

Chapter 30

Project justification and conclusions



Contents

	Page number
30. Project justification and conclusions	30-1
30.1 Project justification	30-2
30.1.1 Project need and objectives	30-2
30.1.2 Adherence to objectives of the EPBC Act	30-3
30.1.3 Adherence to the EP&A Act and suitability of the Project site	30-5
30.1.4 Adherence to principles of ESD	30-9
30.1.5 Justification for carrying out the Project in the manner proposed	30-11
30.2 Conclusions	30-12
30.2.1 Anticipated benefits and impacts	30-12
30.2.2 Early Works phase justification	30-14
30.2.3 Overall Project justification	30-14

List of tables

	Page number
Table 30.1 Relevant Commonwealth EIS Guidelines and NSW SEARs	30-1
Table 30.2 Adherence to EPBC Act objectives	30-3
Table 30.3 Adherence to EP&A Act objectives	30-5
Table 30.4 Adherence to section 79C of EP&A Act	30-7
Table 30.5 Adherence to principles of ESD outlined in the EP&A Act and EPBC Act	30-9

30. Project justification and conclusions

Chapter 30 provides an overall justification for the Moorebank Intermodal Terminal (IMT) Project (the Project), and conclusions regarding the Project's potential impacts on the environment, taking into account the findings of this Environmental Impact Statement (EIS) in its entirety. This chapter seeks to address the Commonwealth Department of the Environment (DoE)'s EIS Guidelines and the Secretary for the NSW Department of Planning and Environment (NSW DP&E)'s Environmental Assessment Requirements (NSW SEARs) listed in Table 30.1 below.

Table 30.1 Relevant Commonwealth EIS Guidelines and NSW SEARs

Requirements	Where addressed
Commonwealth EIS Guidelines under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 EPBC Act	
<ul style="list-style-type: none"> Address the specific objectives and justification for the proposal. Details of how the proposed action is consistent with the objectives of the EPBC Act and principles of ecologically sustainable development (ESD) defined in Section 3A of the Act (refer to Attachment 1). Consideration should focus on <i>The National Strategy for Ecologically Sustainable Development</i>, published by the Commonwealth Government (1992). Each principle should be discussed and conclusions drawn as to how the proposal conforms. A life-of-project perspective must be shown. 	Sections 30.1.1 to 30.1.4 (supported by Chapter 9 – <i>Project sustainability</i>).
<ul style="list-style-type: none"> Provide a strategic and project justification describing the strategic need, justification and objectives for the project, including but not limited to: 	Section 30.1.1 (supported by Chapter 3 – <i>Strategic context and need for the Project</i> and Chapter 6 – <i>Project development and alternatives</i>).
<ul style="list-style-type: none"> The suitability of the site taking into consideration the objects of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). 	Section 30.1.3.
<ul style="list-style-type: none"> The implications of NSW planning requirements in relation to environmental assessment and planning considerations of the site within the broader surrounding precinct and proposed or possible future developments. 	Chapter 1 – <i>Introduction</i> , Chapter 3 – <i>Strategic context and need for the Project</i> and Chapter 4 – <i>Planning and statutory requirements</i> .
<ul style="list-style-type: none"> Alternatives considered to the preferred project (including site layouts) and impacts arising from the relocation of current uses. 	Chapter 6 – <i>Project development and alternatives</i> .
<ul style="list-style-type: none"> The need for and the objectives of the project, taking into consideration container trade numbers (import and export) at the international, national and state levels. 	Section 30.1.1 (supported by Chapter 3 – <i>Strategic context and need for the Project</i>).
<ul style="list-style-type: none"> Future trends in container origin and destination in Sydney; intermodal capacity and demand; and identification of the terminal's freight catchment area and freight split. 	Chapter 3 – <i>Strategic context and need for the Project</i> .
<ul style="list-style-type: none"> Its relationship to and interaction with adjoining development(s), including the proposed intermodal on the Sydney Intermodal Terminal Alliance (SIMTA) site. 	Chapter 3 – <i>Strategic context and need for the Project</i> (refer to Table 3.4). Cumulative impacts with adjoining development assessed in Chapter 27 – <i>Cumulative impacts</i> .

