areas of Liverpool, Camden and Campbelltown in Western Sydney. This growth area has the capacity for approximately 110,000 new dwellings for 300,000 people and would provide land for employment.	The South West Growth Centre will accommodate new residential dwellings and employment areas. The Moorebank IMT Project would help supply the growth in demand for containerised freight for that growth area as well as providing employment opportunities for the area.	New precinct areas to be released over the next 20 years.



The table above includes initiatives to improve the competitiveness of the rail network, such as ARTC's North–South Strategy. Historical trends indicate the rail mode share of the interstate market is declining. The share of freight moved by rail in the north–south corridor (Melbourne–Sydney–Brisbane) has declined from 35% a year to 12% over the 35-year period to 2007 (BITRE, 2011), largely due to improvements in highways and truck productivity. However, the BITRE forecast is that the interstate rail freight share on this corridor will increase slightly, from 12% in 2008 to 14% in 2030 (BITRE 2011).

The ARTC predicts that rail mode share can be improved significantly as a result of infrastructure improvements to benefit rail reliability and transit times (ARTC 2007). This and other factors (such as service, cost, capacity and capability to cater to new entrants) will contribute to future rail competitiveness within the interstate freight market. Infrastructure that can efficiently transfer freight between road and rail is a pre-requisite to sustaining the projected growth in interstate rail freight and increasing its mode share.

The Australian Government considers the establishment of a large IMT along the SSFL to be a key component of the ARTC's North–South Strategy to increase rail utilisation of the interstate rail network.

### 3.6 Government planning and policy objectives

The Project will build on the Australian Government's planned \$4.8 billion investment in the interstate rail network.

Improving freight infrastructure and performance has been a key focus for both the Australian and NSW Governments. The following sections provide an overview of the strategic context of the Project in relation to relevant government strategic planning policies and publications. Where relevant, the following sections include discussion of how MIC's constitutional objectives for the Project (as listed in Table 3.5) are consistent with these policies and publications.

Table 3.5 MIC's constitutional objectives for the Project

No.	Objective
i)	To facilitate the development of an intermodal freight terminal at Moorebank, including an IMEX facility, an interstate freight terminal capable of catering for 1,800 metre trains and ancillary facilities by optimising private sector investment and innovation in the development, construction and operation of the intermodal terminal.
ii)	To facilitate the operation of a flexible and commercially viable common user facility which shall be available on reasonably comparable terms to all rail operators and other terminal users.
iii)	To ensure the intermodal terminal operates with the aim of improving national productivity through an efficient supply chain, increased freight capacity and better rail utilisation.
iv)	To operate on commercially sound principles having regard to the Australian Government's long-term intention to sell its interest in the Company.

In achieving the above objectives, MIC is tasked with delivering a value for money solution to the Australian Government and acting in an environmentally and socially responsible manner with due regard to local communities' views. This means that the IMT needs to be designed, developed and operated in a way that would minimise impacts on nearby residents and businesses.

### 3.6.1 Australian Government policies and publications

#### Nation Building Program

The Australian Government is investing \$36 billion in road and rail infrastructure through the Nation Building Program over the six-year period from 2008–09 to 2013–14 (Department of Infrastructure and Regional Development 2011; <http://www.nationbuildingprogram.gov.au/>). This investment will be delivered through a range of road and rail programs and projects across Australia's land transport network. The focus of this investment is on national and inter-regional land transport corridors that are of critical importance to national and regional growth. An IMT at Moorebank is identified as a NSW project that will receive funding under the Nation Building Program. The National Building Program aligns with MIC constitutional objectives i) and iii).

#### National Land Freight Network Strategy

In February 2011, Infrastructure Australia released the *National Land Freight Strategy Discussion Paper* (Infrastructure Australia 2011). The paper identifies the need to integrate freight and land use planning in developing a national land freight network. New IMT capacity at Moorebank is identified in the discussion paper as a key priority. This strategy aligns with MIC constitutional objectives i), ii) and iii).

#### National Ports Strategy

The *National Ports Strategy* (Infrastructure Australia 2010), introduced in December 2010, was developed by Infrastructure Australia and the National Transport Commission. The objectives of the strategy are to improve the efficiency of port-related freight movements through a coordinated approach to the future development and planning of Australia's major ports and freight infrastructure. The strategy identified the need to improve the efficiency of port-related freight movements across the infrastructure network, which aligns with MIC's constitutional objective iii).

