Appendix E – Statements

E.2 S Bradford

IN THE FEDERAL COURT OF AUSTRALIA
NEW SOUTH WALES
DISTRICT REGISTRY

NO NSD 1703 OF 2007

AUSTRALIAN COMPETITION AND CONSUMER COMMISSION
Applicant

PRK CORPORATION PTY LTD
First Respondent
and others

STATEMENT OF STEPHEN GEORGE BRADFORD

Contents

On 11 November 2008 I, Stephen George Bradford of Level 4, 530 Collins Street, Melbourne in the State of Victoria, Chief Executive Officer, state:

Background

1 I am the Chief Executive Officer of Port of Melbourne Corporation (**PoMC**). I started employment with PoMC in this position on 19 January 2004.

2 Prior to that, I was in the rail industry, as Managing Director Transport of Serco Australia Pty Ltd and Chief Executive Officer of the Great Southern Railway.

3 Somewhat earlier I was engaged as General Manager, Southern Region at National Terminals (Aust) Limited from February 1992 – July 1993. National Terminals was acquired by Patrick Corporation Limited. I left National Terminals upon its acquisition by Patrick

Filed on behalf of the Applicant by:

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4 As CEO of PoMC, I am an executive of Ports Australia, the peak industry body for port and marine authorities.

Port of Melbourne Corporation (PoMC) – legal status and governance

5 PoMC is a statutory corporation established and existing under Part 2 Division 1 of the *Port Services Act 1995* (Vic) (**PSA**). It commenced its operation on 1 July 2003, when the *Port Services (Port of Melbourne Reform) Act 2003* (Vic) commenced and simultaneously:

5 1 **abolished the Melbourne Port Corporation (MPC) and transferred the ownership** and responsibilities of MPC over the port of Melbourne land and landside port infrastructures to PoMC under Part 12 of the PSA; and

5 2 provided for the transfer of the functions and jurisdiction of the Victorian Channels Authority (**VCA**) over the port waters and the commercial shipping channels within the port of Melbourne waters to PoMC under Part 13 of the PSA

6 The PSA sets out the roles and functions of PoMC. Section 12 of the PSA prescribes the following objectives of PoMC:

6 1 to manage and develop the port of Melbourne in an economically, socially and environmentally sustainable manner;

6 2 to ensure that essential port services of the port of Melbourne are available and cost effective;

6 3 to ensure, in co-operation with other relevant responsible bodies, that the port of Melbourne is effectively integrated with other systems of infrastructure in the State;

6 4. to facilitate, in co-operation with other relevant responsible bodies, the sustainable growth of trade through the port of Melbourne; and

6 5 to establish and manage channels in port of Melbourne waters for use on a fair and reasonable basis

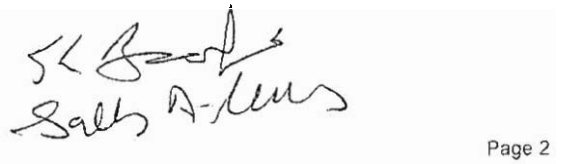
7 Section 13 of the PSA sets out the following functions of PoMC:

7 1 to plan for the development and operation of the port of Melbourne;

7 2 to provide land, waters and infrastructure necessary for the development and operation of the port of Melbourne;

7 3. to develop, or enable and control the development by others of, the whole or any part of the port of Melbourne;

7 4. to manage, or enable and control the management by others of, the whole or any part of the port of Melbourne;



7 5 to provide, or enable and control the provision by others of, services for the operation of the port of Melbourne;

7 6 to promote and market the port of Melbourne;

7 7. to facilitate the integration of infrastructure and logistics systems in the port of Melbourne with relevant systems outside the port;

7 8 to manage and, in accordance with standards developed by the Director of Marine Safety, to dredge and maintain channels in port of Melbourne waters;

7 9 to provide and maintain, in accordance with the standards developed by the Director of Marine Safety, navigation aids in connection with navigation in port of Melbourne waters;

7.10 generally, to direct and control, in accordance with the Marine Act 1988, the movement of vessels in port of Melbourne waters; and

7.11 any other functions that are conferred on the Corporation by or under the PSA or any other Act

8 The portfolio responsibility for port operations under the PSA lies with the Victorian Minister for Roads and Ports (**Minister**). The PSA requires the Minister to consult with and seek the approval of the Victorian Treasurer on a range of matters affecting PoMC

9 Under section 11 of the PSA, PoMC is a public authority and does not represent the Crown Its governance and accountability obligations are prescribed in Part 2 Division 3 of the PSA:

9.1 Under section 25, PoMC is governed by a board of directors appointed by the Governor in Council. The Board has the strategic and overall responsibility for the management, planning, development and operations of the port, but delegates the day to day management and commercial operations to the CEO, senior executives and general managers of PoMC.

9 2 Under section 30, PoMC is subject to the general direction and control of the Minister, and to specific directions given by the Minister with the approval of the Treasurer

9 3 Under sections 33, 34 and 35, PoMC must prepare and submit a corporate plan to the Minister and the Treasurer on or before 31 May of each year for their comments and consultation. The plan must include specific matters including:

9 3.1 a statement of corporate intent on specific matters including its business objectives and main undertakings during the financial year to which it relates and each of the following two financial years;

9.3 2 a business plan containing such information as the Minister or Treasurer requires; and

9 3 3 financial statements containing such information as the Treasurer requires

9 4. The Board must consider any comments on the proposed corporate plan made by the Minister or the Treasurer, must consult with the Minister and the Treasurer in relation to any such comments, and must make such changes to the plan as are jointly agreed to by the Board, the Minister and the Treasurer

9 5 **PoMC must act in accordance with the corporate plan unless the Minister and** Treasurer have first given their prior written approval to do otherwise. It must notify the Minister and the Treasurer immediately of any matters if the Board is of the opinion that they may prevent, or significantly affect the achievements of the business objectives or targets of the corporate plan

9 6 Under section 38, the Minister with the approval of the Treasurer may direct the Board to perform or cease to perform functions which the Minister considers to be in the public interest but that may cause it to suffer financial detriment; or to cease to perform functions that the Minister considers not to be in the public interest

Control of land and port waters of the port of Melbourne

10 PoMC has control over various parcels of land along the banks of the Yarra River and Maribyrnong River and in the north of Port Phillip Bay, within the city of Melbourne, totalling approximately 510 hectares in area. Annexed to this statement and marked **"SB-1"** is a map of the area controlled by PoMC:

10 1. Most of the land shown on annexure **"SB-1"** (shown with title details in yellow, with flags pointing towards the relevant parcels of land) is owned by PoMC.

10 2 Two port infrastructures located on reserved Crown land, known as Station Pier and Ann Street Pier and shown coloured red on annexure **"SB-1"**, are managed and controlled by PoMC as a Committee of Management appointed separately under the PSA and the *Crown Land (Reserves) Act 1978* (Vic).

10.3. PoMC also controls various navigational aids comprising buoys, beacons and lighthouses situated in and around the Bay, including the lighthouse at Point Lonsdale at the Entrance to the Bay. Most of these are located on Crown land or third party land where PoMC's access and control is gained under permits or licences from the land owner.

11 PoMC controls, maintains and operates the commercial shipping channels within the port waters of the port of Melbourne in Port Phillip Bay, in the Yarra and Maribyrnong Rivers between the land controlled by PoMC, and at the Entrance to the Bay PoMC has jurisdiction over marine safety and navigation in these port waters which are coloured blue in the map annexed to this statement and marked **"SB–2"**

12. Within the land and waters controlled by PoMC, there are 34 commercial berths in total These include berths at the following areas:

12 1 Webb Dock;

12 2 Swanson Dock;

12.3. Appleton Dock;

12.4. Holden Dock;

12 5 Victoria Dock;

12 6 South Wharf;

12 7 Yarraville;

12 8 Station Pier;

12 9 Gellibrand Pier; and

12 10. Maribyrnong

A map showing the different types of land use (as terminals or facilities for different cargoes referred to in paragraph 14 below) and the types of trade conducted on or from the land controlled by PoMC is annexed to this statement and marked **"SB-3"**.

13 PoMC's annual turnover for the financial year ending on 30 June 2008 was approximately $171.5 million. Primary sources of this revenue were:

13 1 wharfage fees (which comprised approximately $85.4 million) charged per unit of quantity, volume or weight of cargo for cargoes including empty containers, loaded on or discharged from vessels at the port. These are paid by the cargo owners except for empty containers which are paid by the vessel owners;

13 2 channel fees (which comprised roughly $20.9 million) for the provision of shipping channels and associated services in port waters, levied either on the gross tonnage of vessels using the channels, or to cargo owners, or to both;

13 3 infrastructure fees (which comprised roughly $11.8 million) introduced in April 2008 to recover the cost of the Channel Deepening Project, in the form of a charge per twenty-foot equivalent unit (**TEU**) on overseas containers;

13 4 rent from tenants, which comprised roughly $37.4 million; and

13 5 other miscellaneous fees and charges

14. PoMC facilitates the movement of various types of cargo across its berths, including:

14 1. Containers;

14 2 New motor vehicles;

14 3 Bulk liquids;

14 4 Dry bulk cargo;

Sally A. Lewis

14 5 General cargo; and

14.6 Passengers

15. During the financial year ending on 30 June 2008, port revenue from charges on goods (wharfage and infrastructure fees) amounted to around $97.2 million. Approximately 76% of this revenue was generated by the container trade, and approximately 6% was generated from the motor vehicle trade PoMC considers the container trade to be the most important port trade for the economic growth of the State of Victoria, followed by the export/import of finished automotive vehicles, and liquid and dry bulk cargoes PoMC has published a draft Port Development Plan which predicts international container trade growth to increase from 1.510 million TEU's in 2005 to 7 057 million TEU's in 2035

Acquisition of land by PoMC

16. PoMC is strategically interested in land that facilitates the growth of trade for Victoria Under section 15 of the PSA, PoMC must obtain the Minister's approval before acquiring or disposing of any interest in land, except for any interest or class of interest in land exempted by the Minister by notice in writing to PoMC.

17 Most of the land controlled by PoMC is zoned as "Special Use – Port Areas" in accordance with the relevant planning laws. These regulations are set out in the *Planning and Environment Act 1987* (Vic) and the Port of Melbourne Planning Scheme administered by the Victorian Department of Planning and Community Development. The Minister for Planning is responsible for zoning the areas of land in the port of Melbourne.

18 Most of the land owned and controlled by PoMC was granted by the Crown as part of the corporatisation of MPC, and vested in PoMC under the PSA However both MPC and PoMC have acquired land that was available on the open market, such land normally being industrial land.

19 PoMC has in the past created new wharves and terminals within the port land that it owns, through construction and/or reclamation of land.

Supply of Land by PoMC

20 Most of PoMC's port land used for terminals is leased to tenants for prescribed use, which may stipulate the handling of particular cargo or a range of cargoes PoMC also grants licences to these tenants for berthing at adjacent wharves

21 A number of port berths including F Appleton; 24 Victoria Dock; 27, 28, 29 and 33 South Wharf; and 6 Yarraville are managed by PoMC as common user berths for general cargo and dry bulk cargo. These areas typically comprise berth spaces, wharves and cargo storage areas. The hire conditions for use of these areas encourage quick turnover of cargo. Accordingly, the common user areas are generally designated for handling cargoes that do not require long term storage Only stevedores licensed by PoMC can gain access to the land to conduct stevedoring operations in these areas.

22 PoMC has other common user berths which are used for liquid bulk cargoes. Station Pier has common user berths used for cruise shipping.

23 Generally speaking, PoMC prefers to lease port land rather than managing areas as common user areas as this is more productive Common user areas are less productive because one operation needs to end before another operation begins Leasing, on the other hand, provides the legal framework which:

23 1 allows operators who handle a sufficiently high volume of a particular trade, such as the container trade, to customise their operations and infrastructures that maximise their efficiency and productivity Higher productivity for PoMC also means higher port revenue through port charges;

23.2. facilitates private sector investment in port infrastructure; and

23.3. from a risk management perspective, means that lessees (as occupiers with control over land use) have obligations in managing the safe use of land and the activities conducted on that land, and in meeting the occupational health and safety and environmental obligations associated with such use

24 Since at least 2001, PoMC and its predecessor MPC have designated areas of port land into precincts, where land in each precinct is used for particular purposes These purposes include the designation of areas for terminal operations that handle specific types of cargo as listed in paragraph 14. The map annexed to this statement and marked **"SB-3"** shows the terminal areas currently designated by PoMC for handling specific cargoes

25 In my opinion, from an overall planning perspective, it is sensible to organise the port of Melbourne in this way First, it simplifies and facilitates the management of occupational health and safety issues arising from the handling of cargo at the terminals. Generally speaking, there are potential hazards where more than one user is handling cargo at a particular terminal, due to congestion issues and differences in cargo movements and logistics. Secondly, cargo must be handled at terminals that have the appropriate resources and equipment Certain terminals have purpose-built facilities for handling specific cargoes, for example cement storage facilities, and it may not be possible or efficient for those cargoes to be handled at other terminals. Similarly, it may not be possible or efficient for other types of cargo to be handled at those purpose-built facilities

26 When PoMC designates land for the handling of particular cargo, it considers factors including:

26 1 The physical characteristics of the land, wharf and berth. Some cargo requires a specific amount of land behind the berth For instance containers and vehicles generally require a larger amount of space behind the wharves than other cargo Also, the characteristics of the wharf and berth including the age of the wharf and the depth of the berth may affect the type of cargo handled

26 2 Internal policy considerations, such as PoMC's strategic planning of the use of port land There are no legislative requirements on PoMC to ensure that any particular cargo, or any particular mix of cargo, is handled in the port of

Melbourne. PoMC decides which cargo is handled and will take into account policy considerations including:

26.2.1 whether the facilitation of that cargo is consistent with PoMC's broad objectives and functions under the PSA;

26.2.2 PoMC's obligation as a statutory corporation to manage and develop the port of Melbourne in an economically, socially and environmentally sustainable manner for the benefit of the state of Victoria;

26.2.3 whether fostering the trade in a particular cargo will contribute to the economic development of Victoria; and

26.2.4 revenue contribution to the port

26.3. Policies of the Victorian State Government While PoMC does engage in the practical strategic planning for the port of Melbourne, the Victorian State Government (through the Department of Transport and its predecessor departments) may formulate broad development policy plans for Victorian ports which PoMC would incorporate into its strategic planning for the port of Melbourne. As discussed below, PoMC currently takes into account the *2004 Victorian Ports Strategic Framework* in making its planning decisions.

26.4. Suggested land use by interested parties. Sometimes PoMC will consider suggested land use submitted in Expressions of Interest by interested parties

27 PoMC is currently engaged in the process of strategic planning for the port of Melbourne up to 2035 The draft document entitled *Port Development Plan 2006 - 2035* (**PDP**) outlining PoMC's strategic plans is available for public consultation. Annexed to this statement and marked **"SB-4"** is a true copy of the PDP

28 Notably, one of the main considerations in these plans was the Victorian Government's *2004 Victorian Ports Strategic Framework* (**VPSF**) One of the main initiatives from this framework is the possible development of the east side of the Westgate-Webb Dock precinct for handling international containers as a container terminal when additional capacity is required in the port Annexed to this statement and marked **"SB-5"** is a true copy of the VPSF.

29 In line with the VPSF, the PDP puts forward a staged process with the initial transfer of the handling of automotive cargo which currently occurs on the east side of Webb Dock to the west side of Webb Dock, with further relocation from around 2025

30. In choosing to supply land to a terminal operator, PoMC takes into account factors which include:

30.1 consistency of the proposed use with port objectives - generally PoMC prefers to lease land to users for port related activities;

30.2 whether the trade to be conducted would provide economic development to Victoria;

30.3. whether the prospective terminal operator is prepared to invest in infrastructure and undertake improvements to the terminal;

30.4 the financial stability of the prospective terminal operator and whether they have engaged in terminal activity before or, if not, whether they would be able to. In this respect, PoMC would undertake due diligence on the potential acquirer; and

30 5. the degree of use of rail or road by a prospective operator. In particular, what impact this will have and whether it can be managed utilising the existing infrastructure.

31 Generally speaking, it is PoMC's usual practice to provide land for port development through a public tender process.

31 1. Where a number of potential port-related uses are possible, PoMC will invite submissions for innovative port-related developments.

31.2. PoMC has "inherited" arrangements negotiated by its predecessors for land including the grain terminal at F Appleton, the cement terminal at 26 South Wharf, Coode Island Tank Farms (Five), the fly ash / slag terminals at 32 South Wharf, the tug terminal at 30 South Wharf, Pier 35, Life Saving Victoria and the automotive terminal at Webb Dock West

31 3. In its public tender documents, PoMC may stipulate that port land is to be used for handling specific cargo or a range of cargoes

32 PoMC generally supplies port land under leases which include an escalation rate (typically but not exclusively related to CPI) and timing for rental reviews. PoMC reviews its rental rates periodically in accordance with lease terms and appoints qualified valuers to set the appropriate commercial rates using comparable rental evidence from within and outside the port. If the parties are unable to agree during rent review, an independent valuer is normally appointed to determine the commercial rate

33 The length of the leases that PoMC grants will depend on a number of factors including the level of investment and improvements that a lessee undertakes to provide For example in the case of an automotive terminal, this might include developing facilities such as paved areas and associated buildings within the terminal area

34 In a number of PoMC leases, there is a penalty regime in place if trade guarantees stipulated in the lease are not met However, in my experience, failure to meet trade guarantees by tenants in the port of Melbourne is quite unusual

Supply of Automotive terminal land

35 In my experience, land allocated for automotive vehicles requires consideration of the following:

35 1 appropriate berthing facilities;

35 2 appropriate land availability for the stevedoring of vessels; and

35 3 the possible short, medium or long term storage and associated dealer-delivery services for automotive vehicles.

PoMC does not seek to direct the operator of an automotive terminal as to how this is to be done

36 I understand that an automotive terminal requires a paved surface to facilitate vehicle movement. It may also require appropriate protection from such things as storms, hail and birds, and to be located some distance away from the potential risk of dust from neighbouring operations, including at the dry bulk terminals. Site improvements are generally the concern of the terminal operator

37 An automotive terminal would also require a berth that is suitable to accommodate the loading and unloading of cars from a car carrying vessel. This includes a berth with sufficient draught to accommodate the vessels, and wharves with an appropriate load bearing structure to meet the weight requirements of roll on roll off of vessels and cargo

38 In around 1998, MPC made decisions to dedicate a certain amount of port land for automotive terminals. During this period, MPC designated Webb Dock West and part of Webb Dock East for the handling of automotive cargo

39 PoMC currently leases Webb Dock West to Australian Amalgamated Terminals Pty Ltd (**AAT**), who took assignment of the lease from Toll Corporation Limited (**Toll**) in around 2005. Prior to that, Toll took assignment of the lease from Strang Stevedoring who entered into the lease with MPC in around 1998.

40 PoMC currently leases areas 3 – 5 Webb Dock East to Patrick Stevedores No. 2 Pty Ltd (**Patrick**). Patrick's current leases of 3 - 5 Webb Dock East have been in place since around 2000

41 Details of current leases at Webb Dock West and Webb Dock East, including their expiry dates are as follows:

Lease Location	Tenants	Expiry (including Options)	Permitted Use
Berth 1 Webb Dock East	Toll Transport P/L	May 2017	Coastal shipping terminal
Rear Berth 1, Webb Dock East	Toll Transport P/L	October 2018 (subject to ratification)	Port related cargo distribution centre
Berth 2 Webb Dock East	Sea Road Shipping P/L (pending assignment from Patrick Shipping P/L)	June 2017	Coastal shipping Terminal
Berths 3-5 Webb Dock East (Front area – Lease No 20538)	Patrick Stevedores Operations No 2 P/L	December 2017	Shipping Terminal
Berths 3-5 Webb Dock East (Rear area – Lease No 20548)	Patrick Stevedores No 2 P/L	December 2017	Handling and storage of import and export motor vehicles
Berth 1 Webb Dock West	Australian Amalgamated Terminals P/L	December 2017	Storage, detailing and transport of vehicles imported or exported

through the premises from vehicle carrying vessels.

Consideration of Other Land Suitable for an Automotive Terminal

42 The general cargo berths at 19-21 South Wharf were historically used to handle automotive vehicles up until 1997 when the Bolte Bridge prevented access to the berths which were located east of the bridge. Berths at 28-29 South Wharf west of the bridge have a similar configuration but I do not believe they would be suitable for automotive trade now or in the future, except for short term emergency requirements, as there is insufficient back-up land to accommodate a significant volume of motor vehicles

43 I consider that it would be possible to operate an automotive terminal at Appleton Dock. Appleton Dock has a shallow draught that is perhaps sufficient for car carrier vessels. It has a reasonably sized area behind the wharf which could be suitable for handling some cars, and the wharf structure is generally satisfactory However, the current location of water front sheds is not ideal for handling automotive cargoes which require space for parking and moving vehicles.

44. The lease held by P&O Automotive and General Stevedoring Pty Ltd (**POAGS**) over Appleton Dock expired in December 2007, and the site is currently tenanted by POAGS on a month to month basis for use as a general cargo terminal. PoMC might consider leasing this site for use as an automotive terminal if a suitable proposal was received.

45 It is possible for PoMC to develop and construct a berth and wharf that would be suitable for an automotive terminal The cost of this development would vary depending on the land and the work required. PoMC recently investigated the costs associated with the construction of a new berth at Webb Dock West that would be suitable for an automotive terminal The proposed work included dredging, construction of a wharf and the necessary development of land behind the wharf. It was estimated that this work would cost between $20 million to $50 million. PoMC has investigated the possibility of constructing a second berth at Webb Dock West in order to accommodate a projected increase in automotive cargo trade, in line with the PDP's staged transfer of automotive cargo from Webb Dock East to Webb Dock West.

Competition

46. Generally speaking, I do not consider that PoMC competes with port entities in other capital cities for the supply of land to automotive terminal operators This is because sea transport of motor vehicles around the Australian coast is generally more cost efficient than land based modes of transport, given the distances involved As such, terminal operators will generally set up terminals in the ports that are located in, or as close as possible to, the manufacturer in the case of exports or the customer market in the case of imports

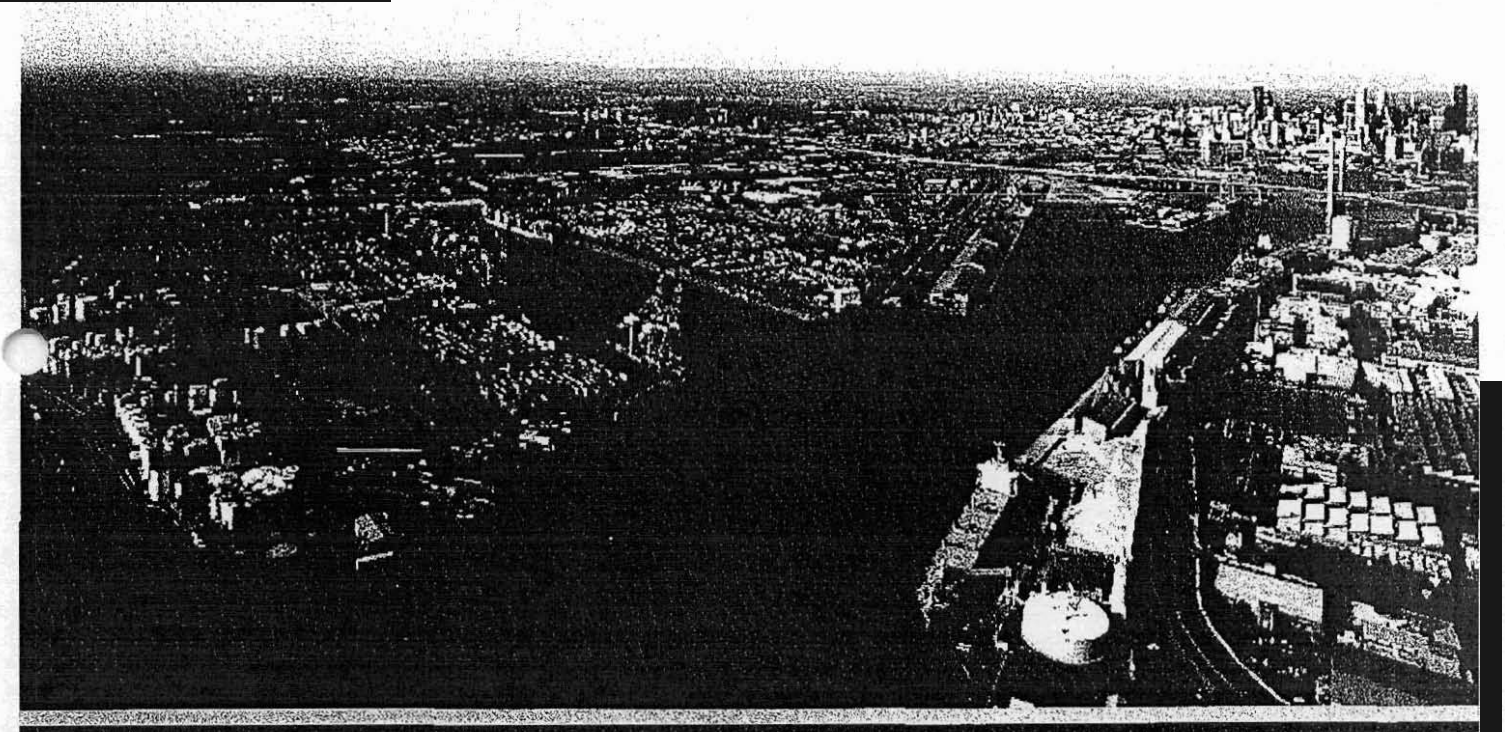
Stephen George Bradford

Signed before me:

Name: Sally Anne Murray

SB – 4

CONSULTATION DRAFT AUGUST 2006



PORT DEVELOPMENT PLAN 2006-2035

Port of Melbourne Corporation

Disclaimer

This document which represents the current view of Port of Melbourne Corporation has been prepared for Port of Melbourne Corporation s planning purposes only and may change over time

No reliance may be placed by any person on Port of Melbourne Corporation meeting the strategic objectives or otherwise taking any action outlined in the document Any potential infrastructure development identified in this document will be subject to financial viability, technical feasibility and environmental and planning considerations that will vary over time.

No commercial reliance may be placed on the trade forecasts in Section 5 or any other forecasts or projects referred to in this document

Foreword

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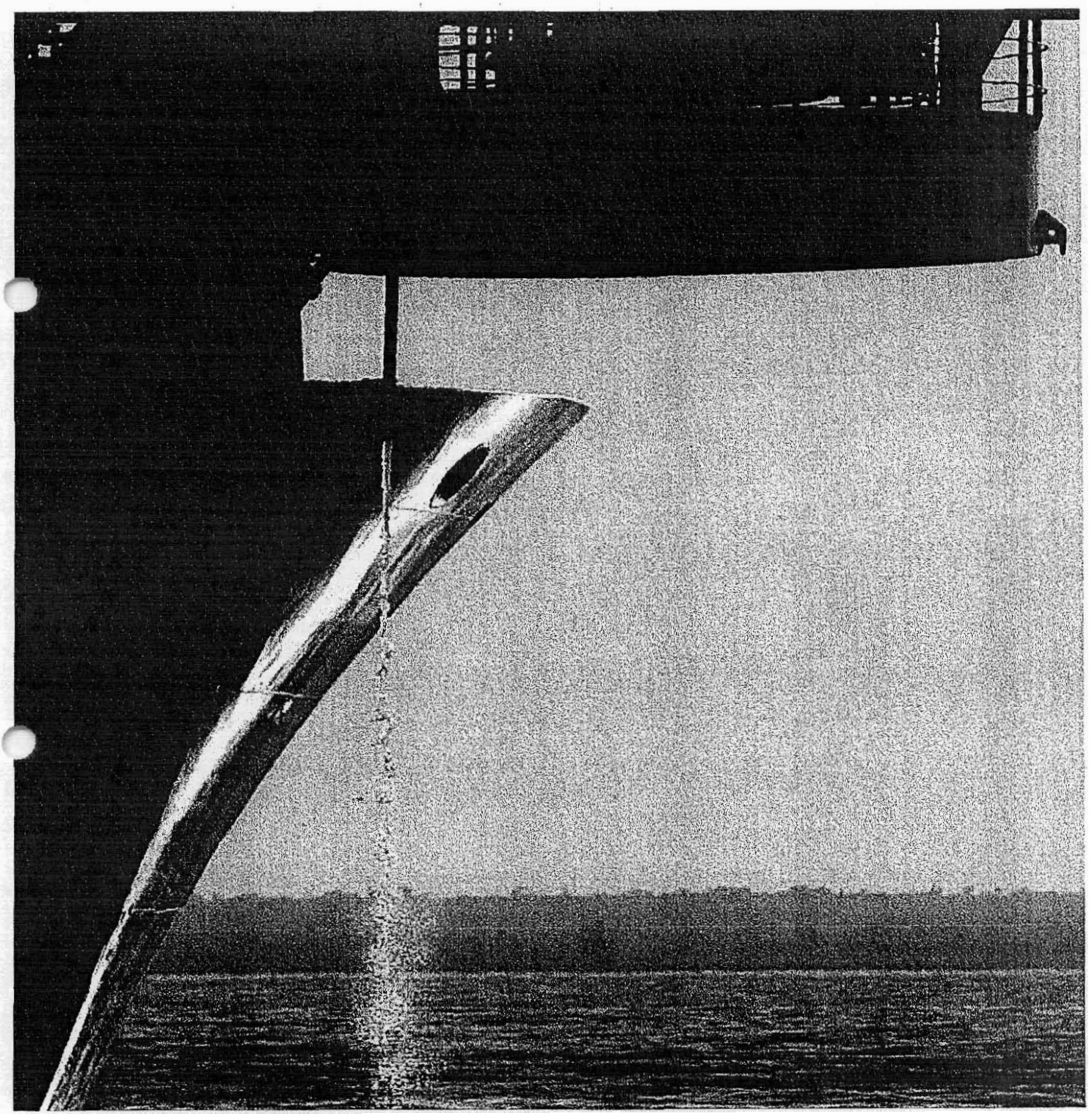

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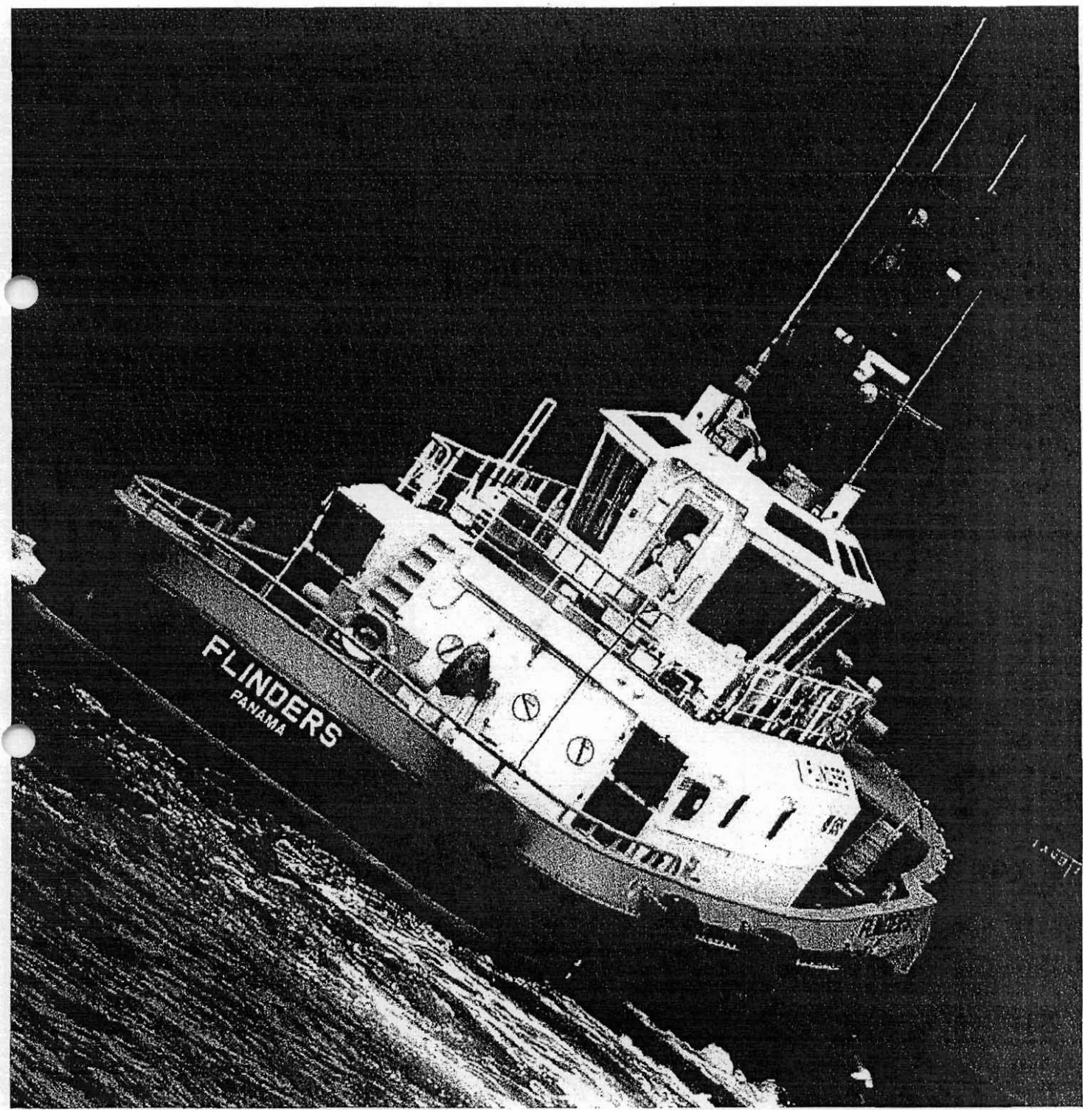
Glossary

AAGR	Annual average growth rate
Backloading	The practice of carrying freight on the return leg of a journey
B-double	Prime mover with two load-carrying articulated trailers: nominally up to 25 metres in length and up to about 62 tonnes gross vehicle mass
BG	Broad gauge (when referring to trains and rail track)
Box	Another word for shipping container
Breakbulk cargo	General (i.e. non-bulk) cargo which is not containerised e.g. timber, paper, steel, vehicles and vehicle components
CAGR	Compound annual growth rate
Capacity	The operational capacity of a berth or terminal is the maximum cargo throughput which can be achieved at an acceptable level of service. Capacity is expressed in terms of tonnes per annum or TEUs per annum
CCTV	Closed circuit television (CCTV) is a visual surveillance technology
Cellular vessel	Ship specially designed and arranged by having cells for the carriage of containers
CKD	Completely knocked down: disassembled motor vehicles
Coastal trade	Sea trade between one Australian port and another
Common-user facility	A port facility not dedicated to a particular use and available for short term hire
Containerisable cargo	Cargo which can physically, conveniently and economically fit into a container
Containerised cargo	Cargo transported in standard shipping containers
Container yard	The container stacking area of the container terminal
CVP	Continuing Voyage Permit
DG	Dual gauge (when referring to rail track suitable for both broad gauge and standard gauge trains)
Distripark	Advanced logistics parks with comprehensive facilities for distribution operations at a single location close to the cargo terminals and multimodal transport facilities
DPRL	Dynon Port Rail Link
Dry bulk cargo	Non-liquid cargoes which are transported and handled in bulk: e.g. grain, cement and fertiliser
Dry container	Unrefrigerated general cargo container
Dwell time	The time in days that containers remain in the container yard
EDI	Electronic data interchange
EMP	Environmental Management Plan
FLC	Fully loaded container
FEU	Forty-foot equivalent unit (container). Two 20ft containers = one FEU
General cargo	All breakbulk and containerised cargo, excluding dry bulk and liquid bulk cargoes and motor vehicles, which is handled at berths other than international container berths and Bass Strait berths
Ground slot	The area required for the footprint of a container
Handymax	A bulk carrier ship of between 35 000 and 50,000 tonnes deadweight
Hinterland	Used to describe the catchment area of a port in terms of export cargoes
Intermodal	The use of more than one transport mode for a journey
ICD	Inland container depot
Landbridging	The replacement of a sea transport freight movement by a land transport freight movement
LCL	Less than container load: a container carrying cargo for more than one consignee
Line haul	The distance 'point to point' between terminals
Liquid bulk cargo	Liquid cargoes which are transported and handled in bulk form. Includes crude oil, refined petroleum products and chemicals
MSS	Municipal Strategic Statement
Multi-purpose facility	A general cargo terminal which handles a mix of breakbulk, dry bulk, containerised and sometimes liquid bulk cargoes
NTK	Net Tonne Kilometres: a standard measure of the freight transport task equal to the effort of moving one net mass tonne by distance of one kilometre
Pack type	The four major ways which cargo is transported by sea i.e. breakbulk, containerised, liquid or dry bulk
Panamax	The maximum size of vessel able to pass through the Panama Canal
PCC	Pure car carrier
PCTC	Pure car and truck carrier
PDI	Pre-delivery inspection (as applied to new motor vehicle imports)
PEMP	Port Emergency Management Plan
Post-Panamax	Vessels too large to pass through the Panama Canal
PPV	Port precinct vehicle such as off-road tractor trailer unit or multi-trailer road train
PSS	Port Strategic Statement
Reefer	Refrigeration equipment or refrigerated containers
Revenue tonne	Greater of one mass tonne or one cubic metre of cargo
RMG	Rail mounted gantry crane
Ro-ro	Roll-on roll-off ship: a ship for carrying cargoes which can be driven on and off the ship on ramps
SEPP	State Environment Protection Policies
SPPF	State Planning Policy Framework
SG	Standard gauge (when referring to trains and rail track)
Stack	The stack of containers in the yard
Stevedore	Individual or firm employed for the purpose of loading and unloading a vessel
Super B-double	Prime mover with two 40-foot long container carrying trailers
TEU	Twenty-foot equivalent unit. The international standard measurement used in indicating the capacity of a container vessel or terminal
Transhipment cargo	Cargo landed at a terminal and shipped out again on another vessel without leaving the port area
TDMC	Trade, distribution and marketing centre
VPSF	Victorian Ports Strategic Framework
WCCU	Wheeled cargo carrying unit



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1. Introduction

Statutory objectives

Port of Melbourne Corporation (PoMC) was established on 1 July 2003 to provide strategic management of the Port of Melbourne and its development

The specific objectives of PoMC as outlined in the *Port Services Act 1995* (Vic) are to:

- manage and develop the port in an economically socially and environmentally sustainable manner
- ensure essential port services are available and cost effective
- ensure effective integration of the port with other systems of infrastructure in the state
- facilitate sustainable trade growth
- manage the channels in the port for use on a fair and equitable basis

PoMC vision and goals

This Port Development Plan (PDP) addresses many of the requirements of PoMC s charter embedded in the Port Services Act and provides a clear direction on how PoMC will address the rapidly changing requirements of managing Australia's largest container and general cargo port over the next 30 years

Optimum balance of PoMC, public and private investment

PoMC s charter gives it a clear role in facilitating trade growth in an efficient cost-effective and sustainable way Central to this will be the delivery of a major capital investment program that increases the port s capacity through leveraging private investment

Australia s freight and logistics industries are undergoing unprecedented change driven by commercial forces to consolidate vertically integrate and deliver greater value to customers from efficiencies achieved across the whole of the freight and logistics system PoMC must clearly understand and be able to adapt rapidly and innovatively to this new paradigm

It is anticipated that PoMC will directly invest over $2 billion ($ 2005) on Port of Melbourne infrastructure supporting this PDP During this period the private sector is likely to invest an even greater amount for ongoing terminal development systems improvements and equipment upgrade

There is also a significant role for government to provide through the relevant authority improvements to road and rail links from the port into the state and national transport system

Acceptable service delivery

PoMC's objective to ensure that essential port services are available and cost effective requires it to understand the market in which the port's stakeholders and customers operate. Delivery of core port infrastructure in this market where there is a natural scarcity of suitable near-water land for terminals, requires large capital investment and has a long lead time.

In this market it is important that the natural tendency to maximise return on investment both by the port and private port service providers does not occur at the expense of deteriorating service levels that add disproportionate costs to the total transport chain.

In this context PoMC has a role not only to provide infrastructure but to ensure that customers of the port receive an appropriate level of service from port provided infrastructure such as channels, roads and rail as well as from the private port service providers.

PoMC will continue to work towards having development and operations agreements with key service providers that provide for investment strategies for infrastructure, equipment and technology and define a set of minimum service level benchmarks that will maintain or improve the service levels to users of the port. PoMC will also work to achieve an optimum balance between the capital required to provide capacity and appropriate service levels to customers of the port and will monitor elements of investment and port performance underpinning this PDP and refine the plan as necessary.

This also includes initiatives in relation to improving road transport efficiences to and from terminals that will lessen any impacts on surrounding community amenity.

Channel deepening essential

As the strategic manager of channels within Port Phillip Bay and given the vital role the Port of Melbourne plays in the Victorian economy PoMC is seeking the necessary approvals to deepen Port of Melbourne access channels to accommodate deep draught vessels.

The government has given conditional commitment to channel deepening, the completion of which is vitally important for the port's future growth and development, and to continued planning for the improvement of landside infrastructure.

Community amenity satisfied

The PDP recognises the importance of balancing the needs of surrounding communities with the ongoing physical and economic development of the port and includes a strong commitment to community engagement and consultation.

The long-term sustainability of the port requires managing the port's impact on surrounding areas and protecting the port from any adverse impact from adjacent developments. It is also important to strike a balance between the needs of a working port and the expectations of the community in terms of amenity, environment, recreation, open space and safety and security.

PoMC is working with the state government and local councils to complete a Port Environs Framework. This framework of planning controls will address issues affecting land close to port operational areas and manage the interests of both the Port of Melbourne and its neighbouring communities. The framework will include the initiatives being developed with terminals and the transport industry in relation to improving transport efficiences.

The PDP document

The primary driver of the future development of the Port of Melbourne is trade growth. The PDP aims to provide an overarching strategic framework for guiding future development of the port to cater for this growth.

The PDP provides:

- a comprehensive set of most likely and upper limit' trade forecasts for the major pack types and commodities (assuming channel depth constraints are removed) – refer Section 5
- the major productivity and development assumptions behind the estimates of future infrastructure needs together with an estimate of future infrastructure needs for each pack type – refer Section 6
- the preferred port development strategy for providing these needs in a timely manner – refer Section 7
- development strategies for the port's transport network including channels, roads and rail – refer Section 8
- a summary of the proposed Melbourne Port@L development strategy and its relationship to this PDP – refer Section 9
- a broad commercial strategy for funding development works over the next 30 years – refer Section 10

1.1. The port

The Port of Melbourne is Australia s premier port, handling almost 40% of the nation s international container trade

Strategically located and serviced by excellent rail and road networks, the port handles more containers than Brisbane Adelaide and Fremantle combined

Ranked among the top fifty[1] ports in the world the Port of Melbourne is Australia s international trading gateway for more than forty shipping lines, providing access to over 300 international markets

A key driver for economic growth, the port contributes over $5 4 billion to the Victorian economy each year and provides jobs for more than 18,000 Victorians on activities attributable to the movement of ships and cargo through the port and indirectly generates jobs for a further 62 000[2]

PoMC is committed to ensuring the port s operations are environmentally sustainable and responsible and continue to contribute to the social wellbeing of Victoria in keeping with its status as a city port

At a glance, the port :

- is the largest multi-cargo pack type gateway port in Australia
- handled 1 92 million TEU (twenty-foot equivalent units) in 2005 growing by 3 9% over the previous year
- increased total trade throughput by 2 2% to 64 5 million revenue tonnes (28.2 million mass tonnes) in 2005
- handled around $75 billion worth of trade in 2005

At a local level each year the port is estimated to contribute:

- $750 million to the City of Melbourne s gross regional product and directly employ 335 of its residents[2]
- $199 million to the City of Port Phillip s gross regional product and directly employ 650 of its residents[2]
- $43 million to the City of Hobsons Bay s gross regional product and directly employ 986 of its residents[2]
- $21 million to the City of Maribyrnong s gross regional product and directly employ 411 of its residents[2]

A plan of the existing port and surrounding area is shown in Figure 1

1 2 Port reform

In early 2000, the Minister for Ports announced a review of Victorian port reform The purpose of the review was to assess the outcomes of the Victorian port reform process implemented through various legislative and administrative changes in the mid-1990s The review involved taking an objective look at the results of the reform process and identifying measures for improving the effectiveness and efficiency of ports in servicing the Victorian community.