Requirements	Where addressed
<ul style="list-style-type: none"> Its consistency with the aims and objectives of relevant State policies and plans including the NSW 2021, Long Term Transport Master Plan, State Infrastructure Strategy 2012-2032, Metropolitan Plan for Sydney 2031, Railing Port Botany's Containers, Action for Air, the Commonwealth's draft National Ports Strategy and National Freight Strategy, NSW Freight and Ports Strategy and project objectives. 	Chapter 3 – <i>Strategic context and need for the Project</i> (refer section 3.6).
<ul style="list-style-type: none"> Discuss potential options and implications of future ownership and land tenure change of the action. 	Chapter 1 – <i>Introduction</i> (refer section 1.4) and Chapter 23 – <i>Property and infrastructure</i> (refer section 23.2.1).
<ul style="list-style-type: none"> An overall conclusion as to the environmental acceptability of the proposal (and/or each option relative to the other) should be provided, including discussion on compliance with the principles of ESD (Attachment 1) and the objects and requirements of the EPBC Act (Attachment 2). Reasons justifying undertaking the proposal in the manner proposed should also be outlined. 	Section 30.2 (supported by sections 30.1.2 and 30.1.4). Reasons for justifying undertaking the Project in the manner proposed are outlined in section 30.1.5.
<ul style="list-style-type: none"> Measures proposed or required by way of offset for any unavoidable impacts on NES [National Environmental Significance] matters, and the relative degree of compensation should be highlighted. 	Section 30.2 (supported by Chapter 13 – <i>Biodiversity</i> and section 28.4 in Chapter 28 – <i>Environmental management framework</i>).
NSW SEARs under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act)	
<ul style="list-style-type: none"> A justification of the development taking into consideration the objects of the EP&A Act. 	Section 30.1.
<ul style="list-style-type: none"> Detail how ESD principles (as defined in clause 7(4) of the Regulation) would be incorporated in each stage of the development. 	Section 30.1 (particularly 30.1.4).

30.1 Project justification

30.1.1 Project need and objectives

The strategic context and need for the Project are outlined in detail in Chapter 3 – *Strategic context and need for the Project*, with Project objectives listed in section 1.3 (in Chapter 1 – *Introduction*). Section 1.3 lists two sets of objectives for the Project: the Commonwealth Project objectives, which were established in 2010 and underpinned the development of the Project and consideration of alternatives; and the Moorebank Intermodal Company (MIC) constitutional objectives, which were established when MIC was formed in 2012.

The Project is needed to address Sydney's shortage of IMT capacity and has the potential to improve Australia's national productivity. Sydney's need for additional IMEX and interstate IMT infrastructure is driven by factors such as the expected growth in containerised IMEX and interstate freight moving through Sydney, capacity constraints on the current and planned IMT network, worsening road congestion around Port Botany and on the M5 Motorway, and the high social and environmental costs of road freight relative to shipping. If these issues are not addressed, they are predicted to add substantial costs to the national and regional freight supply chain, as well as wider economic and environmental impacts associated with road congestion in Sydney. Addressing this need for more IMT capacity is critical to achieving Commonwealth Project objectives 1 (boost national productivity through improved freight network capacity and rail utilisation) and 4 (attract employment and investment to south-west Sydney), as well as MIC constitutional objectives i) (to facilitate development of an IMT at Moorebank), ii) (to facilitate the operation of a flexible and commercially viable facility) and iii) (to improve national

productivity through an efficient supply chain, increased freight capacity and better rail utilisation), refer section 1.3 in Chapter 1 - *Introduction*.

The warehousing component of the Project is needed to improve the logistics supply chain and ensure an efficient terminal. This is critical to achieving Commonwealth Project objectives 2 (create a commercially viable facility), 4 (attract employment and investment to south-west Sydney) and 6 (optimise value for money for the Commonwealth), as well as MIC constitutional objectives i) (to facilitate development of an IMT at Moorebank), ii) (to facilitate the operation of a flexible and commercially viable facility) and iv)(to operate on commercially sound principles).

As described in detail in Chapter 3 – *Strategic context and need for the Project*, the Project would also complement other government rail investments and support the objectives of numerous Australian and NSW Government policy and planning documents. Furthermore, the Project would 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 off the Australian Government’s \$4.8 billion investment towards improving the national rail freight network.

The site of the Project is well located, considering its proximity to major road and rail infrastructure (including the Southern Sydney Freight Line (SSFL) and the M5 Motorway), and the fact that two-thirds of the container freight arriving at Port Botany is bound for western Sydney.

Further justification for the Project is detailed below in relation to adherence of the Project with the EPBC Act and EP&A Act objectives (see sections 30.1.2 and 30.1.3) and the principles of ecologically sustainable development (ESD) (see section 30.1.4). Section 30.1.5 provides justification for carrying out the Project in the manner proposed and assessed in this EIS – in particular, the proposed phasing of the development, the inclusion of three rail access options and the staged approval process.

30.1.2 Adherence to objectives of the EPBC Act

Table 30.2 outlines the objectives of the EPBC Act and how the Project adheres to these objectives.