#### National Infrastructure Priorities

An IMT located at Moorebank has been identified in the *National Infrastructure Priorities – Infrastructure for an economically, socially and environmentally sustainable future* (Infrastructure Australia 2009) as a priority infrastructure project. This document identifies seven key 'themes' designed to boost Australia's productivity, protect the environment and enhance Australians' quality of life. The Project is listed in the document as a 'priority infrastructure pipeline project with real potential' under the theme of 'Competitive international gateways: developing more effective ports and associated land transport systems to more efficiently cope with imports and exports'. MIC's constitutional objectives i), ii) and ii) are consistent with this theme.

### 3.6.2 NSW Government policies and publications

#### NSW 2021

In 2011, the NSW Government released *NSW 2021: A plan to make NSW number one* (NSW 2021) (NSW Government 2011a). This document provides a 10-year plan to guide strategic policy making and infrastructure delivery in NSW.

The plan includes a target of enhancing rail freight movement in NSW, by doubling the proportion of container freight movement by rail through NSW ports by 2020. The plan states that shifting freight movements to rail is a priority action to maximise capacity at Port Botany and reduce truck movements on the NSW road network. This target and action is consistent with MIC's constitutional objective iii) and also the Project Objective 1, as it would provide additional capacity to the existing freight network and maximise capacity at Port Botany by providing for offsite handling of containerised freight. Ultimately, the Project is intended to support planning to increase the proportion of freight movements by rail, and therefore reduce the rate of growth in truck movements on the state's road network.

In regard to south-western Sydney, NSW 2021 includes a South Western Sydney Regional Action Plan, which aims to:

- 'Promote an economic powerhouse, maintaining its position as one of the largest industrial regions in Australia and providing better access to the region's outstanding educational and research facilities
- Deliver a well-connected region, reducing road congestion and improving integrated services to reduce travel time across the region and to surrounding regions
- Support a strong and inclusive region, through the provision of coordinated support services that meet community needs and improve the quality of life
- Managing the environment sustainably, by supporting the social, economic and environmental value of the region's river systems and their catchments and improving air quality in balance with urban development.' <http://www.2021.nsw.gov.au/regions/south-western-sydney>.

MIC's constitutional objective i) is generally consistent with the first of these aims. Similarly, the second aim aligns with MIC's constitutional objective iii). As noted in Table 1.1 in Chapter 1 – *Introduction*, in achieving its constitutional objectives, MIC is tasked with delivering a value for money solution to the Australian Government and acting in an environmentally and socially responsible manner with due regard to local communities' views. This means that the IMT needs to be designed, developed and operated in a way that would minimise impacts on nearby residents and businesses. This is generally consistent with the second and third aims of the Action Plan.

### State Infrastructure Strategy

In 2012, Infrastructure NSW released *The State Infrastructure Strategy 2012–2032* (Infrastructure NSW 2012) (State Infrastructure Strategy). The State Infrastructure Strategy provides an assessment of the infrastructure needed to serve the State over the next 20 years, and identifies a number of principal recommendations for infrastructure projects to meet this demand.

The State Infrastructure Strategy identifies transport access to and from Sydney's international gateways as a short-term infrastructure priority. Development of an IMT at Moorebank in the next five years, and supporting infrastructure in five to 10 years' time, are principal recommendations of the strategy, particularly if there is increased demand for IMEX intermodal freight handling in NSW. MIC's constitutional objectives i), ii) and iii) are generally consistent with this priority and recommendations.

### NSW Long Term Transport Master Plan

In December 2012, the *NSW Long Term Transport Master Plan* (Master Plan) was finalised and released. The Master Plan is an overarching framework that identifies the current challenges in the NSW transport system. It aims to guide long-term and detailed transport plans, policy decisions, reforms and funding decisions and enable an integrated transport system capable of supporting the state's economic and social performance over the next 20 years. The Master Plan provides a direct link to national strategies and integrates with state and metropolitan infrastructure and land use plans. A primary function of the Master Plan is to support detailed planning such as the NSW Freight and Ports Strategy (discussed below).