The government review known as the Russell Report, identified a number of key directions for Victorian ports

The Port Services Act was subsequently amended to incorporate those directions. These amendments resulted in the consolidation of the responsibilities of the previous Melbourne Port Corporation and Victorian Channels Authority into the PoMC

Following the passage of the *Port Services (Port of Melbourne Reform) Act 2003* (Vic) PoMC was successfully established on 1 July 2003

Implementation of the balance of the reform package through measures contained in the Port Services (Port Management Reform) Act has also been completed Safety and environment requirements were the final element of the reform package to come into full operation with all port managers required to have safety and environment management plans in place by 1 July 2005

[1] Source: Cargo Systems Top 100 August 2005

[2] Source: 2001/02 MPC Economic Impact Study

1.3. Victorian Ports Strategic Framework

The *Victorian Ports Strategic Framework* sets out the government s three core directions for the state s commercial trading ports:

- Framework Direction 1: Building on existing capabilities and competitive strengths
  Framework Direction 2: Anticipating and planning for future land access and infrastructure needs
- Framework Direction 3: Providing the right regulatory and institutional settings for a sustainable port system

Strategies to achieve the government s vision for the commercial trading ports are identified for each framework direction

1.3.1 *Framework Direction 1*

Among the strategies for Framework Direction 1 are commitments to:

- maintain the Port of Melbourne as Australia's premier container port through support for developments to maximise the use of the Swanson Dock container facilities until they are substantially utilised and demand for container services warrants the development of the Webb Dock precinct for this purpose
- maintain the Port of Melbourne as the focus for Bass Strait passenger ferry and cruise ship services

Other strategies under Framework Direction 1 are directed at enhancing access to and productivity of, existing port assets by initiatives which include:

- developing and investing in Melbourne Port@L projects – refer Section 9
- undertaking the Port Phillip Channel Deepening Project subject to environmental approvals
- protecting options to reconnect the rail link to Webb Dock
- investing in improved road and rail infrastructure connecting to the port

1.3.2 *Framework Direction 2*

Strategies under Framework Direction 2 are aimed at positioning the commercial ports for long-term strategic development through initiatives including:

- ensuring that effective port strategic land use plans are prepared and in place for each commercial trading port using the outputs of the port strategic land use plans to reinforce protections for ports in state planning policy working with port managers and local councils to ensure that agreed port strategic land use plan outcomes are implemented in local planning schemes

Other strategies under Framework Direction 2 are aimed at improving communication and understanding between ports their communities and industry stakeholders.

1.3.3 *Framework Direction 3*

Framework Direction 3 proposes improvements to the regulation of pricing and access regimes impacting the port

1.4. AusLink National Land Transport Plan

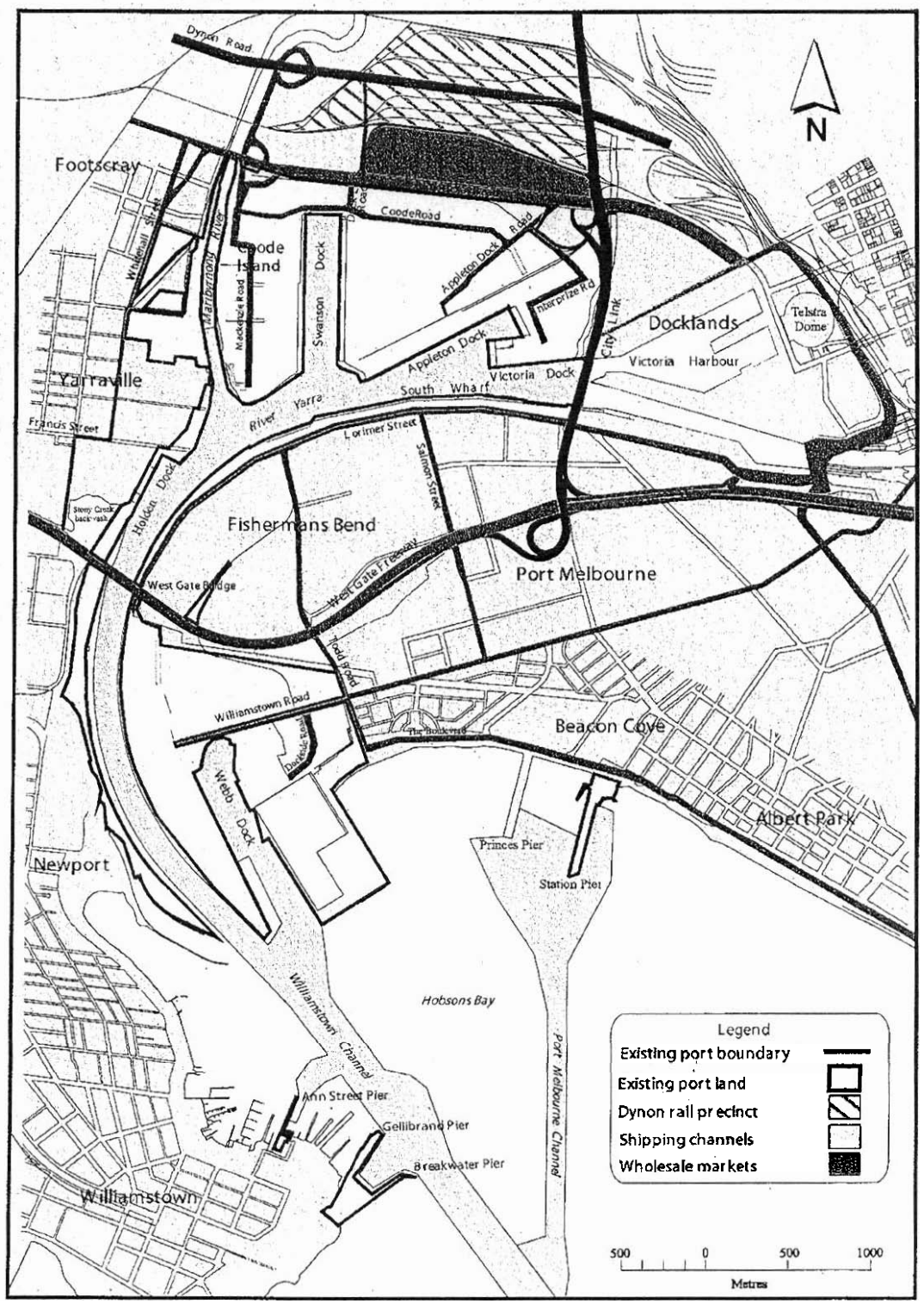
The *AusLink National Land Transport Plan* sets out the Commonwealth Government s investment priorities for a network of land transport corridors and intermodal freight terminals of national importance The key transport corridors and infrastructure servicing the Port of Melbourne of interest to AusLink are the:

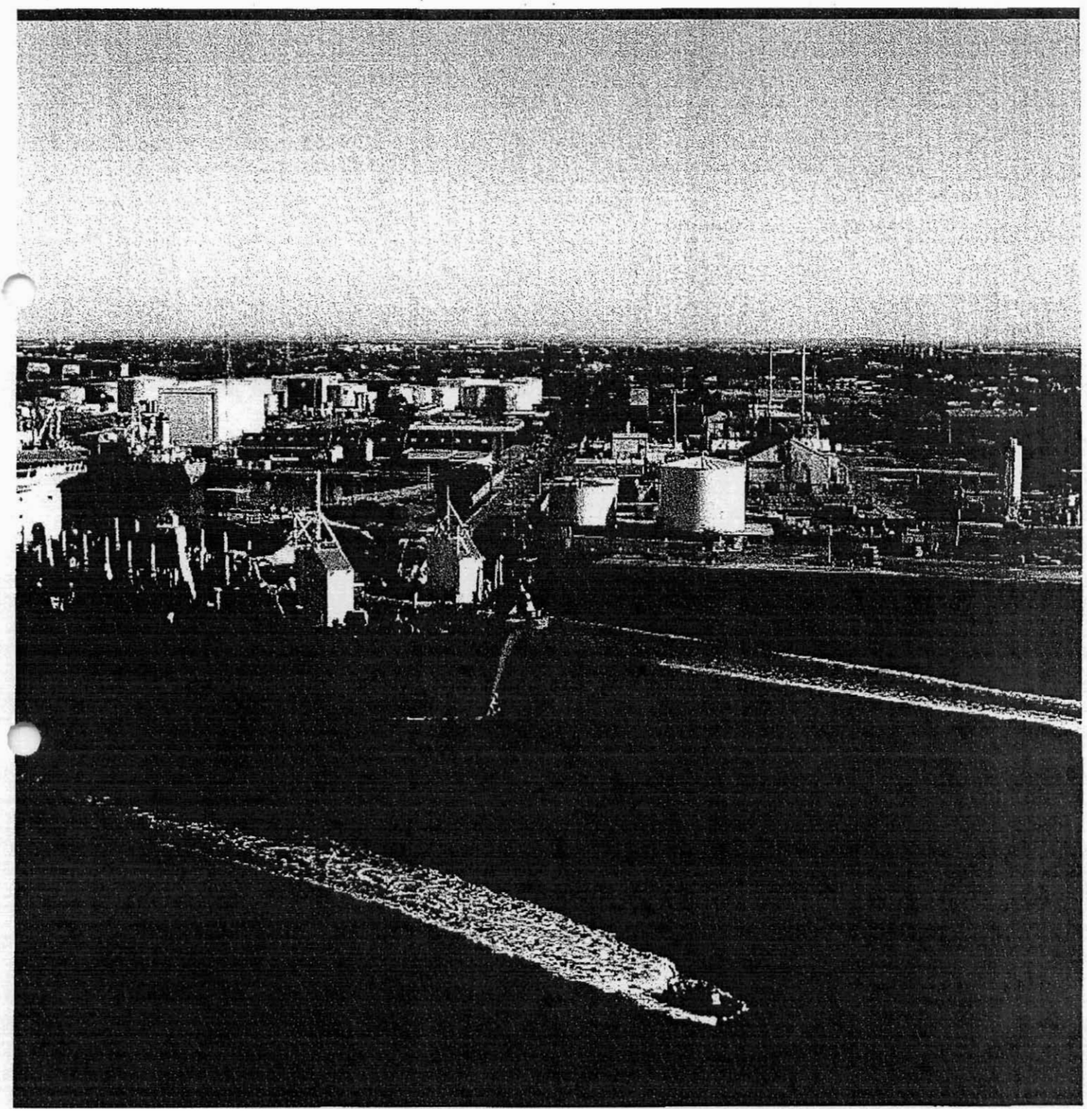
- West Gate Freeway
  Dynon Road and rail intermodal terminal
- Todd Road
  CityLink Tollway
- Footscray Road
  Webb Dock rail link
- standard gauge railway from Sunshine to the port and Dynon intermodal terminals

Investment that safeguards and improves freight access to the port also provides substantial national benefits within the scope of AusLink PoMC will work with the state government to identify opportunities and establish priorities for investment in transport infrastructure of national importance within the Commonwealth Government s AusLink program

Action
PoMC will work with the state government to establish priorities within the Commonwealth Government's AusLink program for investment in transport infrastructure projects on key transport corridors and intermodal freight terminals linking the port to the national road and rail network

Figure 1 Plan of existing port





2. Policy framework

2.1. Policy context

The context within which the PDP was developed was one of increasing awareness that many of the critical elements required for a port to succeed were undergoing rapid change

Those elements were:

- appreciation and support at the national and state government level of the importance of the port
- changes in technology allowing stevedores, shipping companies, road and rail operators to handle more freight faster
- consolidation and vertical integration of many of the companies participating in the industry
- rapid increases in container growth because of changes in business practices, sustained economic growth and globalisation
- sourcing of goods from non-traditional sources such as New South Wales and South Australia resulting in further increases in container and dry bulk volumes
- the potential for increased cruise ship visits to Melbourne
- awareness of the limited nature of the port land supply
- changes in what is considered socially and environmentally acceptable
- desirability of waterfront land for residential and office uses pricing out future port options
- increasing security and safety measures required for the port and the transport supply chain

The changes in the above elements informed PoMC in cooperation with port stakeholders and the state government of the need to provide an overarching strategic framework for guiding future development of the port aimed at taking advantage of improvements in port operations

2.2 Planning responsibilities

PoMC is not a planning authority Due to the significance of the port to the state, the Minister for Planning is the planning authority for the Port of Melbourne Planning Scheme The Department of Sustainability and Environment administers the Port of Melbourne Planning Scheme on behalf of the Minister In practice, however PoMC has responsibilities for undertaking the strategic planning for the port

The state government and the municipal councils that are located near the port have a range of planning policies which form an important planning context for the PDP

There are a number of key land use planning objectives in these policies which set the scene for the development of the PDP The principal elements of the relevant planning policies are outlined below

2.3. Policy and legislative framework

At a state (and national) level there have been a significant number of policies and strategies developed relating to ports.

The key outcomes of those policies is a recognition of the need for an efficient and effective freight and logistics network along with the importance of the Port of Melbourne to the economic prosperity of the state.

The main strategic documents are:

Russell Report: The next wave of Port Reform in Victoria 2001 (Victorian Government)

- *Port Services Act 1995* (Vic)
- *2004 Victorian Ports Strategic Framework* (Victorian Government)
- *Growing Victoria Together* (Victorian Government)
- *Port of Melbourne Land Use Plan 2002* (PoMC)
- *PoMC Corporate Plan* (PoMC)
- *Melbourne 2030* (Victorian Government)
- *Linking Victoria* (Victorian Government)
- *Victorian Coastal Strategy* (Victorian Government)
- *The Cruise Ship Strategy – Destination Victoria 2002-05* (Victorian Government)
- *AusLink White Paper 2004* (Commonwealth Government)
- *Draft Victorian Freight and Logistics Strategy* (Victorian Government)
- *Meeting our Transport Challenges* (Victorian Government)

Some of the challenges facing the state's ports outlined in the 2004 Victorian Ports Strategic Framework include:

- trade growth (the demands this will place on port infrastructure capacity and performance)
- competition between ports (competition from interstate ports for market share of international trades)
  new technology (improved efficiency of road and rail connections; and the use of information and communications technology)
  intermodalism (improving the interfaces between transport modes)
- urban environments (coexisting with urban communities; building of buffers)
- environmental safety and security pressures (increased regulatory and community pressures on port operations)

PoMC's objectives as defined in the Port Services Act include:

- manage and develop the port land and infrastructure in an efficient, safe, secure and environmentally sound manner
- ensure, in conjunction with other responsible organisations, that the port is effectively integrated with the state's broader freight and logistics network
- ensure that key port services are available and cost effective
- facilitate, in conjunction with other responsible organisations, the sustainable growth of trade through the port
- manage the channels for use on a fair and equitable basis

To achieve these objectives PoMC has the following vision for the port:

'The Port of Melbourne will be the core of Australia's premier trade and transport hub, creating prosperity while sustaining environmental and social wellbeing for the people of Victoria and Australia

PoMC has established five goals to ensure that its vision for the port becomes reality These include:

Goal 1 *Innovative and high quality facilities and services*
To develop fit-for-purpose services and facilities which are secure reliable technologically efficient, innovative safe and meet customers' needs

Goal 2 *Integration of the port with land transport systems*
To ensure that the port is fully integrated with land transport systems.

Goal 3 *Trade and trade-related business facilitation and expansion*
To facilitate and expand trade and trade-related business opportunities.

Goal 4 *Sustainable financial performance*
To operate a self-sustaining financially independent and cost effective organisation

Goal 5 *Retain the port's licence to operate as a city port*
To commit to continuous improvement towards sustainable environmental performance port safety and and use planning and develop mutually beneficial relationships with surrounding communities

2.4. State Planning Policy Framework

The State Planning Policy Framework (SPPF) as set out in the Victoria Planning Provisions, deals with land use and development in Victoria and has specific policies on settlement, environment housing economic development infrastructure and particular uses and development

The SPPF also contains principles of land use and development planning most of which are relevant to port land use. The following principles are considered most relevant

2.4.1 Economic wellbeing

Planning should contribute to the economic wellbeing of communities and the state as a whole by supporting and fostering economic growth and development by providing land facilitating decisions, and resolving land use conflicts, so that each district may build on its strengths and achieve its economic potential

2.4.2 Environment

Environment and resource management principles for ecologically sustainable development have been established by international and national agreements These provide a broad framework for the development of strategies and policies at the state level to encourage sustainable land use and development

n Victoria these include State Environment Protection Pol'c es (SEPPs) made under the *Environment Protection Act 1970* (Vic which are binding on all sectors of the Victorian community

2 4 3 Port specific provisions

The SPPF also contains specific policies dealing with sectoral issues

Clause 12 provides objectives and strategies for metropolitan Melbourne and Clause 12 04 contains some strategies which are specific to the port The strategy for transport and freight is to:

Further develop the key transport gateways and freight links and maintain Victoria's position as the nation's premier logistics centre by.

- *Identifying and protecting options for access to, and further development at the ports of Melbourne Geelong and Hastings.*
  Ensuring port areas are protected by adequate buffers to minimise land use conflict
- *Improving rail freight access to ports.*
  Ensuring that planning and development of the Fishermans Bend precinct does not jeopardise the needs of the Port of Melbourne as a working port and as one of the state's most important transport gateways'

Clause 18 05 of the SPPF is specific to ports, and states:

18 05-1 Objective

- *To recognise the importance to Victoria of economically sustainable major ports (Melbourne. Geelong. Portland. Hastings) by planning for appropriate access, terminal areas and depot areas*
- *To plan the land resources adjacent to ports to facilitate the efficient operation of the port and port-related uses and minimise adverse impacts on surrounding urban development and the environment*

18 05-2 General implementation

The land resources adjacent to ports should be protected to preserve their value for uses which depend upon or gain significant economic advantage from proximity to the ports particular shipping operations

Port and industrial development should be physically separated from sensitive urban development by the establishment of appropriate buffers which reduce the impact of vibration. intrusive lighting, noise and air emissions from port activities

Planning for the use of land adjacent to ports should aim to achieve and maintain a high standard of environmental quality, be integrated with policies for the protection of the environment generally, and of marine environments in particular, and take into account planning for adjacent areas and the relevant catchment

2.5. Local council planning policies

The port is located adjacent to and within the cities of Melbourne Hobsons Bay Port Phillip and Maribyrnong - see Figure 2 Each of these municipalities has a municipal strategic statement (MSS) and other planning provisions in their planning schemes that to varying degrees recognise the significance of the Port of Melbourne

The MSSs encapsulate local community values and provide a strategic vision for the municipality and a basis for implementing land use controls The planning policies and strategies of these municipal councils have a significant impact on the future development both in and around the port

PoMC is currently working with the state government and local councils to progress buffer issues through completion of a port environs framework This process is expected to result in changes to planning policy frameworks to manage the interests of both the port and its adjacent communities

2 5 1 *Melbourne planning scheme*

The City of Melbourne s MSS acknowledges the importance of the port to the state and local economy It therefore supports the Port of Melbourne as a 24-hour port

The City of Melbourne s MSS for the Fishermans Bend precinct recognises the need to support the port and avoid conflict with port operations It also supports future rail improvements to the docks including the Webb Dock rail line

To the north of the port the revised MSS supports future redevelopment of the wholesale markets and Dynon rail terminals

The MSS acknowledges that Docklands has a key interface with the port and recognises the importance of ensuring that the port is protected from encroachment by residential and other sensitive uses

Given that Docklands will promote public access to the waterfront the PDP has considered the need for management of the interface and amenity issues in the vicinity of Victoria and Appleton Docks, as well as recreational boating in Victoria Harbour and the Yarra River

The need to manage land use and expectations of amenity in the City of Melbourne are addressed through the proposed introduction of amenity principles An example of this is the requirement that any new development with a frontage to a major road or rail corridor must include noise attenuation measures

The application of these principles at the interface with the port and along major transport corridors is an important mechanism for managing interface issues

2 5 2 *Port Phillip planning scheme*

The City of Port Phillip s MSS recognises the importance of Webb Dock to the state economy while also considering the impact of expansion on the adjacent residential and recreational land uses

A number of the MSS objectives relate to protecting Port Phillip foreshore and the Fishermans Bend industrial area as well as improving the local transport and pedestrian network Station Pier is recognised as part of a major tourist activity area however security issues and its importance for Bass Strait freight are not fully acknowledged

The MSS states that the Garden City and Beacon Cove areas need to be protected from port traffic It also desires that traffic management issues along Williamstown Road be addressed Another stated issue is the need to facilitate public linkages from these residential areas to the Yarra River in a manner that does not compromise the operation of the port and the safety of the public

2 5 3 *Hobsons Bay planning scheme*

The City of Hobsons Bay MSS focuses on coastal and industrial development and is relatively silent on port operations other than the need to avoid transport issues affecting residential amenity The continued port role of Breakwater and Gellibrand Piers is not recognised and this may require further consideration

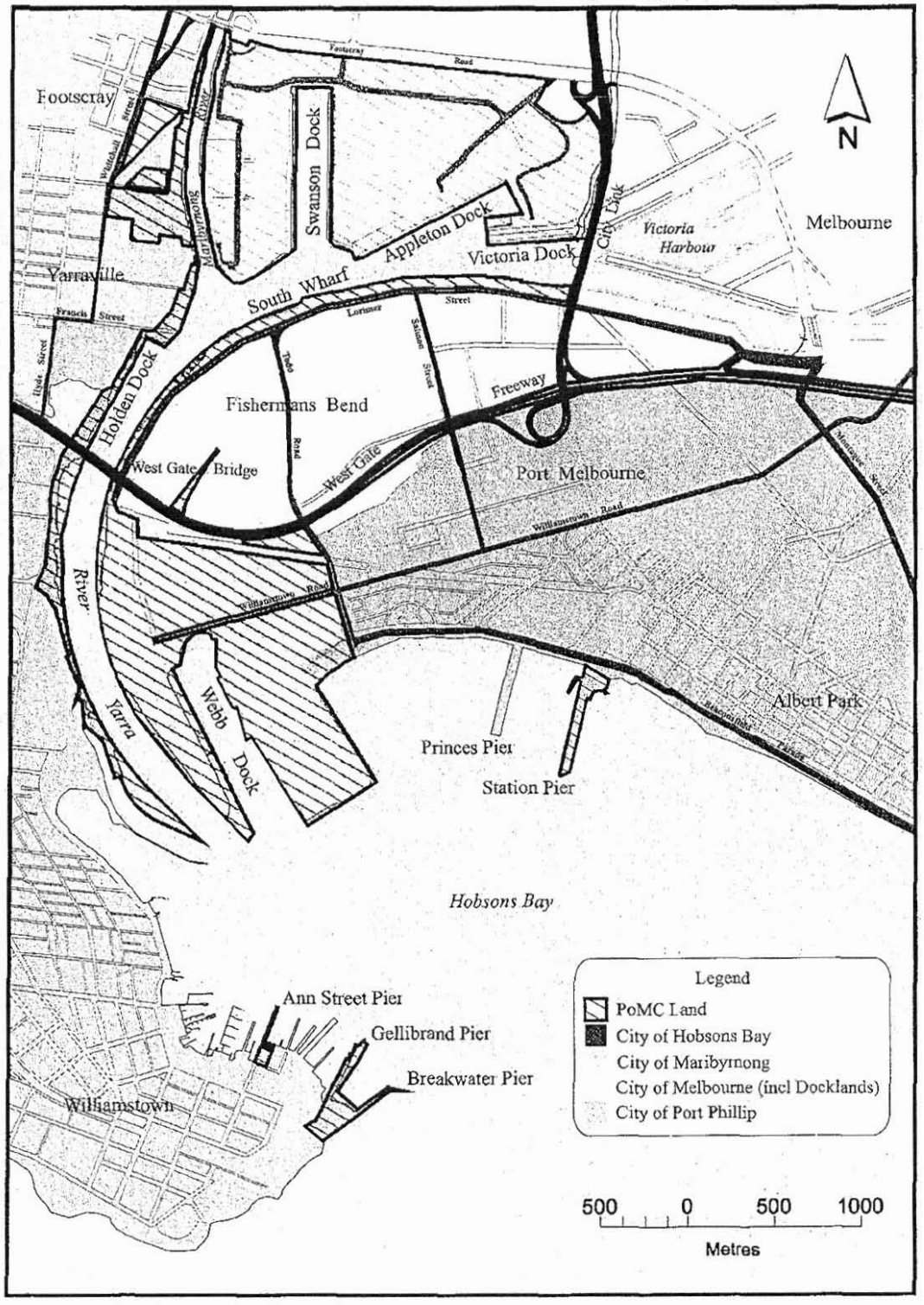
2 5 4 *Maribyrnong planning scheme*

The City of Maribyrnong s MSS focuses on improving the Maribyrnong River amenity and the encouragement of employment-generating and attractive industry

Increasing recreational and commercial boating along the Maribyrnong River will have to be carefully considered on the basis that it does not affect the safety and efficiency of the port

The city's MSS also includes consideration of access and transportation issues It acknowledges that expanding the city's transportation systems will require the cooperation of a number of state agencies in planning and additional development funding for improvements to the arterial road network Linkages between this network and local systems providing access to the core industrial areas the port and major activity centres has also been acknowledged

Figure 2 PoMC land and adjacent municipalities



2 6 Port of Melbourne Planning Scheme

A draft Port of Melbourne Planning Scheme has been prepared in a new format' under the Victoria Planning Provisions (VPPs)

The current Port of Melbourne Planning Scheme facilitates the operation of the port through zoning the majority of the port as Special Use – Port Areas (SU-PA) The purposes of the planning controls that apply to the port are:

- to provide for the development of the port as a key area of the state for interchange, storage and distribution of goods
  to provide for uses which derive direct benefit from co-establishing with a port

The controls under the port zone facilitate port-related use and development by not requiring a planning permit for most port-related activities It is important that this level of flexibility be maintained for development certainty and the long-term viability of the port However, development and use may still be subject to other statutory approvals

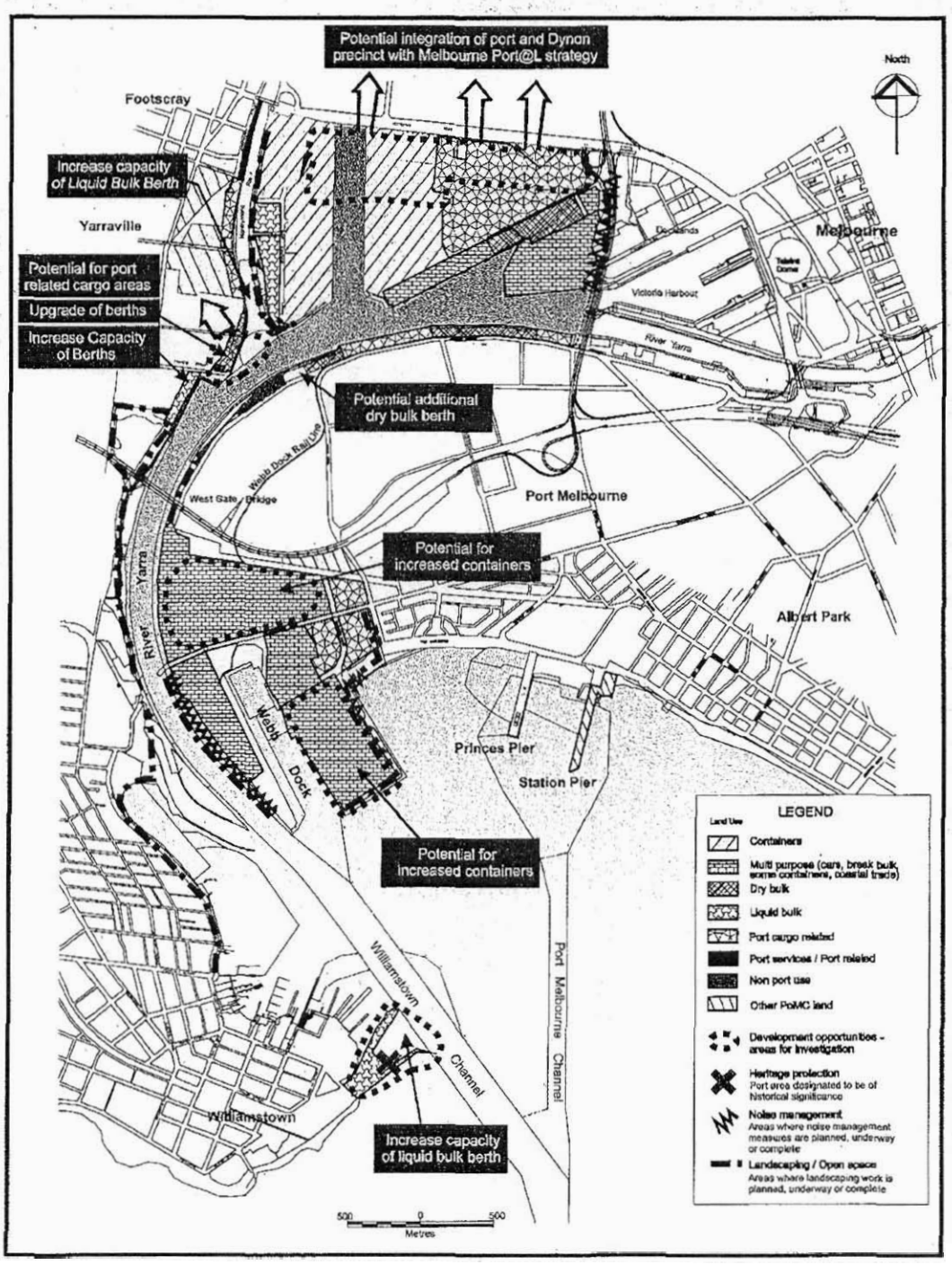
The current zoning has been converted to an equivalent Special Use Zone in the new planning scheme This offers the same flexibility of planning control in the port

PoMC is conscious of ensuring integrated land use and is committed to development being undertaken in a framework of carefully developed Safety and Environment Management Plans (SEMPs) – refer to Section 4 4 1 Furthermore programs will continue to be developed to ensure impacts on the amenity of the surrounding areas are managed

It is equally important from the port s perspective to recognise the impact on port operations that results from new developments near the port boundaries and that surrounding land uses have regard to the history of the port and its long term economic contribution to the state and region

In addition to this PDP these issues are being addressed in the draft new format Port of Melbourne Planning Scheme and the Port Environs Planning process The draft new format planning scheme includes a port strategic statement (PSS) the equivalent of a municipal strategic statement The proposed Strategic Land Use Framework Plan from the PSS is shown in Figure 3

Figure 3. Strategic land use framework plan



3. The Port Development Plan approach

3.1. Aim of the Port Development Plan

The primary aim of the PDP is to create a clear picture for the short (0 to 5 years) medium (5 to 15 years) and long-term (15 to 30 years), development of the port. This will allow the various internal and external stakeholders to have a clearer understanding of the development plans and requirements of the port.

The PDP is intended to inform both PoMC and its various stakeholders of:

- forecast changes anticipated to impact the freight and logistics industry as it relates to the Port of Melbourne
- infrastructure improvements required and the implications for land and water asset utilisation
- the overarching funding strategy for infrastructure projects
- programs for infrastructure development
- environmental and social principles to be followed

An understanding of these issues will provide certainty for all parties leading to the port addressing the long-term investment, social and environmental requirements that are essential for growth.

3.2. Development objectives

In order to guide port development in the short, medium and long term, PoMC has established the following development objectives:

1) To give certainty to investors, shipping lines, government stakeholders, stevedores and other stakeholders on the future development of the port by:
   a. accommodating the forecast growth in trade
   b. attracting a range of investments that maximises the potential of the port and reflects the trade needs of port users
   c. providing timely, cost efficient and appropriately financed infrastructure
   d. providing a business environment which allows our business partners to develop and grow their businesses in accordance with their shareholders objectives
   e. ensuring developments are consistent with the PDP and VPSF
2) Integrate environmental, social and economic considerations for the benefit of the overall performance of the port, involving working closely with all stakeholders to ensure the long term sustainability of the port.
3) Embrace improvements in technology and or work practices that enhance the capacity of the port.
4) Maximise the use of the existing port resources.

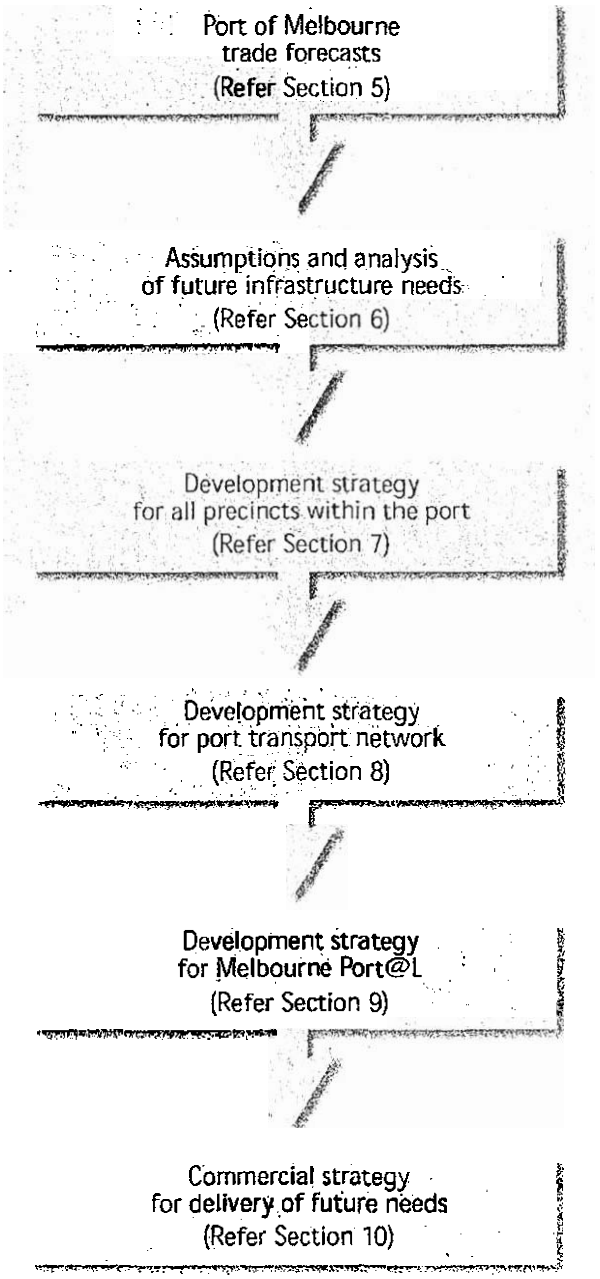
3.3. The Port Development Plan process

The PDP was developed utilising:

- extensive consultation with stakeholders, including stevedores and shipping companies
  analysis of trade and industry statistics
- relevant Port of Melbourne Land Use Plan findings
  reviews of both internal and external literature

The major steps in the PDP process are shown in Figure 4

Figure 4 Port Development Plan process



3.4. Input from the Port of Melbourne Land Use Plan

In July 2002 the *Port of Melbourne Land Use Plan* (LUP) was completed This plan was a whole of port planning strategy which analysed:

- port needs
- economic influences
- transport requirements
- environmental and land use pressures

The PDP has been developed in close consultation with the port s tenants and stakeholders and builds upon the findings of the LUP as well as the economic market and commercial intelligence information gathered to ensure that commercial and economic aspects of the port s operations are soundly considered The PDP supersedes the LUP

3.5. Consultation

Preliminary consultation for the PDP has been undertaken with stevedores, shipping lines and importers and exporters to develop a better understanding of their likely investment and growth expectations as port users and tenants

To identify potential implications and assist with input into the PDP PoMC has also consulted with state government and local council representatives and managers and state government agencies such as VicRoads and VicTrack

Through the Port Community Forum (made up of members of the community who live near the port and PoMC representatives) PoMC has provided local communities with frequent progress reports on various elements of the PDP

Prior to endorsement of the PDP by government PoMC committed to undertake a period of consultation in parallel with the Melbourne Port@L strategy during which individuals and organisations are given an opportunity to provide feedback on the PDP which will be important in reviewing and assessing its subsequent implementation

3.6. Monitoring and periodic review of the PDP

The PDP has identified a number of objectives and strategies that address the key issues of port development, transport and infrastructure and environment

PoMC will continuously monitor the development and implementation of the strategies and achievement of the objectives

Monitoring activities may include the following:

- monitor cargo throughput shipping trends and port performance
- review the PDP every two years The biennial review may include a review of trade forecasts and port infrastructure investment and future needs The review process should take account of
  - world economic and trade trends
  - national and state economic performance
  - introduction of new port and intermodal technology and productivity improvements
  - stakeholder input from PoMC s communications program
  - private sector decisions and government policy

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4. Development options and drivers

In developing the PDP PoMC has identified and considered a number of land use options that would provide for sufficient landside capacity to cater for future trade growth In addition there are many external drivers that influence the way in which the port can evolve and operate

This section identifies and discusses the most significant and influential of these options and drivers on the PDP

4.1 Future land options

The picture of what the port will become in respect of land use planning is both simple and complex

Simply put the port has a finite amount of land This restriction on land available is a commonly confronted issue for city ports, however this problem is addressed in varying ways between ports Some of the options used elsewhere are:

- more efficient use of existing land through improvements in productivity
- land reclamation e g Port of Brisbane and Sydney where port expansion involves new reclamation works to provide an additional 230 hectares and 57 hectares of land respectively and the Port of Long Beach California where up to 200 hectares of additional land may be reclaimed to cater for trade in 2020
- relocation of some activities to new areas in the port or other ports e g Sydney where cars have displaced grain from Glebe Island (to late 2008) and Newcastle where general cargo terminals now occupy the steel mill site
- port redevelopment of existing outdated facilities e g Port of Rotterdam
- expansion of the existing port through land acquisition

PoMC had determined that a development strategy based on improvements in productivity and more efficient use of existing underutilised land within and adjacent to the port will ensure that the port has sufficient land for the planning period

4 1 1 Reclamation

The most visible opportunity for land reclamation in the port would be the southward extension of Webb Dock subject to appropriate feasibility and environmental impact studies

PoMC believes that this option should be retained as a strategic option to be considered in conjunction with Port of Hastings development in consideration of land needs beyond 2035

4 1 2 Relocation

The government's *2004 Victorian Ports Strategic Framework* commits to:

- maintaining the Port of Melbourne as Australia's premier container port through support for developments to maximise the use of the Swanson Dock container facilities until these facilities are substantially utilised and demand for container services warrants the development of the West Gate-Webb Dock precinct for this purpose
- allowing market forces to determine the port where breakbulk and coastal trades will be located in the longer term
- maintaining the Port of Melbourne as the focus for Bass Strait passenger ferry and cruise ship services

Relocation of some trade from the Port of Melbourne because of competitive pressures or because of the need for more land for containers is therefore a realistic possibility in the longer term and is consistent with the government s agenda

4 1 3 Redevelopment/expansion

It is unlikely that the size of the port will greatly exceed the current 500 hectares due to the constraining nature of the existing surrounding urban areas However, it is anticipated that strategic sites may be purchased as the opportunities arise particularly where there is an identified port-related short medium or long-term need It is also anticipated that in the medium to long-term integration of the port and the Dynon rail precinct into a single world-class intermodal hub will occur Refer Section 9 for a broad overview of this concept - referred to as the Melbourne Port@L initiative

The greatest scope for accommodating predicted growth in the short to medium term is to further develop existing terminals Advances in freight and logistics technology make this further development a compelling option Put simply, it is more cost efficient to install new high-speed cranes than it is to build a new wharf

In the longer term redevelopment of some port assets for more critical cargoes, such as international containers and Tasmanian trade will be necessary

Action
PoMC will selectively acquire strategic sites to satisfy the objectives of the Port Development Plan and Melbourne Port@L strategies

4 1 4 Other land requirements

In addition to the direct wharf requirements it is anticipated that over the next 30 years there will also be a need to provide land in the immediate vicinity of the port for related uses Port-related cargo activities may include equipment maintenance equipment rental and leasing cleaning facilities, safety and security services, offices, information and communication services, storage loading/ unloading stripping/stuffing of containers, consolidation of loads distribution, assembly quality control testing repair accessorising cars, grain storage and fumigation newsprint storage cold storage and truck marshalling

Some of these activities support cargoes that are bonded and have not yet cleared customs inspection The inspection of cargoes by both Customs and AQIS are also on-port activities requiring allocated areas

Having a number of these activities within the port precinct means that unnecessary transport for short-term storage can be avoided with the resulting savings delivered to port users

The development of distriparks and trade distribution and marketing centres (TDMCs) in and adjacent to ports such as Rotterdam and Marseilles demonstrates the response ports are making to the demands of new logistics practices These facilities within ports are advanced logistics parks, while others are trade and marketing centres

The need for this type of land will increase as the pressures for optimisation of land within the port are realised by the conversion of land for international containers The expansion of berth and land requirements for containers and multi-purpose cargo handling will result in the reduction of available land within the port for cargo related activities

It is likely that many of these cargo-related activities will be dislocated from within the port but will seek locations in either close proximity to the port or close to improved rapid transport links to the port This increases the importance of ensuring retention of the existing stock of suitably zoned industrial land in the areas surrounding the port such as north of Footscray Road within the Dynon rail precinct

In some areas, such as Fishermans Bend the rise in land values may restrict the type of port-related uses that can be located in the area In other areas, such as Yarraville the location of container parks requires continued management to minimise adverse impacts on residential areas

PoMC will maintain a cooperative approach with the municipalities of Hobsons Bay Maribyrnong Melbourne and Port Phillip to identify initiatives that are aimed at protecting valuable industrial land in proximity to the port It is apparent that some of the surrounding areas already have increasing pressures from nearby residential areas and also from the conversion of industrial land to provide for non-industrial activities

Action
PoMC will maintain a cooperative approach with the municipalities of Hobsons Bay, Maribyrnong, Melbourne and Port Phillip to identify initiatives that are aimed at protecting valuable industrial land in proximity to the port

4.2. Land use and buffers

The long-term sustainability of the port requires it to manage any impact on surrounding areas and also to protect itself from any adverse impact from surrounding developments

Activities in the port are subject to a range of legislative requirements aimed at ensuring that port facilities meet environmental standards and do not pose a hazard to surrounding land uses PoMC is also committed to continual environmental improvement and is implementing a range of plans and strategies for managing potential amenity impacts (see Sections 4 5 and 4 6)

The relationship of land uses outside the port and their implications for the sustainability of its operations as a 24-hour working port is also important Today many ports located within the inner urban areas of cities find themselves being increasingly constrained by surrounding uses and changing community expectations. There is an increasing need for land use planning in these areas to be cognisant of the port and its ongoing operations

The significant changes in land use that have occurred at Docklands and Port Melbourne along with those emerging in the cities of Maribyrnong and Hobsons Bay highlight the importance of ensuring that long-term planning in surrounding municipalities is coordinated with the port and vice versa

PoMC will progress buffer issues through completion of a port environs framework to provide a progressive structure of planning controls to manage the interests of both the Port of Melbourne and its port environs communities. It is being developed in consultation with state and local government and will involve community input

There is not only a need to address land use interface issues, but also broader regional issues such as transport corridors accessing the port The development of suitable planning mechanisms will play a long-term strategic role in ensuring the viability and sustainability of the port

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Action

PoMC will progress buffer issues through completion of a port environs framework to provide a progressive framework of planning controls to manage the interests of both the Port of Melbourne and its port environs communities

4.3. Security

4.3.1 Background

The issue of terrorists turning their efforts to the maritime sector was raised by the International Maritime Organisation As a result, a conference of contracting governments to the *International Convention for the Safety of Life at Sea 1974* (SOLAS) was convened in London from 9 - 13 December 2002 and adopted amendments to SOLAS These amendments provided special measures to enhance maritime security and were supplemented by developments to the International Ship and Port Facility Security (ISPS) Code which contains, inter alia, security requirements relating to the security of the ship and the immediate ship/port interface The Commonwealth Government adopted the amendments, provided an instrument to enforce changes to maritime security, the *Maritime Transport and Offshore Facility Security Act (MTSA) 2003* (Cwlth) and charged the Department of Transport and Regional Services (DoTARS) as the regulator to oversee the implementation of the Act into ports and maritime interests throughout Australia The MTSA and regulations provide for rules and regulations relating to preventive security at ports and facilities, with the main emphasis being the physical ship to shore interface

The consequences of ongoing terrorist attacks continue to cause economic repercussions around the world with governments investing capital expenditure on ongoing protective security projects, in an effort to deter and mitigate the threat from terrorism Although the emphasis in the past has been air transport security the importance of the maritime sector by governments has required increased investment in security works over the past 24 months in an effort to provide protection against acts of terrorism at sea and in ports

4.3.2 PoMC approach to security

PoMC has defined its approach to security under the MTSA in order to:

- deter terrorist activities by using visible physical security measures and CCTV cameras
- detect terrorist activities by the incorporation of intruder alarms on perimeters and incorporated CCTV on berth areas and planned response force utilising guards and police
  prevent terrorist activities by engaging in sound informative intelligence networks at Commonwealth and state levels, which will incorporate a port-wide communication and notification system

4.3.3 Future

Since mid-2004 PoMC has implemented a range of new security measures as part of the ongoing upgrade programme for PoMC common-user and bulk liquid terminals. PoMC's *Maritime Security Plan* was approved by DoTARS on 26 June 2004. The implementation of additional security measures will continue through to 2007 and will include the upgrade of security lighting, additional perimeter security, enhanced CCTV, intruder alarm systems, additional waterside protection and ongoing security training for relevant PoMC staff.