Table 30.2 Adherence to EPBC Act objectives

Objective	How the Project adheres to objective
(a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance	<p>Matters of national environmental significance (MNES) under the EPBC Act are discussed in section 4.1 (Chapter 4 – <i>Planning and statutory requirements</i>) of this EIS. DoE (formerly the Department of Sustainability Environment, Water, Population and Communities) has determined that the Project is a ‘controlled action’ under the EPBC Act because it is an action by a Government Business Enterprise acting on behalf of the Commonwealth (i.e. a Commonwealth action) which would have a significant impact on the environment; it affects Commonwealth-owned land; and it is likely to have a significant impact on listed threatened species and communities.</p> <p>The protection of the environment, including MNES, is a key objective of all aspects of development of the Project, including the assessment of feasible alternatives and optimisation of the indicative concept layout options. Commonwealth Project objective 5 specifically sought to achieve sound environmental and social outcomes that are considerate of community views. In achieving its constitutional objectives, the Moorebank Intermodal Company (MIC) is also tasked with acting in an environmentally and socially responsible manner; this was considered in the development and assessment of the Project.</p> <p>The criteria used in the multi-criteria analysis described in Chapter 6 – <i>Project development and alternatives</i> incorporated various environmental and community performance criteria, including minimising clearing of Commonwealth or State listed vegetation communities.</p> <p>This EIS included a detailed assessment of potential impacts on listed threatened species and communities, and concluded that no Threatened</p>

Objective	How the Project adheres to objective
	<p>species population or ecological community is likely to be significantly impacted by the Project, as detailed in Chapter 13 – <i>Biodiversity</i>. Notwithstanding this, substantial biodiversity offsets are proposed as part of this Project to offset the proposed vegetation clearing required to enable development of the Project. These are described in section 13.4.2 in Chapter 13 – <i>Biodiversity</i>.</p> <p>The proposed offsets strategy seeks to achieve the long-term protection and/or enhancement of existing habitat in moderate to good condition and the restoration, rehabilitation and re-establishment of habitat in poor condition.</p> <p>Potential impacts on all other aspects of the environment are also addressed in this EIS and numerous management and mitigation measures are proposed to manage identified impacts on the environment.</p>
(b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources	<p>As described in Chapter 9 – <i>Project sustainability</i> and below in section 30.1.4, the principles of ecologically sustainable development (ESD) have been considered in the development of the Project and would continue to guide subsequent design development and the construction and operation phases.</p>
(c) to promote the conservation of biodiversity	<p>The development of the Project and the indicative concept layout options have sought to conserve biodiversity through retention and proposed improvements to riparian vegetation along the riparian zone of the Georges River.</p> <p>A detailed biodiversity impact assessment was completed as part of this EIS. Various management and mitigation measures are proposed to minimise impacts on flora and fauna during construction and operation of the Project, and biodiversity offsets are also proposed and explained in Chapter 13 – <i>Biodiversity</i>.</p>
(ca) to provide for the protection and conservation of heritage	<p>The development of the Project and the indicative concept layout options have sought to protect and conserve heritage through avoidance of direct impacts within the riparian zone of the Georges River (with the exception of rail access connection and stormwater drainage outlet works). This riparian zone is where the majority of Aboriginal heritage values are concentrated. The Aboriginal heritage impact assessment has involved registered Aboriginal parties and these stakeholders would continue to be involved in confirming appropriate mitigation measures where impacts cannot be avoided.</p> <p>In terms of European heritage, some heritage items would be relocated to Holsworthy as part of the approved Moorebank Units Relocation Project. For remaining items, a number of heritage items would be directly affected by the Project's construction footprint, as described in Chapter 21 – <i>European heritage</i>. Various measures are proposed to minimise and mitigate these impacts, including investigating, documenting and archiving those deposits identified as having the greatest research potential; additional investigations, historical research and a comprehensive salvage program; and further consideration of adaptive reuse and relocation options for key items, with archival recording as a minimum.</p>
(d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples	<p>As described in Chapter 5 – <i>Stakeholder and community consultation</i>, a detailed program of stakeholder, government agency, community and indigenous stakeholder consultation has been implemented and would continue for the duration of the Project. Where feasible, concerns of those consulted have been considered in the Project's design development, impact assessment and delineation of mitigation measures.</p>
(e) to assist in the co-operative implementation of Australia's international environmental responsibilities	<p>By facilitating a mode shift from road to rail freight, the Project would assist in meeting international climate change objectives. Various mitigation measures are also proposed to minimise the emission of greenhouse gases during the Project's construction and operation.</p>

Objective	How the Project adheres to objective
(f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and	As noted above, the Aboriginal heritage impact assessment has involved consultation with registered Aboriginal parties and these stakeholders will continue to be involved in confirming appropriate mitigation measures where impacts cannot be avoided. This consultation is ongoing. Any concerns of registered Aboriginal parties regarding sustainable use of biodiversity would be considered in mitigation and management measures and further design development of the Project.
(g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.	Refer to (f) above.