The Master Plan focuses on five key transport challenges:

- integrating modes to meet customer needs;
- getting Sydney moving again;
- sustaining growth in Greater Sydney;
- providing essential access for regional NSW; and
- supporting efficient and productive freight.

The challenges of 'sustaining growth in Greater Sydney' and 'supporting efficient and productive freight' have direct relevance to the Project's need and strategic justification. The challenge of 'providing essential access to regional NSW' is also supported by the proposed development of the Project's interstate terminal component, which aims to improve regional freight connections and access to containerised freight via an efficient regional rail network. The other two challenges of 'integrating modes to meet customer needs' and 'getting Sydney moving again' are largely related to passenger transport, not freight. The Project would not impede how either of these challenges is met, as it would not affect public passenger transport. In fact, the Project is expected to support the challenge of 'getting Sydney moving again' as it should ease the movement of public passenger vehicles on the regional road network due to the anticipated shift in freight transport from road to rail.

The Master Plan specifically recognises the 'benefit in improving freight efficiency and productivity through major investments and efficiencies in the road and rail freight networks and at ports, airports and intermodal terminals'. The plan therefore supports the Project, which would have a number of strategic benefits for western and greater Sydney such as:

- reducing road congestion particularly around Port Botany and the M5 Motorway;

- alleviating the current bottlenecks and constraints for freight processing and distribution, including supporting the removal of the planning cap at Port Botany;
- supporting Sydney's (and more broadly NSW and Australia's) growing population and increasing demand for containerised freight;
- improving overall environmental and social outcomes by reducing the amount of road freight, particularly the impacts of air pollution and greenhouse gas emissions from heavy vehicles, fuel consumption and waste generation, noise and vibration, congestion costs and road accidents; and
- supporting the need for interstate freight infrastructure to increase the current rail share of freight transport.

The Master Plan specifically lists the development of the Project as an important component in achieving a number of objectives including:

- the potential to generate new jobs in the transport and logistics sector and support commercial activity across south-west Sydney and the broader city;
- encouraging a more competitive rail alternative to road freight and contributing to the development of a metropolitan network of intermodal terminals;
- encouraging further state, regional and national investment in rail freight capacity; and
- securing a suitable location to develop a strategically located intermodal site that supports the expansion of a strategic freight network in western Sydney.

The Master Plan is therefore consistent with the overall Project objectives and supports all four of MIC's constitutional objectives.

### Metropolitan Plan for Sydney 2036

The *Metropolitan Plan for Sydney 2036* (NSW Government, 2010) was released in December 2010 and provides an integrated long-term planning framework for Sydney's development to 2036. The plan identifies IMTs as an essential component of an efficient freight and logistics sector. It also identifies the need for ongoing collaboration with the Australian Government to facilitate development of IMT facilities. The Project is specifically noted for its potential to generate employment in the Liverpool LGA and to support commercial growth across the metropolitan area.

MIC's constitutional objectives are generally consistent with the principles of the Metropolitan Plan.

### Draft Sydney Metropolitan Strategy for Sydney to 2031

The *Draft Metropolitan Strategy for Sydney to 2031* (DP&I, 2013) (Draft Metropolitan Strategy) was released for public consultation in March 2013. Once the current draft strategy is finalised (expected in 2014), this will replace the *Metropolitan Plan for Sydney 2036*.

The Draft Metropolitan Strategy sets the framework and strategic planning foundation for the sustainable growth of Sydney and has been prepared in conjunction with NSW 2021, the NSW Long Term Transport Master Plan and the State Infrastructure Strategy.



The Draft Metropolitan Strategy identifies the need for more efficient transport and infrastructure delivery to improve the efficiency and capacity of Sydney's freight transport and intermodal terminal network. MIC's constitutional objective iii) is generally consistent with this principle. The Strategy also identifies that industrial lands close to rail, motorways, other major roads, or ports, airports and intermodal terminals have high strategic value, and recognises the need to plan for the Project in the medium to long term. The proposed location of the Project at Moorebank is generally consistent with this principle.