Similarly, private sector operators within the Port of Melbourne are committed to the implementation of security plans at all dedicated terminals.

Action:
The PoMC will continue with the implementation of additional security measures throughout the port through to 2007

4.3.4 Summary

In summary, PoMC has implemented the requirements of the MTSA and has prepared a maritime security assessment and plan which incorporates long-term practical security approaches focused on risk and cost efficiency.

4.4 Safety and environmental management

The Port Services Act as amended requires PoMC as a port manager to prepare a safety and environment management plan (SEMP) and ensure that reasonable steps have been taken to implement the measures or strategies that are specified in it to prevent or reduce the hazards and risks associated with the operation of the port. The SEMP covers the operations in the whole of the Port of Melbourne 'declared area' including those activities over which PoMC has direct control as well as those which it can attempt to influence.

The SEMP has been developed by PoMC building on the significant amount of existing safety and environment risk management knowledge, expertise and processes, which are embedded into the port's operations. The identification and analysis of each risk scenario also consolidates and builds on the significant amount of existing safety and environmental risk knowledge embodied within reports and studies commissioned by PoMC.

The SEMP relies on the underpinning safety and environment management systems for its implementation and review. It also creates clarity around the roles and responsibilities of PoMC, government agencies and other organisations. The SEMP does not override any of the existing legislation, rather it assists in coordinating the port and stakeholders' efforts in safety and environmental management.

PoMC's safety and environmental management framework is shown schematically in Figure 5.

4.4.1 *Safety and environmental management framework*

PoMC recognises that port stakeholders are subject to relevant safety and environmental obligations that are applied through legislation and regulated by the relevant authorities. Within the port there are a number of activities and areas where PoMC has direct responsibility and control of operations. However there are other activities and areas over which PoMC has no direct control and can only influence the improvement of safety and environment outcomes associated with these areas and activities.

Notwithstanding this, PoMC is committed to reducing safety and environmental risks in activities and areas that it controls to a level 'As Low As Reasonably Practicable' (ALARP) and to influence all stakeholders to manage safety and environmental risks within the areas that they control to meet the ALARP principle.

To determine the associated safety and environmental risks within the port, a high-level activity based approach has been developed. This provides a representation of the port's core activities and then identifies principal activities which fall under each area. Importantly, this shows the interface between the land and water activities under the port operations/activities. An outline of the identified core activities is also included in Table 1.

For each of the five core activities, the principal safety and environmental risk scenarios are listed and the principal controls and compliance agencies in the management of the risks are defined. For risks that do not meet the ALARP principle treatment measures have been identified and programmed for implementation.

Figure 5: Safety and environmental management framework

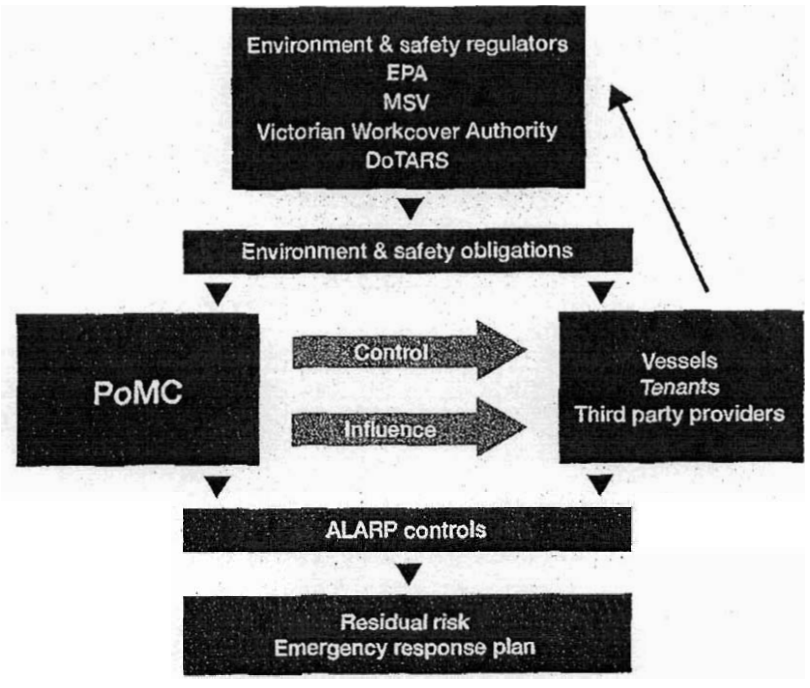

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Table 1 Port of Melbourne core activities

Core activity	Description
Ship in port waters	The management of ship navigation and other on-water activities, including vessels entering or clearing port waters between Port Phillip Heads and Breakwater Pier
Ship berthing/unberthing	Ships berthing/unberthing relates to the management of activities including the transit of a vessel north of Breakwater Pier through to its approach to the berth and the activities required to moor the ship before it is secured alongside (or vice versa)
Ship alongside (including ship/land transfer at berth)	Ship/land transfers at berth relates to all activities taking place at the wharf–ship interface while the ship is berthed This includes the loading or unloading of cargo onto the wharf ship waste disposal refuelling, ballasting operations, maintenance activities and personnel transfers
Activities on port land	All activities and facilities on port land that are required to move and store handled cargo and the loading/unloading of cargo onto/from trucks/trains for transportation by road and rail This also includes the movement of cargo by pipeline Other activities considered are management of open space marina developments, ships maintenance and repairs in dry dock development and maintenance of port infrastructure utilities infrastructure and service providers
Movements to and from port	Encompasses transport vehicles such as trucks, trains and pipelines moving cargo to and from the port The activities managed are the movements of the freight through the port and the impact these activities have on the surrounding community

4 4 2 Managing safety and environmental residual risk

Emergency management is a key component of the approach to risk management in the port Emergency management provides a safeguard in assisting in the management of risks for which a degree of residual risk remains after the implementation of management strategies or for responding to the unexpected or unforeseen event

PoMC has a comprehensive emergency management plan for emergencies that occur on port property or in port waters The emergency procedures are tested on a periodic basis to test the robustness and effectiveness of response and are revised whenever there is a major change to the port operations In particular the procedures undergo review after the occurrence of any incident or emergency situation

4 4 3 Review and revision

As per the requirements outlined in the Port Services Act, the SEMP will be externally audited within two years of certification to determine whether it continues to adequately provide for the matters required by Section 91D(1) and that PoMC as port manager, is complying with it The recertification of the SEMP will then occur within the third year

In addition to these requirements PoMC will undertake regular reviews of the SEMP and its implementation These reviews will be aligned with the existing safety and environmental management system review processes

Action
PoMC will review the implementation of the Safety and Environment Management Plan on a regular basis and will have it recertified every three years

4 4 4 Transport mode environmental impacts

Transport issues are of particular importance to the efficient operation of the port and as an off-site impact of freight movement in general In the next 30 years Melbourne's population is expected to rise from approximately 3 5 million to more than 4 5 million This will bring with it an increased demand for freight as evidenced by the rapid growth in container movements into and out of Melbourne over the last 10 years Total container trade through the Port of Melbourne is forecast to grow from 1 92 million TEU in 2005 to around 8 million TEU by 2035 – refer Section 5 The transportation options are limited to either road or rail freight to other ports or to direct shipping from Melbourne

Based on the current levels of technology the most environmentally efficient methods of moving large amounts of freight are in order:

1 international shipping
2 coastal shipping
3 rail freight
4 articulated trucks
5 fixed trucks

While it is acknowledged that advances in technology will improve the environmental performance of rail and road freight the shift to larger and more modern shipping will also improve environmental performance PoMC is therefore committed to encouraging improvements in shipping technology and more efficient goods handling processes by developing deeper channels and upgrading berths PoMC is also committed to the increased movement of goods by rail and to more efficient truck utilisation as these are seen as positive environmental steps for the local community and the broader Melbourne area

4.5. Social considerations

4.5.1 Social impact of the port

PoMC acknowledges that its role as a key trading gateway and employment generator also has an influence on local communities in terms of access, safety and heritage and can impact public amenity.

PoMC aims for the port to be recognised and valued by its neighbours and the wider community as a key public asset and that this results in support for the port's long-term development. This is reflected in its most recent corporate plan where it recognises the need to conduct its operations in keeping with the port's licence to operate and to manage and develop the port in a way which provides a high quality of physical security together with environmentally and socially sustainable outcomes.

PoMC actively engages and fosters relationships with neighbouring communities and local governments and is committed to adopting a program of continuous improvements with respect to social and environmental outcomes. With the growth in both trade and population around the port, PoMC considers it imperative to continually strive to improve the social and environmental aspects of the port through a community relations framework incorporating:

- community engagement through direct engagement and consultative forums
  the ongoing development of its vibrant education program which has been widely acclaimed, for example Adopt a Ship
- support for community activities
  recognition of the port's ecological footprint and managing its impact on the environment facilitated by the port's SEMP and the proposed Port Environs Plan
  an appreciation of the port's landscapes facilitated by the port amenity enhancement program

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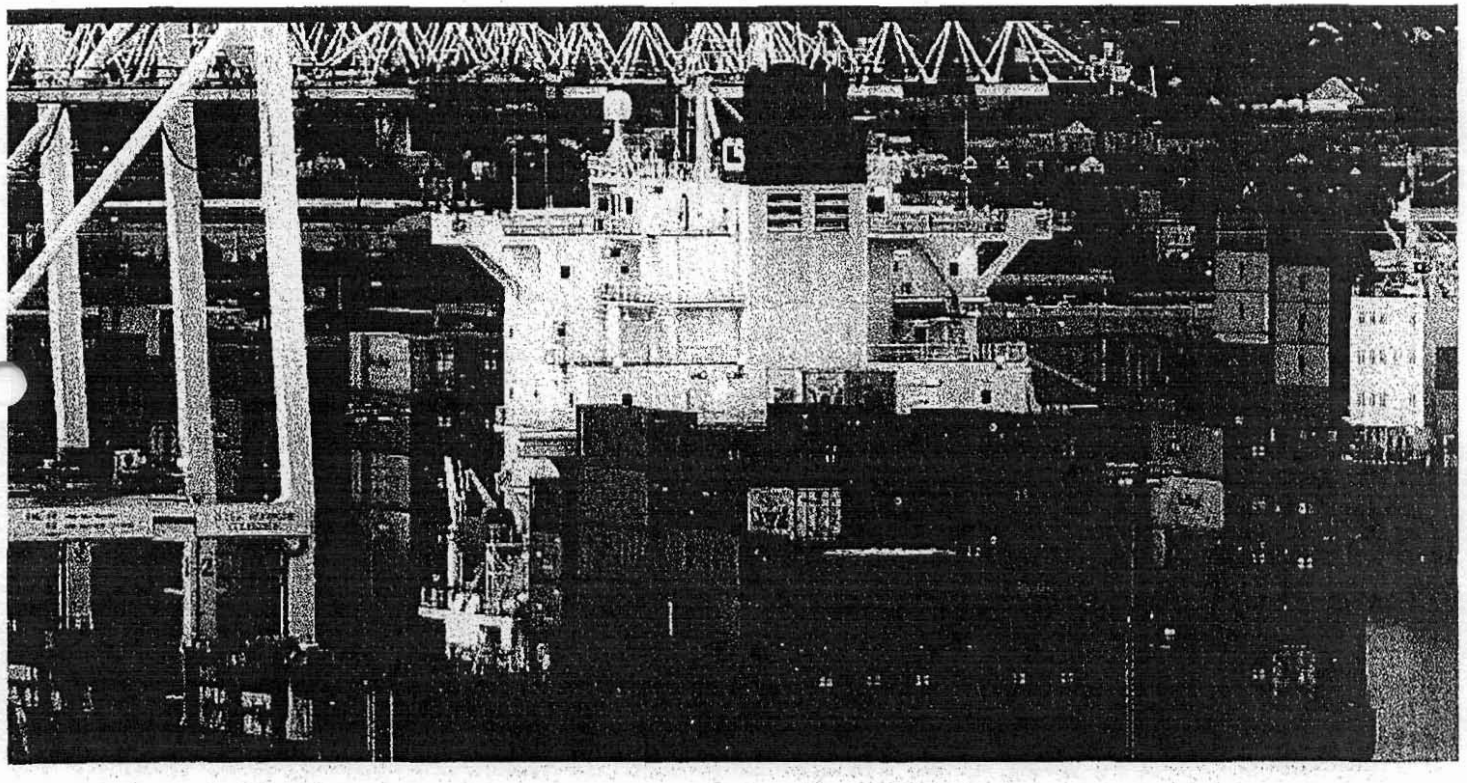
Action

PoMC will continually strive to improve the social and environmental aspects of the port through a community relations framework

5. Trade forecasts



The trade forecasts identified in this section assume an unconstrained port operation in terms of channel depth and capacity terminal facilities, infrastructure and operations and land transport connections.

The ability to handle the trade forecasts depends on meeting the infrastructure needs outlined in Section 6. Failure to meet these needs may result in substantially lower than forecast growth. Therefore a major objective of PoMC is to ensure that port infrastructure has the capacity to meet future trade volumes.

Channel depth is a key constraint to the ability to handle the trade forecasts efficiently. The Channel Deepening Project, which is the subject of a Supplementary Environment Effects Statement, aims to remove this constraint.

5.1. Approach to trade forecasting

For infrastructure planning purposes PoMC commissioned Meyrick and Associates Pty Ltd (Meyrick) to prepare detailed trade forecasts for all major trade segments comprising a 'most likely' forecast for the period 2005 to 2035 and an 'upper limit' forecast for the period 2005 to 2015.

Major trade segments include:

- international containers
- Tasmanian trade
- motor vehicles
- breakbulk
- dry bulk
- liquid bulk

The 'most likely' forecast is used to estimate the port's future land and berth requirements to 2035. Because it is possible that trade growth will exceed the 'most likely' forecast in the short to medium term, PoMC has adopted a more conservative approach for short to medium-term facilities planning, based on the 'upper limit' forecast.

5.2. International containers

International container trade comprises full and empty imports and exports having an overseas origin or destination

History

Total international container trade through the port increased from 733 000 TEU in 1995 to 1 510 million TEU in 2005 - an annual average growth rate (AAGR) of 7.5%

Future

Australia's container growth is expected to continue in line with world container growth which is expected to slow as the stimuli given to global trade growth by the rapid liberalisation of the 1990s tapers off and global container markets mature. In the long term, Melbourne's container growth is assumed to be the same as Australia's

PoMC's international container forecasts are shown in Table 2

Figure 6 charts historic and forecast future volume of international containers

Forecast growth of empty containers (included in total) is shown in Table 3

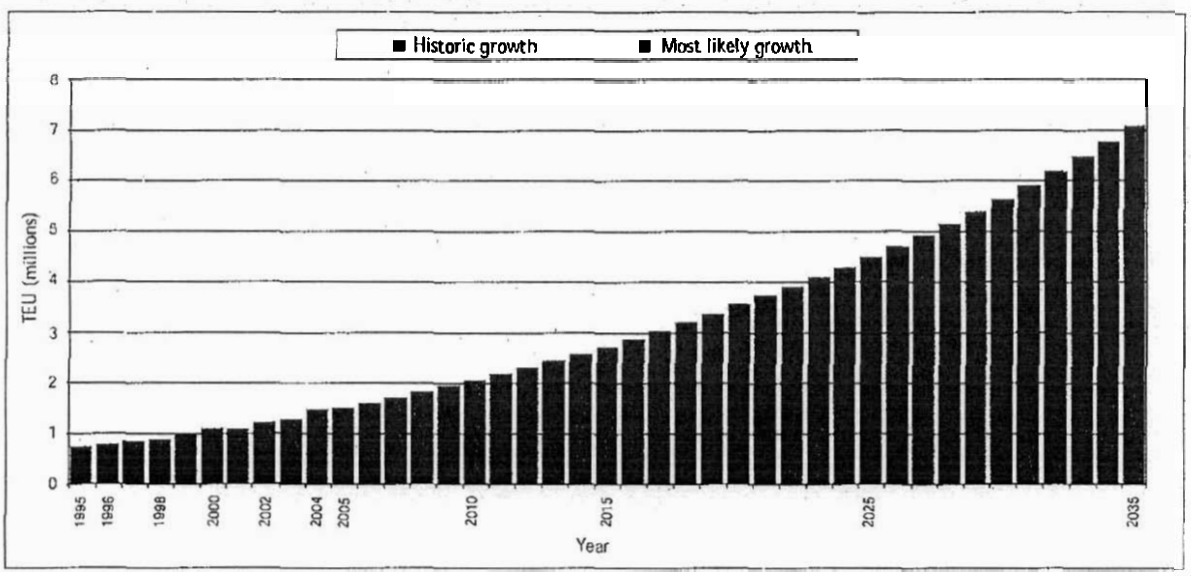
Table 2. Total international container trade forecast (millions TEU)

	Year	Containers		
Actual	2005	1.510		
Forecast		Most likely		Upper limit
			CAGR	
	2010	2.062	6.4%	2.231
	2015	2.707	5.6%	3.026
	2025	4.466	5.1%	
	2035	7.057	4.7%	

Table 3. Empty international container trade forecast (thousands TEU)

	Year	Containers		
Actual	2005	264		
Forecast		Most likely		Upper limit
			CAGR	
	2010	343	5.0%	369
	2015	425	4.5%	460
	2025	706	5.1%	
	2035	1.115	4.7%	

Figure 6 Total international container trade forecast (millions TEU)



5 3 Mainland container trade

Mainland container trade includes domestic and international containers carried on international shipping services between capital city ports operating with CVPs

History

Between 1995 and 2005 mainland container trade increased from 13,200 TEU to 91 700 TEU – an AAGR of 21 4%

Future

It is estimated that approximately 10% of mainland containers are carried at sea PoMC s long-term forecast assumes that sea will continue to take about 10% of the north/south and east/west freight task in addition to transhipment cargo

The PoMC's mainland container forecasts are shown in Table 4

Table 4: Mainland container trade forecast (thousands TEU)

	Year	Containers		
Actual	2005	91		
Forecast		Most likely		Upper limit
			CAGR	
	2010	105	2.9%	124
	2015	130	4.4%	
	2025	180	3.3%	
	2035	240	2.9%	

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5.4. Tasmanian trade

The bulk of Tasmanian trade comprising containers, breakbulk, WCCUs and new motor vehicles is handled at purpose-built terminals at Webb Dock, although a considerable quantity of containers and breakbulk is also handled at Appleton Dock. Tt-Line's passenger ships accommodated at Station Pier also carry freight mainly on WCCUs.

History

Between 1995 and 2005 Tasmania's container trade increased from 153,000 TEU to 322,000 TEU – an AAGR of 7.7%. In the same period breakbulk, WCCUs and motor vehicles grew at an AAGR of 4.3%, 4.2% and 6.5% respectively.

Future

Long-term growth in all segments of Tasmanian trade is expected to be closely linked to changes in Victorian economic activity. PoMC's Tasmanian trade forecasts for containers, breakbulk, WCCUs and new motor vehicles are shown in Table 5 to Table 8.

For planning purposes Tasmanian trade has been aggregated into equivalent TEUs (equiv TEU) as follows:

- Container: 1 x 20 ft unit = 1 equiv TEU
- Motor vehicles: 2 vehicles = 1 equiv TEU
- Breakbulk: 2 ½ mass tonnes = 1 equiv TEU
- WCCU: 1 WCCU = 2 equiv TEU

Figure 7 charts historical and forecast future volume of the total Tasmanian trade in equivalent TEUs.

Table 5: Tasmanian container trade forecast (thousands TEU)

	Year	Containers		
Actual	[illegible]	[illegible]		
Forecast		Most likely		Upper limit
			CAGR	
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]

Table 6. Tasmanian breakbulk forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	86		
Forecast		Most likely		Upper limit
			CAGR	
	2010	144	10.9%	366
	2015	167	3.0%	421
	2025	191	1.4%	
	2035	229	1.8%	

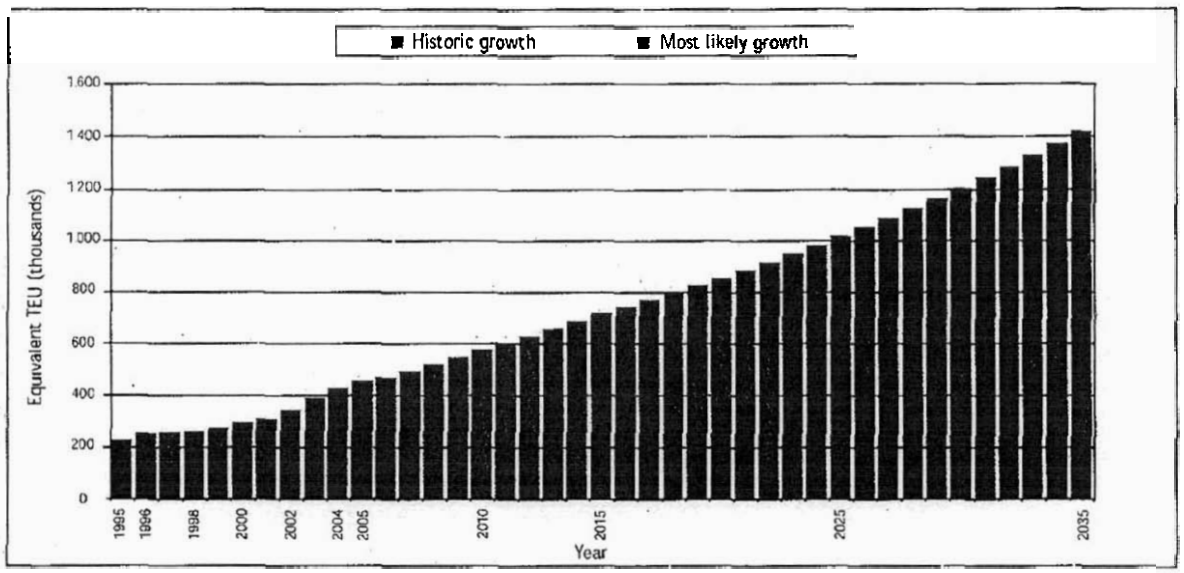
Table 7. Tasmanian WCCU forecast (thousands units)

	Year	WCCUs		
Actual	[illegible]	[illegible]		
Forecast		Most likely		Upper limit
			CAGR	
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]

Table 8. Tasmanian motor vehicles forecast (thousands vehicles)

	Year	Vehicles		
Actual	2005	31		
Forecast		Most likely		Upper limit
			CAGR	
	2010	36	3.0%	39
	2015	43	3.6%	47
	2025	58	3.0%	
	2035	75	2.6%	

Figure 7. Tasmanian trade forecast (thousands equivalent TEU)



5.5 Motor vehicles

Only motor vehicles transported on pure car carriers (PCCs) and pure car and truck carriers (PCTCs) are included in this section Because commercial vehicles and equipment like agricultural machinery are also carried on PCCs and PCTCs, an additional 25% is added to the new motor vehicle forecasts to provide for these commodities for planning purposes

The forecasts exclude Tasmanian motor vehicle trade and CKD vehicles and parts

Because trade statistics have traditionally been kept in mass tonnes, a conversion ratio of 1 41 mass tonnes per vehicle has been used for forecasting purposes

History

Between 1995 and 2005 new motor vehicle trade increased from 89 000 vehicles to 298 000 vehicles – an AAGR of 12 9%

Future

Growth in new motor vehicles imported through the port is closely linked to a number of variables including population growth vehicles per head of population average vehicle age and ratio of imports to total sales Growth in exports is expected to gradually decline over the long term due to the greater competitiveness of the Chinese export vehicle industry

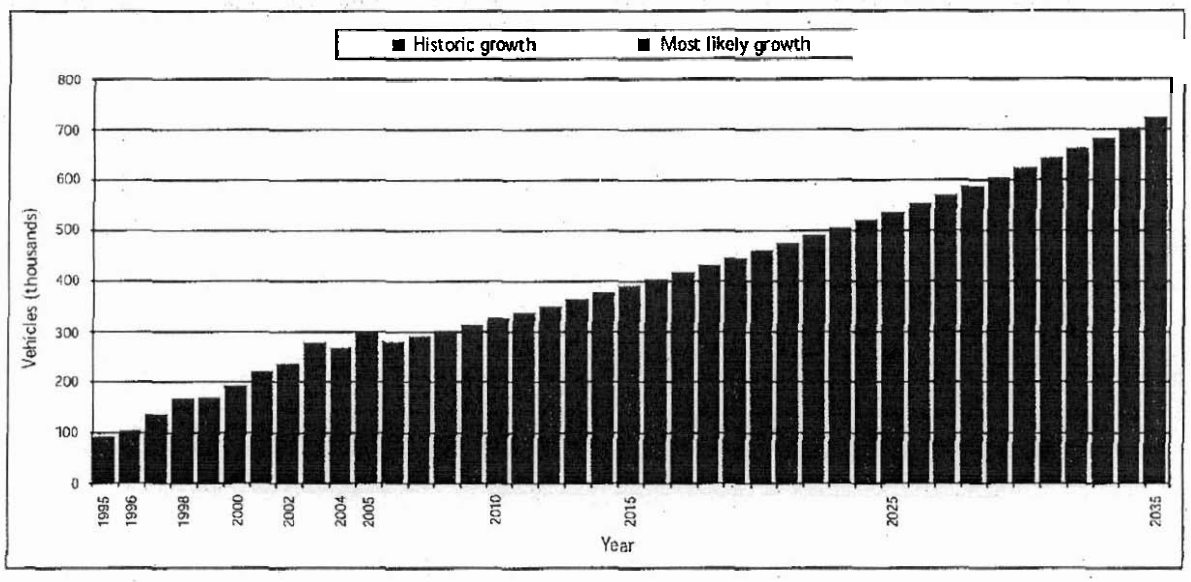
PoMC s new motor vehicle forecasts are shown in Table 9

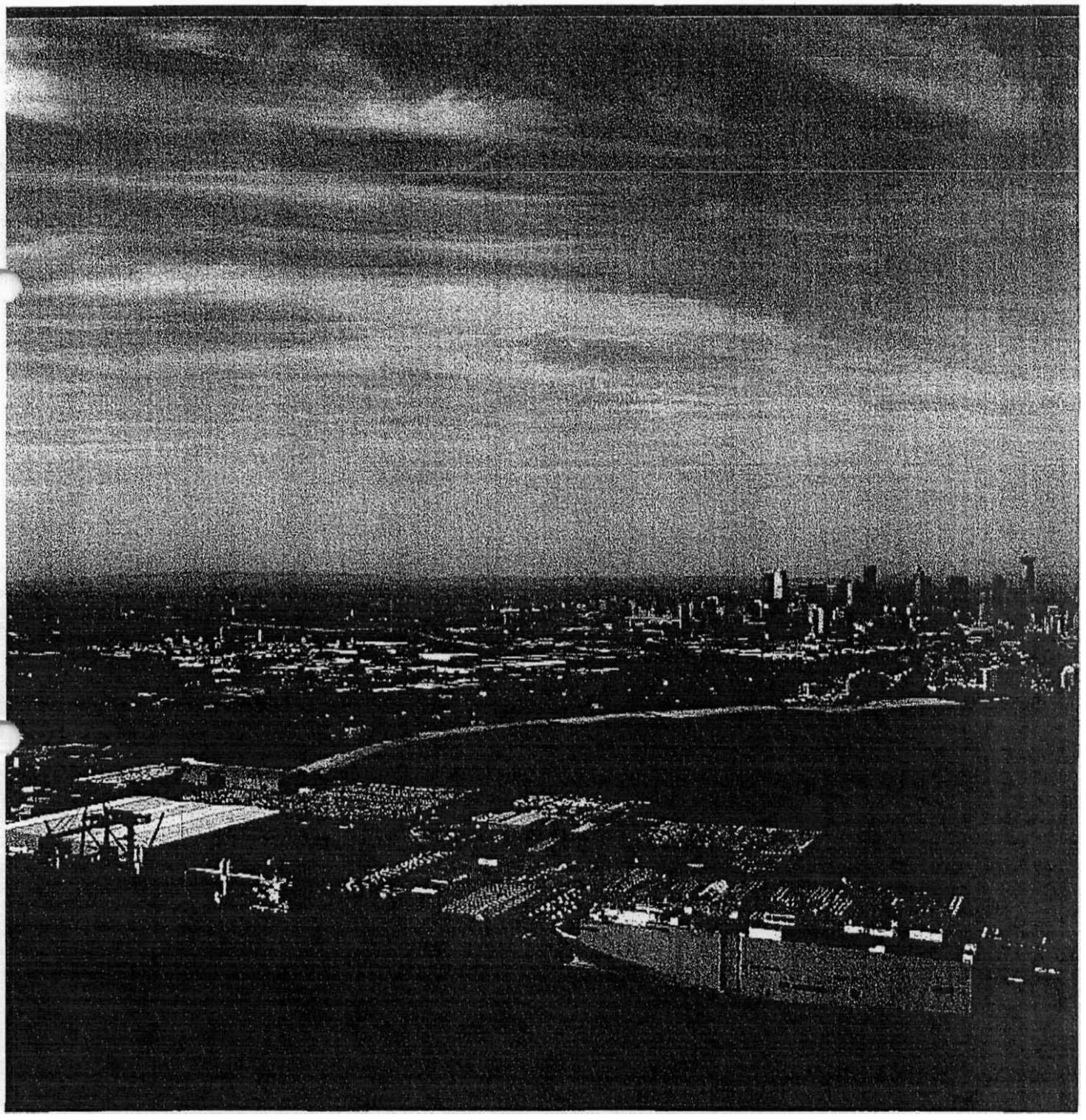
Figure 8 charts historic and forecast future volume of new motor vehicles

Table 9 New motor vehicle trade forecast (thousands vehicles)

	Year	Vehicles		
Actual	2005	298		
Forecast		Most likely		Upper limit
			CAGR	
	2010	324	1.7%	368
	2015	389	3.7%	441
	2025	534	3.2%	[illegible]
	2035	720	3.0%	[illegible]

Figure 8 New motor vehicle trade forecast (thousands vehicles)





5.6. Breakbulk

Major breakbulk commodities include timber, iron and steel, vehicles, transport equipment and agricultural machinery. Numerous small quantities of not otherwise specified cargoes are aggregated and categorised as breakbulk – other.

Because they are mainly transported on PCCs and PCTCs, vehicles, transport equipment and agricultural machinery are transferred from the breakbulk segment to the vehicles segment for planning purposes. Bass Strait timber is similarly included in the Tasmanian trade segment. These commodities are therefore not included in the breakbulk forecasts.

Separate forecasts for each of the following major breakbulk commodities have been prepared:

- Overseas timber
- Iron and steel

History

Between 1995 and 2005 breakbulk trade increased from 643 000 mass tonnes to 959 000 mass tonnes – an AAGR of 4.1%.

Future

Growth in overseas timber is expected to level out in the medium to long term as the shift to alternative building materials for domestic building balances out the need for timber. Iron and steel imports are expected to follow recent trends with growth declining over the long term.

PoMC's new forecasts for major breakbulk commodities are shown in Table 10 and Table 11. Table 12 and Figure 9 summarise and chart historic and forecast future total volume of all breakbulk commodities.

Table 10. Overseas timber trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	[illegible]		
Forecast		Most likely		Upper limit
			CAGR	
[illegible]	2010	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

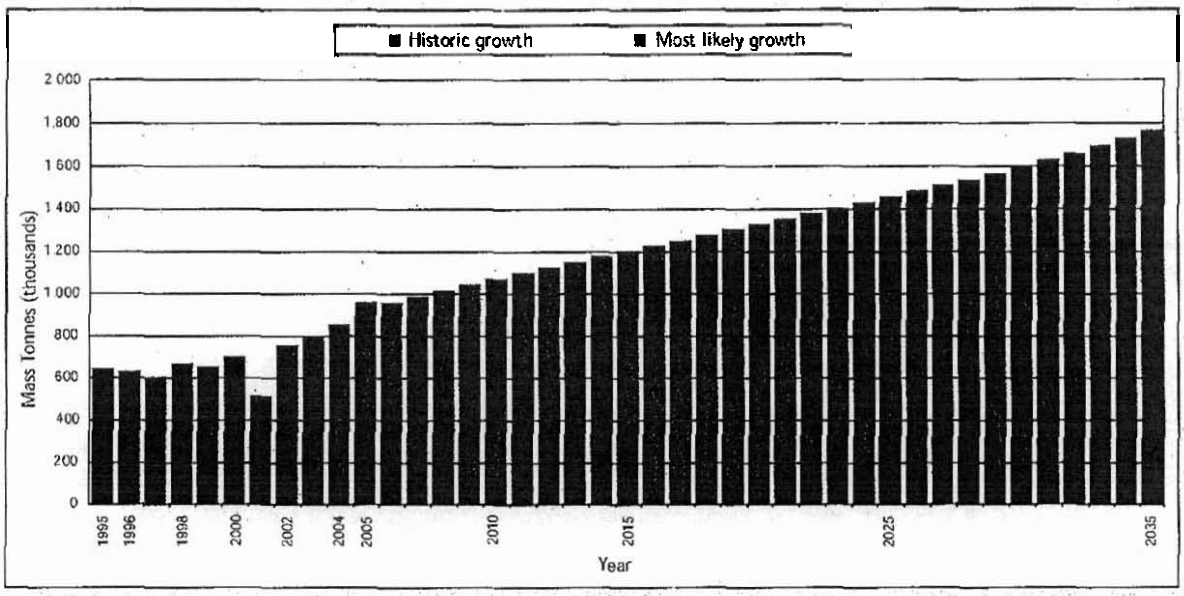
Table 11: Iron and steel trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	529		
Forecast		Most likely		Upper limit
			CAGR	
	2010	600	2.6%	728
	2015	674	2.4%	816
	2025	783	1.5%	
	2035	855	1.0%	

Table 12. Total breakbulk trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	959		
Forecast		Most likely		Upper limit
			CAGR	
	2010	1,070	2.2%	1,413
	2015	1,203	2.4%	1,595
	2025	1,459	1.9%	
	2035	1,769	1.9%	

Figure 9 Total breakbulk trade forecast (thousands mass tonnes)



5.7 Dry bulk

Major dry bulk commodities include cement, grain, sugar, gypsum, fertiliser, stockfeed (includes meals and flours) and crude fertiliser and minerals (predominantly cement extenders). Numerous small quantities of not otherwise specified cargoes are aggregated and categorised as 'dry bulk – other'.

Because dry bulk facility requirements are generally based on the dominant type of cargo, separate forecasts for each of the following commodities have been prepared:

- Cement imports
  Fertiliser imports
- Sugar imports
  Gypsum imports
- Grain exports
- Stockfeed imports
- Crude fertiliser and minerals imports

History

Between 1995 and 2005 total dry bulk trade increased from 1,663,000 mass tonnes to 3,083,000 mass tonnes – an AAGR of 6.4%, however if grain exports through the ABA facility at F Appleton Dock which started as a new trade in 2001, are excluded, the AAGR for all other commodities reduces to 4.6%.

Future

Demand for cement products has peaked and within five years is expected to return to the historical long run average growth of 1.8% pa. Long term sugar growth is expected to match growth in Victoria's population. Long term gypsum growth is expected to be closely linked to changes in Victorian economic activity and the grain forecast is derived from estimates of Australian exports published by the Grain Research and Development Corporation.

PoMC's new forecasts for major dry bulk commodities are shown in Table 13 to Table 16. Table 17 and Figure 10 summarise and chart historic and forecast future total volume of all dry bulk commodities.

Table 13: Cement imports trade forecast (millions mass tonnes)

	Year	Mass tonnes		
Actual				
Forecast				
			CAGR	
	2010			14

Table 14: Sugar imports trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	263		
Forecast		Most likely		Upper limit
			CAGR	
	2010	311	3.4%	382
	2015	327	1.0%	401
	2025	361	1.0%	
	2035	400	1.0%	491

Table 15: Gypsum imports trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	440		
Forecast		Most likely		Upper limit
			CAGR	
	2010	631	7.5%	683
	2015	745	4%	807
	2025	971	2.7%	
	2035	1249	2.5%	

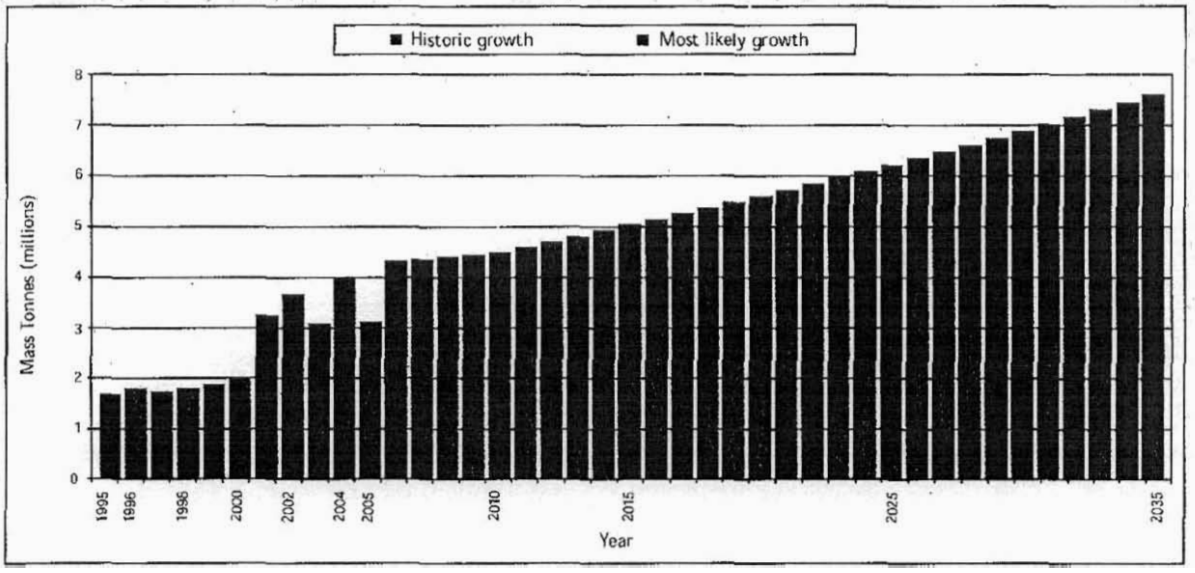
Table 16 Grain exports trade forecast (millions mass tonnes)

	Year	Mass tonnes		
Actual	2005	0.466		
Forecast		Most likely		Upper limit
			CAGR	
	2010	1.651	28.8%	2.086
	2015	1.858	2.4%	2.347
	2025	2.351	2.4%	
	2035	2.976	2.4%	

Table 17 Total dry bulk trade forecast (millions mass tonnes)

	Year	Mass tonnes		
Actual	2005	3.083		
Forecast		Most likely		Upper limit
			CAGR	
	2010	4.477	7.7%	5.558
	2015	5.022	2.3%	6.231
	2025	6.196	2.1%	
	2035	7.589	2.0%	

Figure 10 Dry bulk trade forecast (millions mass tonnes)



5.8. Liquid bulk

Major liquid bulk commodities include crude oil petroleum products and hazardous chemicals Numerous small quantities of 'not otherwise specified cargoes are aggregated and categorised as liquid bulk – other'.