30.1.3 Adherence to the EP&A Act and suitability of the Project site

Table 30.3 details the objectives of the EP&A Act and the adherence of the Project with those objectives. This includes consideration of the suitability of the Project site for the proposed development.

Table 30.3 Adherence to EP&A Act objectives

Objective	How the Project adheres to objective
(a) (i) To encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment	<p>Consistent with this objective, one of the Commonwealth Project objectives is to achieve sound environmental and social outcomes that are considerate of community values. In achieving its constitutional objectives, MIC is also tasked with acting in an environmentally and socially responsible manner.</p> <p>Impacts on natural and artificial resources have been considered in the development of the Project concept. The key natural resources at and near to the Project site include flora and fauna, and water in the Georges River. The key 'artificial' resources include heritage resources and the community surrounding the Project site. Detailed impact assessments of these issues have been completed as part of the development of this EIS.</p> <p>The development of this Project is also expected to provide a number of economic, social and environmental benefits to the locality and wider region, as detailed in this EIS, particularly section 3.2 in Chapter 3 – <i>Strategic context and need for the Project</i>.</p>
(a) (ii) To encourage the promotion and co-ordination of the orderly and economic use and development of land	The Project is designed to achieve sustainable economic outcomes, and economic objectives are a key driver of this Project. This is discussed further in Chapter 23 – <i>Property and infrastructure</i> and Chapter 24 – <i>Social and economic impacts</i> .
(a) (iii) To encourage the protection, provision and co-ordination of communication and utility services	Impacts on utilities are described in Chapter 23 – <i>Property and infrastructure</i> of this EIS. Utility stakeholders have also been consulted during the development and environmental assessment of the Project as described in Chapter 5 – <i>Stakeholder and community consultation</i> .
(a) (iv) To encourage the provision of land for public purposes	The majority of the Project site is currently owned by the Australian Government, but is not used for public purposes, as it is occupied by the Department of Defence. The IMT would also restrict public access. However, as described in Chapter 23 – <i>Property and infrastructure</i> , once the IMEX rail access connection (for the northern or central rail access option) is constructed during Phase A, part of the land may be developed for recreational or other purposes (to be determined). Opportunities would be explored during the detailed design process to utilise the remaining space for recreational purposes.

Objective	How the Project adheres to objective
(a) (v) To encourage the provision and co-ordination of community services and facilities	The Project would provide economic benefits to the surrounding community through increased employment and the use of local services by workers during the Project's construction and operation. No major impacts on community services and facilities are anticipated, as discussed in Chapter 24 – <i>Social and economic impacts</i> .
(a) (vi) To encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats	<p>The protection of the environment, including flora and fauna, is a key objective of all aspects of development of the Project, including the assessment of feasible alternatives and optimisation of the indicative concept layouts. Commonwealth Project objective 5 specifically seeks to achieve sound environmental and social outcomes, and MIC is required to act in an environmentally and socially responsible manner in achieving its constitutional objectives. The criteria used in the multi-criteria analysis described in Chapter 6 – <i>Project development and alternatives</i> also incorporated various environmental and community performance criteria, including minimising clearing of Commonwealth or State listed vegetation communities.</p> <p>This EIS included a detailed assessment of potential impacts on listed threatened species and communities, and concluded that no threatened species population or ecological community is likely to be significantly affected by the Project, as detailed in Chapter 13 – <i>Biodiversity</i>. Notwithstanding this, substantial biodiversity offsets are proposed as part of this Project to offset the vegetation clearing required to enable development of the Project. The Project also includes retention and improvement of a large area of riparian vegetation on the eastern bank of the Georges River (referred to as the conservation area). Potential impacts on all other aspects of the environment are also addressed in this EIS, and various management and mitigation measures are proposed to manage identified impacts on the environment.</p>
(a) (vii) To encourage ecologically sustainable development	The Project has been designed and assessed with the principles of ESD in mind. This is further discussed in section 30.1.4. In addition, a sustainability strategy has been prepared for the Project, consistent with the principles of ESD, and is contained in Chapter 9 – <i>Sustainability</i> .
(a) (viii) To encourage the provision and maintenance of affordable housing	As discussed in Chapter 24 – <i>Social and economic impacts</i> , the Project could result in a minor increase in demand for housing in the local area, which could affect housing affordability.
(b) To promote the sharing of the responsibility for environmental planning between the different levels of government in the State	Various levels of government have been consulted as part of the stakeholder consultation requirements of the Project. The Project team would continue to work closely with stakeholders of all varieties, government and non-government throughout the approval, construction and operation of the Project.
(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment	The preparation of this EIS has involved extensive consultation with the general public and relevant community groups. This would continue throughout the remaining approval, construction and operation phases of the Project.