### Railing Port Botany's Containers

The NSW Government identified developing an IMT at Moorebank as a critical requirement to meet Sydney's freight rail targets in *Railing Port Botany's containers: Proposals to ease pressure on Sydney's roads* (Freight Infrastructure Advisory Board 2005). The Project site was identified as strategically important given its proximity to the SSFL and the M5 and M7 Motorways. The report recommended the NSW Government implement the following strategies:

- Develop the major, new terminals at Enfield, Moorebank and Eastern Creek (including adequate provisions to allow common user and open access operations).
- Regard Moorebank as a key component in meeting Sydney's intermodal capacity needs.
- Ensure that the Moorebank site is secured for IMT development by the private sector.
- Work with the Australian Government to move the SME from the site as soon as possible.
- Commence planning for the site's development by the private sector as an IMT with the capacity to handle at least 500,000 TEU a year.
- Develop a business model for the acquisition and development of the site in a way that allows the private sector to bring forward the terminal's development.
- Pursue negotiations with the Australian Government to secure AusLink funding for an ARTC rail connection into the Moorebank site.
- Ensure that access to the Moorebank site does not compromise the future expansion of the East Hills passenger line.
- Ensure planning for Moorebank includes design buffers to reinforce the site's separation from residential development and provide public recreation facilities along both sides of the Georges River.

The Project concept and MIC constitutional objectives are generally consistent with these recommendations. In regard to the last point, the proposed conservation area shown in Figure 7.4 to Figure 7.6 in Chapter 7 – *Project built form and operations* comprises an appropriate buffer from residential areas to the west. The Project proponent has not yet confirmed whether public access will be provided to this area. This requires further consideration of security and conservation values as part of the finalisation of the detailed design. However, this issue will be further considered during development of the Project (as discussed further in Chapter 24 – *Social and economic impacts*).

### Sydney Metropolitan Strategy

The *Metropolitan Strategy – City of Cities: A Plan for Sydney's Future* (Department of Planning 2005) (Metropolitan Strategy) provided a regional planning and development framework to manage Sydney's growth and development up to 2031. The Metropolitan Strategy has since been superseded by the *Metropolitan Plan for Sydney 2036*, but is still instructive in detailing the strategic need for development of the Project.

The Metropolitan Strategy proposes concentrating growth in centres, to meet the target of ensuring Sydney's residents do not have to travel more than one hour a day for jobs, services, higher order medical and legal services, major cultural and entertainment venues, or regional open space or recreational opportunities. This proposal is consistent with MIC's constitutional objective i).

The Metropolitan Strategy includes an objective to maximise the efficiency of freight transport and the proportion transported by rail, which is generally consistent with MIC's constitutional objective iii). Contained within the Metropolitan Strategy objectives is an action to 'Plan an intermodal terminal network in Sydney', noting that the plan would examine the need to locate new major terminals to service western and south-western Sydney in conjunction with existing smaller intermodal terminals. Although the Project is not specifically mentioned in the Metropolitan Strategy, submissions received in relation to a review of that document highlight Moorebank as a critical location.

### South West Subregion: Draft Subregional Strategy

The *South West Subregion: Draft Subregional Strategy* (the 'Draft Subregional Strategy') was prepared by the NSW Government in 2007 (Department of Planning 2007) and is yet to be finalised.

With respect to the Project the Draft Subregional Strategy highlights that:

'The State Government regards the proposal for a transport terminal at Moorebank as a key component in meeting Sydney's intermodal capacity needs.' (p 30, Department of Planning 2007)

In the context of managing commercial transport growth, the Draft Subregional Strategy identifies that:

'As part of the NSW Government's vision to build on strong economic growth and employment in western and south western Sydney, the subregional strategy needs to ensure that sufficient land remains available to support a network of intermodal freight terminals in the subregion including locations such as Minto, Ingleburn and Moorebank.' (p 90, Department of Planning 2007).

The Draft Subregional Strategy also acknowledges that an intermodal facility should have access to the SSFL, as well as good road access from the M5 Motorway. The Project concept is consistent with the Draft Subregional Strategy in that it locates the proposed IMT within south-west Sydney (at Moorebank) and close to the SSFL and M5 Motorway. The Draft Subregional Strategy is generally consistent with MIC's constitutional objective i).