Because liquid bulk facility requirements are generally based on the dominant type of cargo separate forecasts for each of the following commodities have been prepared

- Crude oil imports
- Petroleum products
- Hazardous products

History

Between 1995 and 2005 total liquid bulk trade increased from 4 147 000 mass tonnes to 4,390 000 mass tonnes – an AAGR of 0 6%

Future

Growth in crude oil imported through the port is closely linked to a number of variables including Victoria s consumption of oil products. Mobil s Altona share of Victoria s consumption and the estimated volume of crude oil provided from Bass Strait via the Westernport Altona Geelong (WAG) pipeline The bulk of petroleum products through the port are imports which are expected to remain essentially stable over the long term Recent slow downward trend in the import of hazardous products is assumed to continue in the long term

PoMC s new forecasts for major liquid bulk commodities are shown in Table 18 to Table 20

Table 21 and Figure 11 summarise and chart historic and forecast future total volume of all liquid bulk commodities

Table 18 Crude oil imports trade forecast (millions mass tonnes)

	Year	Mass tonnes		
Actual	2005	2.419		
Forecast		Most likely		Upper limit
			CAGR	
	2010	3.085	5.0%	3.616
	2015	3.768	4.1%	4.417
	2025	5.049	3.0%	-
	2035	6.132	2.0%	

Table 19 Petroleum products trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	1,662		
Forecast		Most likely		Upper limit
			CAGR	
	2010	912	-10.2%	1,209
	2015	912	0%	1,209
	2025	912	0%	
	2035	912	0%	

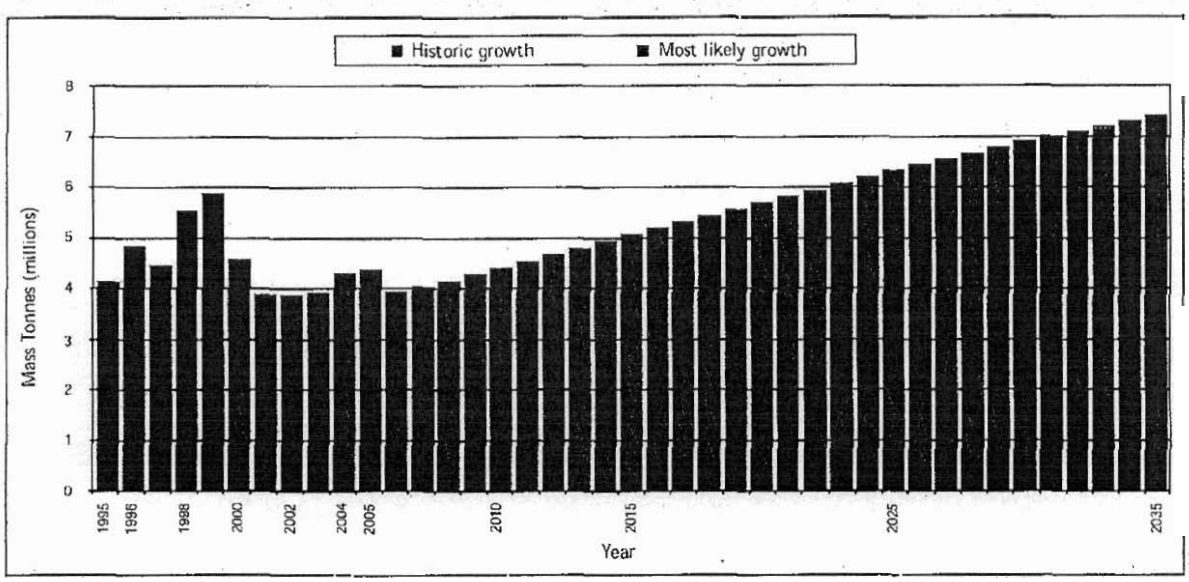
Table 20. Hazardous chemicals trade forecast (thousands mass tonnes)

	Year	Mass tonnes		
Actual	2005	272		
Forecast		Most likely		Upper limit
			CAGR	
	2010	274	0.1%	335
	2015	258	-1.1%	316
	2025	244	-0.6%	
	2035	236	0%	

Table 21 Total liquid bulk trade forecast (millions mass tonnes)

	Year	Mass tonnes		
Actual	2005	4.390		
Forecast		Most likely		Upper limit
			CAGR	
	[illegible]	[illegible]	[illegible]	[illegible]
	2015	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	
	2035	[illegible]	[illegible]	[illegible]

Figure 11 Liquid bulk trade forecast (millions mass tonnes)



5 9. Passenger ships

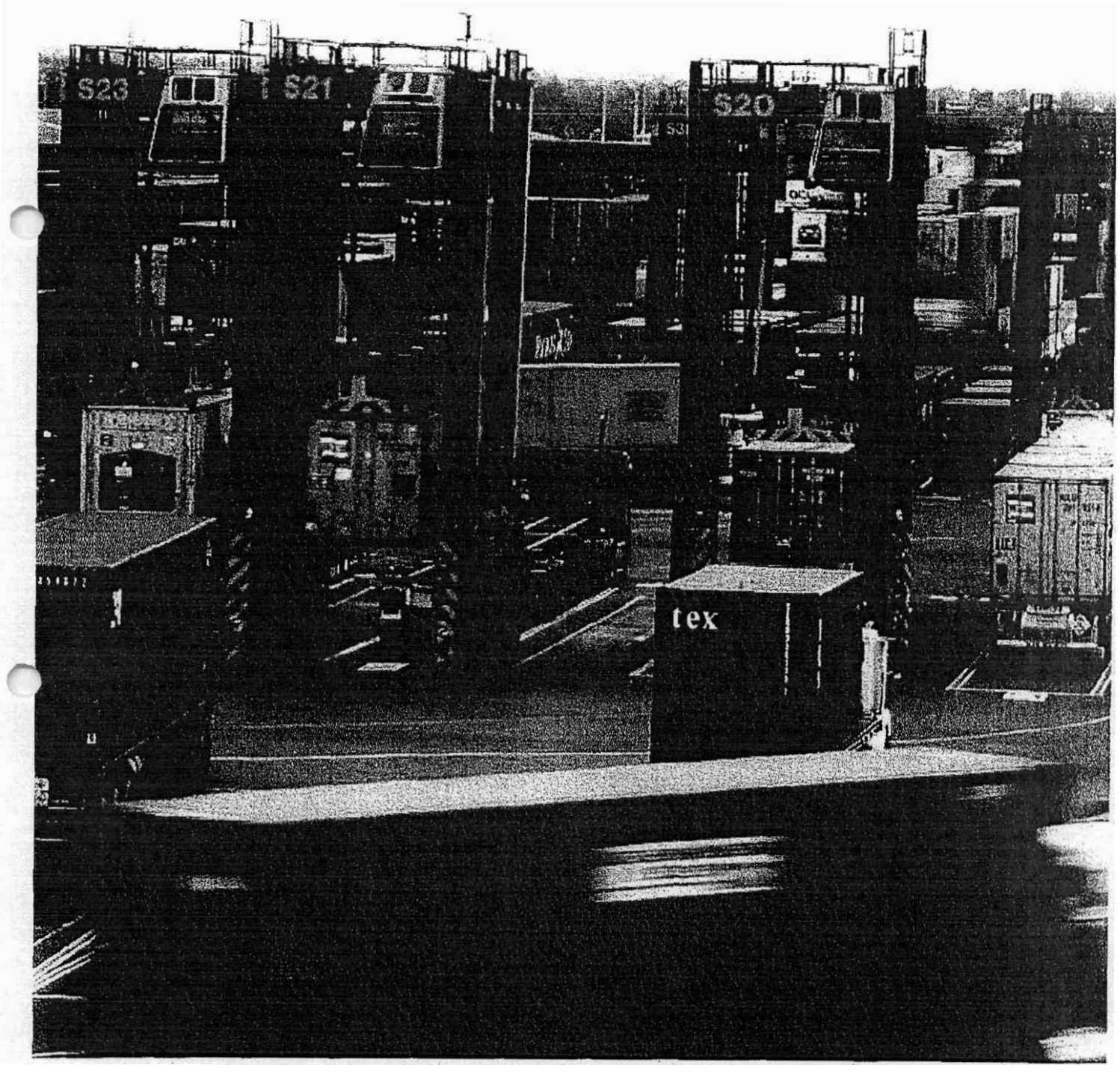
Passenger ships comprising TT-Line s Spirit of Tasmania 1 and 2 and cruise ships, are accommodated at Station Pier

In 2005/06 cruise ship season a record 35 cruise ships visited the Port of Melbourne with visitor numbers exceeding 85,000 (est 58 000 passegers and 27 000 crew)

The number of voyages made by TT-Line from Melbourne to Tasmania in 2005 was 403

It is difficult to estimate with any accuracy the number of cruise ships in the future, however for planning purposes PoMC estimates the total capacity of Station Pier to be around 90 cruise ships per year - refer Section 6 7 2, which is well in excess of the most optimistic estimates

Similarly the number of voyages made by TT-Line is seasonal and demand driven – the theoretical maximum capacity of the TT-Line terminal with the current ships is over 700 per year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6. Infrastructure needs assessment

To enable development of a detailed precinct by precinct plan for the future PoMC has undertaken an analysis of current and future port capacity taking into account likely future efficiency and technology improvements

Based on this analysis, the future berth and land needs to accommodate the forecast growth in trade have been quantified

Much of the productivity improvement that is expected to evolve will be related to technological change in the cargo handling and supply chain that will require major investment by both the port's commercial operators and PoMC.

This section defines some of the factors which will lead to improved port performance and quantifies the major assumptions that are used in estimating future infrastructure needs It also suggests appropriate performance measurements that may be used to monitor actual performance and to provide comparison with other ports

The jigsaw has then been assembled into a future vision for the port in 2035 and the intermediate stages leading to it

With the exception of dry bulk liquid bulk and passenger ship facilities, the future infrastructure needs quantified in this section will provide at least 15% excess capacity in the port at any time PoMC believes this to be appropriate in the context of competition between operators and it will allow for an imbalance in market share between operators at any time

To control risk of underdevelopment in the short to medium term 2015 infrastructure needs have also been assessed for an upper limit growth scenario combined with minimal productivity improvements to give a worst case estimate of future needs – refer Section 7 6

6.1. International container terminals

6 1 1 Assumptions

Substantial improvement in productivity of the existing Swanson Dock international container terminals combined with capital investment in berths, wharves, cranes, yard storage and transport links by both PoMC and stevedores will ensure that this precinct has the ability to service the international and mainland container trade needs for at least the next 10-15 years

To achieve this it has been assumed that:

- 14-metre draught Post-Panamax ships can be accommodated on at least 50% of the berth and 14-metre draught Panamax ships on the remainder when the channel deepening project has been completed
- crane density increases to approximately one per 100 metres of berth
- crane rates increase from 29 to 32 lifts per hour
- berth occupation increases to 62 5% based on maximum ratio of waiting time to service time of 0 1 providing an acceptable level of service to shipping lines
- the average dwell time in the yard is 3 5 days
- the percentage of 40-foot containers increases from 36% to 40%
- 24-hour/7-day operation of all terminal facilities including container receival/dispatch
- berth length on each side of the dock increases by 120 metres

Productivity of Swanson Dock berths is forecast to increase from approximately 850 TEU/metre in 2005 to almost 1500 TEU/metre by 2017 This is comparable with the rates currently being achieved at the world s most efficient container terminals having similar vessels and exchanges

Swanson Dock terminal productivity is assumed to increase in proportion to berth productivity – this will be achieved mainly by the progressive conversion of the container storage areas to rail mounted gantry or similar high density operation Productivity is forecast to increase from approximately 19,000 TEU/hectare in 2005 to around 32 000 TEU/hectare by 2015 This is significantly less than that currently achieved at the world s most efficient container terminals

It is proposed that sometime before Swanson Dock reaches its ultimate capacity additional international container terminal facilities will be developed at Webb Dock

New terminal developments will be nominally based on two-berth/25-hectare modules. Berths will be capable of accommodating 14-metre draught Post-Panamax ships and yard capacity will match berth capacity. New terminals will be efficiently linked to the external road and rail networks. Truck queues will be accommodated totally within the terminals. Rail terminals, that can accept interstate, regional and metropolitan trains, will be provided at or adjacent to, the terminals.

By 2035 the port's international container terminals will be operating at a berth productivity of up to 2000 TEU/metre and a terminal productivity of up to 45,000 TEU/hectare.

Figure 12 and Figure 13 indicate the expected increase in berth and terminal productivities respectively

Terminal performance will be monitored against international performance benchmarks to ensure that the terminals perform to world's best standards.

Action
PoMC will monitor international container terminal performance levels against international performance benchmarks

6.1.2 Future needs

Based on the above assumptions, PoMC has assessed the cumulative long-term infrastructure needs for international containers (including mainland containers) as shown in Table 22

Table 22. Future international container terminal infrastructure needs

	Year	Berth length (m)	Terminal area (ha)
Existing		1,828	77
Future	2010	1,828	85
	2015	2,070	90
	2025	2,670	120
	2035	3,770	160

Figure 12 International container berth productivity forecast

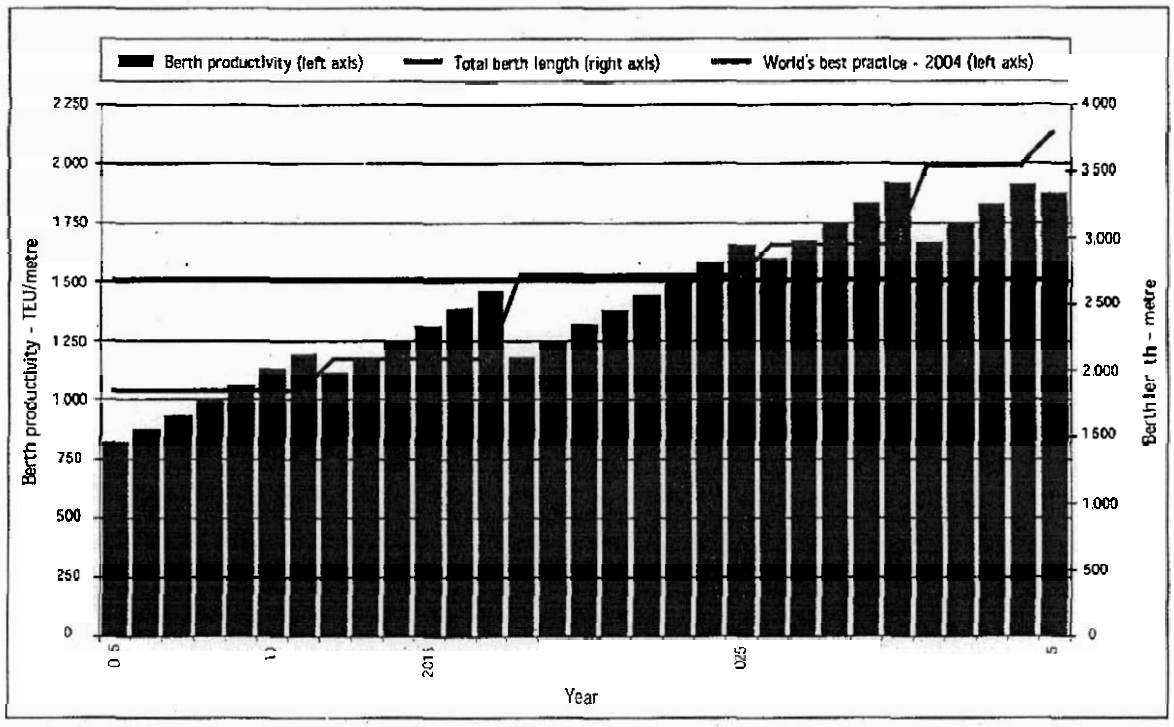
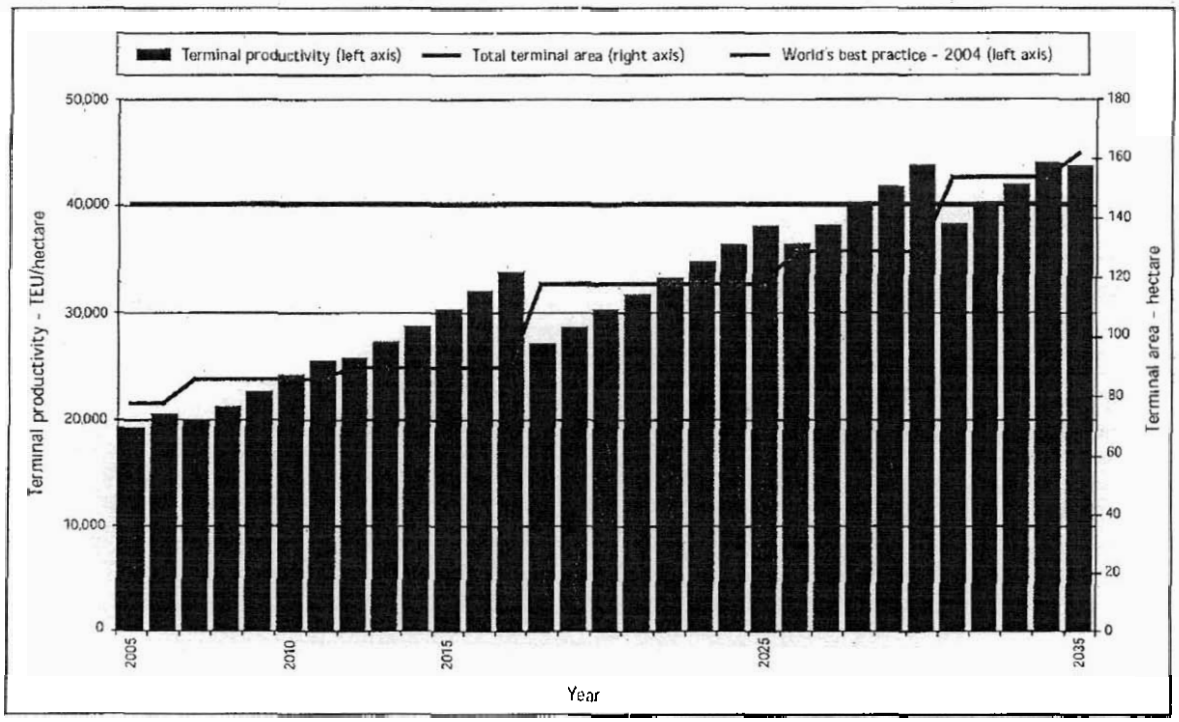


Figure 13 International container terminal productivity forecast



6.2. Tasmanian trade

6.2.1 Assumptions

Webb Dock ro-ro terminals and the Appleton Dock conventional terminal handle the bulk of Tasmanian containers, breakbulk and new motor vehicles. It is assumed that these cargoes will continue to be handled at Webb Dock through to 2035 but that the Appleton Dock terminal will cease to handle Tasmanian cargo beyond 2015. TT-Line ships operating from Station Pier will continue to carry the bulk of WCCUs.

Substantial improvements in productivity at Webb Dock have been factored in to future capacity estimates – the main assumptions being that:

- ro-ro ships continue to carry the bulk of Tasmanian cargo
- the average capacity and load on ro-ro ships increases in proportion to trade growth
- the maximum ship to shore transfer rate increases from 65 TEU/hour to 100 TEU/hour
- the percentage of 40-foot containers increases from 7.5% to 17.5%
- daily services are operated by all lines.

When additional infrastructure is required – refer Section 6.2.2 additional berth capacity requires the building of new facilities due to the close integration of berth and yard operations. Additional yard capacity will, if possible, be provided by extending the existing terminals.

6.2.2 Future needs

Based on the above assumptions, PoMC has assessed the cumulative long-term infrastructure needs for Tasmanian trade as shown in Table 23.

Note that Station Pier and Appleton Dock facilities are excluded from these estimates.

Table 23: Future Tasmanian terminal infrastructure needs (ro-ro facilities only)

	Year	Berths	Terminal area (ha)
Existing		2	14
Future	2010	3	14
	2015	3	16
	2025	4	20
	2035	5	30

6 3. Motor vehicles

6 3 1 Assumptions

Motor vehicle terminals are currently located at Webb Dock East and Webb Dock West It is assumed that motor vehicles will continue to be accommodated in the Webb Dock precinct until at least 2025 By 2017 it is assumed that the motor vehicles located at Webb Dock East will have been progressively moved to Webb Dock West to make way for international containers

Because yard throughput is based on the logistics requirements of importers, including the amount of detailing undertaken on site future needs have been based on the assumption that imported vehicles will remain on-port for an average of seven days

Other significant assumptions include:

- The maximum berth occupation for a two-berth terminal increases from 45% to 50%
- The average ship to shore transfer rate increases from 70 movements/hour to 130 movements/hour based on improved work practices and PCC/PCTC technology
- 25% is added to motor vehicle forecasts to allow for other vehicles and equipment
- 20% of the terminal area is set aside for PDI operations
- The percentage of import vehicles increases from 70% to 80%
- The average dwell time for import vehicles remains at seven days
- The average dwell time for export vehicles remains at five days

For any additional infrastructure requirement – refer Section 6 3 2 additional capacity will be provided in the short to medium term by extending existing terminals where possible and in the long term by possibly creating new dedicated motor vehicle facilities at some suitable location within the port or at another Victorian port

6 3 2 Future needs

Based on the above assumptions, PoMC has assessed the cumulative long-term infrastructure needs for motor vehicles as shown in Table 24 The estimated needs are highly sensitive to input assumptions such as the average import vehicle dwell time

Table 24 Future motor vehicle terminal infrastructure needs

	Year	Berths	Terminal area (ha)
Existing		2.5	31
Future	2010	2	25
	2015	2	30
	2025	3	40
	2035	3	50

6.4 Breakbulk

6.4.1 Assumptions

The ports major breakbulk operations are accommodated at general cargo facilities located at B-D Appleton Dock 24 Victoria Dock and 3-5 Webb Dock It is assumed that breakbulk will continue to be accommodated at these facilities in the short to medium term In the long term beyond 2015, it is assumed that breakbulk will be progressively moved from 3-5 Webb Dock to make way for international containers Long-term breakbulk operations will be concentrated at Appleton Dock and Victoria Dock general cargo facilities

Breakbulk needs include berths, open yard storage area and covered storage area

Main assumptions include:

- Yard and shed storage density remains around 4500 tonnes per hectare
- The ratio of shed area to yard area remains at 1:7
- Berth occupation increases to 52.5% for a single berth terminal and 58% for a two berth terminal
- The average ship to shore transfer rate increases from 100 mass tonnes/hour to 130 mass tonnes/hour
- The average dwell time in storage reduces from seven days to five days

6.4.2 Future needs

Based on the above assumptions, PoMC has assessed the cumulative long-term infrastructure needs for breakbulk as shown in Table 25

Note that because breakbulk is handled at multiple/shared general cargo facilities, the port s total berth and land allocation for general cargo may be in excess of the minimum berth and land requirements for breakbulk as listed in the table

Table 25 Future breakbulk terminal infrastructure needs

	Year	Berths	Terminal area (ha)
Existing		3	15
Future	2010	3	15
	2015	3	15
	2025	3	15
	2035	3	15

6.5 Dry bulk

6.5.1 Assumptions

Future dry bulk needs are based on berth capacity and cargo transfer rates only Storage capacity of dry bulk terminals is heavily dependent on the type of storage used for the dominant cargo e g silos versus sheds, which are provided by the tenant or user

It is assumed that the existing dominant uses will continue for the forecast period

- Cement 26-27 South Wharf
- Sugar 5 Yarraville
- Gypsum 5 Yarraville
- Grain F Appleton Dock
- Cement additives 33 South Wharf

Main berth assumptions include:

- Berth occupation increases to 52.5% for a single berth terminal

Transfer rates increase over 30 years as follows:

- Cement 500 to 800 mass tonnes/hour
- Sugar/Gypsum 300 to 450 mass tonnes/hour
- Grain 500 to 800 mass tonnes/hour

As part of the Channel Deepening Project PoMC is currently assessing the future depth requirement for Appleton Dock F berth If grain terminal throughput is to be maximised it should be possible to fully load Handymax and Panamax ships

6.5.2 Future needs

Based on the above assumptions, PoMC has assessed the cumulative long-term infrastructure needs for dry bulk and has concluded that no additional capacity is required however some minor relocation and consolidation of existing dry bulk trade may be required

6.6 Liquid bulk

6.6.1 Assumptions

Future liquid bulk needs are based on berth capacity and cargo transfer rates only. Storage capacity of liquid bulk terminals in the Port of Melbourne is in many cases provided by the tenant or user outside the port boundary.

It is assumed that the existing dominant uses will continue for the forecast period:

- Crude oil — Gellibrand Pier
- Refined products — Holden Dock
- Chemicals/Hazardous — Maribyrnong No 1

Main berth assumptions include:

- Berth occupation increases to 52.5% for a single berth terminal

Transfer rates increase over 30 years as follows:

Crude oil	1250 to 1500 mass tonnes/hour
Refined products	400 to 550 mass tonnes/hour
Chemicals/Hazardous	175 to 250 mass tonnes/hour

Only a marginal increase in the size of ships is anticipated however ship loads at Gellibrand Pier and Holden Dock have the potential to increase significantly when the channel deepening project has been completed.

6.6.2 Future needs

Based on the above assumptions PoMC has assessed the cumulative long-term infrastructure needs for liquid bulk and has concluded that no additional berths are required.

6.7. Passenger ships

6.7.1 Assumptions

It is assumed that Station Pier will continue to be the home of TT-Line and cruise ships. It is further assumed that TT-Line will increase the number of sailings, ship speed and capacity to satisfy passenger demand.

For cruise ships it is assumed that they:

- are usually accommodated at Outer West and at Outer East berths
- have an average stay of around 16 hours
- visit Melbourne only between November and March

Maximum occupation of cruise ship berths is estimated to be 20% during the season.

6.7.2 Future needs

Based on the above assumptions, PoMC has assessed the long-term needs for passenger ships and has concluded that adequate capacity is available at Station Pier to cater for the needs of TT-Line and the cruise ship industry.

The theoretical capacity of the two cruise ship berths is approximately 90 visits per year while the TT-Line berth could accommodate more than 700 visits per year.

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6.8. Port-related needs

6.8.1 *Value added logistics*

There is a range of port-related industries which may be located on-port or near-port either to meet logistics requirements of key users and operators or to enhance the port's competitive position. These industries include:

- cold stores
- packing and unpacking depots
- distribution centres
- distriparks

Where possible provision will be made within the port and Dynon precincts for these industries, particularly where it services industry needs. Over time should land availability become critical for more direct port-related operations, it is envisaged that these activities will be progressively moved to outer metropolitan locations.

6.8.2 *Container depots and parks*

Container depots and parks provide an essential link between importers, exporters and international container terminals. Critical functions include storage and servicing of empty containers providing a time buffer for delivery and receival of full containers and assisting terminals to cope with peak load periods.

In its planning for future land allocation within the Dynon and port precincts, PoMC recognises the need for near-port container depots and parks. Container depots and parks will also be an integral element in the development of outer metropolitan intermodal terminals.

6.8.3 *Ancillary needs*

Provision will be made at appropriate locations within the port to accommodate a range of land and water based businesses and operations that support the port including:

- tugs
- bunkering barges
- storage depots for piles and marine equipment
- customs services
- security services
- berthing facilities for miscellaneous vessels.

6.9. Services/Utilities

Where necessary PoMC commits to ensuring easements and infrastructure for the adequate reliable and efficient distribution of essential services to tenants exist including:

- water
- electricity
- gas
- communications

Action

PoMC will ensure that easements and infrastructure exists for the adequate reliable and efficient distribution of essential services to tenants

7. Port development strategies

The PDP takes a long-term strategic approach to development that:
- builds on current port land uses
- recognizes the limited land supply and external community constraints
- prioritises infrastructure development by pack type
- accommodates anticipated increases in demand
- specifies the service required by the shipping industry
- estimates future berth and land requirements
- accommodates development lead times
- understands the transport constraints and opportunities
- provides choice for customers

This section builds on the above matters to provide a detailed precinct by precinct breakdown of the issues and the opportunities for development of the port to 2035

7.1. Long-term cargo needs

The hierarchy of cargoes in which the PDP addresses the future infrastructure needs is:
1 International containers
2 Tasmanian trade
3 dry bulk/liquid bulk
4 breakbulk
5 motor vehicles

Sixty-five per cent of the freight passing through the Port of Melbourne is international containers

While not suggesting that international containers are more important than any other cargo the magnitude and cost of the infrastructure requirements dominate others

International containers are considered to be essential to the port because the vast majority of containerisation relates to activities surrounding the Port of Melbourne supporting imports and exports for local industry and consumption

Similarly much of Tasmania's imports and exports are now transhipped through Melbourne and southbound trade in particular is time sensitive

Dry bulk and liquid bulk berths are usually linked directly to dedicated land-based transfer and storage facilities For dry bulk commodities such as grain the port can provide a highly competitive transport link between the supplier and customer that benefits both parties

The ability to cater for breakbulk is important however there is some flexibility in accommodating its needs at relatively low cost general cargo facilities

While it is recognised that motor vehicle terminals are important in servicing the needs of the export industry in particular by comparison they do not require high cost facilities their major needs being land area which may be provided at alternative locations within the port or at another Victorian port This trade is considered to be more flexible than other trades in its ability to be accommodated at alternative locations For these reasons the long term development strategy for motor vehicles is not as definitive as other cargoes While Webb Dock provides considerable scope for motor vehicles up to 2025 in the long term the need to free up Webb Dock for international containers and Tasmanian trade necessitates that an alternative location for this trade be found Within the Port of Melbourne a location to the west of the Maribyrnong River may provide an appropriate use for this area after taking into account the surrounding land uses

With the exception of empty containers, liquid bulk and dry bulk trades PoMC aims to provide sufficient infrastructure to ensure that a 15% capacity buffer is maintained in the port at all times This capacity buffer is provided to ensure that a competitive environment exists and to allow for an imbalance of market share

Action
PoMC will aim to ensure that a 15% capacity buffer is maintained at all times within the port where necessary to provide a competitive environment and to allow for an imbalance of market share

7.2 Development strategies by precinct

To help in understanding the current use of port facilities, the issues affecting the surrounding community and the future use of port infrastructure nine land use precincts and a port waterways precinct have been identified. This section defines the current port use within each of the precincts, identifies the key issues associated with them and proposes appropriate future uses for them.

The precincts are:

- Williamstown
- Newport
- Webb Dock
- Yarraville
  Coode Island
- Holden Dock
- Swanson/Appleton/Victoria Docks
- South Wharf
- Station Pier
- Port waterways

7.2.1 Williamstown precinct

Figure 14 Williamstown precinct

Williamstown precinct has three key sites – Refer Figure 14

- Ann Street Pier
- Gellibrand Pier
- Breakwater Pier

Ann Street Pier

Current use
Storage of maritime equipment and mooring of marine equipment such as tugs, barges, pontoons, workboats and pilot launch
Key issue
Community interest in access versus security and safety.
Future use
Ann Street Pier will continue its multi-purpose role for the foreseeable future.

Gellibrand Pier

Current use
Crude oil and derivatives imports. These products are transferred by pipeline between Gellibrand Pier and Mobil's Altona refinery
Key issues

- Public access near pier in context of security and safety issues. Issues related to storage of crude oil
- Ensuring adequate buffering is maintained between sensitive uses (predominantly residential) and the pier
- The adjacent Tenix ship building facility site is likely to be retained for maritime use

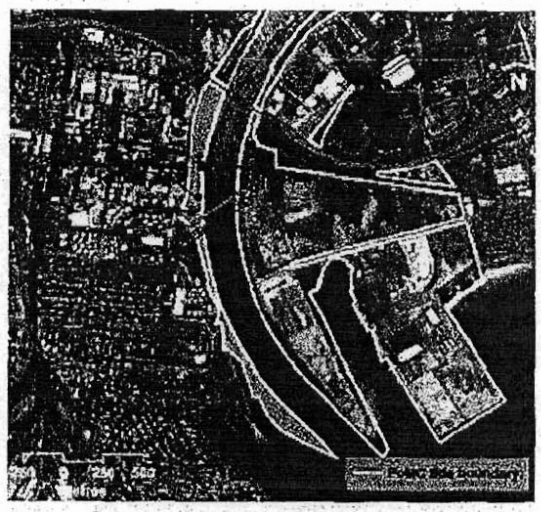
Future use
Gellibrand Pier will be retained for liquid bulk (crude oil) pack type

Breakwater Pier

Current use
Special use for dredging and construction plant etc
Key issue
Minimise potential conflicts between Point Gellibrand Coastal Heritage Park and port uses
Future use
Breakwater Pier will be retained to ensure the security and safety of the adjacent Gellibrand Pier. Breakwater Pier is also considered to be a strategic port asset for use as a future liquid bulk berth or for special purposes such as visiting naval ships, vessel lay-up, large plant storage etc

7.2.2 Newport precinct

Figure 15 Newport precinct



Current Use

PoMC land between Greenwich Bay and the West Gate Bridge adjacent to the river includes oil pipelines and jetties utilised by adjacent oil companies.

Oil pipelines in the precinct include a communal facility known as the Y-Cage and other areas maintained by individual oil companies. Bunkering jetties are also located in the Newport precinct. In addition a number of major services such as power lines, communication lines, the WAG pipeline and gas and sewer lines cross the river in this area.

This precinct abuts petroleum storage, tourism and open space.

Key issues

- Maintenance of landscaping
- Maintenance of security and safety
- Product management

Future use

The Newport precinct will be retained as it is regarded as a key asset for the petroleum industry and as a park managed in partnership with Parks Victoria, Hobsons Bay City Council and PoMC.

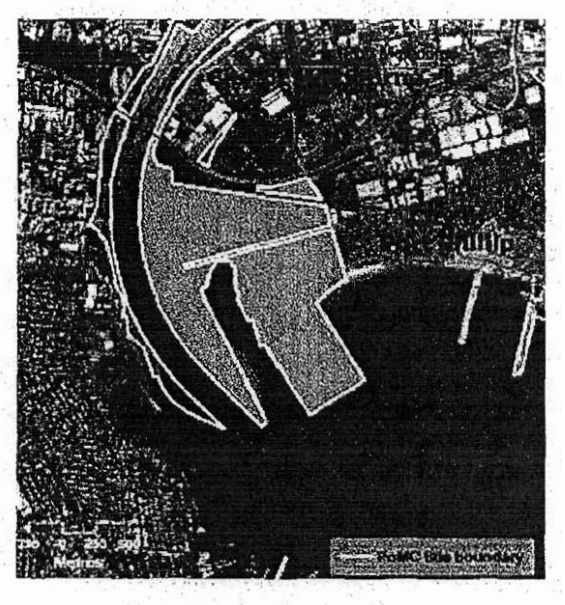
The area to the west is losing its industrial focus and is slowly being converted to residential. In order to avoid any potential conflict with future port development, the need for appropriate buffers in this area is being considered in consultation with the council, as part of the broader port environs management process.

Action

PoMC will manage port assets within this precinct in partnership with Parks Victoria and Hobsons Bay City Council

7 2 3 Webb Dock precinct

Figure 16 Webb Dock precinct



Current use

Webb Dock is used for ro-ro services between Melbourne and Tasmania the import and export of cars, breakbulk a small amount of international container trade and some value added business

The land north of Williamstown Road is currently undeveloped

See Figure 17 for the current use of Webb Dock

Key issues

- Reconnection of the Webb Dock rail link
- Development of an adequate road network
- Provision of adequate buffers and controls to minimise adverse impacts between port and residential areas
- The future of the Webb Dock saltmarsh area
- Public access to adjacent recreational and open space areas
- Maintenance of security

Future use

Webb Dock will continue its current use until around 2015 and then in conjunction with the reconnection of Webb Dock rail the east side of the dock will progressively be converted to international containers In the long term the west side of the dock will become the port s major coastal terminal precinct and displaced motor vehicles and breakbulk will be relocated to general cargo facilities elsewhere in the port or to another Victorian port

With the majority of leases expiring in 2017 the opportunity exists to develop this precinct as the port's future international container terminal growth area It is envisaged that by 2035 this precinct will handle a similar number of containers to Swanson Dock

Action

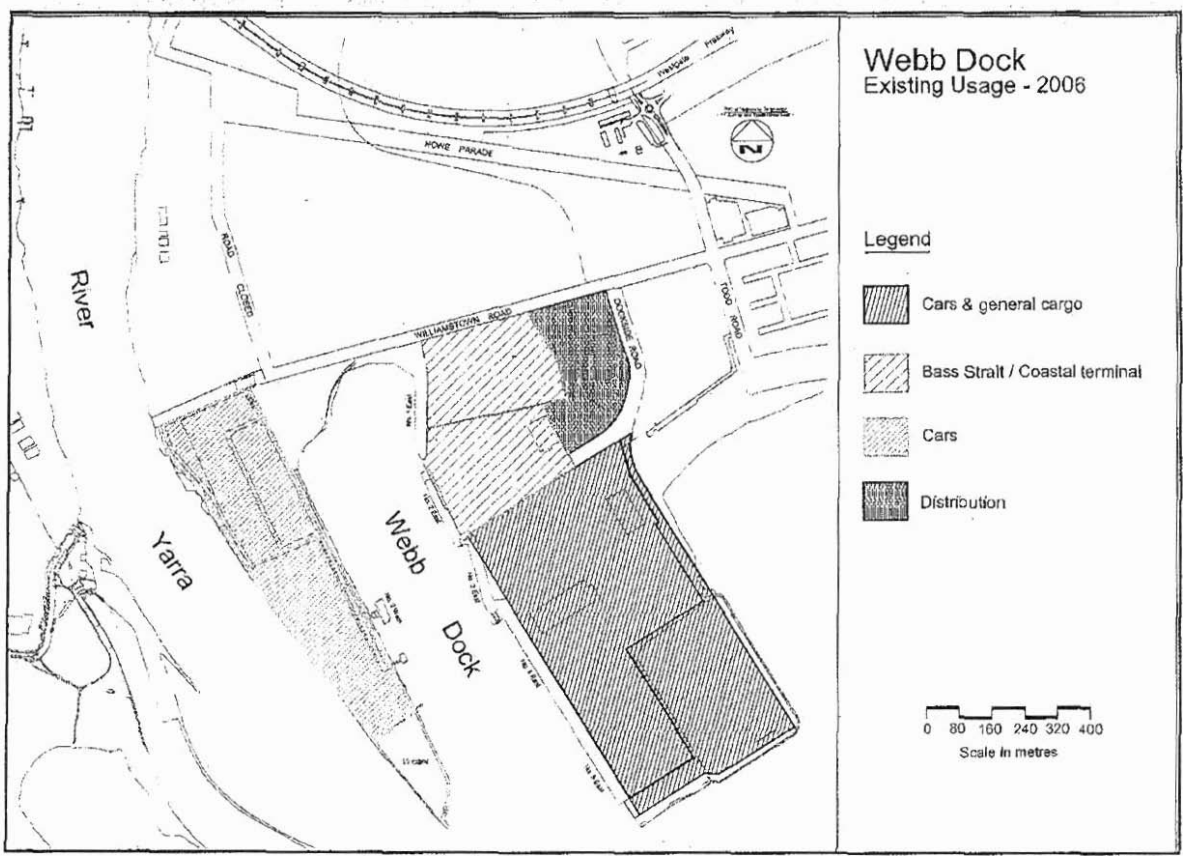
PoMC will manage allocation of leases at Webb Dock to private sector port operators commensurate with new investment that is consistent with this PDP

The development of Webb Dock for international containers may need to be brought forward if it is deemed that Swanson Dock is unable to provide sufficient capacity service levels provided to shipping lines is unsatisfactory or if commercial considerations justify an earlier development

Because of the specific importance of the Webb Dock precinct to the PDP in the long term an indicative 30-year staging plan for the precinct has been prepared

The major stages in the Webb Dock development process in five-year increments are shown in Figure 18 to Figure 23 inclusive

Figure 17 Webb Dock – 2006



From 2006 to 2010 development works include:

constructing new Webb Dock access road in parallel with VicRoads Plummer Street local truck bypass and Todd Road improvements

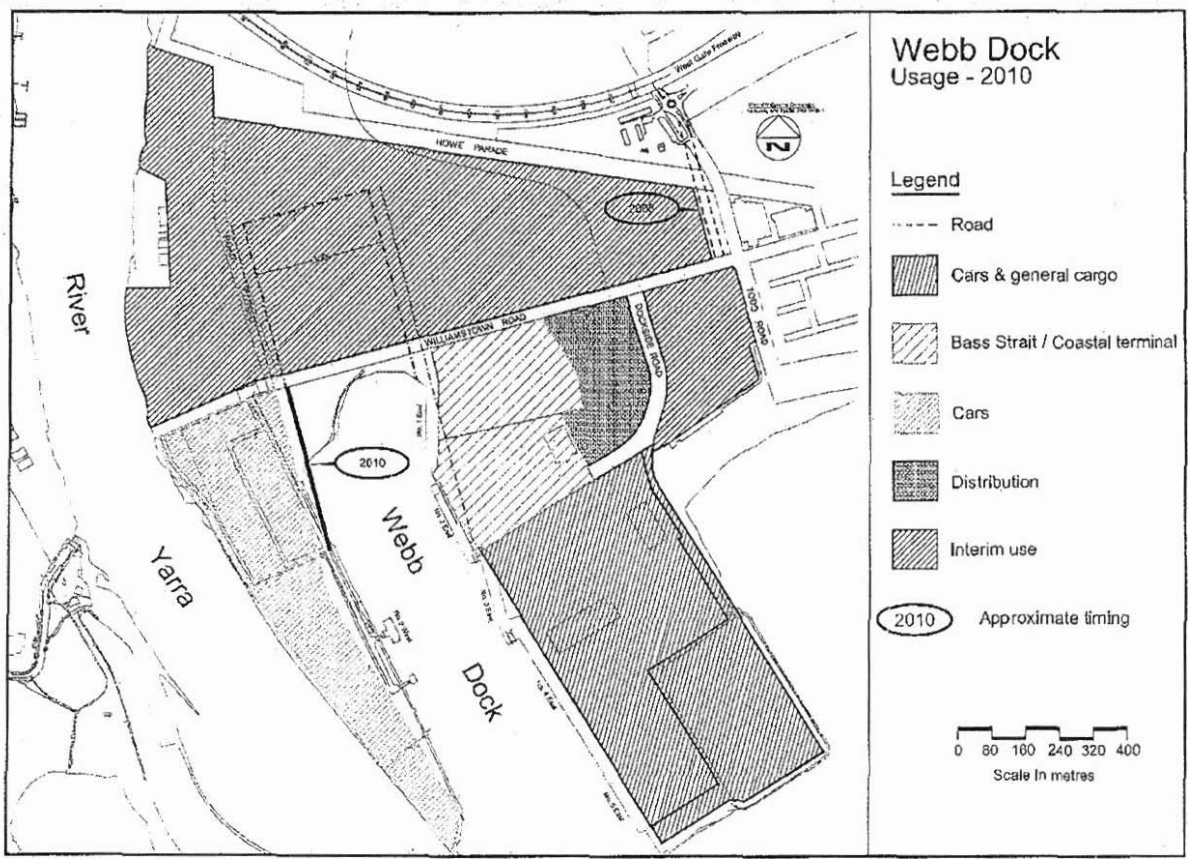
- relocating saltmarsh
- constructing an additional ro-ro berth at Webb Dock West suitable for PCCs and PCTCs on an alignment that allows for the future operation of Post-Panamax vessels in the dock

allocating land north of Williamstown Road for interim use

allocating land bounded by Dockside Road Williamstown Road and Todd Road for interim use

The 2010 vision for Webb Dock is shown in Figure 18

Figure 18 Webb Dock -- 2010



All initiatives subject to financial viability technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

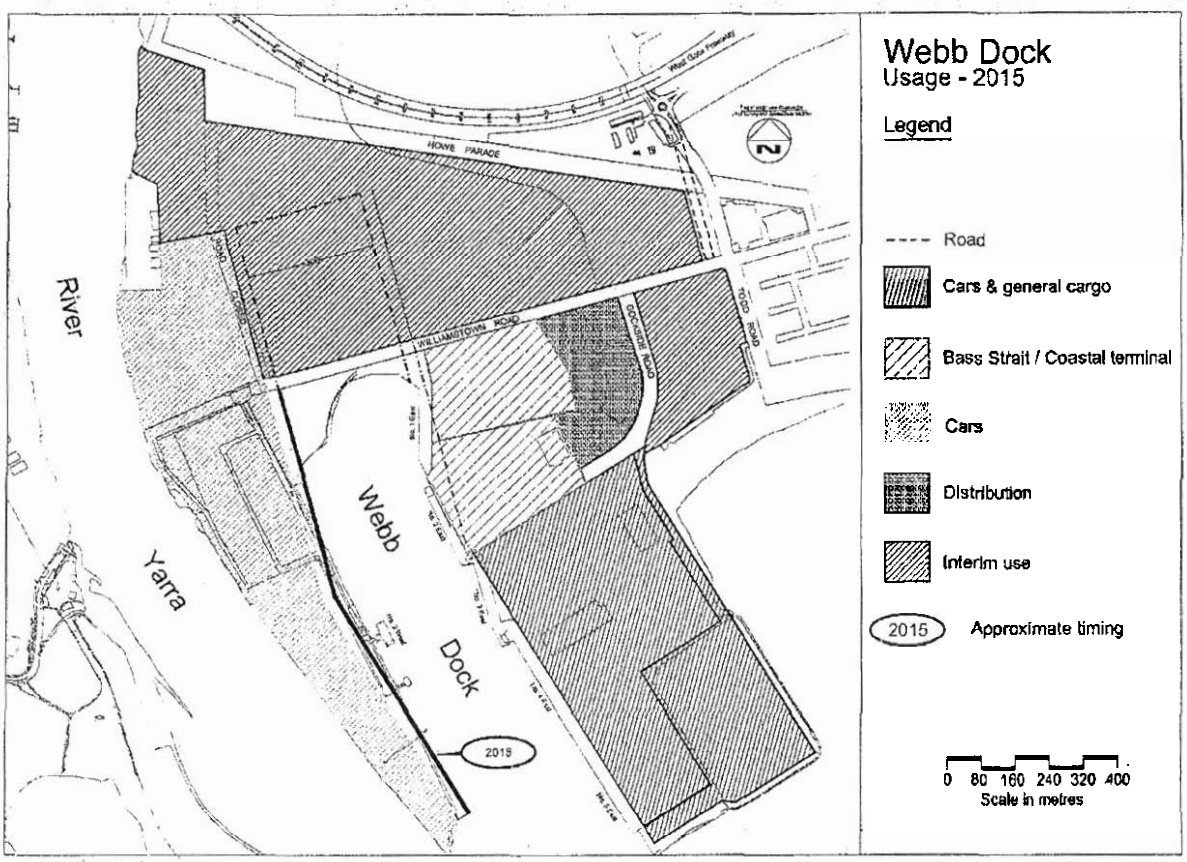
From 2010 to 2015 development works include

constructing an additional ro-ro berth at Webb Dock West suitable for PCCs, PCTCs and Bass Strait vessels on an alignment that allows for the future operation of Post-Panamax vessels in the dock

extending motor vehicle terminal at Webb Dock West

The 2015 vision for Webb Dock is shown in Figure 19

Figure 19 Webb Dock – 2015



All initiatives subject to financial viability technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

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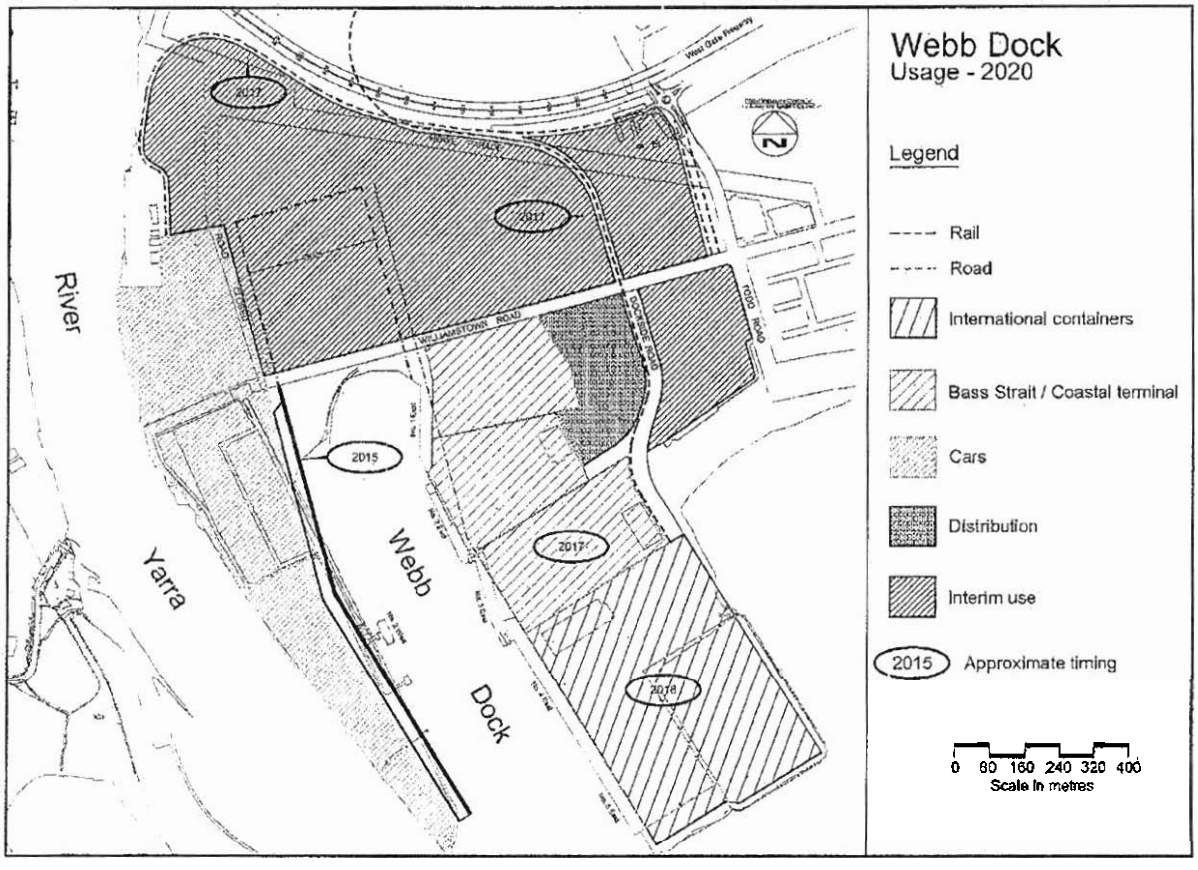
From 2015 to 2020 development works include.