Adherence to section 79C of the EP&A Act

Table 30.4 details the matters used by a consent authority in determining a development application (section 79C of the EP&A Act), including the suitability of the chosen site for the Project, and where or how these matters have been considered or addressed within this EIS.

Table 30.4 Adherence to section 79C of EP&A Act

Objective	Where the objective is considered or addressed in this EIS
(a) the provisions of:	
(i) any environmental planning instrument, and	<p>Refer sections 4.2.1, 4.2.4 and 4.3 (in Chapter 4 – <i>Planning and statutory requirements</i>). Relevant instruments include:</p> <ul style="list-style-type: none"> • <i>Liverpool Local Environmental Plan 2008</i>; • <i>The State Environmental Planning Policy (State and Regional Development) 2011</i> (the SRD SEPP); • <i>State Environmental Planning Policy (Infrastructure) 2007</i> (the Infrastructure SEPP); • <i>SEPP 19 – Bushland in Urban Areas</i>; • <i>SEPP 33 – Hazardous and Offensive Development</i>; • <i>SEPP 44 – Koala Habitat Protection</i>; • <i>SEPP 55 – Remediation of Land</i>; and • <i>Greater Metropolitan REP 2 – Georges River Catchment</i>.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	<p>This EIS is not subject to any proposed or draft instruments requiring consultation under this Act. It should be noted, however, that section 4.2.4 in Chapter 4 – <i>Planning and statutory requirements</i> discusses the proposed rezoning of the Project site in accordance with Part 3 of the EP&A Act under s89E(5) of the EP&A Act. For this purpose, MIC has lodged a draft planning proposal with the Secretary of NSW DP&E to amend the <i>Liverpool Local Environmental Plan 2008</i>. The draft planning proposal will go on public exhibition at the same time as this EIS.</p>
(iii) any development control plan, and	<p>The development of the Project site is subject to the <i>Liverpool City Council Development Control Plan</i> (DCP) 2008:</p> <ul style="list-style-type: none"> • Part 1 – General Controls for all Development. This applies to all land within the Liverpool LGA including the Project site and lists controls to minimise environmental hazards such as bushfire, salinity and flooding as well as controls to promote bushland and habitat preservation and urban and environmental design. • Part 2.4 – Development in Moorebank Defence Lands. This applies to the Amiens site, which is located on the north-eastern boundary of the Project site on Moorebank Avenue, Moorebank. This part contains urban design controls for the Amiens site. • Part 7 – Development in Industrial Areas. This part would apply as the Project site would be rezoned to an industrial use. This part contains the overall requirements and objectives for development including urban design controls in the industrial areas of Liverpool. <p>This DCP has been referred to in the development of the EIS and would be incorporated into the future detailed design and Stage 2 State significant development (SSD) approval(s) for the Project, where applicable.</p>

Objective	Where the objective is considered or addressed in this EIS
(iiiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and	Not applicable.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	Not applicable.
(v) any coastal zone management plan (within the meaning of the <i>Coastal Protection Act 1979</i>),	The <i>Georges River Estuary Data Compilation & Estuary Processes Study</i> (GRCCC) states that the Georges River Estuary stretches approximately 50 kilometres (km) and extends from its mouth at Botany Bay to the tidal limit at Liverpool Weir. As the Project site is located upstream of the Liverpool Weir, adjacent to the freshwater reaches of the Georges River, the Project site is not part of the Georges River Coastal Zone and no coastal zone management plans apply.
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	A detailed assessment of impacts is included in this EIS, with management and mitigation measures detailed in Chapter 28 – <i>Environmental management framework</i> .
(c) the suitability of the site for the development,	<p>The site is currently zoned as IN1 General Industrial and SP2 Infrastructure. The proposal is for an IMT, which is a land use permissible with consent in these zones, provided the development occurs in accordance with relevant planning and regulatory requirements and is undertaken with required consent and approvals.</p> <p>Notwithstanding that the Project is permissible with development consent, as outlined in section 4.2.4 (in Chapter 4 – <i>Planning and statutory requirements</i>), in order to facilitate future development of the Project site in accordance with this EIS, MIC is seeking to rezone the Project site in accordance with Part 3 of the EP&A Act under s89E(5) of the EP&A Act.</p> <p>The planning proposal seeks to amend the <i>Liverpool Local Environment Plan 2008</i> (LEP) to rezone the Project site to partly IN1 General Industrial (for the IMT) and partly E3 Environmental Management (for the conservation area along the Georges River). Other ancillary uses would be achieved by amending Part 7 (additional local provisions) of the Liverpool LEP to permit development on certain land.</p> <p>Other matters relevant to the consideration of the suitability of the site for development include its location and context and the potential impacts of the Project on the environment and the surrounding community. These issues have been assessed and described in detail in this EIS, in Chapter 2 – <i>Site context and environmental values</i>, and in the impact assessment chapters (Chapters 11 to 29). Overall, the Project site is considered suitable for development, assuming the effective implementation of the management and mitigation measures listed in Chapter 28 – <i>Environmental management framework</i>.</p>
(d) any submissions made in accordance with this Act or the regulations,	Section 1.6 of Chapter 1 – <i>Introduction</i> and Chapter 5 – <i>Stakeholder and community engagement</i> provide an overview of the planning and assessment process that is currently underway, in addition to the future public exhibition and submissions phase of the EIS.