### NSW Ports and Freight Strategy

In November 2013, the final *NSW Freight and Ports Strategy* (NSW Government 2013) was released. This strategy seeks to establish a roadmap for understanding and addressing NSW's current and future freight needs. The strategy identifies a series of actions to achieve network efficiency, capacity and sustainability through government mechanisms (policy reform, program delivery and infrastructure investment by both the private and public sector). The strategy notes that the Project site has been identified by the Australian and NSW Governments as a key strategic location to increase intermodal capacity.

Action 2E of the strategy is to 'Foster intermodal terminal network development'. The document notes that 'metropolitan intermodal terminals are critical to increase rail mode share and manage the rapidly growing import container trade, as well as the interstate freight task' (p 120). It also acknowledges that '[t]he existing capacity of intermodal terminals in Sydney is inadequate to meet the growing demand for import and export container movements'(p 120), and that '[t]he development of appropriate intermodal terminals in the Sydney metropolitan area and regional areas will contribute to increasing freight moved by rail, particularly in the container market' (p120). These statements are generally consistent with the identified need for the Project and MIC's constitutional objectives i) and iii).

The strategy supports the development of an IMT at Moorebank as it is 'supported by dedicated rail freight lines and adequate road connections' (p121). The strategy also notes that development of two intermodal facilities at Moorebank (the Moorebank IMT Project and SIMTA) would have cumulative impacts on the local road network; therefore, to support these developments, Transport for NSW (TfNSW) is seeking to provide road network upgrades. The specific goals of these upgrades include:

- providing additional capacity and traffic reliability on key routes accessing the Project site;
- ensuring full access to the precinct for high productivity vehicles (HPV), including higher mass limit (HML) vehicles; and
- managing the needs of the Project site in terms of road access, while addressing negative impacts on the surrounding community and environment.

The strategy also notes that TfNSW is proposing to 'undertake modelling and economic analysis to determine the optimal road upgrade package to meet the needs of the developed Moorebank intermodal precinct' (p 122, NSW Government 2013). This process should assist in minimising the road network impacts of the Project, including cumulative impacts.

### Action for Air

The NSW Office of Environment and Heritage (OEH) (formerly DECCW)'s *Action for Air 2009 Update* (DECCW 2009) is the NSW Government's air quality management plan for Sydney, Wollongong and the Lower Hunter. NSW 2021 makes cleaner air a priority, and sets a target requiring NSW to meet national air quality goals identified in the National Environment Protection Measure for Ambient Air Quality (the Air NEPM). The aims of Action for Air are to reduce:

- emissions to comply with the State Plan's cleaner air targets and meeting the national air quality standards for six pollutants as identified in the Air NEPM; and
- the population's exposure to air pollution, and the associated health costs.

As described in detail in Chapter 17 – *Local air quality* and Chapter 18 – *Regional air quality*, review of air quality monitoring data has shown that air quality has improved over the past decade, with significant reductions in ambient concentrations of lead, carbon monoxide, sulfur dioxide and nitrogen dioxide. Impacts of the Project on local and regional air are described in detail in these chapters and are considered to be generally in accordance with the objectives of this plan.

Action for Air also discusses future directions and strategies for air quality management and notes that increasing the use of the rail network for transport freight improves air quality. This is generally consistent with MIC's constitutional objectives i) and iii).

### 3.7 Summary of need for the Project

In summary, the Moorebank IMT would be able to handle a significant proportion of the expected growth in containerised IMEX and interstate freight moving through Sydney. As the Project would enable more containerised freight to be moved by rail, it would respond to Sydney's need for more freight handling capacity without the limitations posed by Sydney's congested road network. The Project is, however, one of a number of IMTs needed in Sydney to manage the increased number of containers expected to come through Port Botany in the long term.

The Project would also take advantage of the substantial operating cost savings and environmental benefits that can be achieved through the greater use of rail for long distance freight transport, thereby leveraging the Australian Government's \$4.8 billion investment in improving the national rail freight network.

The site of the Project is well located, considering two-thirds of the container freight arriving at Port Botany is bound for western Sydney.

Overall, it is envisaged that the Project would boost rail freight's role in moving goods through the Sydney region, with potential to improve Australia's national productivity and better manage the rate of growth of traffic on the road network.