- constructing Webb Dock Rail and connection to 4-5 Webb Dock East International container terminal
- constructing access road to 4-5 Webb Dock East international container terminal
  constructing access road to Webb Dock West along new alignment
- relocating motor vehicles from 3-5 Webb Dock East to Webb Dock West
- relocating breakbulk cargo operation to general cargo facilities at Appleton Dock/Victoria Dock/South Wharf
- extending Bass Strait operations to 3 Webb Dock East
  constructing international container standard terminal at 4-5 Webb Dock East and provide container handling cranes and equipment
- constructing rail terminal at 4-5 Webb Dock East adequate to handle 30% of all international containers
  introducing International container operations to 4-5 Webb Dock East

The 2020 vision for Webb Dock is shown in Figure 20

Figure 20 Webb Dock – 2020



All initiatives subject to financial viability technical feasibility and environmental assessment
Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

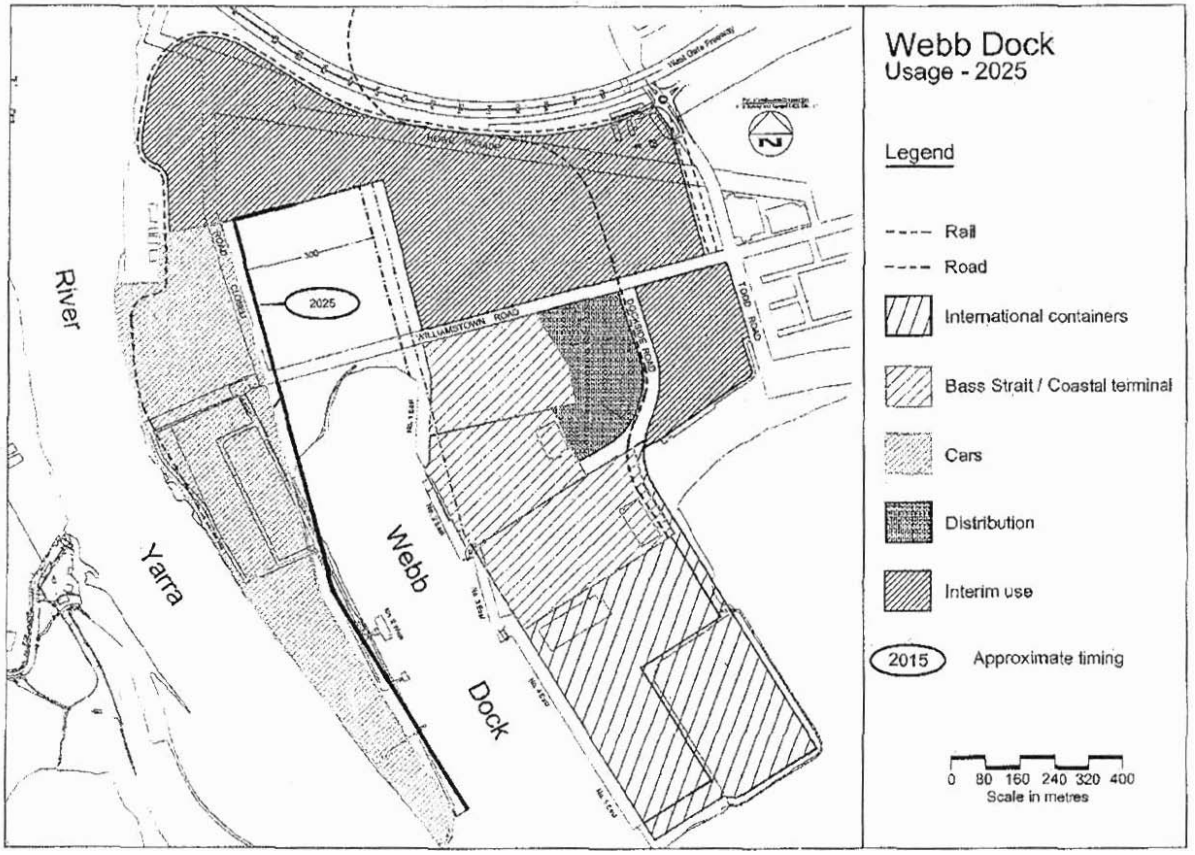
81

From 2020 to 2025 development works include

constructing additional ro-ro berths at Webb Dock West suitable for PCCs PCTCs and Bass Strait vessels on an alignment that allows for the future operation of Post-Panamax vessels in the dock

The 2025 vision for Webb Dock is shown in Figure 21

Figure 21 Webb Dock – 2025



All initiatives subject to financial viability, technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

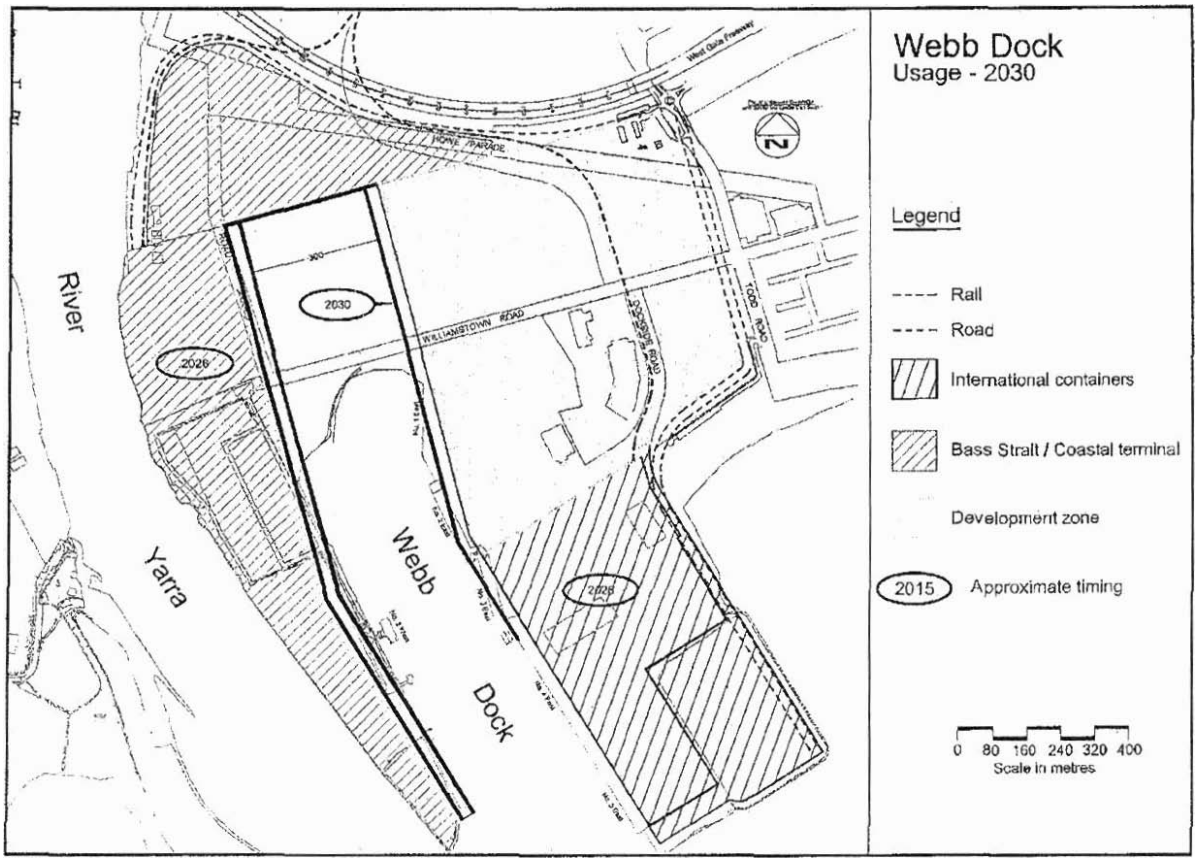
82

From 2025 to 2030 development works include:

- relocating motor vehicle operations from Webb Dock West to an alternative location within the port or to another Victorian port
- constructing a rail link to Webb Dock West
- relocating Bass Strait operations to Webb Dock West
- relocating distribution business to alternative location
- constructing new international container berths at Webb Dock East
- extending International container terminal to 3 Webb Dock East
- developing new international container facility at Webb Dock East, north of berth 3, including management and support precinct

The 2030 vision for Webb Dock is shown in Figure 22

Figure 22 Webb Dock – 2030



All initiatives subject to financial viability, technical feasibility and environmental assessment

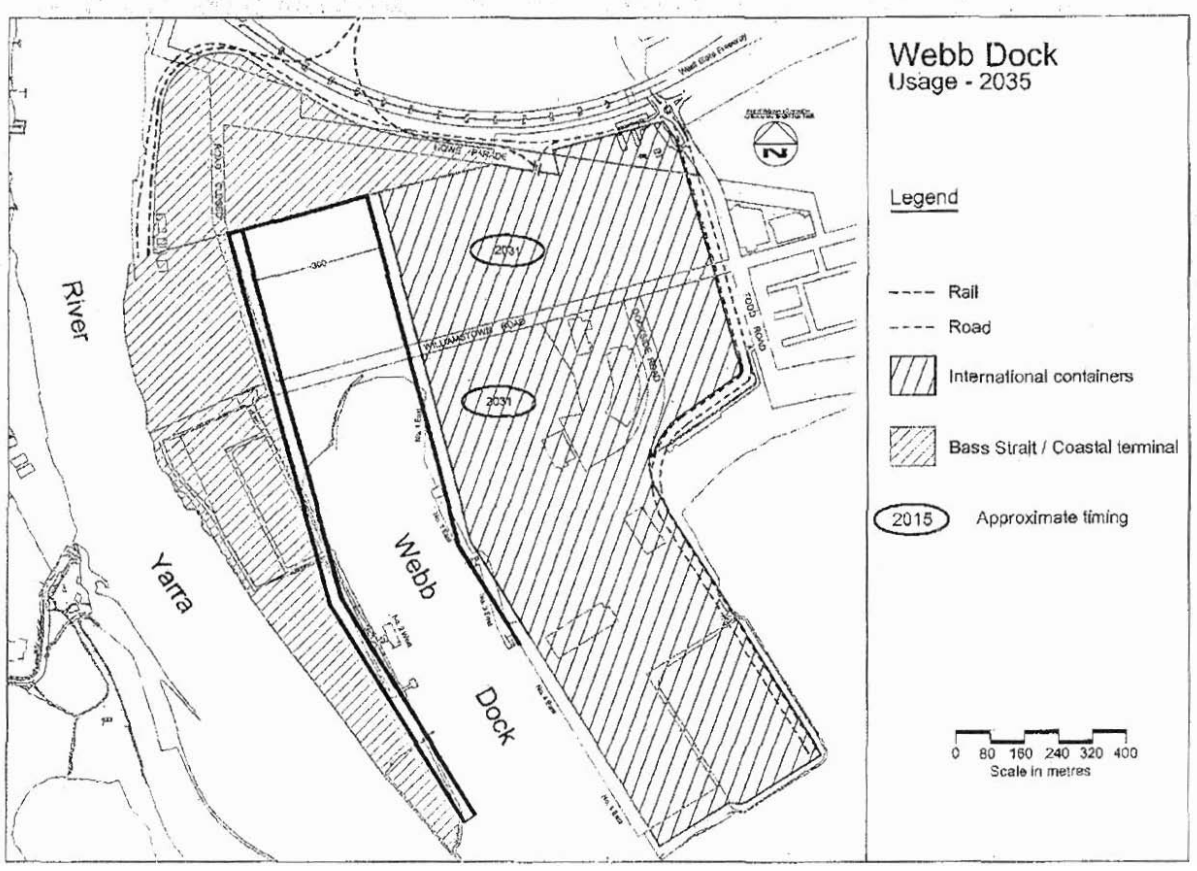
Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

From 2030 to 2035 development works include

- full configuration of Webb Dock East for international container terminal operations

The 2035 vision for Webb Dock is shown in Figure 23

Figure 23. Webb Dock – 2035



All initiatives subject to financial viability technical feasibility and environmental assessment
Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

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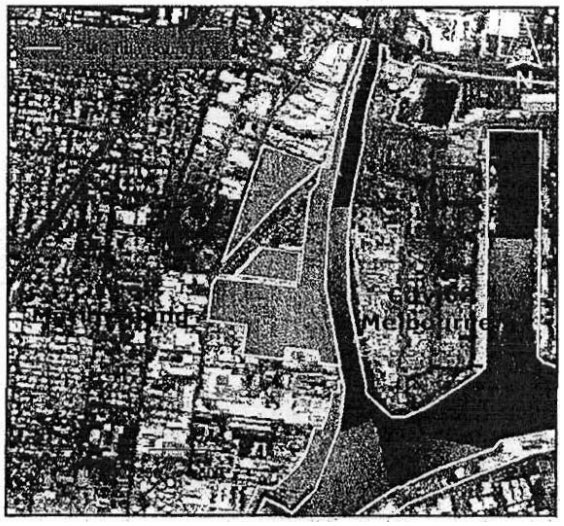
7.2.4 Yarraville precinct

Figure 24 Yarraville precinct



This precinct encompasses both private and PoMC land along the west bank of the Maribyrnong River between Napier and Francis Streets. The land between Whitehall Street and the river is occupied by a number of port-related industries including:

- Albright and Wilson (Aust) Limited
- Orica Australia Pty Ltd
- CSR Limited (including Sugar Australia)

These industries have storage and/or processing facilities on private land outside the port boundary.

There are two operational berths within this area:

- 5 Yarraville is used by CSR for the import of raw sugar and gypsum
- 6 Yarraville is a common-user berth catering for small volumes of dry bulk and liquid bulk cargoes

In recent years PoMC has acquired several properties in this precinct and will progress development of these sites for port-related uses.

Key issues

- Provision of rail access to properties in the precinct
  Provision of adequate buffers and controls to minimise adverse impacts between port and residential areas
- Contamination debt
- Residential and high-end business and commercial development in port environs
- Road access and utilisation

Future use

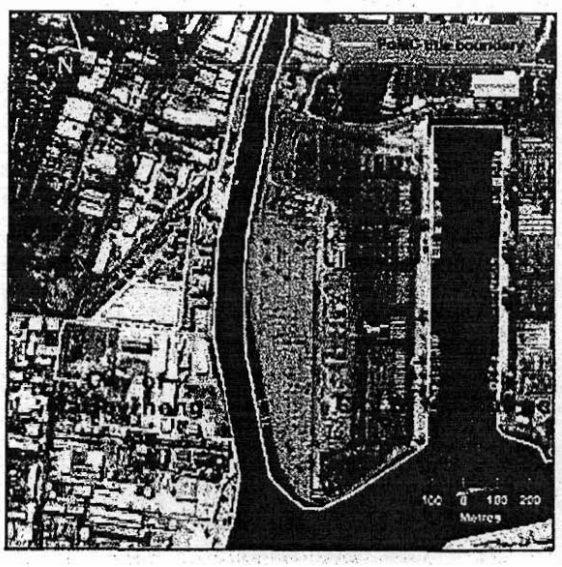
The Yarraville precinct will retain its multi-purpose dry and liquid bulk functions in the short to medium term and appropriate development of newly acquired PoMC properties for port-related functions will be encouraged.

Suitable long term uses may include new motor vehicle terminals or other acceptable port related operations.

PoMC is currently working with the state government and local councils to progress buffer issues through completion of a port environs framework that will provide a progressive structure of planning controls to manage the interests of both the port and its adjacent communities. The industrial zoning incorporating this precinct provides immense value as a transition zone and buffer between the community and working port and should be considered in any development proposals for increased port operations in the precinct. The community is expected to have substantial input into the buffering process.

7.2.5 Coode Island precinct

Figure 25 Coode Island precinct



Current use

This precinct is used as a storage facility for importing and exporting bulk liquids (chemical and food-grade products) through Maribyrnong No 1 common-user berth Some imports are stored for relatively long periods (3-4 months) with deliveries by truck to the user's manufacturing plant on a just-in-time basis

Following redevelopment all facilities will be consolidated to the west of Mackenzie Road

Key issues

Environmental management

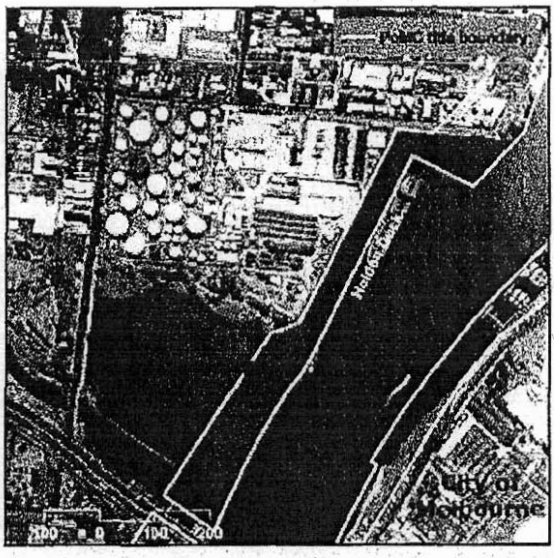
- Security and safety
- Buffering and landscaping on the east side of the Maribyrnong River
- Societal risk management

Future use

Because it serves a vital state role Coode Island is to be retained for bulk liquid operations for the foreseeable future

7.2.6 Holden Dock precinct

Figure 26 Holden Dock precinct



Current use

Holden Dock is a common-user berth for the oil industry Mobil Oil Australia Ltd The Shell Company of Australia Ltd and BP Australia Ltd operate and maintain pipelines running from Holden Dock to storage and/or processing facilities The adjacent Mobil Oil facility includes storage facilities for approximately 100 000 tonnes of refined oil products (petroleum jet fuel and diesel fuel) on nearby freehold land

Key issues

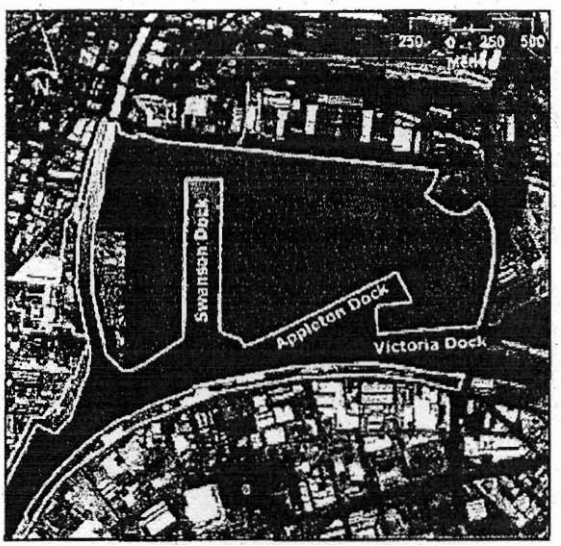
- Environmental management
- River access in the vicinity of Holden Dock
- Security and safety
- Buffering requirements

Future use

Holden Dock will be retained for bulk liquid operations for the foreseeable future

7.2.7 Swanson/Appleton/Victoria Docks precinct

Figure 27. Swanson/Appleton/Victoria Docks precinct



The Swanson/Appleton/Victoria Docks precinct is a fundamental component of the Melbourne Port@L vision – refer Section 9. PoMC aims to promote the Melbourne Port@L as Victoria's key intermodal trading hub involving the integration of the port with the Dynon rail precinct.

Current use

Swanson Dock East and West are utilised as the port's two major international container terminals. Both terminals are serviced by rail and are supported by adjacent container parks and other logistics facilities.

Appleton Dock comprises five berths and is utilised for Bass Strait general cargo and dry bulk cargoes.

Berths B, C and D are general cargo berths, berth E is a coastal terminal and berth F is utilised for dry bulk cargoes (principally grain exports).

Victoria Dock berths accommodate conventional general cargo vessels. There is also a slipway at the rear of the dock which is to be retained in the short term.

The recently reclaimed area behind the dock is currently being redeveloped as a general cargo terminal with value added logistics and rail terminal capacity.

The remaining non-wharf areas in this precinct include:

- cold and food storage logistics facilities
- customs facilities.

See Figure 28 for the current use of the Swanson/Appleton/Victoria Docks precinct.

Key issues

- Substantial increase in international container throughput
- Buffering to protect the operation of the Appleton and Victoria Dock terminals, and the amenity of Docklands residential and commercial areas.
- Impact on Webb Dock rail link from adjacent residents and recreational vessels movements
- Need for improved road and rail access throughout the precinct and at interfaces with the external network
- Security and safety

Future use

Swanson Dock East and West will continue to be used as the port's primary international container facility in the short to medium term. This will involve an intensification of trade through the dock with an expansion of the dock to the north possibly necessary to cater for future shipping needs.

Trade through Victoria Dock will also increase in the short to medium term with substantial new investment currently underway.

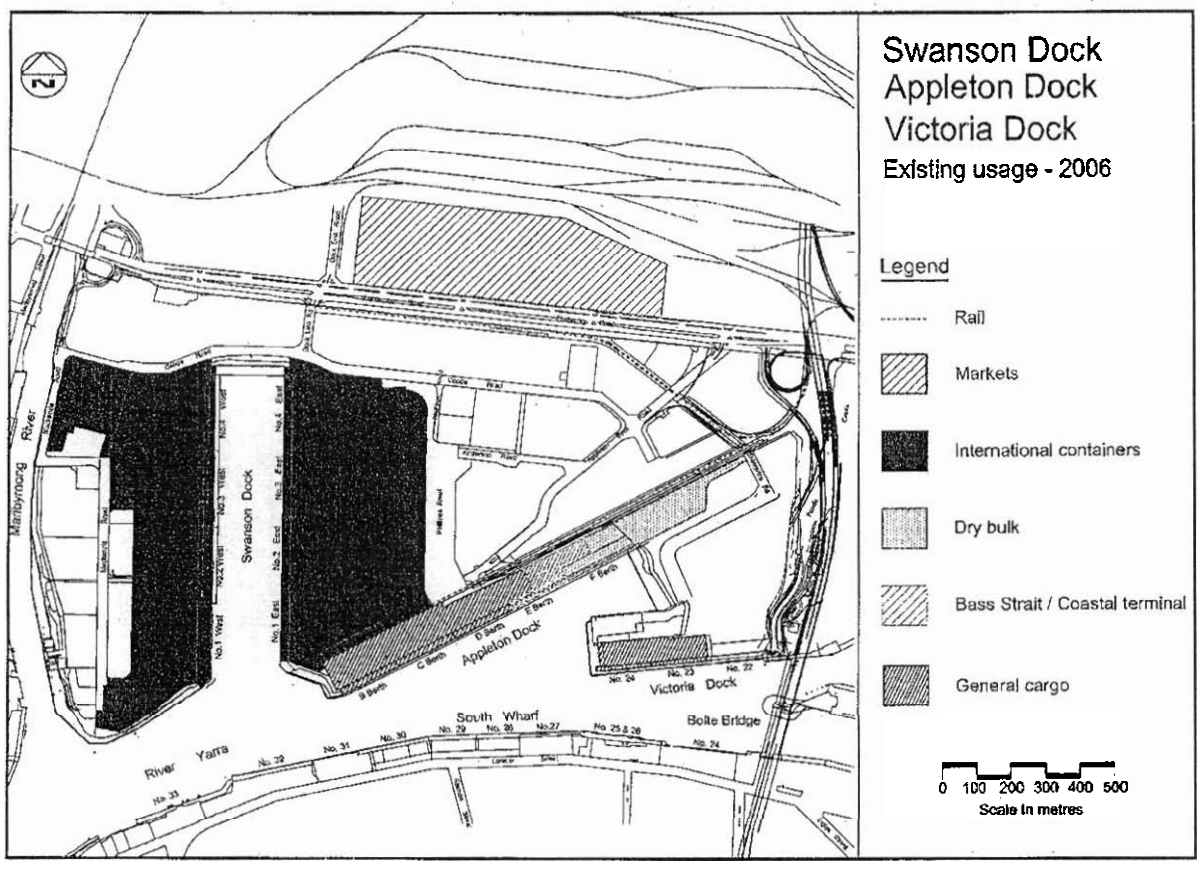
The eastern edge of Victoria Dock is reserved for the future Webb Dock rail link.

This precinct will be closely integrated with the Dynon rail precinct to the north of Footscray Road following relocation of the Melbourne Wholesale Fruit and Vegetable Market proposed for around 2010 – refer Section 9.

Intensive development of the Swanson/Appleton/Victoria Docks precinct for international containers and general cargo is planned to take place during the next 10–15 years. This is necessary to ensure that Swanson Dock can cope with up to 3.2 million TEU by 2015 and that Appleton and Victoria Docks become highly efficient general cargo terminals.

It is predicted that by 2015 to 2020 the combined capacity of the Swanson Dock terminals using the best of current technology will be in the range of 3.4 to 4 million TEU.

Figure 28 Swanson/Appleton/Victoria Docks precinct – 2006



Because of the specific importance of the Swanson/Appleton/Victoria Docks precinct to the PDP in the short to medium term an indicative staging plan for the next 10 years has been prepared

2010 and 2015 visions of the Swanson/Appleton/Victoria Docks precinct development are shown in Figure 29 and Figure 30 respectively

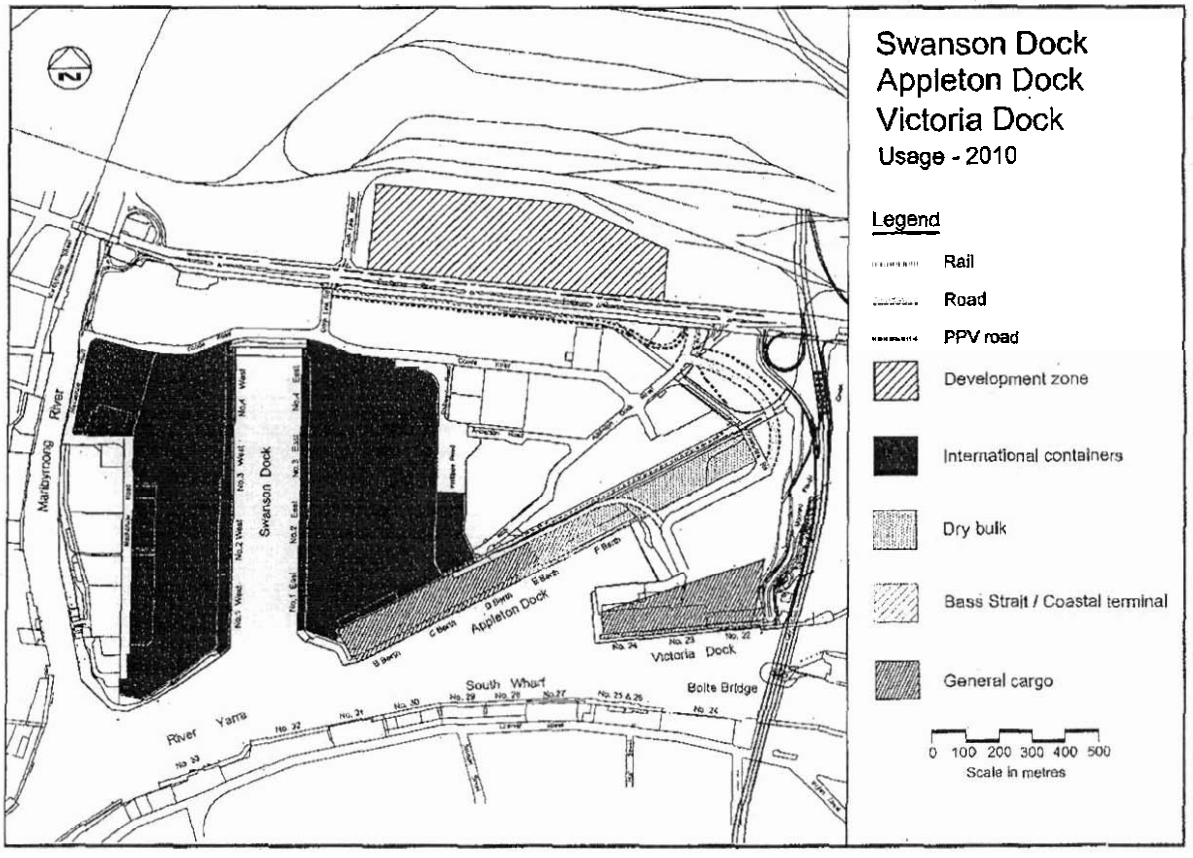
It is conceivable that implementation of initiatives associated with the Melbourne Port@L may result in international containers being concentrated in the Swanson/Appleton/Victoria Docks precinct for a longer period of time

From 2006 to 2010 development works include

- closing Coode Road west of Dock Link Road and integrating the Swanson Dock West container terminal with the rail terminal completing the rail terminal development at Swanson Dock East
- completing the Coode Island development works along Mackenzie Road and expanding the Swanson Dock West container terminal
- relocating the slipway and marine maintenance operations
  subject to environmental approvals, upgrading all berths to accommodate ships having a 14-metre operating draught
  subject to environmental approvals, completing channel, river swinging basin and berth dredging to allow operation of 14-metre draught Post-Panamax ships
- grade separating rail access to the port from Footscray Road, Appleton Dock Road and Enterprize Road
  constructing a link road between Enterprize Road and Appleton Dock
- constructing PPV roads between the east and west of this precinct and between the port and Dynon rail precinct
- completing development of Victoria Dock terminal
- extending and upgrading Victoria Dock berths

The 2010 vision for the Swanson/Appleton/Victoria Docks precinct is shown in Figure 29

Figure 29. Swanson/Appleton/Victoria Docks precinct - 2010



All initiatives subject to financial viability, technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

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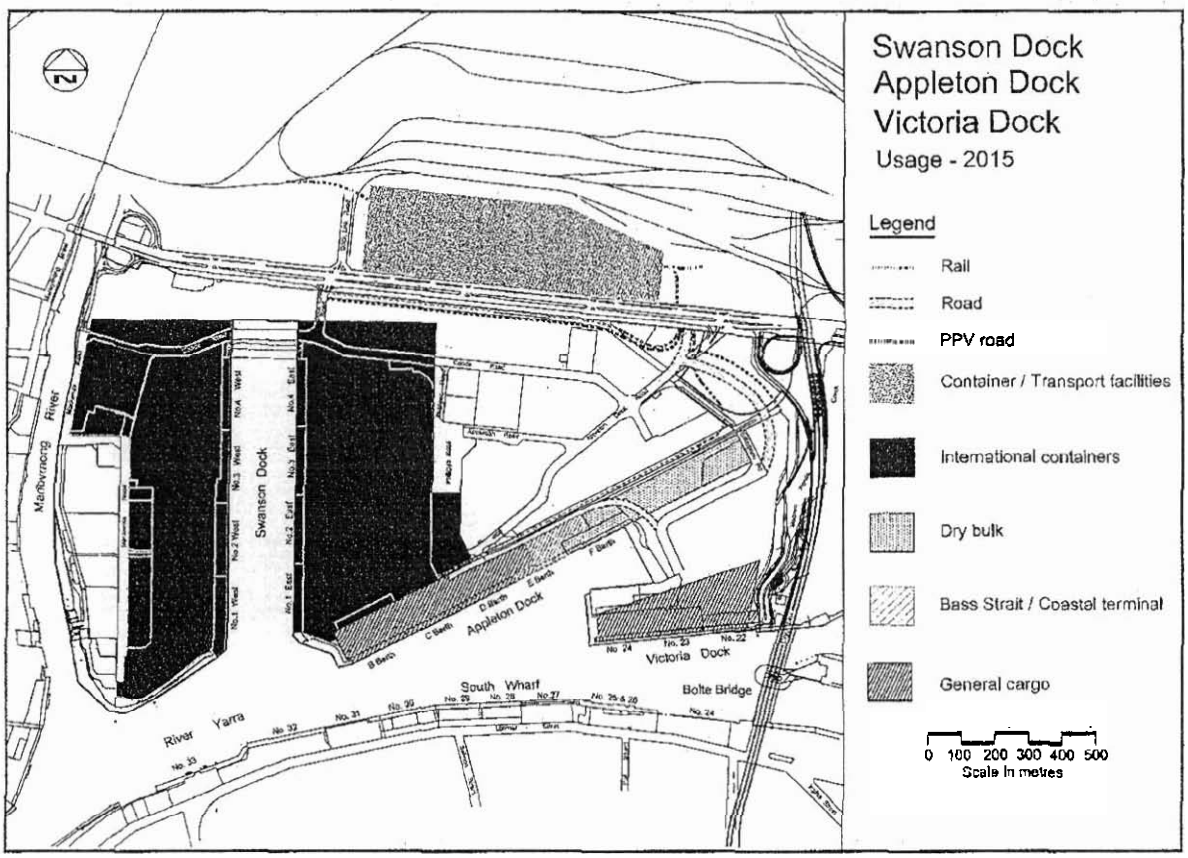
From 2010 to 2015 development works include:

- closing Coode Road west of Phillipps Road to facilitate the integration of the Swanson Dock East container terminal and container park sites
  completing a 120-metre extension of Swanson Dock to container terminal standard
  upgrading Appleton Dock B-E berths, yards and sheds for dedicated and improved general cargo operations
- commencing integration of the Dynon rail precinct with the port

The 2015 vision for the Swanson/Appleton/Victoria Docks Precinct is shown in Figure 30

Figure 30 Swanson/Appleton/Victoria Docks precinct - 2015



All initiatives subject to financial viability technical feasibility and environmental assessment
Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

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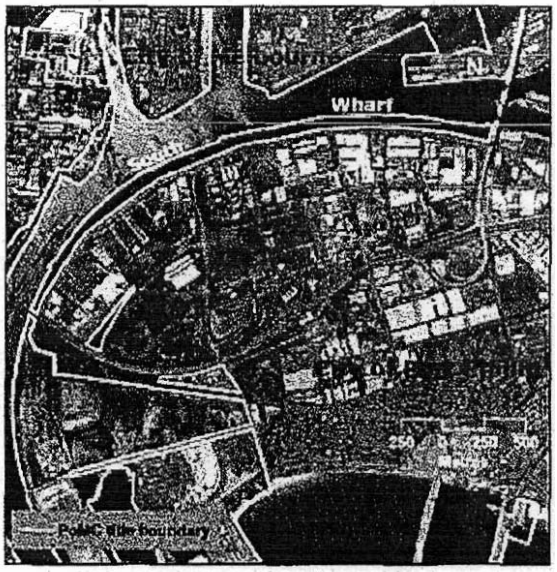
7.2.8 South Wharf precinct

Figure 31 South Wharf precinct



Current use

26-27 South Wharf is principally reserved for bulk cement imports, and has extensive silo facilities.

28–29 South Wharf common user berths are used for general cargo

30–31 South Wharf is used for tugs

33 South Wharf is used for dry bulk principally the import of bulk fly-ash and slag

The Shipping Management Centre and Port Education Centre are adjacent to 35 South Wharf which is a marina facility.

The remainder of the area is used for port ancillary services and port-related activities such as warehousing, container storage and ship maintenance.

Key issues

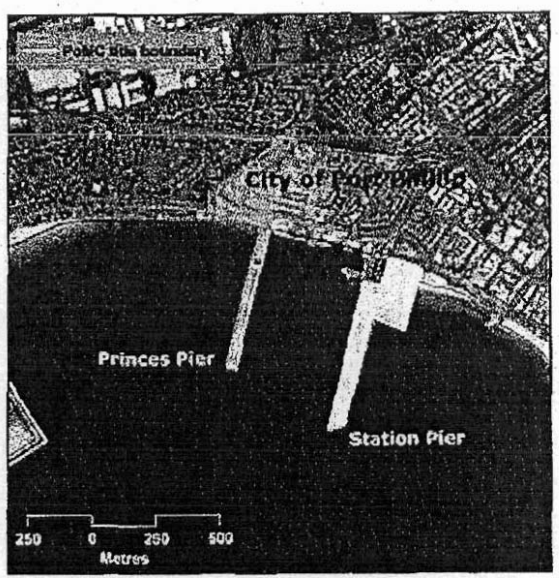
- Management of the interface between the port and adjacent industry and commercial developments
- The need to protect the Webb Dock rail reserve

Future use

South Wharf will continue to be utilised for its current activities. The limited width of the wharf area, particularly with the Webb Dock rail corridor, makes the wharf area ideally suited to the needs of the current industries located there.

7.2.9 Station Pier precinct

Figure 32 Station Pier precinct



Current use

Station Pier is utilised as the Melbourne Sea Passenger Terminal and is the principal cruise liner facility in Melbourne. The inner east berth is used by TT-Line Tasmania service which operates the Bass Strait passenger and freight ferry service between Tasmania and the mainland. Visiting naval vessels also make significant use of Station Pier.

Key issues

- Security and public access
- Land side transport
- Integration with a gentrifying urban environment
- Appearance and heritage issues

Future use

Station Pier will continue to be used by TT-Line cruise liners and naval vessels visiting Melbourne.