Objective	Where the objective is considered or addressed in this EIS
(e) the public interest.	<p>Chapter 5 – <i>Stakeholder and community engagement</i> provides an overview of the consultation process that was carried out throughout the development of the Project and this EIS, and issues raised by the public to date. Public interest has been considered in this EIS through this consultation process and the assessment of social and economic impacts (refer Chapter 24 – <i>Social and economic impacts</i>).</p> <p>The Project is also expected to provide a number of economic, social and environmental benefits to the public within the locality and wider region, as detailed in this EIS, particularly in section 3.2 of Chapter 3 – <i>Strategic context and need for the Project</i>. The public interest has also been considered in the development of the management and mitigation measures described in Chapter 28 – <i>Environmental management framework</i>.</p>

30.1.4 Adherence to principles of ESD

Table 30.5 summarises the adherence of the Project to the principles of ESD, as defined in Schedule 2 of the EP&A Act and Section 3A of the EPBC Act. The principles embodied in the EPBC Act were based on *The National Strategy for Ecologically Sustainable Development*, published by the Australian Government in 1992.

Table 30.5 Adherence to principles of ESD outlined in the EP&A Act and EPBC Act

Principle	How the Project adheres to principle
Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.	Both long-term and short-term considerations have been addressed in the development of the Project concept and this EIS. For key issues such as noise, traffic and local air quality, the EIS was based on the assessment of scenarios that seek to consider short, medium and long-term impacts.
<p>If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.</p> <p>The EP&A Act additionally states that in the application of the precautionary principle, public and private decisions should be guided by:</p> <ul style="list-style-type: none"> • careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and • an assessment of the risk-weighted consequences of various options, 	<p>As described in Chapter 10 – <i>Impact assessment approach</i>, a worst case assessment or precautionary approach was applied to the EIS. This was partly in response to the uncertainty identified in this principle. Detailed management and mitigation measures are also proposed for all identified issues, with a focus on avoidance of impacts, where possible, followed by mitigation and management. An environmental risk analysis of potential impacts, including consequence, likelihood and unmitigated and mitigated significance, was also undertaken for the Project (refer to Chapter 29 – <i>Environmental risk analysis</i>).</p>

Principle	How the Project adheres to principle
<p>As per the principle of inter-generational equity, the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.</p>	<p>To demonstrate that a project fulfils its objectives and obligations to maintain the environmental principle of inter-generational equity, a holistic approach to maintaining environmental values is required. This EIS has considered issues with potential long-term implications, such as consumption of non-renewable resources, waste disposal and greenhouse gas emissions. The proposed management and mitigation of such impacts, through planning and design considerations summarised in Chapter 28 – <i>Environmental management framework</i>, demonstrate a commitment to maintaining or enhancing the environmental quality of the Project site and surrounding area in the future. Some specific examples of how the Project would deliver inter-generational equity include:</p> <ul style="list-style-type: none"> • remediating areas of contamination identified through existing assessments as well as any other areas discovered prior to and during construction; • maintaining and improving areas of natural ecological value through the establishment of the conservation area and biodiversity offsets; • promoting a shift in freight transport from road to rail with subsequent benefits for the environment associated with greenhouse gas emissions, air quality and road congestion, including: <ul style="list-style-type: none"> > annual greenhouse gas (GHG) savings of approximately 7,300 tonnes of CO₂-e a year (by 2030 as a result of the use of trains for transport rather than trucks); and > saving nearly 20.5 million truck vehicle kilometres travelled each year by 2030; and • the provision of long-term economic benefits to the national, state, regional and local economies.
<p>The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.</p>	<p>The Project seeks to minimise adverse impacts on, and where possible enhances the area's environmental values. An example of this is the proposed retention and improvement of riparian vegetation along the Georges River (the conservation area), as well as the package of additional offset land proposed as part of the Project.</p> <p>The conservation of biological diversity and ecological integrity has been considered throughout the development of the Project.</p>
<p>Improved valuation, pricing and incentive mechanisms should be promoted.</p> <p>The EP&A Act specifies that examples of such mechanisms include:</p> <ul style="list-style-type: none"> • polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement; • the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste; and • environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to 	<p>Throughout the planning and development of the Project, detailed consideration and assessment has been given to the business case and functional need for this Project within the context of Sydney's current regional freight network and future needs. Valuation of the environment and the economic valuation attributed to potential environmental savings, have been integral to this overall demand analysis.</p> <p>The planning and development of the Project considered a number of environmental impacts associated with the existing freight transport network as opportunities to achieve environmental and economic benefits from the Project. The modal shift from road to rail transportation created by the Project would allow the following impacts to be addressed:</p> <ul style="list-style-type: none"> • GHG emissions and air pollution contributed by road transport; • road accidents associated with heavy vehicles, including the significant social and economic costs of fatalities and healthcare; • the relative inefficiency of fuel consumption and waste generation (e.g. maintenance costs) associated with road vehicles compared to rail, which increases as travel distances and haulage increase; and

Principle	How the Project adheres to principle
<p>environmental problems.</p>	<ul style="list-style-type: none"> • congestion costs including time delays and the resulting additional emissions and wear and tear on road infrastructure. <p>The principles and concepts outlined in the <i>Sustainable Procurement Guide</i> (SEWPaC 2013) would be considered and incorporated where appropriate into the procurement process for the Project.</p> <p>The <i>Green lease schedule</i> (Department of Climate Change and Energy Efficiency 2011) would be considered and could be incorporated into any lease agreements for buildings in the Project, where appropriate.</p> <p>In addition, the Project would promote and enhance environmental sustainability through valuation and procurement mechanisms aimed at:</p> <ul style="list-style-type: none"> • encouraging material recycling and reuse; • minimising waste; • minimising heat loads from solar gain; • maximising natural light, transparency and access; • minimising energy use; • minimising the use of potable water and promoting the use of recycled water; • minimising greenhouse gas emissions; and • providing opportunities to improve workforce and community welfare. <p>These initiatives are discussed further in section 9.4 (Chapter 9 – <i>Project sustainability</i>).</p>

30.1.5 Justification for carrying out the Project in the manner proposed

As described in section 30.1.1 and Chapter 7 – *Project built form and operations*, the Project is proposed to be phased (staged) in terms of both its approval and its development for both construction and operation. The EIS also assesses three rail access options. The reasons for this approach are summarised in this section.

Justification for phased development

The main reason for the phased approach to the Project is the anticipated change over time in container cargo demand and the prevailing economic conditions. The phasing is intended to ensure that the required infrastructure is built only as it is needed. That is, the IMEX facility and associated warehousing are proposed to be progressively developed over Phases A and B, in line with the expected growth in demand. The interstate IMT (and associated warehousing) would not be built until demand increases for interstate and regional freight movements by rail. This increase in demand is anticipated to occur in the medium to long term (2025 to 2030).

There is a substantial amount of facilitating works that cannot be deferred until Phases B or C and would instead be built as part of the Early Works and Phase A packages. Early Works would include some site and soil remediation, building demolition, establishment of the conservation area within the plant and equipment operation training area (known as the 'dust bowl'), services disconnection, establishment of construction access and services. These works are proposed to be completed prior to the main construction works because they are essential to prepare the Project site for the main development. They also comprise a discrete phase of development, as MIC is seeking approval to commence these

works in accordance with the conditions of approval, with no further approval requirement. Phase A would include installation of the majority of site-wide drainage infrastructure, an upgrade of Moorebank Avenue, internal roads and access points, and the IMEX connection to the SSFL (and associated Georges River bridge).

Justification for assessment of three rail access options

This EIS presents three rail access options to connect the IMT with the SSFL – a northern, a central and a southern rail access option. Each option is associated with a slightly different internal layout for the main IMT site. This approach is proposed in order to maintain flexibility for future developers and operators of the Project. Once the selected developer/operator has been appointed, the Project would progress to the detailed design phase and one of the three rail access options identified above would be selected by the developer/operator (refer section 1.2.3 in Chapter 1 – *Introduction*). All three rail access options have been assessed in this EIS.

Justification for staged approval

As explained in Chapter 1 – *Introduction* and Chapter 4 – *Planning and statutory requirements*, Commonwealth EPBC approval is being sought for the current Project concept, and that approval would not be staged. However, staged development approval is being sought under the NSW EP&A Act, pursuant to Part 4, Division 4.1 of the Act (SSD). The key reason for this approach is to provide certainty around the key design and operational parameters under the NSW legislation, while allowing for design optimisation to occur once a final Project developer (private sector entity) has been selected.

30.2 Conclusions

The following conclusions are made in regard to the environmental acceptability of the Project as proposed in this EIS, and overall justification for the Project (including compliance with the principles of ESD and the objectives and requirements of the Commonwealth EPBC Act and NSW EP&A Act).

30.2.1 Anticipated benefits and impacts

The Project is anticipated to have significant economic benefits at the regional, state and national levels, as well as environmental and social benefits associated with the anticipated shift in freight transport from road to rail that the Project would encourage and facilitate.