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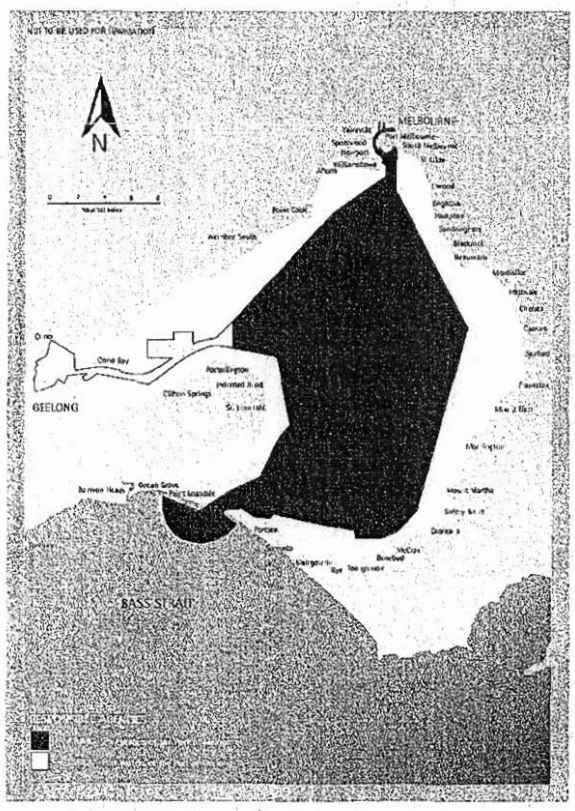
7 2 10 Port waterways precinct

Figure 33 Port waterways precinct



Current use

This precinct covers all the waterways adjacent to the wharves and extends up to Shepherd Bridge on the Maribyrnong River and to the Bolte Bridge on the Yarra River It also covers all of the port access channels to The Heads

The Port of Melbourne is situated in a sensitive estuarine environment The Yarra and Maribymong Rivers and Port Phillip Bay are characterised by a number of environmental values, including habitat of regional and state significance areas of heritage significance tourism recreation and aesthetic values and the local fishing industry

While PoMC is responsible for all commercial shipping the actual management of the waterways is the responsibility of Parks Victoria

Key issues

Protection of areas of environmental sensitivity

- Management of conflict between commercial shipping and recreational craft
- Pollution and introduction of marine pests
  Shipping backwash
- Security and public access
  Managing the demand and capacity of essential port services
  I e tugs bunkering, mooring
- Ship draught requirement

Future use

The continued use of the waterways for large ships is of utmost importance and it is essential that this is facilitated and managed in an environmentally sustainable manner consistent with the PoMC safety and environmental management plans The issues of channel depth ship size potential conflict between commercial shipping and recreational craft and ferries and improvement in water quality are seen as ongoing issues and PoMC will have to continue to work closely with other government agencies to ensure they are effectively managed taking into account the needs of all stakeholders The renewed focus on utilising and living near the waterways will continue to be a major issue that PoMC will continue to monitor

Action:

PoMC will continue to work closely with other government agencies to ensure that port waterways are effectively managed taking into account the needs of all stakeholders

7.3 Long-term whole of port development plan

Ongoing development of the port will be undertaken to enable it to meet the needs of the shipping industry and importers/exporters

PoMC has assessed the proposed future use for each of the precincts discussed above against the future port needs identified in Section 6 and has prepared development plans for the years 2015 2025 and 2035

These plans which are based on the most likely growth forecasts are staged to provide sufficient capacity in the port at all times. The major initiatives in port development are listed below generally in order of timing

2006 – 2010

- The Channel Deepening Project (subject of a Supplementary Environment Effects Statement) is completed and ships having up to 14 metres draught can be accommodated at Swanson Dock Gellibrand Pier and F Appleton Dock
  Coode Road is closed west of Dock Link Road facilitating the integration of the Swanson Dock West container terminal with the rail terminal
  Substantial productivity improvements are made at the Swanson Dock container terminals through a complementary capital investment program including the upgrading of container cranes and the start of high density yard operations
- The Victoria Dock development incorporating a rail terminal that is linked to the external rail network becomes operational
- Victoria Dock berths are extended and upgraded
- Port rail access is improved with the grade separation of Footscray Road Appleton Dock Road and Enterprize Road
  Planning and design for Webb Dock rail link is completed
  Increased train network capacity to the port is provided
  PPV link between the port and Dynon rail precinct is provided with the Dynon Port Rail Link project
  A commercial process is undertaken to identify interim uses for the vacant land at Webb Dock
  Motor vehicle import/export facilities at Webb Dock are upgraded
  Road access improvements are made at Webb Dock and possibly to the west of the Maribyrnong River
- An interim use for the former Pivot site at 221 Whitehall Street Yarraville is developed

2011 – 2015

- Coode Road west of Phillipps Road is closed and the Swanson Dock East container terminal is integrated with the container park sites to the north of Coode Road
- 120-metre extension of Swanson Dock is completed
- Substantial productivity improvements are made at the Swanson Dock container terminals through a complementary capital investment program including the upgrading of container cranes and further introduction of high density yard operations
  Webb Dock rail link is constructed
- The Melbourne Wholesale Fruit and Vegetable markets are relocated to facilitate integration of the Dynon rail precinct with the port and development of a new rail terminal
- Appleton Dock coastal operations transferred to Webb Dock
- Appleton Dock B-D converted and upgraded for general cargo operations

A plan of the 2015 vision for the port is shown in Figure 35

For reference Figure 34 provides a plan indicating the existing port land use

All initiatives subject to financial viability technical feasibility and environmental assessment
Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

Figure 34 2006 Port land use

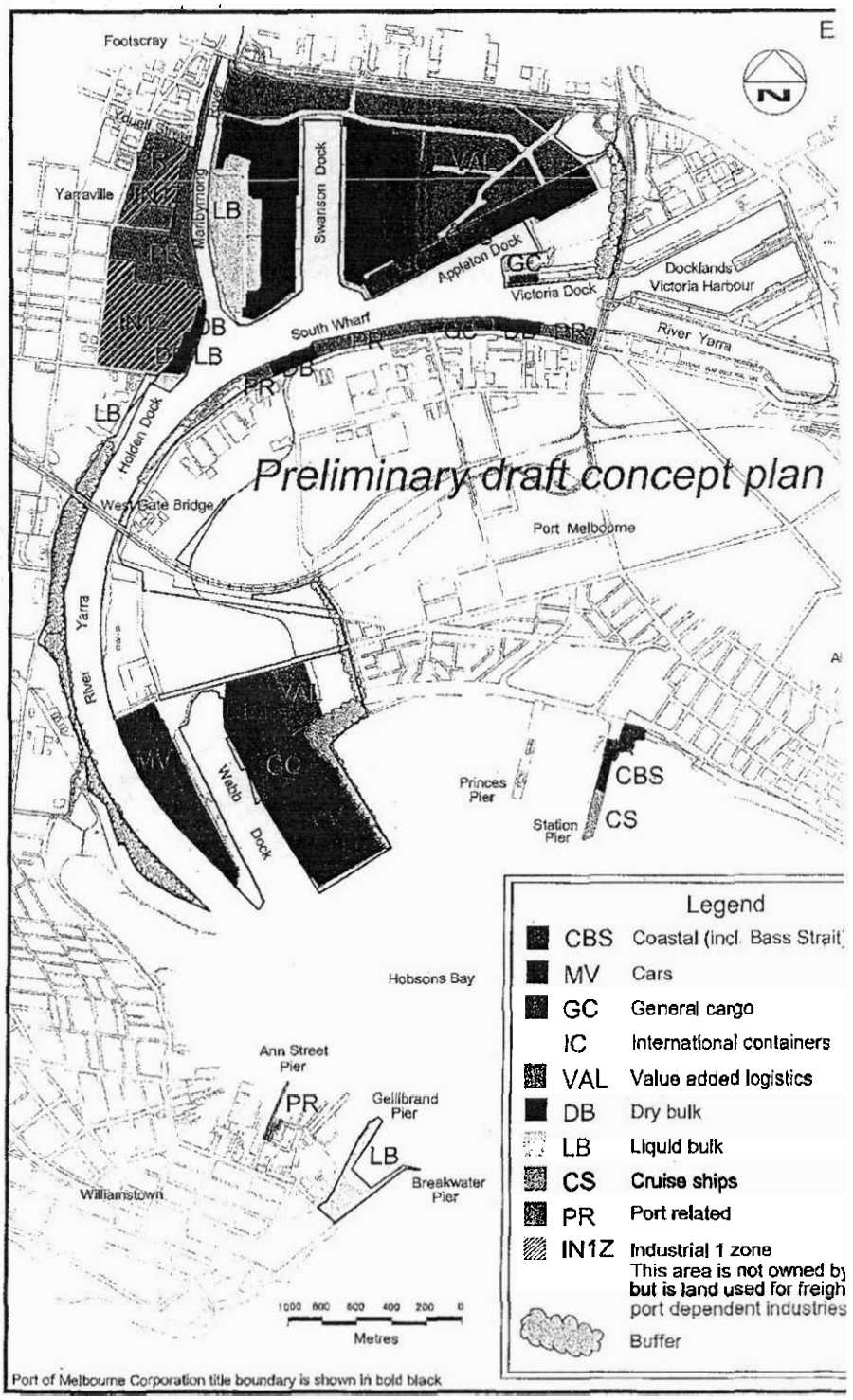
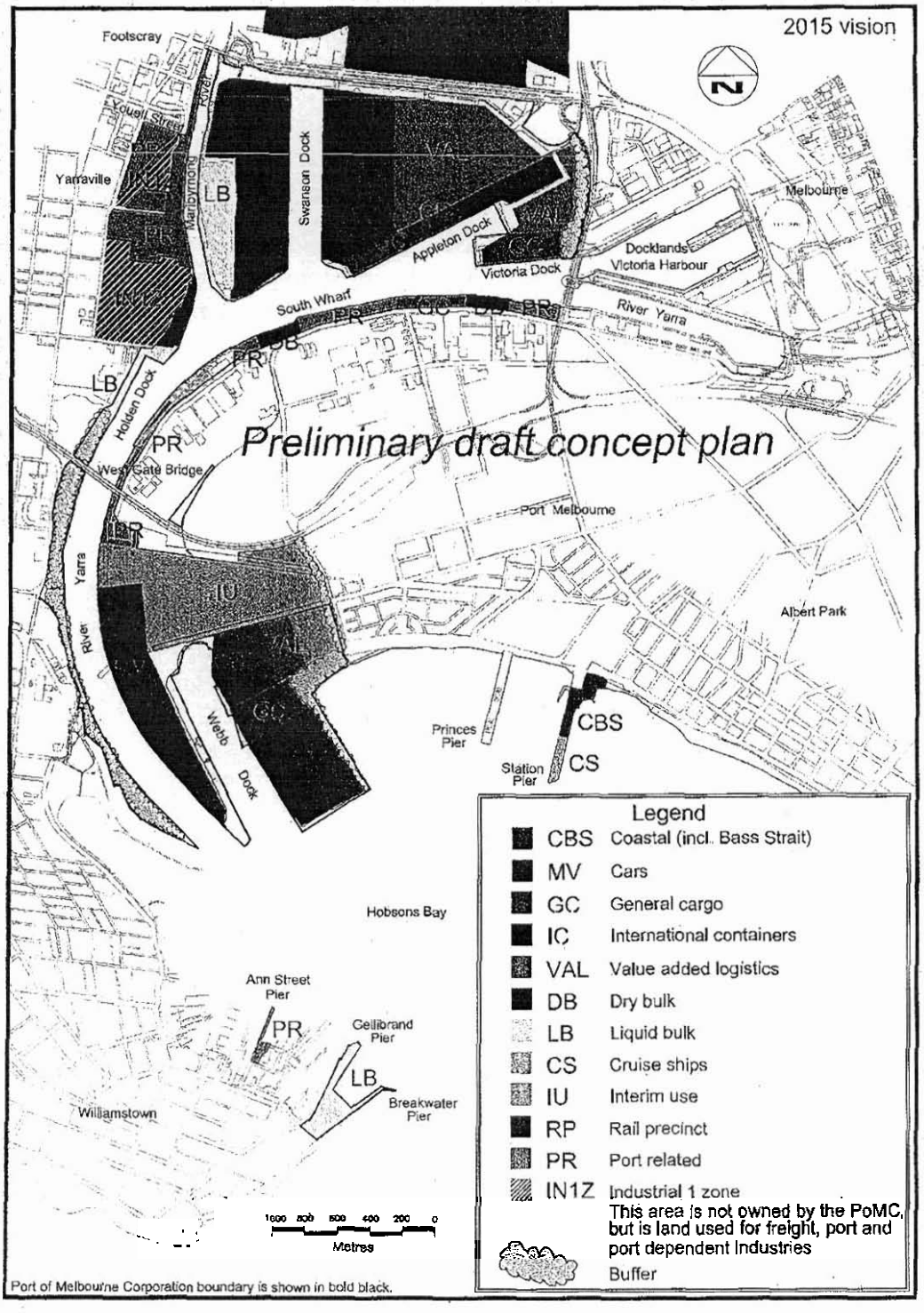


Figure 35: 2015 Vision of the port



Before 2017

- Planning and preliminary design and construction work for Webb Dock container operations undertaken
- Motor vehicle operations transferred from 3-5 Webb Dock East to Webb Dock West
- Rail connection to 4-5 Webb Dock East provided
- Expression of interest process for Webb Dock international container terminal operator completed and preferred developer appointed
- 4-5 Webb Dock East berth upgraded for 14-metre draught ships

Before 2018

International container terminal operations, including rail terminal established at 4-5 Webb Dock East

- Tasmanian trade terminals extended to 3 Webb Dock East

2019 – 2025

Webb Dock extended to the north of Williamstown Road with new ro-ro berths constructed at Webb Dock West suitable for PCCs, PCTCs, ro-ro and coastal ships

A plan of the 2025 vision for the port is shown in Figure 36

2026 – 2035

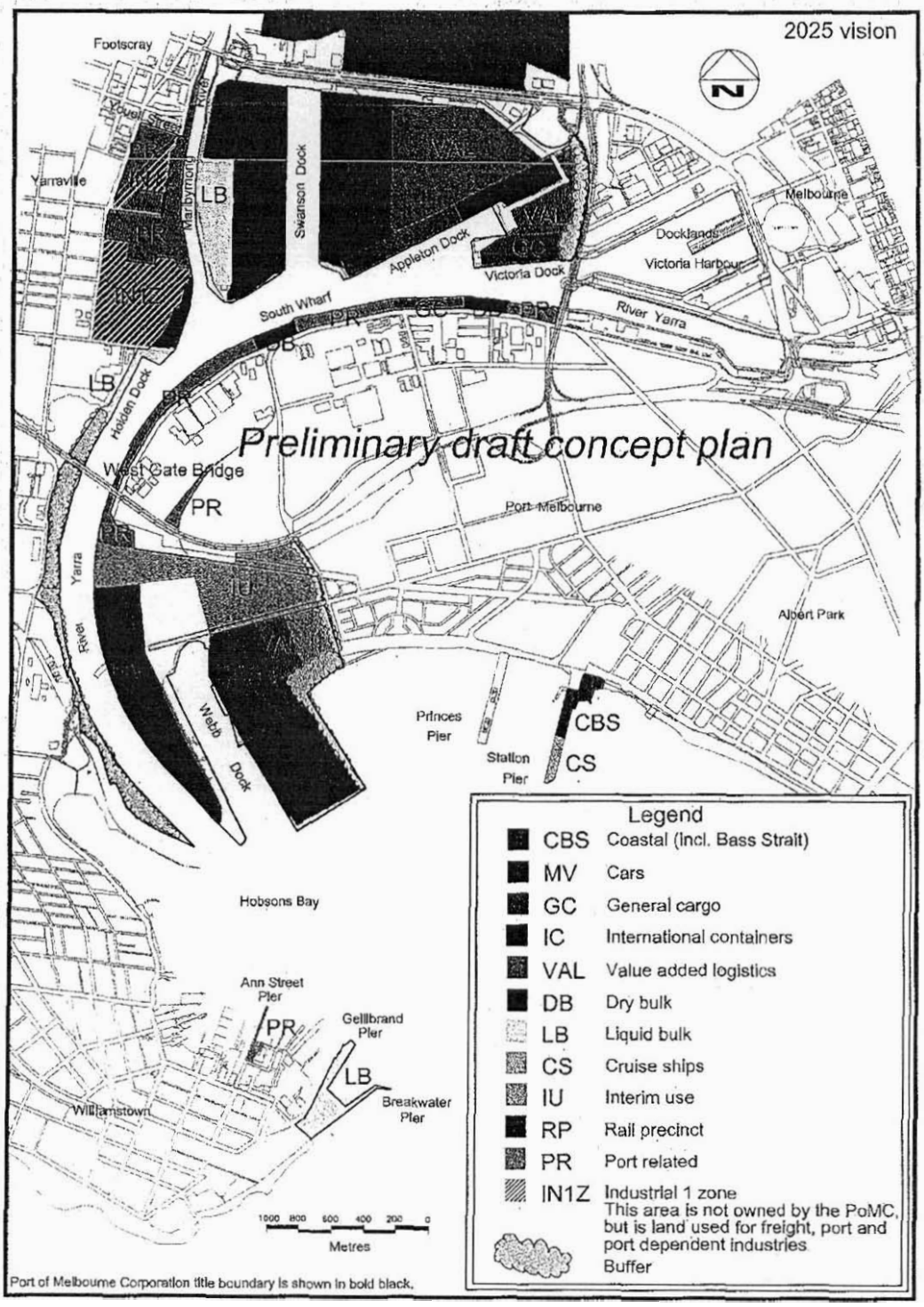
- Motor vehicle trade is relocated from Webb Dock West to a suitable alternative location within the port or to some other Victorian port
- Tasmanian trade terminals relocated to Webb Dock West
- New international container berths constructed at Webb Dock East
- International container terminal operations progressively extended to new berths at Webb Dock East
- Webb Dock rail terminal capacity extended

A plan of the 2035 vision for the port is shown in Figure 37

All initiatives subject to financial viability technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC

Figure 36 2025 Vision of the port



7 4. 2035 vision

The port in 2035 will be substantially different in appearance from the way it is today because it will be handling more than four times the number of containers, more than three times the volume of Bass Strait trade, more than two and a half times the number of new motor vehicles (subject to a suitable location for this trade being found) and double the quantity of bulk products

The most obvious differences will be the extensive development of Webb Dock and the Dynon rail precinct Swanson Dock will have been extended northwards Footscray Road will have been elevated over the rail lines linking the port to the external rail network with both Appleton Dock Road and Enteprize Road also grade separated The Webb Dock precinct will also be connected to the rail network which will substantially increase the port s capacity to move cargo by rail The port s operations will have been seamlessly integrated with the Dynon rail terminals by the removal of the markets to the north of Footscray Road and implementation of the Melbourne Port@L strategy will be complete – refer Section 9

Because of the deeper channels leading to the port (subject of a Supplementary Environment Effects Statement) bigger and more efficient ships will visit the port on a regular basis More trains and nightly efficient trucks will transport the cargo to and from the port using upgraded rail and road infrastructure that minimises the impact on the surrounding community

The port will handle all major trade segments (subject to a suitable location for motor vehicles) and will have sufficient capacity to cope with the most likely volume of trade currently forecast Substantial rearrangement of terminal boundaries and functions will mean that highly efficient international container terminals will be located at Swanson Dock and Webb Dock East Webb Dock will also cater for the Tasmanian trade General cargo will be concentrated at Appleton Dock and Victoria Dock Dry bulk and liquid bulk facilities will look much the same as today however some rearrangement of South Wharf dry bulk terminals will have occurred Station Pier will continue to service the needs of the cruise ship industry and the Tasmanian passenger trade

Beyond 2025 the Yarraville precinct is a potential site for new motor vehicle terminals Alternatively the motor vehicle trade may choose to relocate to another Victorian port The Port of Hastings, in its December 2005 Community Update No 3 has identified motor vehicles as a trade that could be located at the Port of Hastings by 2035 and has developed port layout options for public comment that includes the potential for motor vehicle terminals

Social and environmental stewardship is viewed as critical to the future of the port The port will be seen as an attractive and pleasant place to live and work near Sufficient planning and development has occurred between 2005 and 2035 to ensure that sensitive uses are adequately buffered from core port activities

A plan of the 2035 vision for the port is shown in Figure 37

7.5 Implementation of the plan

The port operates in a market where there is a natural scarcity of suitable near-water terminal land where core port infrastructure comes at a very high cost and with a long lead time

In this market it is important that the natural tendency to maximise return on investment both by the port and private port service providers does not occur at the expense of deteriorating service levels that add disproportionate costs to the total transport chain

In this context the success of the PDP will be founded on the ability of Swanson Dock to cater for the growth of international container trade until the existing Webb Dock infrastructure becomes available in 2017

Up until then significant investment driven productivity improvements at Swanson Dock will be required to deliver the necessary increase in capacity.

Although there is little doubt that Swanson Dock capacity will be able to keep up with growth if these investments are made there is some risk that service levels to importers and exporters, shipping lines, road transport operators etc will deteriorate as terminal throughput increases

To manage this risk PoMC is working towards having development and operations agreements with the key service providers that provide for investment strategies for infrastructure equipment and technology and define a set of minimum service level benchmarks that will maintain or improve the service levels to users of the port

Action.
PoMC is seeking ongoing agreements with the key service providers that provide for investment strategies for infrastructure equipment and technology, and define a set of minimum service level benchmarks that will maintain or improve the service levels to users of the port

Other important implementation mechanisms will include:

- *Partnerships* – between PoMC, the port's neighbours, customers, stakeholders and relevant agencies
- *Communication* – between PoMC and the port's neighbours and the broader community
- *Monitoring and review* – to establish a review process and monitoring of the ongoing implementation of the strategy
- *Land use controls* – through the port and local council planning schemes – refer Section 2.5

7.5.1 Partnerships

A collaborative approach including PoMC, government, the private sector and port neighbours is required to address the various port development issues which have been raised during the consultative process. This is critical given a state wide approach for addressing integrated transport solutions is necessary

A partnership approach should assist in making the objectives of the PDP achievable. Some of these partnership approaches should include:

- Partnerships with government agencies such as:
  - VicRoads and local government, to ensure that roads and capital works programs in and around the port are provided in a timely and coordinated manner
  - DoI to ensure that the Dynon rail terminals and the port can operate as one integrated intermodal hub (Melbourne Port@L initiative)
  - EPA, Department of Sustainability and Environment, Parks Victoria, Victorian WorkCover Authority etc to promote environmental best practice
- Partnerships with neighbours and adjoining local governments to manage amenity issues and protect the port's operations from encroachment

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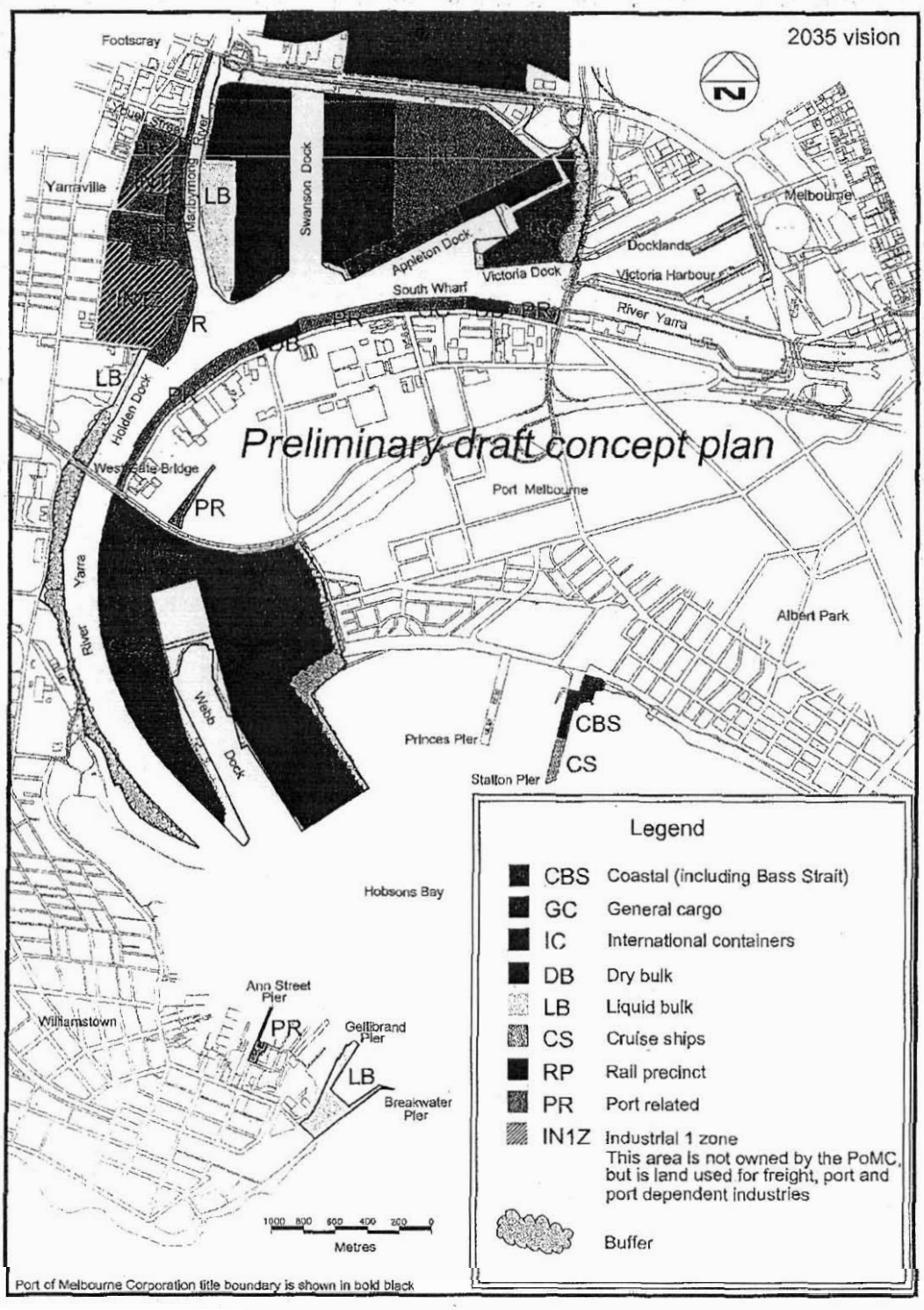
Figure 37: 2035 Vision of the port



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7 6. Upper limit forecast development plan to 2015

PoMC has considered the risks associated with forward planning based on the most likely trade growth scenario considered in Section 7 3

The main variables which affect the timing of future infrastructure and which are both, to a significant extent, beyond the control of PoMC are:

- trade growth – will it exceed forecasts?
- capacity improvements – will they eventuate?

The risks associated with these two variables are illustrated qualitatively in Table 26

Table 26. Upper limit risk matrix

	Trade growth		
Capacity	Lower than forecast	As forecast	Higher than forecast
No increase	No congestion	Congestion	Severe congestion
As forecast	No congestion	No congestion	Congestion
Higher than forecast	No congestion	No congestion	No congestion

Because:

- capacity improvements are largely outside PoMC s direct control and there is risk of congestion if capacity increases are not delivered by operators
- trade growth rates have generally been higher than forecasts for the last 10 years
- lead times associated with new developments may be up to five years

In its modelling of future port capacity PoMC has adopted a minimum risk approach to the provision of capacity to 2015 by considering an 'upper limit' trade growth scenario for all pack types/commodities, with only nominal terminal productivity improvements.

While it is preferable that stevedores provide sufficient capacity to cope with the growth in trade by development of their existing terminals, a fall-back strategy is required to protect the port from under capacity

Because of the need for additional capacity under the upper limit growth scenario, contingency development plans to 2015 have been prepared for international containers, Bass Strait trade and new motor vehicles. The upper growth limit forecast volume of all other commodities to 2015, including passenger ships, can be catered for within their existing facilities

International containers upper limit growth strategy

- Substantial additional berth and yard capacity will be required by 2015 delivered through a complementary capital investment program
- Because berth capacity is dictated predominantly by the number of cranes necessary for the ship-to-berth transfer task acceleration of the crane investment program may be necessary.
- The proposed 120-metre extension of Swanson Dock together with the closure of Coode Road, may also need to be brought forward to facilitate the installation of additional cranes
- Similarly, acceleration of the yard capacity intensification program will be required to provide an equivalent quantity of additional yard capacity

Maunsell Australia Pty Ltd and Drewry Shipping Consultants Ltd in their 2004 joint study of international container terminal capacity in the Port of Melbourne estimated that a fully developed Swanson Dock (including 10% to 15% berth extension) has a potential capacity of 3 4 million TEU/year Assuming this capacity even with a growth scenario of 11% CAGR the port would have sufficient capacity for at least the next six years (i e to 2012) Assuming a five year lead time to deliver additional capacity elsewhere in the port there remains a year before any action outside the current strategy needs to be taken

PoMC will monitor trade growth, stevedore performance and terminal development programs to be confident that sufficient capacity will be available at all times If it is deemed that sufficient capacity may not be available or service levels provided to shipping lines is unsatisfactory PoMC may need to bring forward the development of Webb Dock for international containers

Action:
PoMC will continue to monitor international container trade growth and stevedore performance and will work cooperatively with the stevedores to ensure that the port continues to have sufficient international container terminal capacity under an upper growth scenario.

Bass Strait trade upper limit growth strategy

- Based on the existing performance and operating constraints of the major Bass Strait operators, it is possible that by 2015 there may be insufficient capacity to cope with the upper limit growth forecast

- Because capacity is constrained mainly by the size of ships, time at berth and the number of weekly services, it should be possible to provide the necessary additional capacity by addressing these issues. For example, if larger ships are introduced, the number of weekly services is seven and extra time is spent at berth each day, sufficient capacity should be available to satisfy the 2015 needs

PoMC will monitor stevedore performance and terminal/shipping development programs to be confident that sufficient capacity will be available at all times. If it is deemed that sufficient capacity may not be available, PoMC may need to bring forward the development of additional Bass Strait facilities

Action

PoMC will continue to monitor Bass Strait trade growth and stevedore performance and will work cooperatively with the stevedores to ensure that the port continues to have sufficient Bass Strait terminal capacity under an upper growth scenario.

Motor vehicles upper limit growth strategy

It is possible that some additional land may be required to cater for the upper limit trade forecast if imported vehicles remain in the port for an average of seven days or more

- Subject to other interim demands, adequate land should be available in the Webb Dock precinct

Alternatively, a reduction in the average dwell time for imports may eliminate any requirement for extra land

Action

PoMC will continue to monitor motor vehicle trade growth and stevedore performance and will work cooperatively with the stevedores to ensure that the port continues to have sufficient motor vehicle terminal capacity under an upper growth scenario.

7.7. Possible interim land uses

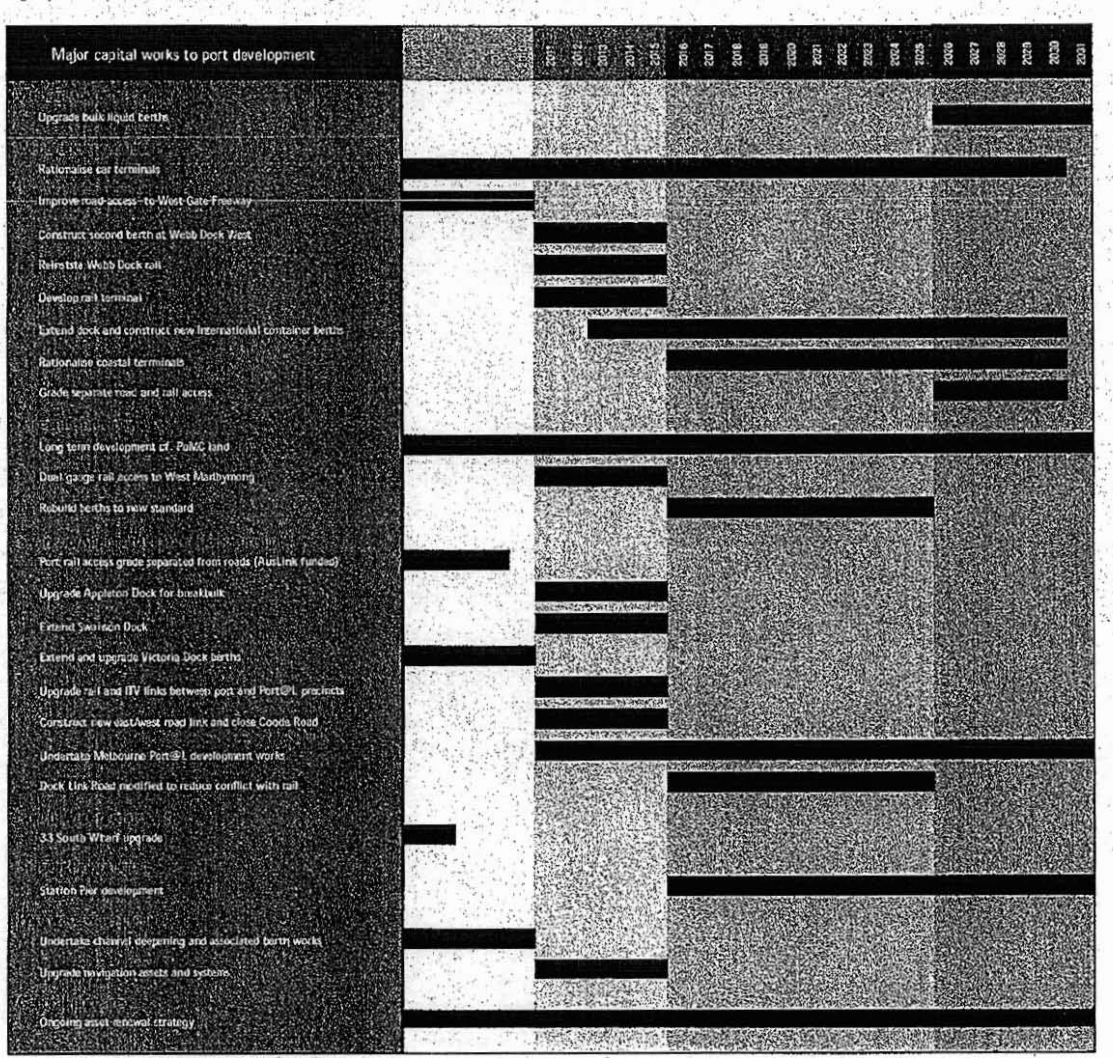
Opportunities for interim land uses that are consistent with future needs will be identified and encouraged - particularly in the Webb Dock precinct. Sufficient flexibility will be incorporated into these arrangements to ensure that upper limit growth scenarios can be accommodated if necessary.

7.8. Investment program

An indicative 30-year capital investment program for the Port of Melbourne that incorporates the major elements of the long-term whole of port development plan - refer Section 7.3 - is shown in Figure 38.

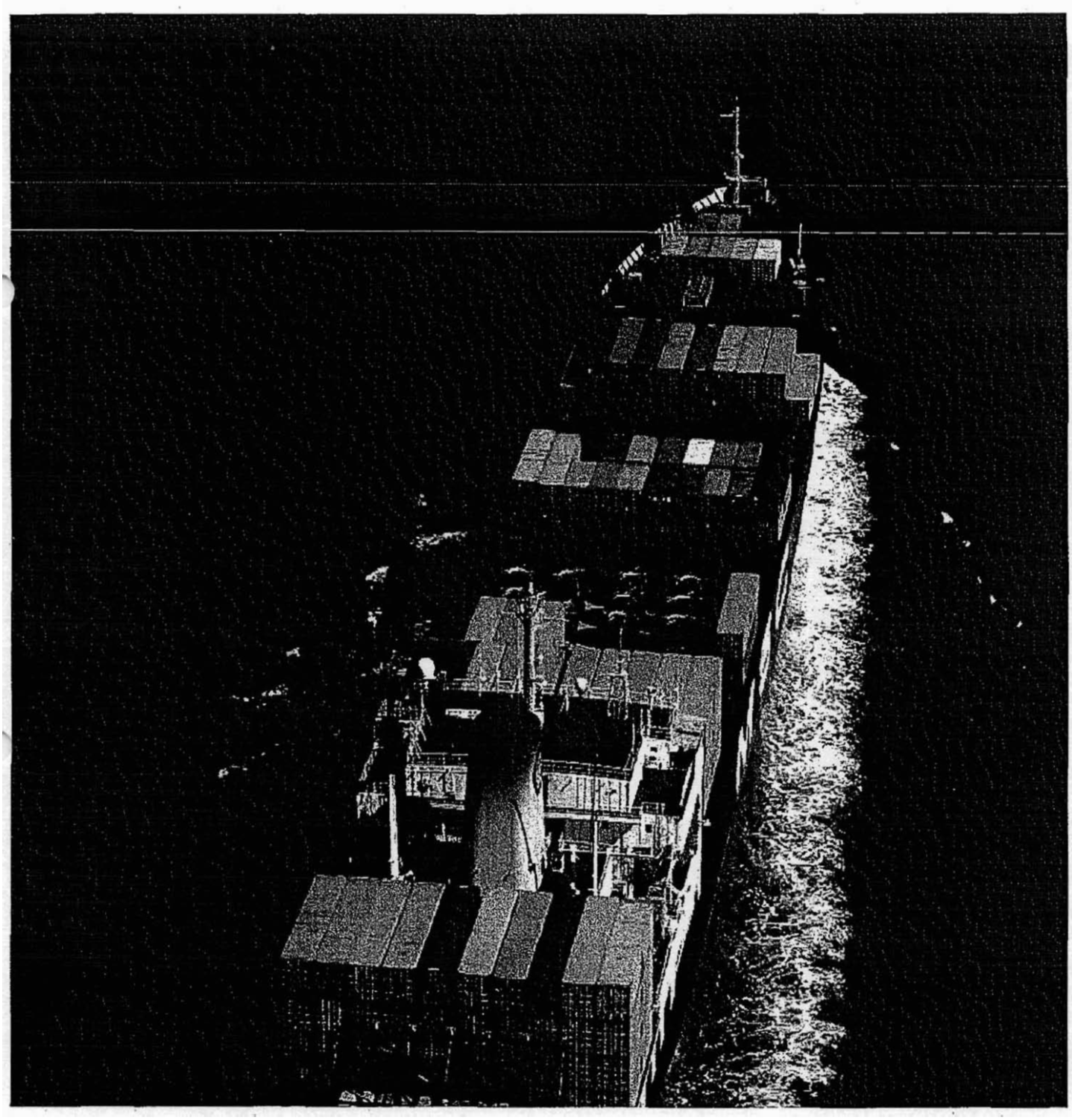
Refer to Section 10 for funding proposals to support the investment program

Figure 38. Indicative capital investment program



All initiatives subject to financial viability, technical feasibility and environmental assessment

Indicative timings for infrastructure development are included to inform more detailed port planning decisions and should not be used by third parties for commercial decisions without prior agreement by PoMC



8. Port transport logistics planning

The port s sea road and rail transport systems and infrastructure must be planned to maximise efficiency

Because the port is dependent on the efficient performance of a variety of state and privately owned transport infrastructure an integrated approach to transport planning is required to address the complexities of transport issues Many of these issues will be addressed through the Melbourne Port@L development initiative – refer Section 9

PoMC will work closely with government local councils and transport authorities to encourage seamless and adequate road and rail connections that are appropriately designed to cater for port users.

Action
PoMC will work closely with government local councils and transport authorities to encourage seamless and adequate road and rail connections to the port

8.1 Road transport

Approximately 80% of all port trade is currently moved by road transport (excluding liquid bulk movement by pipelines)

Because road transport has a highly visible and profound impact on community amenity the efficient management of truck movements servicing the port is a critical issue for the trucking industry stevedores, local councils, PoMC and government to address The basic strategies that PoMC will be supporting for minimising individual truck movements in the immediate neighbourhood with both commercial and amenity pay-offs include:

- increasing the utilisation of trucks to reduce the number of trucks needed
- optimising truck trips to reduce the distance travelled
- moving more cargo by rail to reduce the road share
- locating appropriate container management functions (e g pack/unpack) within the perimeter of the port and at key suburban intermodal terminals
- optimising the use of existing road infrastructure improving the road network by increasing its scope capacity and convenience

This section discusses some of the issues relating to truck operations in and around the port and should be read in conjunction with Section 9

Note. Extensive consultation will be held with the trucking industry, VicRoads, stevedores government, local councils and other stakeholders to better define the road transport issues, identify initiatives that will reduce truck numbers and the impact of trucks on the community and to formulate action plans to implement the recommended changes

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8.1.1 Container Origin/Destination Study

A Port of Melbourne Container Origin/Destination Study completed in 2003 indicated that 5% of imported containers go to the near-port suburbs, 17% go to the inner suburbs and 68% go to the outer industrial suburbs of Melbourne, typically 15-40 km from the port. The remaining 10% is split almost evenly between Victorian country areas and New South Wales.

The transport patterns for export containers indicated that 13% came from the near-port suburbs, 11% from Melbourne's inner suburbs and 36% from the outer industrial suburbs. A further 32% of export containers originated from Victorian country areas and 8% came from other states.

8.1.2 Truck efficiency and truck numbers

The results of a 24-hour survey of 6692 container trucks in November 2005 revealed container vehicle utilisation as shown in Table 27.

This table indicates that only 51% of total vehicle capacity was used at an average of 1.11 TEU/vehicle.

In order to manage future truck numbers, substantial improvements in trucking efficiency will be essential.

To minimise the number of port trucks on roads PoMC and government departments such as DoI will encourage, when possible, the trucking and transport industry and stevedores to deliver a significant increase in truck utilisation by:

- encouraging change in the truck fleet with Super B-doubles (four TEU per truck) and B-doubles (three TEU per truck) increasing at the expense of semi-trailers (two TEU per truck)
- encouraging stevedore systems and practices that drive increased efficiency
- integrating supply chain logistics systems such that the proportion of loaded inbound trucks with an outbound load (and vice versa) is increasing.

The aim of these initiatives is to increase truck utilisation from the current 1.11 TEU/vehicle to 2.0 TEU/vehicle by 2035. The potential impact of this improvement in truck utilisation on Swanson Dock truck numbers is indicated in Figure 39.

The truck numbers displayed in this figure also assume that the percentage of containers transported by rail will increase from 17% in 2005 to 30% in 2010 and beyond.

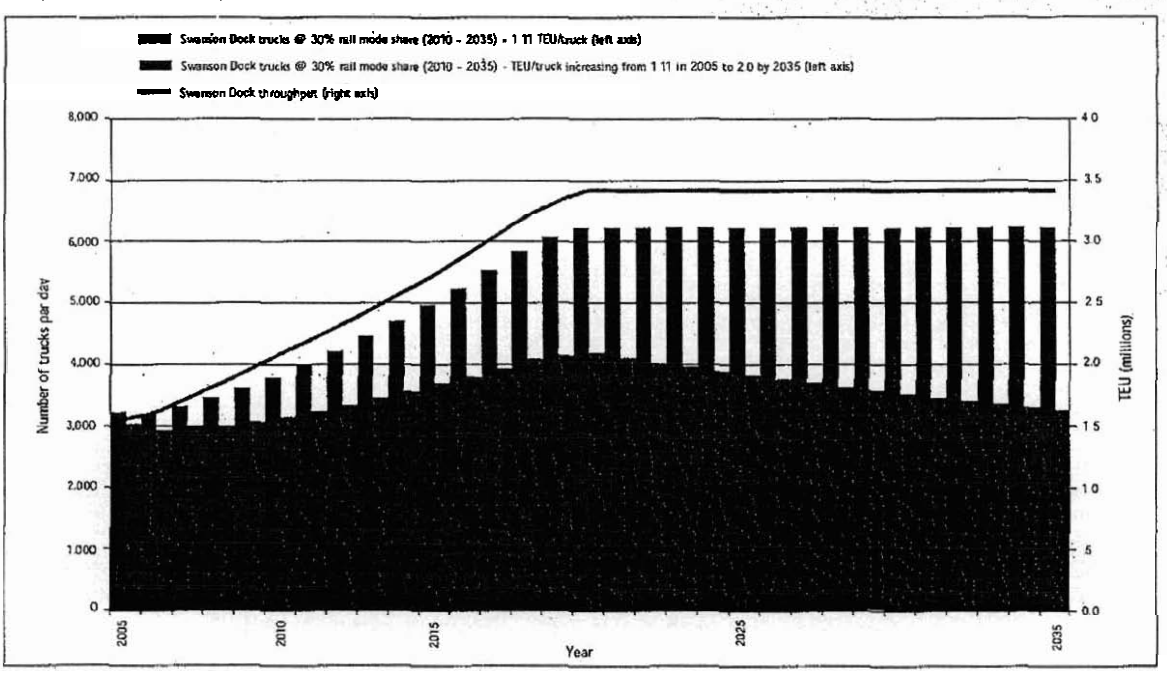
Action

PoMC will work with the trucking and transport industry and stevedores towards delivering a significant increase in truck utilisation.

Table 27: Container vehicle utilisation – November 2005

	Number of trucks	% of total	% empty	% empty TEU slots	Ave TEUs/vehicle	Vehicle TEU capacity
Rigid	71	1.1%	24%	21%	0.79	1
Rigid & trailer	6	0.1%	50%	50%	1.00	2
Articulated	5,026	75.0%	38%	49%	0.98	1.9
B-double	1,556	23.3%	34%	49%	1.52	3
Super B-double	33	0.5%	18%	34%	2.64	4
Total/Average	6,692	100%	37%	49%	1.11	2.16

Figure 39: Container truck numbers at Swanson Dock with improved efficiency



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8 1 3 Vehicle weight and height regulations

VicRoads issues guidance on the appropriate maximum weights for vehicles of differing specifications

VicRoads encourages the appropriate use of large-capacity vehicles as they are considered more productive than using many small trucks, hence B-doubles and higher mass limit vehicles are important to the efficiency of the freight task in Victoria

In 2004, 89% of Victoria's main roads were approved for use by B-doubles and higher mass limit vehicles, enabling seamless movements between the port and inner urban, intermodal distribution hubs

At present the use of high efficiency vehicles such as Super B-doubles (110 tonne gross vehicle mass), B-triples and other specialised trucks are predominantly limited to the road network in the port

8 1 4 Trucking trends

Contrary to the growing trend to use larger container carrying trucks some just-in-time applications use smaller loads delivered more regularly Significant cross docking/container unpacking and packing services are now being performed on port or near port resulting in an increase in the mix of general freight vehicles These vehicles vary from single units to B-doubles

In the car industry the overall car distribution task is undertaken by a range of vehicles varying from two car carriers delivering directly to car yards to B-doubles carrying 11 cars which are generally used for long haul deliveries

These trends will be built into future port transport planning

8 1 5 Port Precinct Vehicles

PPVs provide the facility to move containers cost effectively and efficiently within the port and between the port precinct and the Dynon rail precinct To maximise productivity PPVs may have a capacity of up to 10 TEU typically loaded on five trailers These trailers may be hauled by one heavy-duty prime mover resulting in a road train length of up to 80 metres

These non-registered vehicles will be required to operate on the port road network and require specialised treatment at public road interfaces and crossings Separation of PPV roads from other road and rail corridors is therefore desirable and will be facilitated where possible

Action
PoMC will work towards the introduction of a PPV capable road network within and between, the port precinct and the Dynon rail precinct

8.2. Port roads

PoMC has responsibility for the provision and mainteriance of an efficient road network within the port boundary A number of changes and improvements to this network will be undertaken as discussed below

Refer to Figure 40 for an indication of the location of port road development and capacity improvement strategies which include:

8.2.1 Mackenzie Road

The extension of Mackenzie Road to an intersection with Footscray Road at Sims Street, completed in early 2005 provides road access to Swanson Dock West container terminal and Coode Island

This new road connection will allow Coode Road west of Dock Link Road to be closed and integration of the Swanson Dock West rail terminal with the container terminal

Direct access from the Swanson Dock West container terminal to Dock Link Road will maintain the Port/Dynon connection for overweight and Super B-double transfers

8.2.2 Coode Road

The closure of Coode Road west of Dock Link Road will allow integration of the Swanson Dock West container terminal with the rail terminal as mentioned above

Closure of Coode Road east of Dock Link Road will also allow integration of the Swanson Dock East container terminal with the transport services, container freight stations and storage functions to the north of Coode Road

The closure of Coode Road east may require the provision of an internal heavy and PPV vehicle access road that will link Swanson Dock West to the rest of the port and the Dynon rail terminals and will also provide access to Dock Link Road from areas to the east of the port

8.2.3 Appleton Dock Road

Appleton Dock Road will be grade separated from the port rail network as part of the Dynon Port Rail Link (DPRL) project – refer Section 9.2

Appleton Dock Road to the south of Anderson Road may be closed to allow completion of the Swanson Dock East rail terminal development This closure will be dependent on successful completion of the link road between Enterprize Road and Appleton Dock – refer Figure 40

8.2.4 Enterprize Road

Enterprize Road will also be grade separated from the port rail network as part of the DPRL project

Enterprize Road will provide total access to the ABA/Grainco facility Victoria Dock and Appleton Dock B-E leaseholds

8.2.5 Link road

A link road will be constructed from Enterprize Road to service the Appleton Dock leaseholds and permit the closure of the existing Appleton Dock Road rail crossing

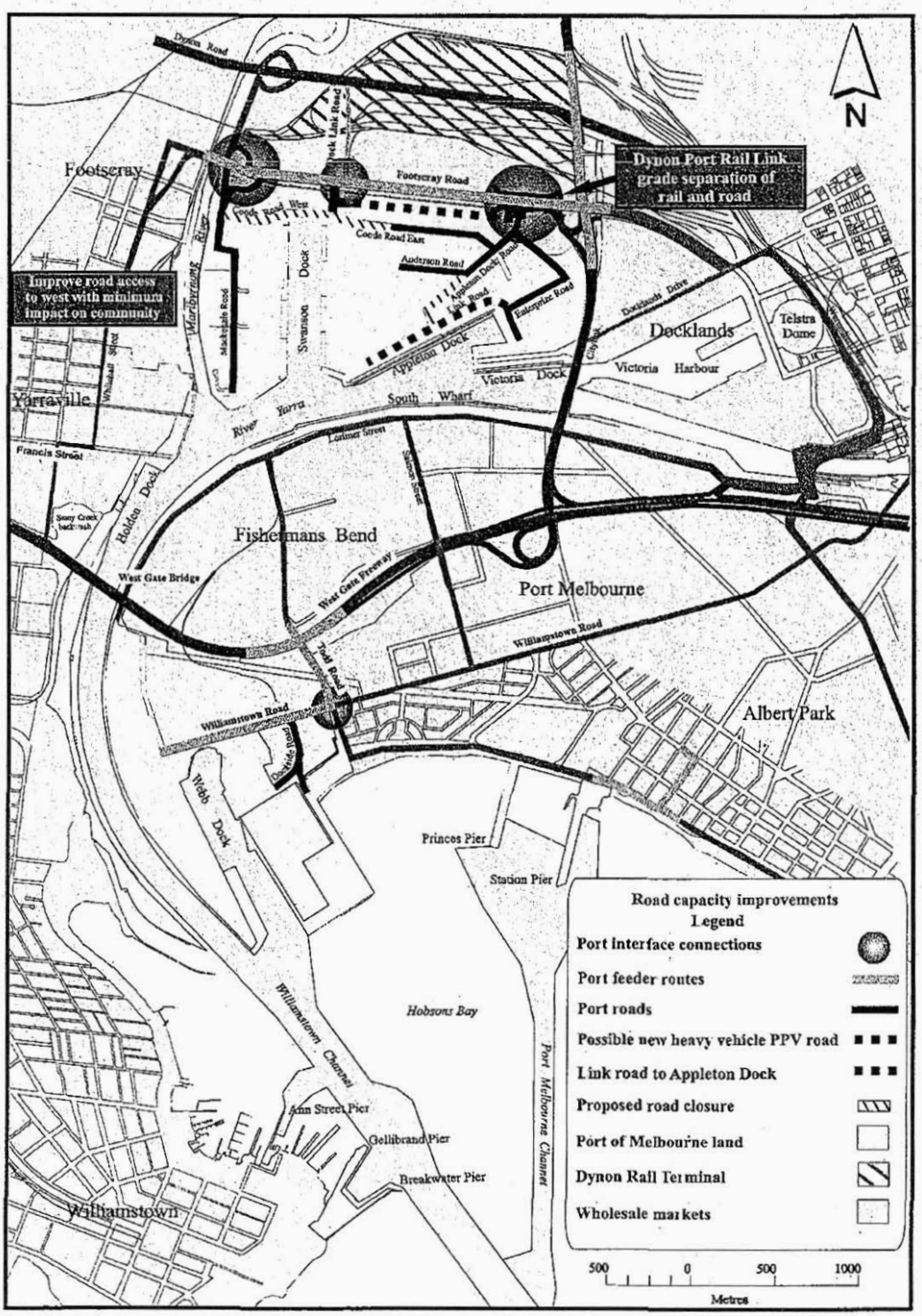
8.2.6 Dockside Road

Dockside Road works will be undertaken as required to complement other Webb Dock road works to provide an integrated solution

8.2.7 Port and Dynon connection

In conjunction with the DPRL project there is an opportunity to provide for unrestricted movement of special vehicles including PPVs between the port and Dynon rail terminal precincts This opportunity is being integrated into the DPRL design

Figure 40 Road capacity improvements



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8 3. Port rail

PoMC's objectives for port rail are:

to ensure that the port rail network satisfies and encourages an increase in modal share to rail and meets the needs of individual customers

- to ensure that the agencies responsible for the strategic planning of the Victorian and national railway network are familiar with and plan effectively for, the growing port-generated rail freight task
- to ensure equitable access to the port rail network and for access to terminals on port land
- to encourage lowest sustainable rail charges consistent with trade facilitation and the capacity to maintain the network and invest in system improvements

An indication of the future rail task for port containers, as measured in TEUs, is indicated in Figure 41. For a 30% rail share the volume of containers on rail will need to grow to more than 700 000 TEU by 2010 – a 125% increase on the 2005 volume and almost 2 5 million TEUs by 2035 – more than 650% increase on the 2005 volume

PoMC initiatives aiming to deliver 30% of containers on rail include:

- supporting the development of on-port rail terminals through appropriate land allocation and provision of efficient rail links between the external network and terminal boundaries
- engaging Australian Rail Track Corporation Ltd (ARTC) to provide management services for rail operations within the port that maximise the use of available track capacity for port trains
- promoting the further integration of rail operations with stevedoring operations
- actively supporting the concept of common-user access to on-port rail terminals under acceptable commercial arrangements
- gaining a better understanding of the critical elements of the business models underpinning rail operations servicing the port
- working with various industry bodies to develop rail based logistics links between the port and outer urban areas.

An important part of achieving the government s 30% target on rail is the development of viable shuttle train services between outer urban intermodal terminals and the on-port rail terminals. PoMC in conjunction with the Melbourne Port@L project will work with stevedores, rail operators and other stakeholders towards achievement of the rail mode share target

Action.
PoMC, in conjunction with the Melbourne Port@L project, will work with stevedores, rail operators and other stakeholders towards achievement of the rail mode share target

Note: PoMC considers the PDP consultation process to be an opportunity to better define rail transport issues and to assist with policy making in this area

PoMC, in conjunction with the Melbourne Port@L project will be seeking input and proposals from the rail industry, ARTC, VicTrack, stevedores, government, local councils and other stakeholders to identify initiatives that will maximise the quantity of cargo on rail and to help formulate action plans to implement the recommended changes.

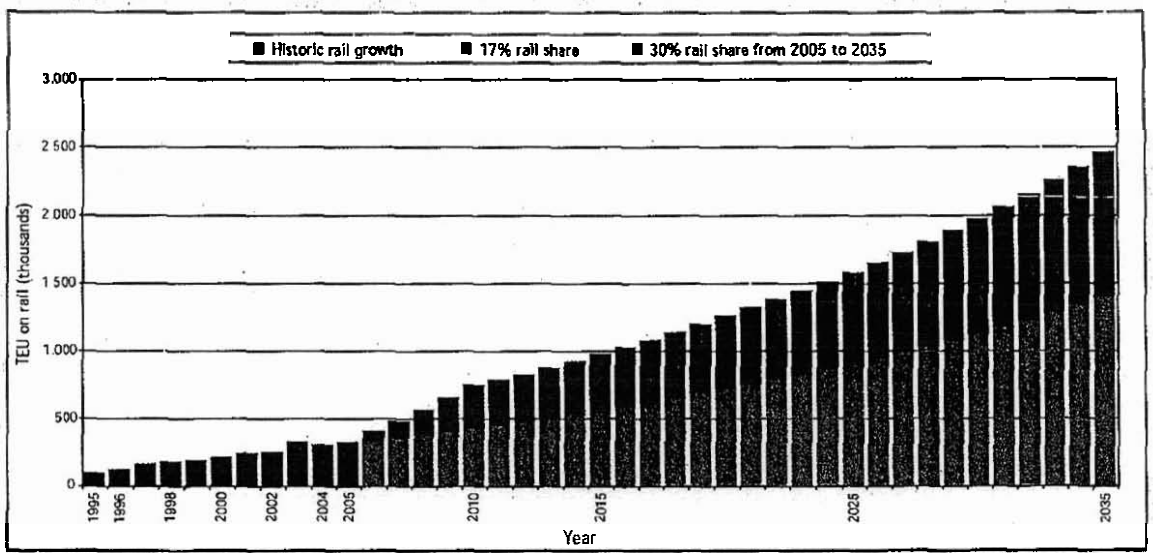
8 3 1 Current rail operations

A number of rail services already operate to and from the on-port rail terminals

Interstate and intrastate container trains are accommodated at Swanson Dock East and West rail terminals on a regular basis. Metropolitan shuttle trains operated by CRT also regularly run to the Swanson Dock rail terminals and the bulk of export grain passing through the Appleton Dock grain terminal is transported by rail

In 2005 the total quantity of port cargo transported by rail amounted to more than 3 9 million tonnes -- almost 17% of the total port throughput

Figure 41 Container rail share forecast (thousands TEU)



8.3.2 *Train efficiency and train numbers*

Port trains consist of three types:

- interstate
- intrastate
- port shuttles

The current optimum length of interstate standard gauge (SG) trains is 1500 metres having a load capacity of around 225 TEU

Victorian intrastate trains are generally constrained in length to about 750 metres and may be either SG or broad gauge (BG). These trains typically carry either containers – up to 110 TEU or grain – up to 2500 mass tonnes

Port shuttle trains may be either SG or BG with a nominal length of 300 to 600 metres carrying 45 to 75 TEU

For the purposes of estimating future train numbers the following assumptions have been made:

- 30% rail share is maintained between 2010 and 2035
  average load on an interstate train increases from 150 TEU in 2010 to 200 TEU in 2035
  average load on an intrastate train increases from 60 TEU in 2010 to 90 TEU in 2035
- average load on a shuttle train increases from 40 TEU in 2010 to 75 TEU in 2035
  there is equal freight volume in both directions.

Using these assumptions the estimated number of train movements (excluding grain trains) into and out of the port (including Dynon rail terminals) is indicated in Table 28. Any variation in the percentage of cargo on rail is more likely to have an impact on the number of shuttle trains rather than interstate or intrastate trains

Table 28 Forecast train movements

	Average train movements per day			
Train type	2010	2015	2025	2035
Interstate	3	4	5	6
Intrastate	11	15	17	20
Shuttle	27	34	47	56
Total	41	53	69	82

8.4 Port connections to the external rail network

Rail access to the Port of Melbourne is via the inner western rail corridor and through the Dynon rail terminals to the north of Footscray Road

The port links into the state and national rail networks The interstate capital city rail freight network is SG and the intrastate rail network is predominately BG with some SG connections Train movements to and from the port are scheduled and managed by ARTC.

All on-port rail is constructed as dual gauge (DG) to facilitate access by any service from any location

Refer to Figure 42 for an indicat on of the location of on-port rail network deve opment strategies which include

8 4 1 *Webb Dock rail connection*

The rail connection to Webb Dock was severed by the previous government in 1996 to allow for the Docklands development to proceed however a new reservation has been provided west of and adjacent to the Bolte Bridge to allow for its reinstatement

The new rail alignment requires either a bridge or tunnel crossing of the Yarra River

Under the VPSF the Government has committed to protect future options to reconnect the rail link to Webb Dock This project will be progressed when there is a strong business case to do so and all necessary environmental clearances have been obtained

On the basis of PoMC trade forecasts in Section 5 and infrastructure needs assessment in Section 6 the optimum time for reopening this rail connection is sometime before 2017 However reopening this link is likely to be a prerequisite for any development of Webb Dock for international container operations irrespective of timing

With almost half of the port s international containers and all of the Bass Strait containers going through Webb Dock in 2035 the government s 30% rail mode share target will be impossible to meet without this rail connection By 2035 the rail connection is estimated to remove at least 70 heavy trucks per hour from the local road network however it should be noted that these vehicles represent only a small percentage of the total vehicles on the West Gate Freeway (only 2% of all vehicles and 10% of commercial vehicles counted in 1999) and would not in themselves trigger the need for significant freeway upgrade works

The rail connection has a theoretical capacity of up to 96 train movements per day which could transport approximately 67% of all containers shipped through Webb Dock

The Webb Dock rail connection is a major element in the successful implementation of the PDP It is a key to Webb Dock being developed for international container operations and plays a major role in reducing the need for trucks to access this area in the port

Action:
PoMC will progress the Webb Dock rail connection when there is a strong business case to do so and all necessary environmental clearances have been obtained

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8.4.2 *West Maribyrnong rail connection*

A BG rail link connects North Dynon Terminal to the port and other properties to the west of the Maribyrnong River. This track currently terminates near Somerville Road

To enable the PDP to be implemented over time, rail access to this precinct will continue to remain strategically important

8.4.3 *Swanson Dock, Appleton Dock rail connections*

On-port rail terminals at Swanson Dock West, Swanson Dock East, and Appleton Dock grain are linked to the external rail network with DG track provided by PoMC

8.4.4 *Port to external rail network connections*

Several AusLink funded projects comprising the Dynon Port Rail Link and bi-directional rail between Bunbury Street and Tottenham contribute to increased train capacity to the port, however, to take full advantage of these two initiatives there is a need to fill in the gap separating them with an upgraded track. An AusLink funding submission has been prepared for a second bi-directional track between Sims Street and Footscray Road that will complete the 'missing link' to the port

There is also a proposal to complete a 'W Track' arrangement in the Dynon rail precinct that will provide a direct connection between the port and North Dynon rail terminals.

8 5. On-port rail terminals

Note: There is considerable debate around the capacity of the on-port rail terminals. The theoretical terminal capacities provided in this section are based on optimum operations which may not be achievable in practice. PoMC, in conjunction with the Melbourne Port@L project, will work with stevedores, rail operators and other stakeholders to ensure that sufficient rail capacity is available in the port and Dynon rail precincts.

The existing DG on-port rail terminals at Swanson Dock East and West predominately service interstate and intrastate container carrying trains with a growing number of metropolitan shuttle train services.

Significant quantities of interstate and intrastate containers also arrive or depart the port by rail through the Dynon rail terminals. These containers, although transferred to and from the port by road, are considered to be part of the port's on-rail trade.

Bulk product passing through the grain terminal at F Appleton Dock is predominantly carried on rail.

Refer to Figure 42 for an indication of the location of port rail terminal development strategies which include:

8 5 1 Swanson Dock East on-port rail terminal

The existing Swanson Dock East rail terminal comprises a single track 520 metres in length.

Two 666 metre freestanding rail sidings have recently been installed to service the Swanson Dock East empty container park site. The common-user rail sidings and access arrangements have also been upgraded to eliminate the need to stand trains over Enterprize Road.

The long-term master plan (assumes the DPRL is completed) provides for the full duplication of the Swanson Dock East sidings to permit long trains to be accommodated within the sidings without the need for shunting.

The theoretical capacity of the Swanson Dock East rail terminal is 550 000 TEU per annum.

8 5 2 Swanson Dock West on-port rail terminal

A 550-metre DG rail siding which allows 1100 metre trains to be accommodated is located north of the Swanson Dock West container terminal and parallel to Footscray Road.

Future duplication of the siding and completion of the DPRL project will increase the theoretical capacity of this terminal to 320 000 TEU per annum.

8 5 3 Grain Terminal

The DG grain facility at F Appleton Dock has the capacity to handle trains up to 710 metres long or 44 grain wagons plus two locomotives with some train breaking and shunting required to the west of Enterprize Road.

The DPRL project should provide for trains up to 50 wagons long to operate through this facility without the need to break the train. Extension of the dead end track to the west combined with a second unloading facility could increase future capacity substantially.

8 5 4 West Maribyrnong

In the short to medium term there is only one container park in this area which uses rail. Future port rail needs in this area have not been identified but rail easements permitting future DG links will be protected.

8 5 5 Victoria Dock

The first stage of the Victoria Dock development involves the introduction of train operations. A DG rail will provide a direct link with Westgate Port's Altona terminal so that cargoes can be immediately transferred to Altona for servicing while the Victoria Dock facility is being constructed.

Working track length of up to 400 metres is possible at this site.

It is estimated that up to six trains a day could be accommodated at the site in the first stage.

8 5 6 Webb Dock

As mentioned in Section 8 4 1 it is likely that the reintroduction of rail operations to Webb Dock will be before or integral with the commencement of intensive international container terminal operations in this precinct around 2017

Opportunities exist in the short to medium term to provide an interim rail terminal parallel to Howe Parade that could service the Tasmanian trade and car import business

While the actual layout of rail terminals linked to any new international container terminal developments will not be known for some time it is conceivable that up to 4500 metres o working track having a theoretical capacity of 900 000 TEU per annum could ultimately be provided

Bass Strait terminals at Webb Dock West may also be serviced by rail in the medium to long term

8 5 7 Dynon Rail Terminals

With relocation of the markets to the north of Footscray Road opportunities exist to extend the capacity of the rail terminals in the Dynon precinct thereby adding additional on-port rail capacity

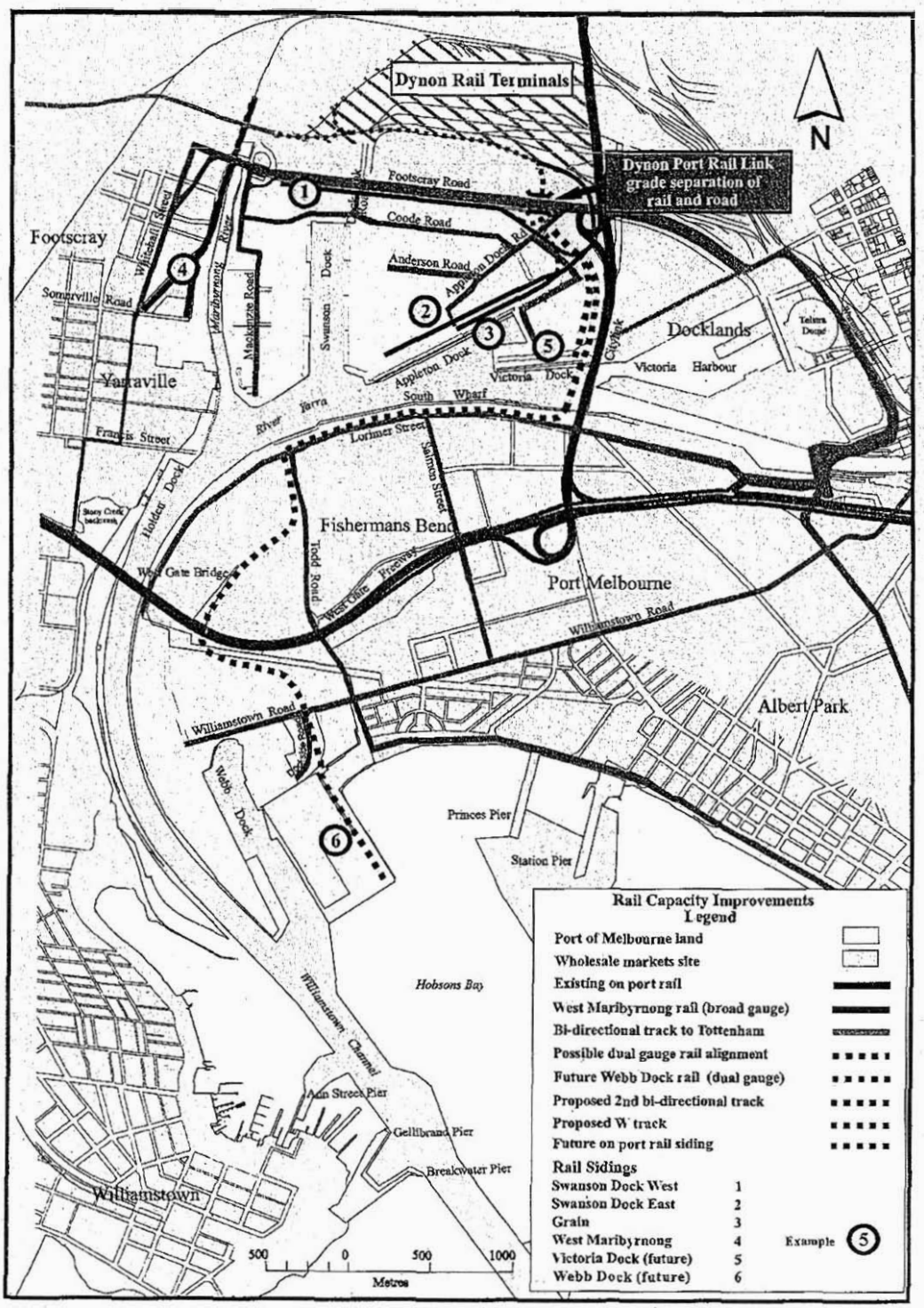
These opportunities will be explored through the Melbourne Port@L development initiative – refer Section 9

When fully developed the Dynon precinct will potentially provide a number of intermodal terminals which could accommodate trains up to 1800 metres long The southernmost terminal would effectively be an on-dock terminal as it would be adjacent to the port with good PPV links to both Swanson Dock East and West container terminals The total domestic and port capacity of the South Dynon Terminals in this configuration is estimated to be around 2 5 million TEU

8 5 8 On-port rail capacity

When fully developed the total capacity of the rail terminals listed above (excluding Dynon) could be in excess of 2 million TEU Further work will be carried out within the Melbourne Port@L project to establish the most efficient rail development strategy

Figure 42 Rail capacity improvements



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8.6 Shipping

8.6.1 Ship numbers

Since 1995 the total number of ships visiting the Port of Melbourne has increased by approximately 29%

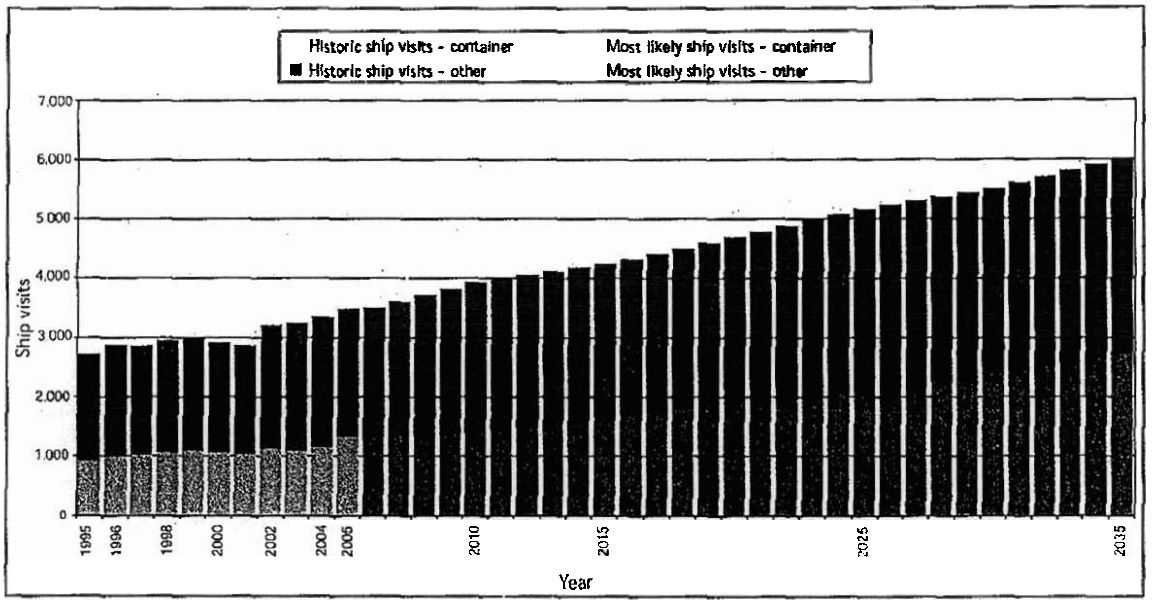
Table 29 illustrates the ship types/numbers for 2005

Table 29: 2005 ship visits to the Port of Melbourne

Ship type	Visits	% of total
Conventional	184	5.3
Container	1,308	37.5
RoRo/roll-off	719	20.6
Pure car carrier	295	8.5
Dry bulk	216	6.2
Liquid bulk	228	6.5
Passenger	427	12.2
Non-commercial	113	3.2
Total	3,490	100

PoMC estimates that by 2035 approximately 6000 ships will visit the port with approximately 45% of these being container ships – refer Figure 43

Figure 43: Ship visits forecast



8.6.2 Ship size and draught

Container ship size is increasing with economies of scale being realised by deploying container ships up to 4100 TEU capacity to Melbourne. These larger ships are growing in number as shipping lines rationalise costs in a competitive market. Within the next 10 years it is predicted that ships up to 4500-5500 TEU capacity will come to Melbourne from the busiest trading routes once they are replaced by larger vessels.

For design of future port infrastructure including channels, turning basins and berths, specifications have been developed for a design vessel. The design vessel is the size of the largest vessels likely to be deployed to the Australian trades by 2030.

The principal dimensions of the design vessel are as follows:

- Draught 14.0 metres
- Length 300 metres
- Beam (width) 40 metres

A container vessel of this size typically has a maximum capacity of 6500 TEU.

Around 26% of container ships accessing the port in 2005 had a maximum summer draught equal to or greater than 11.6 metres and were therefore potentially affected by draught limitations. Approximately 12% of dry bulk ships and 40% of liquid bulk ships were similarly affected – refer Table 30.

Table 30 2005 ship type by maximum summer draught equal to or greater than 11.6m

Ship type	Ships >= 11.6m draught	% of visits
Conventional	4	2.2
Container	340	26.0
Roll-on/roll-off	27	3.8
Pure car carrier	4	1.4
Dry bulk	26	12.0
Liquid bulk	90	39.5
Passenger	0	0
Non-commercial	1	0.9
Total	492	14.1

8.7 Channels and berths

Channels and waters within Port Phillip Bay and the Yarra and Maribyrnong Rivers serving the port are controlled by PoMC. Parks Victoria is responsible for the management of the recreational use of the waters of the bays and rivers.

Port Phillip Bay is a large, relatively shallow body of water with a restricted entrance to Bass Strait from the bay. All commercial vessels entering or leaving the port are required to use the defined shipping channels.

PoMC maintains the channel depths in Port Phillip Bay at a depth of 13.1 metres. This restricts vessels arriving and departing the port to a maximum draught of 11.6 metres at any time and 12.1 metres with tide assistance.

There are many container ships operating both in Australia and on other major trade routes, whose draughts exceed these limits and therefore are unable to load to their full capacity.

The port currently caters for container ships in excess of 4000 TEU capacity, however there is increasing demand for deeper draught as larger ships are deployed to the Australian trade routes. PoMC has been advised by its customers that channel depth is a priority issue, and that this matter needs to be addressed immediately.

8.7.1 Channel capacity

A review of channel capacity from the pilot boarding ground in Bass Strait to Victoria Dock was undertaken as part of the preliminary feasibility study for the channel deepening project.

The ship number adopted for traffic modelling was substantially more than the 6000 estimated by PoMC in Section 8.6.1. The study concluded that there was no indication that delays would increase to the extent that significant congestion of the channel would result.

Further ship simulation modelling is now being undertaken to confirm this conclusion.

8.7.2 Channel deepening

PoMC is seeking all approvals necessary to deepen sections of the existing channels to provide access to the Port of Melbourne for deeper draught vessels. The Channel Deepening Project is currently the subject of a Supplementary Environment Effects Statement.

The project is vital to:

- address the current draught restrictions whereby up to 30% of vessels cannot load to full capacity
- accommodate the next generation of deeper draught container vessels
- maintain Melbourne's competitive advantage as the lynchpin in the logistics chain for Victoria and south-eastern Australia
- benefit from economies of scale by reducing costs in the logistics chain for importers and exporters.

Action

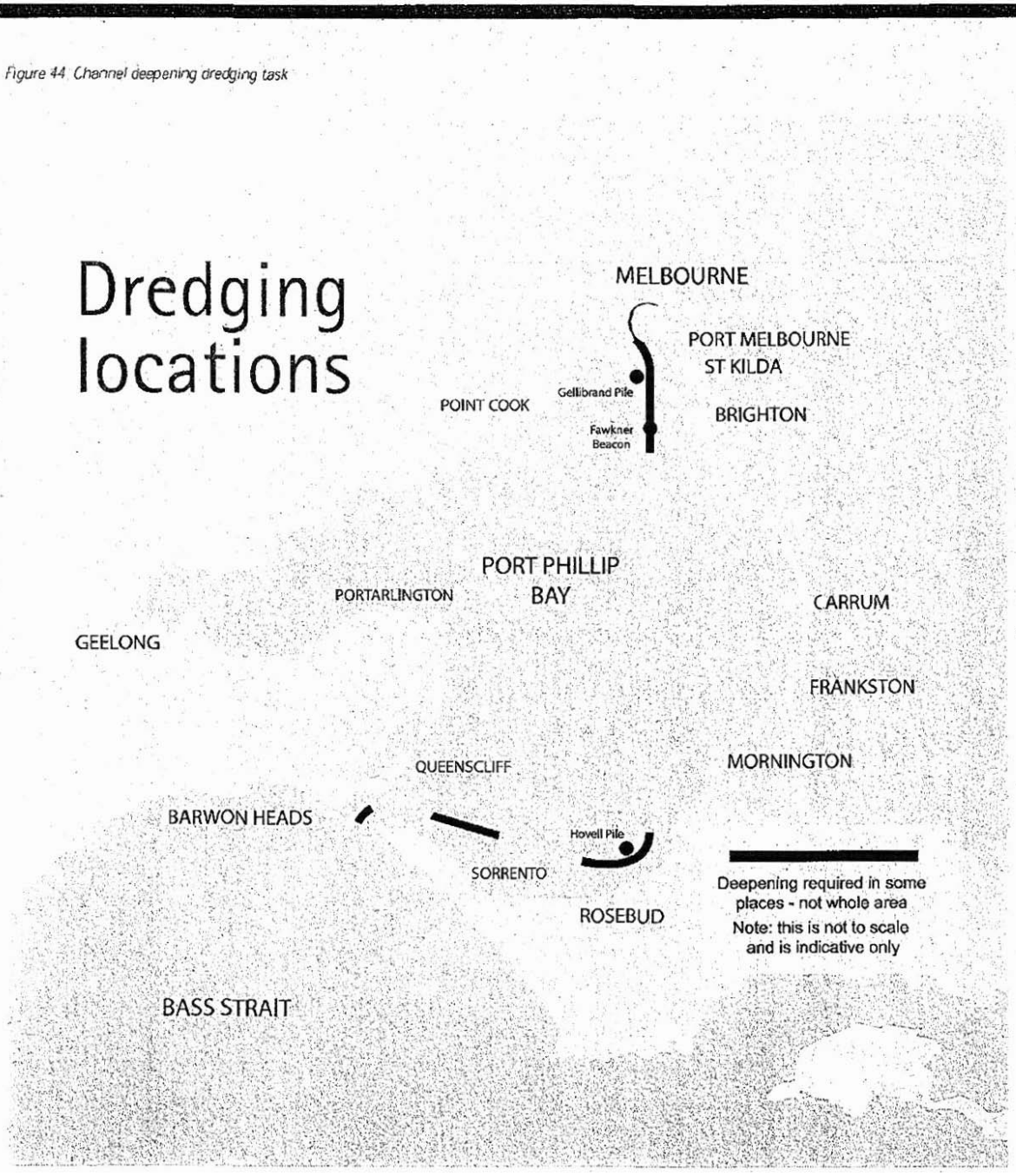
PoMC is seeking all approvals necessary to deepen sections of the existing channels to accommodate deeper draught vessels to 14m at all tides subject to metocean conditions.

The Victorian Government has given its in-principle support to the project subject to:

- the necessary environmental approvals required under the *Environment Effects Act 1995* (Vic), the *Coastal Management Act 1995* (Vic) and the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*
- satisfactory resolution of technical issues relating to the project
- government acceptance of a sound financing strategy for the project.

The broad scope of the channel deepening works is shown in Figure 44.

Figure 44 Channel deepening dredging task



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8.7.3 Berth deepening strategy

Key improvements to the commercial berths are required to complement the dredging element of the project. The work varies from berth to berth, but generally comprises the installation of new fenders, piling, deck strengthening and remediation of deteriorated elements of the existing structures necessary to accommodate 14-metre draught vessels.

The improvements are summarised below and shown in Figure 45.

Swanson Dock berths (east and west sides)
Swanson Dock berths will be modified to accommodate the design vessel.

Gellibrand Pier
Rehabilitation and piling works will be undertaken at Gellibrand Pier to allow a deepening and extension of the existing berth pocket and the adjacent area (to a width equal to the maximum beam of the design vessel plus 20 metres) to allow deep-draught access.

Holden Dock
Rehabilitation and piling works will be undertaken at Holden Dock to allow a deepening of the berth pocket (or the whole dock if required) to minimise the impact of the surge effect associated with the transit of deeper draught vessels past the dock towards Swanson and Appleton Docks.

Appleton Dock berth F
Appleton Dock F berth will be reconstructed as a dedicated grain-only facility.

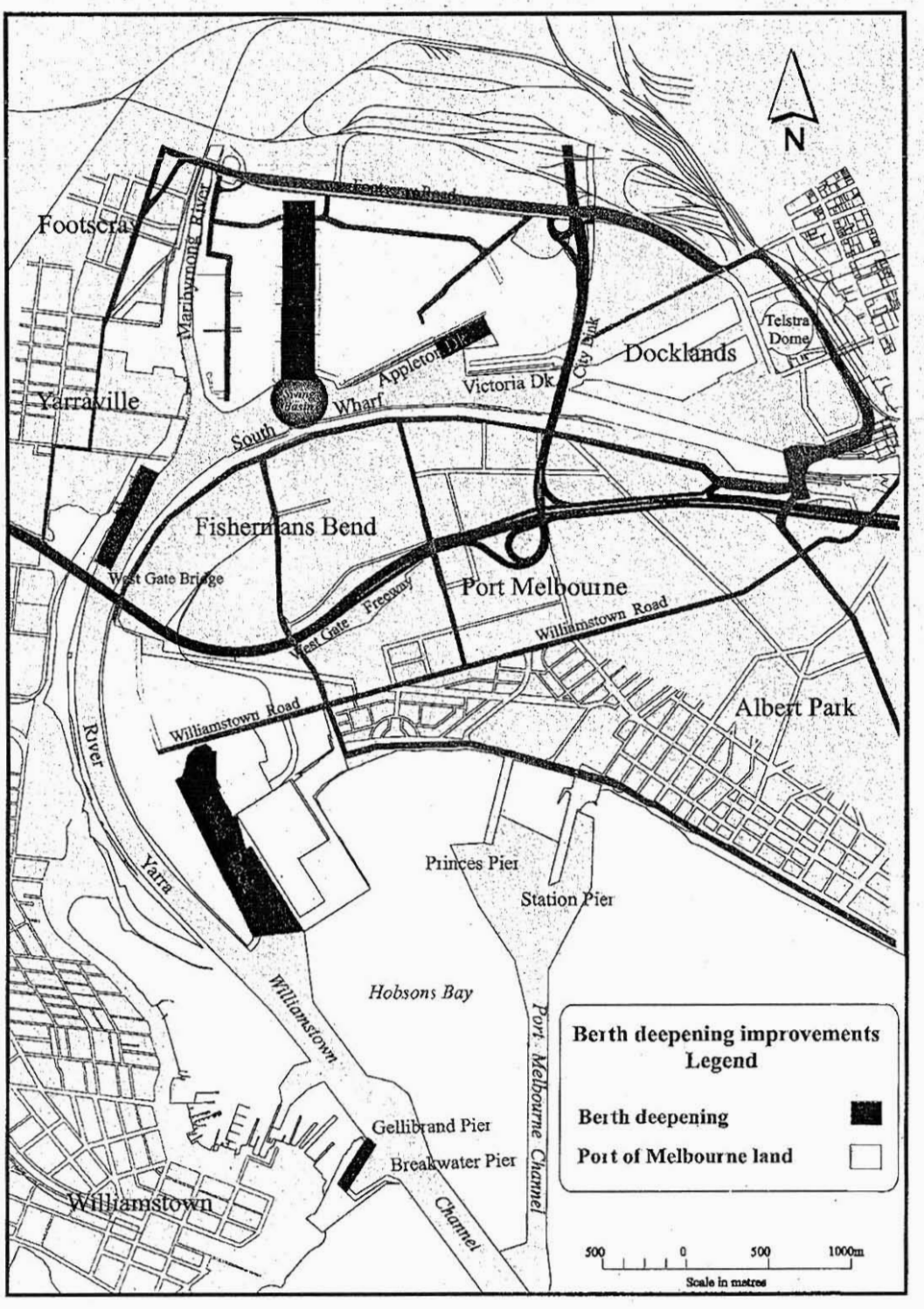
Webb Dock East
Webb Dock berths will be strengthened and dredging undertaken to accommodate the design vessel when container operations commence at this facility around 2018.

8.7.4 Swinging basins

Swinging basins will be deepened and in some cases enlarged progressively to accommodate the current and predicted growing fleet of larger deeper draught vessels.

At Swanson Dock wharf demolition and bank stabilisation will be undertaken to allow modifications to the existing swing basin to accommodate the design vessel – Refer Figure 45.

Figure 45 Berth deepening improvements



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9. Melbourne Port@L

Melbourne Port@L is a long-term strategic planning initiative of the state government to improve the efficiency and capacity of the Port of Melbourne. Melbourne Port@L will integrate, from a port system perspective, the port, the adjacent Dynon rail precinct and the other rail terminals used for collection and distribution of containers, into a single intermodal hub and improve road and rail links from the port to the outer metropolitan area and regional Victoria. These improved transport links will support the development of outer urban intermodal facilities in the west, north and south-east of Melbourne.

The government has established the Melbourne Port@L Board of Management which includes DoI, VicRoads, PoMC and VicTrack representatives to progress the concept. The board will also play an important role developing and strengthening relationships with local communities.

Melbourne Port@L initiatives will seek to:

- enhance rail and road access to, and between, rail and shipping terminals
  use information technology to improve logistics-chain performance
- reduce road congestion around the port
- free up strategic land within the Port@L precinct for freight-related activities
- encourage growth of outer metropolitan intermodal terminals servicing the port
- increase the Port of Melbourne's capacity, including its container terminal capacity at Swanson Dock.

The Melbourne Port@L Board of Management is releasing the Port@L development strategy for public consultation in parallel with the PDP.

It is conceivable that implementation of initiatives associated with the Melbourne Port@L may result in a medium to long-term vision of the port that concentrates international containers in the Swanson/Appleton/Victoria Docks precinct.

9.1 Dynon rail precinct

Relocation of the Melbourne Wholesale Markets from their Footscray Road location around 2010 will facilitate development of this site for more appropriate port related activities.

To support the 30% rail mode share target, the Melbourne Port@L Board of Management is proposing the creation of a metropolitan intermodal terminal (MIT) on this site.

The MIT will have efficient freight rail connections to key suburban intermodal terminals, around which non-core port container transport and logistic services and other supply chain activities will be encouraged to locate to provide the base volume for shuttle train operations.

9.2 Dynon Port Rail Link (DPRL)

The efficiency and capacity of the existing on-port rail terminals is severely constrained by the number of at-grade rail crossings, and particularly by the one at Footscray Road. An initial stage of the Melbourne Port@L initiative is the DPRL project being undertaken by DoI using AusLink funding. This project will eliminate three existing at-grade crossings and allow longer trains to operate in the port. Delays to road traffic on Footscray Road, Enterprize Road and Appleton Dock Road caused by train operations will also be eliminated.

9.3 Road network

Overall the port is well serviced by the external road network having adequate capacity to service the hinterland, however a number of local and metropolitan road improvement strategies have been identified to increase capacity through the planning period. These road improvement strategies largely intend to deal with Melbourne's growing east-west road capacity requirements. PoMC will ensure that sufficient allowance is made in these strategies for the port road freight task.

Action

PoMC will work with VicRoads to ensure that sufficient allowance is made in road improvement strategies for the port road freight task.

9.3.1. Footscray Road

Although the road freight task associated with the port generates only a small percentage of all road movements in the local area there is still a need to ensure that efficient road freight links into the port and Dynon precincts are maintained

PoMC in cooperation with VicRoads has independently developed a road plan for the local precinct until 2023 largely based on Footscray Road. This plan provides details of timings and works required

For the Port@L concept to work effectively, it will be necessary to improve connectivity between Swanson Dock to the south, and current and future rail facilities to the north. This is likely to require consideration of design solutions (e.g. grade separation of Footscray Road) and/or provision of alternative east-west routes for through traffic. These are matters which will be fully considered in the $5 million East-West Link Needs Assessment recently announced in the government's *Meeting our Transport Challenges* statement.