The Project is also anticipated to have a number of environmental and social impacts, as detailed in this EIS. The majority of the identified impacts are not considered significant, assuming effective implementation of the proposed mitigation and management measures outlined in this EIS.

As detailed in Chapter 29 – *Environmental risk analysis*, no adverse environmental impacts are predicted to have a residual significance rating higher than 'moderate'. Assuming implementation of the proposed mitigation measures, the residual impacts of the Project on key issues — such as traffic, transport and access; local air quality; heritage; socioeconomics; hazard and risk; soils and contamination; local stormwater catchment flooding and water quality; property and infrastructure; greenhouse gases; and human health — are predicted to be either 'low' or 'low to moderate' in significance.

The following issues were predicted to have a residual impact of 'moderate':

- increase in ambient noise levels at sensitive receivers;
- loss or disturbance of Threatened flora and fauna species;
- potential for increase in flood levels (afflux) upstream of the Georges River bridge; and
- adverse impact on visual amenity.

In each case, the residual risk rating of 'moderate' was reflective of the need for a relatively complex set of mitigation measures or controls to reduce the predicted impacts to an acceptable level, and also of the likelihood of ongoing community concern in relation to these issues. The ratings do not indicate that these issues cannot be mitigated effectively through the measures proposed.

In relation to noise impacts, this EIS commits to the implementation of a detailed set of mitigation measures during construction and operation. A mitigated operational scenario was also modelled as part of the noise and vibration assessment. The assessment concluded that where the Project adopts reasonable and practical noise control measures during the detailed design phase, the northern, central and southern rail access options would be expected to comply with the relevant noise assessment criteria at the majority of the assessed residences. This would be confirmed through further detailed analysis during detailed design, once the detailed layout of the site is known.

In relation to disturbance of threatened flora and fauna species, no Commonwealth EPBC Act or NSW *Threatened Species Conservation Act 1995* listed Threatened species, population or ecological community is likely to be significantly affected by the Project. Furthermore, a detailed biodiversity offset strategy is proposed to compensate for the predicted impacts.

In relation to the potential for an increase in flood levels (afflux) upstream of the Georges River, none of the three bridge options were predicted to increase the flood risk to upstream properties during a 1% annual exceedance probability (AEP) event, and no significant increase in flood extent is predicted. Flow velocities in the river are also unlikely to be affected. Furthermore, a detailed set of construction and operational measures is proposed to reduce the predicted increase in afflux to an acceptable level.

In relation to visual amenity, potential visual impacts are predicted to be 'moderate to high' for some public park and residential receivers. Also, residential receivers that overlook the Project site would experience a noticeable change in the brightness of the area on clear nights. To manage these issues, various visual and light spill mitigation measures are proposed in this EIS.

An assessment has been undertaken of the cumulative impacts of the Project with development on the SIMTA site. Three cumulative impact scenarios were considered; each scenario comprised an IMT precinct across both sites with IMT and warehousing facilities distributed across the two sites. The cumulative assessment found that the Project has the potential to contribute to cumulative traffic, noise and air impacts associated with development on the SIMTA site. However, this EIS proposes various measures to reduce and manage these impacts, including the potential combined coordination of construction management plans where appropriate and relevant.

Furthermore, in the case of all potential environmental risks and impacts, ongoing monitoring and evaluation are proposed, with a view to investigate and implement new or additional measures as required.

Overall, the potential impacts of the Project on the environment and community are considered acceptable.

30.2.2 Early Works phase justification

The Early Works phase of the Project is not expected to be associated with significant adverse impacts. Furthermore, a range of construction management measures are proposed to avoid, remedy and mitigate potential impacts of this phase of works, as identified in this EIS. Considering this, commencement of the Early Works is considered justified in accordance with the conditions of approval (if approved).

30.2.3 Overall Project justification

Overall, the development of the Project is justified considering:

- the need for the Project, considering the shortage of IMT capacity in Sydney and the predicted growth in containerised freight passing through Sydney;
- the adherence of the Project to the identified Project objectives;
- the lack of feasible alternatives that meet the identified Project objectives;
- the suitability of the Project site at Moorebank, considering its size, its proximity to major rail and road freight corridors, and that two-thirds of the container freight arriving at Port Botany is bound for western Sydney;
- the consequences of not proceeding with the Project – including substantial costs to the entire economic supply chain, as well as wider economic and environmental impacts associated with road congestion;
- the adherence of the Project to the objectives and requirements of the EPBC Act and the EP&A Act, as demonstrated in Tables 30.2 and 30.3; and
- the fact that the Project concept and environmental assessment have sought to avoid, remedy and/or mitigate potential impacts on the social, economic and natural environment as far as reasonably practicable.