9.3.2. Dock Link Road

Dock Link Road provides access from the port to the Pacific National (PN) interstate terminal at the Melbourne Freight Terminal for high productivity vehicles

Although the extension of Dock Link Road from the Melbourne Freight Terminal to Dynon Road has been completed, further works are required to allow high productivity vehicles to continue along Dynon Road and enter the North Dynon Rail Terminal

A road access issue also exists at the at-grade level crossing leading to the Melbourne Freight Terminal. It is expected that this issue will be addressed in conjunction with development plans associated with the Melbourne Port@L strategy

9.3.3 Todd Road/Williamstown Road

To improve traffic conditions in the Port Melbourne/Webb Dock area, including ameliorating the impacts of existing Williamstown Road traffic on local residents, a network improvement study of the Port Melbourne/Webb Dock area was recently undertaken. This study, commissioned by VicRoads, recommended a number of priority road works including:

- widening of Todd Road and Cook Street and placing traffic signals at the intersection of Cook Street and the West Gate Freeway east bound off ramp
- development of Plummer Street as an alternative access route to the West Gate Freeway

Todd Road and Plummer Street network improvements will complement road works in the port to provide an integrated solution to Webb Dock access concerns.

The state government has recently announced funding has been approved for the Plummer Street local truck bypass project scheduled for completion by mid-2008

9.3.4 West Gate Bridge

The West Gate Bridge is near capacity during peak periods. VicRoads is undertaking a review of the West Gate Bridge capacity and exploring solutions to improve its capacity. While the port will contribute only a small percentage of the total traffic, overall congestion may have an impact on port operations and future growth and development

9.4. Rail network

As indicated in Section 8.3, there is expected to be high growth in the volume of containers transported to and from the port by rail and this will put considerable strain on the ability of the external rail network to cope. The Melbourne Port@L initiative will seek to ensure that sufficient capacity is available on the rail network to meet the government's objective

9.4.1 Rail network capacity constraints

Constraints on rail network capacity that need to be addressed include:

- quantity and duration of available daily track access windows on both SG and BG systems
- limited SG track access through Tottenham yard
- lack of train stabling and marshalling facilities close to the port and in the Dynon rail precinct
- possible future noise restrictions on train and terminal operations
- inadequate clearances for double-stacked containers.

9.4.2 Increased network capacity

Opportunities for increasing the capacity of the rail network servicing the port include provision of bi-directional rail between Bunbury Street and Tottenham which has been allocated $40 million under the AusLink five-year program. Further opportunities to increase rail network capacity will be explored with the assistance of VicTrack, ARTC and DoI. For example, additional storage capacity for long trains close to the port will increase network capacity and improve efficiency of rail operations by reducing train delays.

Substantial rail works associated with the DPRL will permit long trains to efficiently operate to and from the on-port rail terminals.

An important part of achieving the government's 30% target on rail is the development of viable shuttle train services between outer urban intermodal terminals and the port rail terminals. The use of the metropolitan passenger BG network for shuttle train operations may be necessary.

Action
PoMC will work with the rail industry towards increasing the capacity of the rail network

9.4.3 Metropolitan rail network

To support a 30% rail mode share, train volume will require a network similar to that required for passenger services. It is anticipated that some metropolitan shuttle trains will share BG track with passenger trains – particularly to the south-east. Freight trains have the advantage that they can be spread more flexibly over a 24-hour period and are therefore able to take advantage of unused capacity in the metropolitan system.

9.4.4 Operating constraints

Twenty-four hour train operations along rail corridors carrying freight, and at intermodal terminals, may cause noise impacts on adjacent communities that will need to be effectively managed by rail authorities and operators.

PoMC will work with these parties to develop buffering strategies for local rail access corridors and terminals.

Action
PoMC will work with rail authorities and operators to develop buffering strategies for local rail access corridors and terminals

9.5 Off-port container logistics

Off-port container depots/parks are increasingly important for the port. There are transport efficiencies and logistic benefits in some container depots being located near port terminals and exporters.

The increasing use of near port and outer urban container collection/distribution hubs, referred to as inland container depots (ICDs), with rail or road shuttles to port terminals, although involving double handling, may benefit the transport chain as a whole and increase transport efficiencies alongside environmental and social benefits.

9.5.1 Container depots/parks

Container depots and parks are commonly located both near the port terminals and also off-port on less expensive land near industrial areas. This is the situation in Melbourne, Sydney, Brisbane and Fremantle.

There are transport efficiencies and logistic benefits in container depots, which offer more than simply container park services, being located near port terminals.

There are also benefits in parks being located near exporters to reduce the cost of sourcing empty containers. This is important to both shipping lines and exporters.

As throughput increases, it is likely that the demand for double handling through near-port depots will increase, even allowing for future increased throughput capacity at the port's container terminals on the day shift.

The role of container depots as a buffer between importers and exporters on the one hand and port container terminals on the other is increasing in all of Australia's major container ports.

Key linkages between port container terminals, container parks, importers and exporters are shown schematically in Figure 46.

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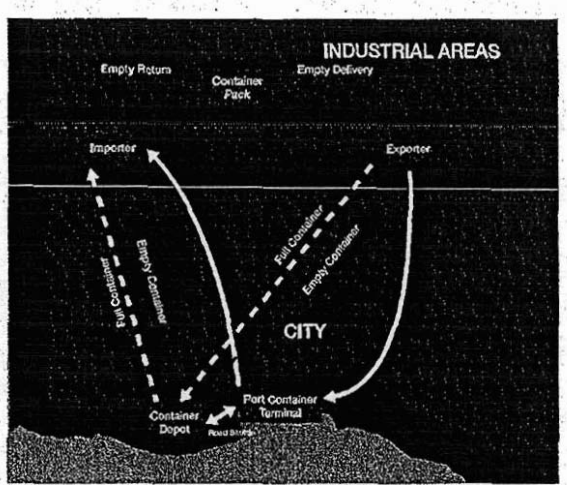
Figure 46 Transport linkages



Action

PoMC will work with the shipping and transport and logistics industry to support development of container depots/parks in strategic metropolitan locations

9.5.2 Inland container depots

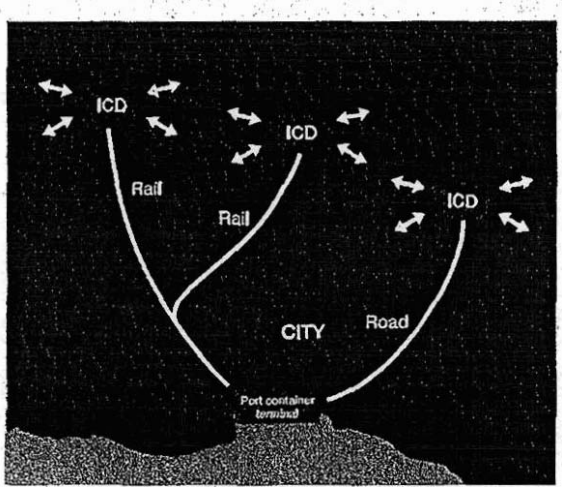
The increasing use of ICDs with rail or road shuttles to port terminals, although involving double handling may benefit the transport chain as a whole and increase transport efficiencies with consequential environmental and social benefits.

The main options for future use of ICDs in this way are:

- direct rail connection between the port and ICD terminals. This is a growing trend in Sydney with short-haul cross-city rail traffic growing from 15% to 25% of total containers over the period 1995-2000.
  Note: It is estimated that to achieve the government's target of 30% on rail between 50% and 60% of the rail task will have an origin/destination in the metropolitan area.
- increasing use of B-double shuttles between the port and ICD terminals.

Key linkages between port and ICD terminals are shown schematically in Figure 47.

Figure 47 ICD and port linkages



A number of organisations are developing or planning to develop ICDs at the following sites

- *CRT- freight terminal and distribution hub*
  CRT- freight terminal has developed a rail shuttle service between on-dock rail at the port and a terminal in Altona
- *SCT- freight terminal and distribution hub*
  SCT has invested in substantial infrastructure at the Laverton terminal to improve road to rail interchange of freight. The company is encouraging storage and manufacturing businesses to locate in the local precinct and utilise the distribution facilities, either the rail shuttle to the port, interstate rail or trucks to specific customers in the metropolitan area

SALTA/Westgate Ports – freight terminal and distribution hub, Laverton

SALTA/Westgate Ports propose to provide a rail shuttle service from the Victoria Dock rail siding and cargo freight station to the Laverton freight terminal and distribution hub.

P&O Intermodal – freight terminal and distribution hub

P&O Intermodal has established the first official inner urban distribution hub. P&O Intermodal is completing construction of a spacious, purpose built, multi-modal terminal with 130 hectares of storage, processing and packaging capacity at Somerton. The P&O Intermodal philosophy is to create an environment that can establish the critical freight mass for rail and freight hub to work together.

Murray Goulburn – distribution hub

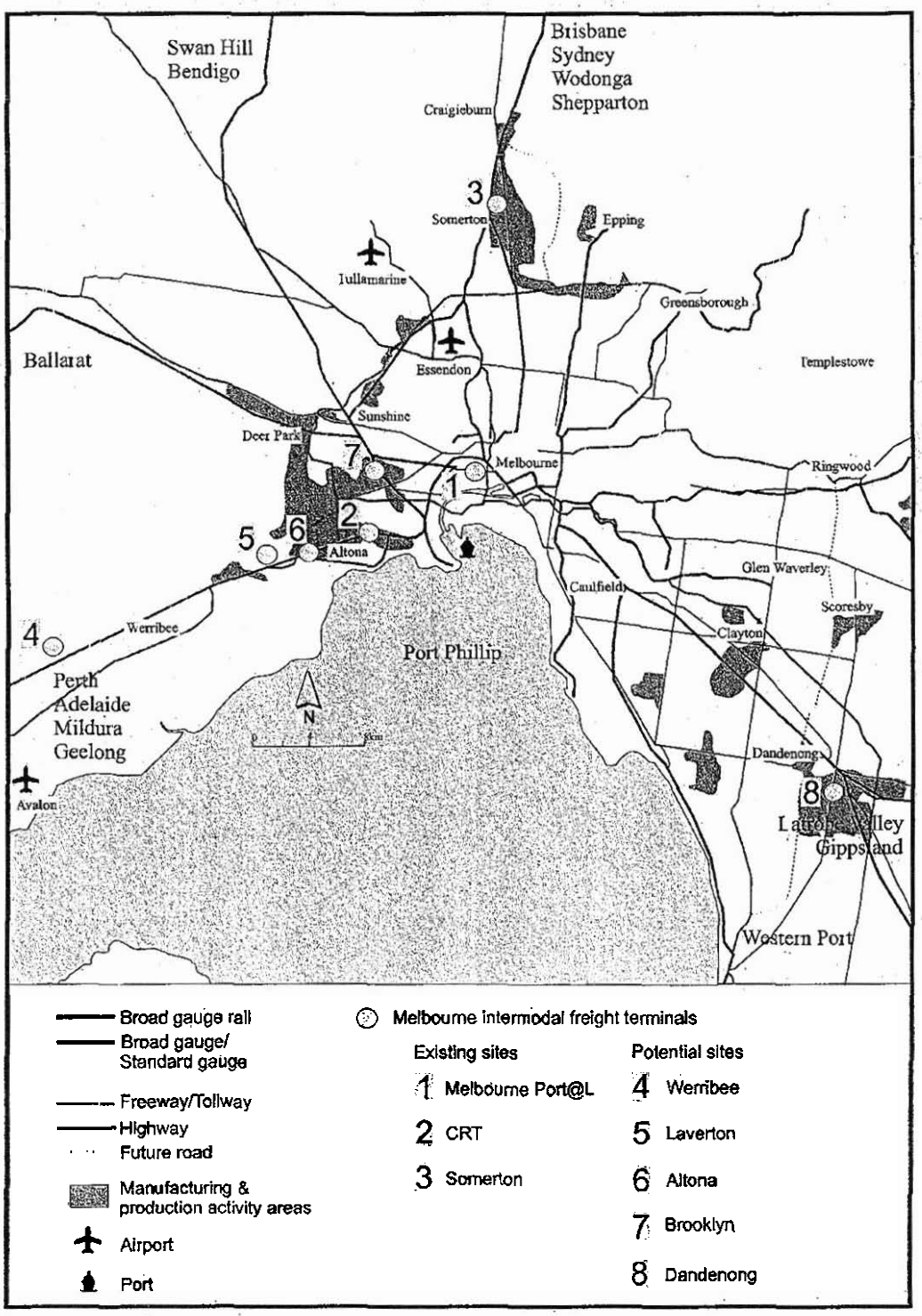
The outer urban location of the plant in Laverton means that the raw domestic product can reach the packing centre without needing to travel through central Melbourne. Rail is not available at this distribution hub, so Murray Goulburn has a system of trucks organised to bring produce to the port from the packing plant in Laverton where it is transported by ship to domestic and international markets.

Figure 48 indicates location of existing and potential inland container depots.

Action

PoMC will work with the government and the transport and logistics industry to support development of viable outer urban container collection/distribution hubs

Figure 48 Inland container depot locations



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10. Pricing and funding

10.1. Legislative framework and ESC

On 30 June 2004 the Essential Services Commission (ESC) submitted its report on the regulation of the Victorian ports to the Minister for Finance. The report recommended implementation of a price monitoring framework for the regulation of the Victorian ports. In November 2004 the Minister for Transport indicated the government's support for those recommendations in the *Victorian Ports Strategic Framework*.

The government's strategy for the economic regulation of the commercial trading ports as outlined in the framework is as follows:

The Government will ensure that port and related rail infrastructure is properly regulated by:

a. *supporting continued independent economic regulation of commercial trading ports in Victoria by the Essential Services Commission (ESC) where market power exists that may limit competition between ports or result in unfair or unreasonable port charges being imposed on users*
b. *supporting the ESC's proposals to introduce a lighter handed 'price monitoring' approach to port price regulation effective from 1 July 2005, subject to scheduled review and appropriate threat of re-regulation*
c. *supporting the ESC's proposals to declare the shipping channels of Port Phillip Bay and its entrance for the purpose of regulating access and, in particular, protecting the access rights of the users of the Port of Geelong*

In light of the government's support for the ESC's price monitoring framework the ESC and PoMC have implemented a new regulatory structure.

The implementation of the price monitoring framework involved:

- the ESC making a price monitoring determination that specified the regulatory obligations of the port and the role of the ESC
- the ESC developing in consultation with the port the detailed requirements in relation to the provision of financial statistical and quality of service information
- the development and publishing of a pricing policy statement by the port covering the period to 2010
- the development and publishing of a reference tariff schedule by the port applicable from 1 July 2005

In its price monitoring determination the ESC suggested that PoMC should have regard to the following pricing principles when establishing prescribed prices.

Prescribed prices:

- should generate expected revenue that is sufficient to meet the expected efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued)* commensurate with the risks involved
- should not provide a sustained level of revenue that is significantly above that which would be or would have been sufficient to meet the efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued)* commensurate with the risks involved
- should not be structured to advantage the operations of PoMC over those of a competitor in a related market except on the basis of costs of supply
- should not discriminate between users of equivalent ('like for like') services where those users compete in a related market other than on the basis of differences in the costs of supply
- may reflect efficient forms of price discrimination as follows
  - multi-part pricing and price discrimination should be employed when these will promote efficient outcomes
  - the expected revenue raised from the prices applying to a particular service should be:
  - no lower than the forward-looking avoidable cost of providing that service
  - no higher than that required to support the provision of that service on a stand-alone basis.

PoMC *Pricing Policy Statement* has reflected these principles and has included information about how PoMC has:

- calculated its reference tariffs
- applied the pricing principles in developing its reference tariffs applied any other relevant economic principles or commercial considerations in developing its reference tariffs

In 1996 the Victorian Government set the value of the Port Phillip shipping channel assets existing at that time as zero (for regulatory purposes).

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10.2. Private sector investment

The overarching strategy driving the PDP is for PoMC to provide the infrastructure backbone necessary to support the significant private investment that will enable the Port of Melbourne to continue to satisfy the trading needs of the state

In the short to medium term PoMC is working towards having development and operations agreements with key service providers that provide for investment strategies for infrastructure equipment and technology and define a set of minimum service level benchmarks that will maintain or improve the service levels to users of the port

PoMC will grant leases to other investor operators commensurate with the level of new investment in developments that are consistent with this PDP

In its commercial dealing and allocation of land PoMC will have regard to its obligation under the *Trade Practices Act 1974* (Cwlth) and the benefits of competition to the operation of the port

10.3. Development agreements

A number of the development strategies defined in the document will be supported by mutual development deeds providing commercial commitments to investment

10.4 Funding

PoMC expects that direct government contribution to any element of the plan will only occur when there is a demonstrable public good element or issue of national importance for the project PoMC will therefore need to assume that this plan will be self funding

PoMC has developed financial models of future port pricing which take into consideration the need to fund the development of the port Major assumptions of the models include:

- the capital expenditure program outlined in this plan
- capital and operating costs of the Channel Deepening Project
- pricing consistent with the ESC pricing principles
- a commercial return on non-regulated assets and services
- continuation of the commercial basis of financial management i e competitive neutrality through application of NTER GST and FAL expectations of dividends, conformance to a BBB credit rating minimum self funding of borrowings
- trade growth consistent with that outlined in Section 5 of this plan

It is evident from this modelling that PoMC can support the PDP through a combination of appropriate pricing and growth in trade. The port's pricing is substantially below that of its major competitors and it is expected that even after the large scale expenditures on the Channel Deepening Project (subject of a Supplementary Environment Effects Statement) that the port will retain its competitive position with other Australian gateway ports

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10 4 1 AusLink program

Investment that safeguards and improves freight access to the port also provides substantial national benefits within the scope of AusLink The *AusLink National Land Transport Plan* sets out the Commonwealth Government s investment priorities for a network of land transport corridors and intermodal freight terminals of national importance PoMC will work with the state government to establish priorities within the AusLink program for investment in transport infrastructure projects on key transport corridors and intermodal freight terminals linking the port to the national road and rail network

Action
PoMC will work with the state government to establish priorities within the AusLink program for investment in transport infrastructure projects on key transport corridors and intermodal freight terminals linking the port to the national road and rail network

10 4 2 Road funding

State government road funding is available for appropriate freight transportation road works

PoMC also provides funds for road works within the port boundary and at the interface with the external road network Port tenants are in some circumstances also encouraged to contribute to road works which benefit them

10 4 3 Rail funding

The DPRL – refer Section 9 2 is a freight project of national importance and the state government sought and received funding for it through the Commonwealth Government s AusLink Initiative

Other rail projects within the port may be jointly funded by PoMC and relevant tenants while external projects are expected to be funded by rail authorities and governments

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VICTORIAN **PORTS** STRATEGIC FRAMEWORK

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The Place to Be

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CONTENTS

PART A

THE NEED FOR A VICTORIAN PORTS STRATEGIC FRAMEWORK

INTRODUCTION

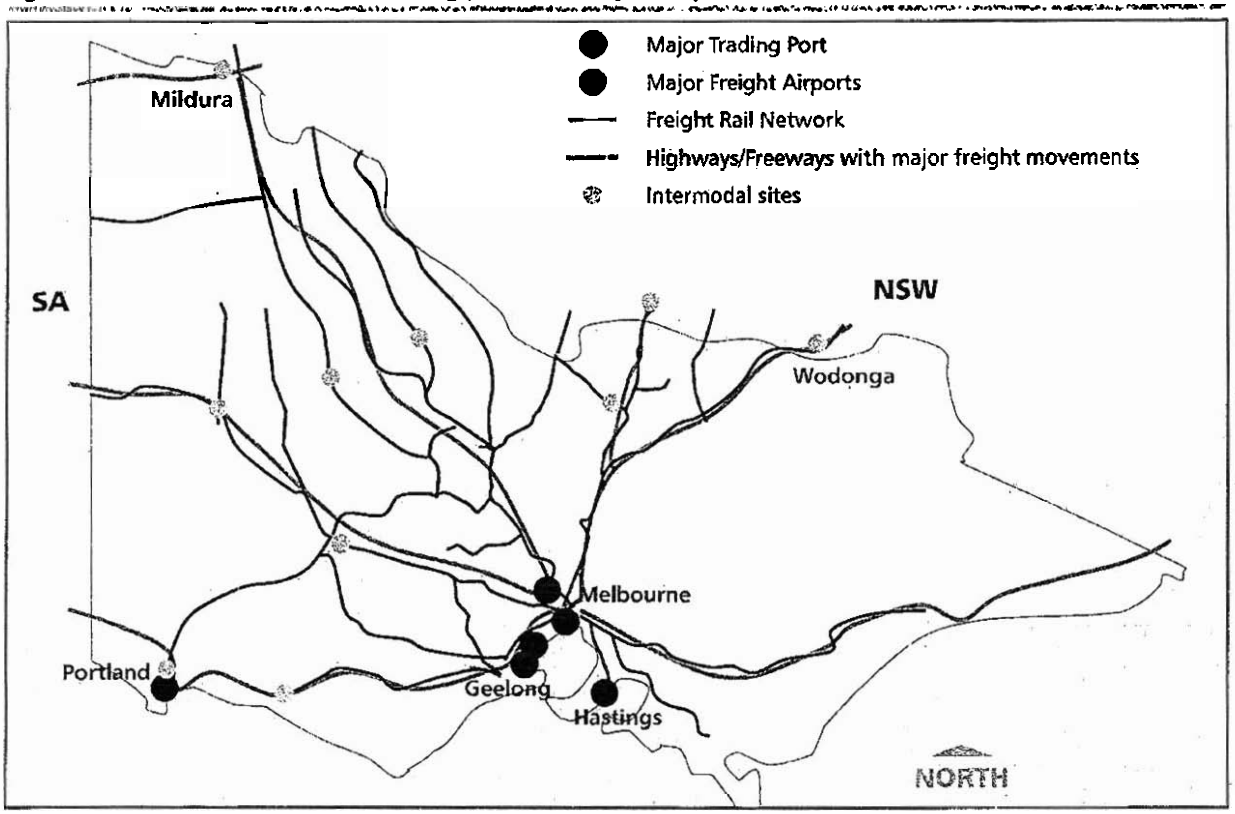
Our commercial trading ports are key engines for Victoria s economic growth At the simplest level ports are the interface between land and sea transport Ports are critical transfer points in Victoria s transport network They are part of a regional and global transport system which needs to operate at world competitive levels for the benefit of the Victorian and Australian economies

The commercial trading ports of Victoria handled more than $53 billion worth of import and export trade last year (in terms of customs value) [1]

To provide a competitive advantage for the State s exporters and to keep the cost of imported consumer goods and business inputs low the commercial trading ports must be mindful of international trends in shipping and logistics

Victoria s commercial trading ports must satisfy the demand of growing trades and manage potential risks that may emerge through urban encroachment and increasing environmental safety and security pressures The Victorian Ports Strategic Framework identifies the Government's strategies and policies to assist the commercial trading ports port service providers and freight operators to meet these challenges

Figure 1. Victoria's commercial trading ports and key transport networks



[1] Australian Bureau of Statistics (2004) Imports and Exports – Victoria 2003-04 unpublished data Commonwealth of Australia This data excludes coastal and domestic trades to and from the commercial trading ports The Port of Melbourne Corporation (POMC) estimates the total value of all trade including coastal trades through its port is approximately $70 billion a year

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The Framework targets the Government s three core directions for the commercial trading ports:

> building on existing capabilities and competitive strengths
> anticipating and planning for future land access and infrastructure needs
> providing the right regulatory and institutional settings for a sustainable port system

Strategies to achieve the Victorian Government s vision for commercial trading ports are identified for each direction

VICTORIA'S PORTS

Victoria s ports can be categorised as commercial trading ports or local ports [2]

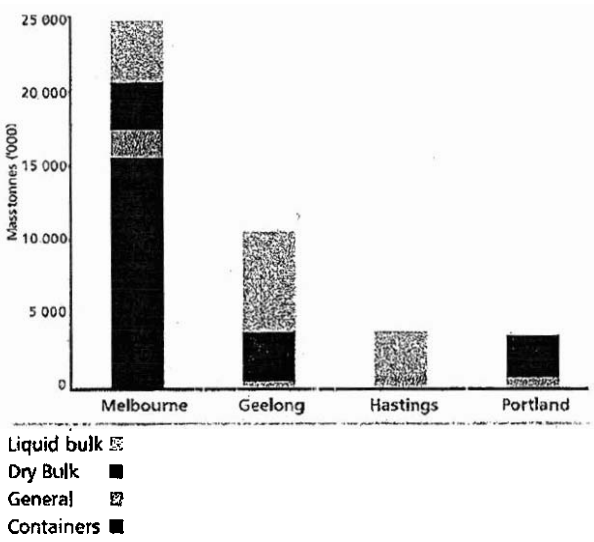
This framework applies to Victoria s four major commercial trading ports: Melbourne Geelong Portland and Hastings (Figure 1) These ports are Victoria's gateways to the world — providing access to more than 300 markets for Victorian exporters

The landside assets of the ports of Geelong and Portland are owned and operated by private businesses The ports of Melbourne and Hastings are in public ownership under the control of two statutory port corporations The operation of the Port of Hastings is contracted by the port corporation to a private business

While containers dominate Melbourne s trade the bulk trades are also significant for Victoria's economy — most particularly in regional Victoria (Figure 2)

This framework applies to Victoria's four major commercial trading ports Melbourne, Geelong, Portland and Hastings

Figure 2. Port trade mix for 2002–03



Source Essential Services Commission (ESC)(2004) Regulation of the Victorian Ports Final Report June p 17

PORTS ARE KEY CONTRIBUTORS TO VICTORIA'S ECONOMY

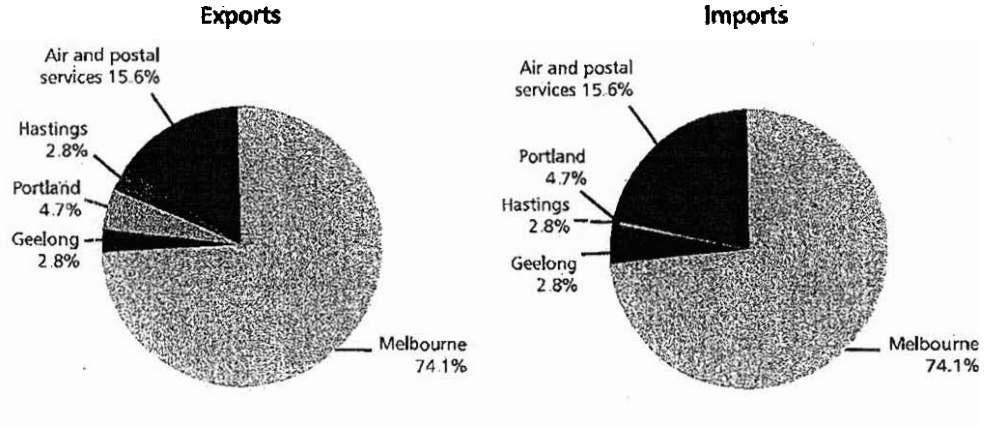
Victoria s commercial trading ports make a vital contribution to the economic well-being of Victoria

Almost 85 per cent of Victoria s traded goods (by customs value) are exported from one of Victoria's commercial trading ports and almost 80 per cent are imported through them (Figure 3) The operation of Victoria's commercial trading ports generates employment and income for local communities as well as flow on effects to other local businesses

The Port of Melbourne is Australia s largest and busiest container port handling 37 per cent of the nation s container trade The port's efficient operation is essential to both the Victorian and Australian economies

[2] Victoria has 13 'local' ports which vary in size and function They service the commercial fishing industry recreational and boating interests and regional tourism Their total quantifiable economic impact to Victoria is estimated to be $546 million a year which includes a direct contribution of $190 million and an indirect contribution of $356 million generated by flow on production and consumption induced effects Source: Deloitte Touche Tohmatsu *Local Ports of Victoria Economic Impact Study* September (2003) The Department of Sustainability and Environment (DSE) is responsible for managing the overall program for local ports including strategic planning and public funding

Figure 3. Victorian international goods trade by customs value 2003–04



Source Australian Bureau of Statistics (2004) Imports and Exports – Victoria unpublished data

POMC estimates the gross impact of the port on the Victorian economy to be valued at $5 4 billion Of this the direct and indirect value-added contribution per year amounts to approximately $1 7 billion This in turn generates an estimated 18 000 jobs [3]

. they make a vital contribution to the economic well-being of Victoria

Victorian commercial trading ports play a central role in the effectiveness and efficiency of the logistics chain that ensures our manufacturers and agricultural producers are competitive in world markets The freight logistics chain is dependent on the provision of high-quality port infrastructure and effective connections between the ports manufacturing centres and the productive hinterlands

The ports and their related businesses form part of an estimated 16 000 businesses that operate primarily within the freight and logistics sector in Victoria, providing more than 100 000 jobs With the high forecasts of growth for the freight task and the high level of investment required to support Victoria's standing as a national freight hub this framework provides a significant input to sustained employment growth in the sector and the economy generally

On a national basis the Bureau of Transport and Regional Economics estimates that a 1 per cent improvement in the efficiency of delivery of national transport services would increase annual Gross Domestic Product (GDP) by approximately $500 million [4]

.and play a central role in the efficiency of the freight logistics chain

The gross impact estimate includes a 'global efficiency impact' a measure of the economic costs that would be imposed on Victoria if the port was not available of $3 7 billion Direct value added was estimated to be approximately $900 million and indirect value-added $800 million In addition to approximately 7 800 full-time equivalent jobs at the port a further 10 900 are estimated to be indirectly generated through flow-on effects largely in land transportation and storage Allowing for the 'global efficiency impact' total jobs created as a result of the port's existence are estimated at 80 000 Source EconSearch *Ensuring a sustainable future The value of the port of Melbourne* October 2002 a study commissioned by Melbourne Port Corporation

[4] In 2002 prices, based on Monash University MMRF-Green Dynamic General Equilibrium Model of the Australian Economy Source Department of Transport and Regional Services (2004) *AusLink White Paper* Commonwealth of Australia p 1

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CHALLENGES FOR OUR PORT SYSTEM

International trends in shipping and logistics and local pressures present challenges to Victoria s commercial trading ports These challenges which can be summarised as:

TRADE GROWTH
COMPETITION BETWEEN PORTS
NEW TECHNOLOGY
INTERMODALISM
URBAN ENVIRONMENTS
ENVIRONMENTAL, SAFETY AND SECURITY PRESSURES,

need to be addressed at both system-wide and individual port levels They are discussed briefly below

Victoria's commercial trading ports face a number of challenges

TRADE GROWTH

Challenge

International trade increased significantly during the 1990s compared to growth in world production This has been reflected in the volume of trade flowing through Victoria s commercial trading ports This growth is expected to continue (Figure 4)

Implications

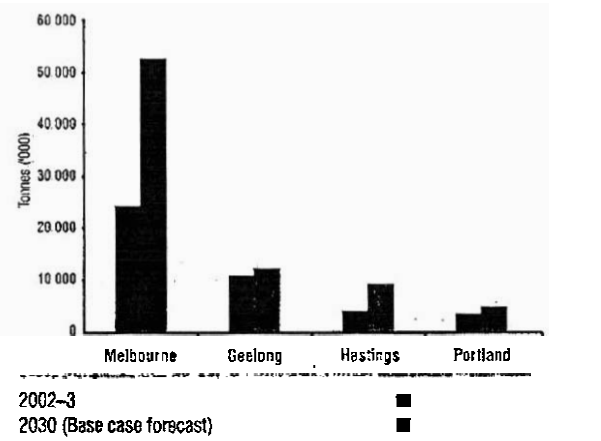
The demands this trade growth will place on port infrastructure capacity and performance will be significant along with the need to manage the impacts of such growth on neighbouring communities

COMPETITION BETWEEN PORTS

Challenge

In an increasingly competitive environment a port s share of trade growth can not be taken for granted Victoria's

Figure 4. Forecast port trade for 2030[5]



Source Actual for 2002–03 from ESC Regulation of the Victorian Ports Final Report *June 2004, p 17 and forecasts from DOI and DTF,* Victorian Ports Strategic Study: Final Report (2000) *Prepared by Maunsell McIntyre Pty Ltd*

commercial trading ports face competition for international trades from each other to some extent and more significantly from interstate ports In the western and northern areas of Victoria grain and other bulk trades are moved between Victorian South Australian and New South Wales ports on the basis of transport costs and service levels. While Melbourne remains the Australian port with the highest container exchanges this Framework must be mindful of ongoing challenges to part of its market share from Adelaide (given that Melbourne services a significant portion of South Australian trade) and from major container operations in Brisbane and Sydney for those cargoes that can be land-bridged cost effectively

Implications

Increasing competitive pressure reinforces the drive to achieve the minimum total freight cost to importers and exporters by improving the efficiency and effectiveness of freight movement into and out of Victoria's commercial trading ports. It also increases the importance of and scrutiny upon regulatory arrangements to ensure conditions for fair competition exist

[5] Forecast trade figures in the 'base' case have been calculated using a series of projections of economic growth, taking into account State national and world economic forecasts and possible trade diversion effects by the National Institute of Economic and Industrial Research (NIEIR) The outputs of this analysis were growth rates for each of the 70 commodities import and export to/from each of the 40 different regions in Australia

NEW TECHNOLOGY

Challenge

The nature of port operations continues to evolve, driven by changes in freight technology and shipping patterns Shipping lines have increasingly sought to reduce costs by rationalising services and using larger ships to consolidate their trades into centralised hub ports These larger ships benefit Victoria's exporters and importers through efficiencies gained by the economies of scale they capture

Currently up to 4th generation container ships come to Melbourne, which can accommodate vessels with a draft of up to 12 1 m with tide assistance However as Figure 5 shows some 3rd generation and many 4th generation vessels can not access Melbourne fully loaded

Providing efficient access for these larger ships and handling their greater volumes of cargo within ever shorter periods of time will place still further stress on port infrastructure and transport links Projects at the Port of Melbourne to facilitate more efficient rail and road connections develop internal transfer technologies and encourage the adoption of information and communications technologies — as well as the proposed channel deepening — are current responses to this challenge New technologies also provide opportunities for ports to service trade growth and compete successfully

Implications

To be successful in an increasingly competitive environment Victorian commercial trading ports will need to continually strive to reduce their internal costs and to anticipate and cater for user needs Achieving higher levels of port productivity will be key to maintaining the competitive position of Victorian ports and exporters Port operators planners and regulators must ensure ports have the capacity and flexibility to adopt new technologies to improve the productivity of their port

INTERMODALISM

Challenge

There is a worldwide trend to improve the interfaces between transport modes. Multimodal approaches provide opportunities for the provision of door-to-door and just-in-time total logistics services While this trend is most advanced in the container sector it is also affecting the bulk trades Victorian agricultural producers and manufacturers are turning to external total logistics providers to take advantage of efficiencies in transport inventory management and damage minimisation

Efficient intermodal transfers are particularly important because the charges faced by shippers to bring cargo to and from the port and for handling the cargo over the wharf are many times larger than charges for the provision of basic port infrastructure Figure 6 shows that the Port of Melbourne remains the most cost-competitive container port in Australia However inefficiencies in the wider supply and logistics chain can eliminate any gains from improved port performance

Implications

The timely development and efficient operation of port transport links and intermodal operations will have a critical impact on competitive outcomes

Figure 5. Evolution of container ships

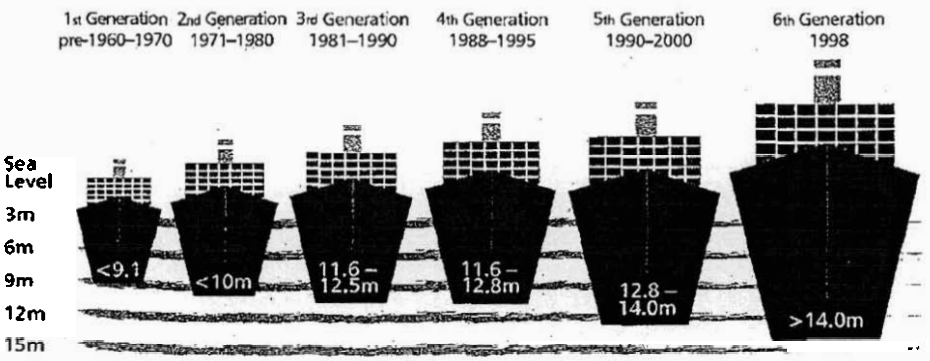


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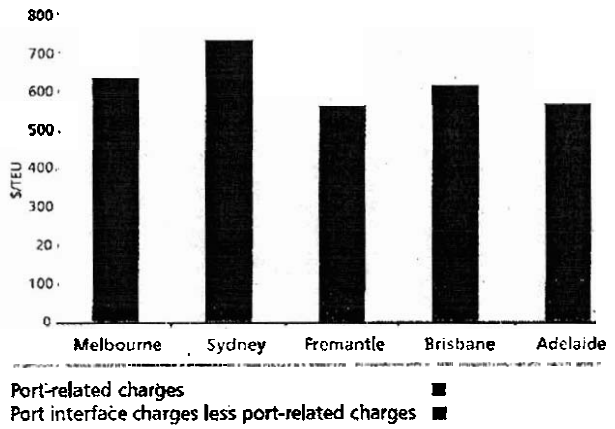
Figure 6. Components and comparison of port interface charges for containerised trade (January–June 2004)



Source: Bureau of Transport and Regional Economics, Waterline Issue 37, September 2004

Note: port-related charges cover port and navigation authority charges arising from ship-based charges (State government charges, berth hire and tonnage) and the cargo-based charges (wharfage). Port interface charges include port-related charges plus ancillary charges (pilotage, towage, mooring and customs fees), terminal charges (stevedoring and wharf handling) and road transport charges

The speed and quality of transport services available currently form one of Victorian industries' competitive advantages. However, if this advantage is to be sustained continuous improvements in road and rail connections and modal interfaces will be required to attract and support increased trade through Victoria's commercial trading ports.[6]

Multimodal approaches demand cooperation between the port terminal operators, international shipping lines and domestic land transport carriers. Coordination of the planning, development and operation of port facilities, intermodal hubs and land transport infrastructure will be essential to maximise intermodal benefits and to optimise the capacity of existing facilities to service growing trade.

URBAN ENVIRONMENTS

Challenge

In recent years, the issue of how ports co-exist with adjoining residential areas has become a major concern to port managers, users and local residents alike. The increasing popularity of residential development adjacent to working ports provides many challenges. While a view of ships and port facilities can appear attractive, the issues of pollution through noise, air and light soon impact. Objections and complaints can lead to constraints in the form of curfews, both on the port operations themselves and on the transport movements that support them. This in turn inhibits port investment — as industry becomes reluctant to fund port development when major conflict with the community and planning authorities is likely. Recreational uses adjoining the port can also conflict with the port's efficient operation and increase community demands for regulatory restrictions on commercial port operations.

Implications

Commercial trading ports need to manage forecast growth in a sustainable way to minimise potential impacts on public amenity and the consequent trade risks to port operations and competitiveness. *Melbourne 2030* has identified the critical importance of the ports of Melbourne and Hastings and protects them as special activity centres with transport links to other designated industrial areas and freight terminals. Similar protection is being sought for the Port of Geelong.

Long term land use planning for all commercial trading ports, including planning and implementation of effective buffers, must be undertaken. This planning must involve effective consultation and the outcomes and implications must be clearly communicated to neighbouring communities. This is not an ad hoc process — it can only be achieved through the ports' ongoing participation in and engagement with their surrounding communities.

[6] Department of Infrastructure (DOI) and Department of Treasury and Finance (DTF) (2000) *Victorian Ports Strategic Study: Final Report*. Prepared by: Maunsell McIntyre Pty Ltd, January.

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ENVIRONMENTAL, SAFETY AND SECURITY PRESSURES

Challenge

As the community places increasing value on environmental and safety outcomes and the international climate leads to demands for new security measures commercial trading ports are and will continue to be subject to increasing regulatory requirements restricting their operations and adding to their costs

Implications

Port operators must proactively manage environmental safety and security risks on an ongoing basis in order to mitigate pressures for new regulation and identify innovative cost-effective approaches to improving outcomes The impact of new regulatory requirements on commercial trading ports should be assessed and alternative approaches to achieving improved outcomes tested

The Government's vision is for Victoria's commercial trading ports to be the most efficient, productive, competitive and economically, socially and environmentally sustainable ports in the nation

A VISION FOR VICTORIA'S COMMERCIAL TRADING PORTS

Victoria s commercial trading ports will be the most efficient productive competitive and economically socially and environmentally sustainable ports in the nation

As the major gateways for the State s international trading effort the ports will be efficiently integrated into the broader freight and logistics system with world-class land and sea transport links and state-of-the-art intermodal transfer facilities

The ports will be key drivers of the State s economy and of their respective regional economies Their capability and commitment to innovation and continuous productivity improvement will underpin Victoria's continuing strength in agricultural and manufacturing sectors

Individually the ports will play to their strengths by building on their core trade competencies and exploiting their natural and commercial competitive advantages They will build their own niches and have the opportunity to compete actively for contestable trades

Collectively the ports as a system will complement each other and provide the most efficient possible combination of total capacity and capability to accommodate Victoria's rapidly expanding trading requirements for the foreseeable future

Victoria s ports will have comprehensive risk-based safety security and environmental management systems in place and will comply with all State national and international obligations

Sound planning will have made adequate provision for the ports to grow sustainably remain readily accessible to their markets and adopt best practice operating techniques

The ports will be seen as good neighbours by their local communities and their critical role in sustaining the economic well-being of the State will be well understood and strongly supported by the Victorian community in general

Part B.

VICTORIAN PORTS STRATEGIC FRAMEWORK

FRAMEWORK DIRECTION 1 — BUILDING ON EXISTING CAPABILITIES AND COMPETITIVE STRENGTHS

The Government will collaborate with industry and the community to build on the competitive strengths of Victoria s commercial trading ports and optimise the use of existing port assets and infrastructure

1 1 BUILDING ON CAPABILITIES

The Government aims to ensure that the best possible use is made of investment that has already been made by both the public and the private sectors in port infrastructure and connecting transport links Avoiding duplication of expensive infrastructure is in the interests of all Victorians

Taking advantage of potential economies of scale and scope while encouraging efficient use of existing infrastructure by continuing to support sustainable competition is central to the Victorian Ports Strategic Framework The gains that can be achieved through improvements in management technology and integrated transport and cargo management processes will defer the need for major new port developments

1 2 REINFORCING EFFICIENT PORT DEVELOPMENT PATTERNS

The Government considers there is in general a logical sequence of port and freight transport development to efficiently meet trade growth demands in Victoria - to capture economies of scale and scope in existing port infrastructure before new port infrastructure is necessary This sequence should be considered the presumption for planning purposes - a presumption which should be revalidated periodically as commercial and other changes occur

Victoria s four commercial trading ports have important roles to play in the port system and can be expected to continue to focus on the particular market segments to which they are best suited Specialisation is not intended to prevent opportunistic competition for trade between Victoria's commercial trading ports but rather to allow the ports to effectively complement each other

The Government recognises that infrastructure development is crucial to the continuing competitiveness of the Victorian port sector and that private port operators and service providers will make their own investment decisions in response to trade opportunities

The Government s role in the provision and use of port and related freight infrastructure is to provide a clear policy and planning context a stable regulatory framework and where appropriate and in the public interest to manage or fund components of transport infrastructure The Government will consider investment directly or through Partnership Victoria arrangements in port and intermodal infrastructure supporting commercial trading port operations where it considers such investment to be consistent with the efficient pattern of development set out in this Framework

There is a broadly logical sequence of port and freight transport development to follow, in building on existing capabilities and competitive strengths in our commercial trading ports

CONTAINERS

For container trades the Port of Melbourne has the advantages of proximity to key markets and extensive existing infrastructure There is considerable scope to increase the capacity of the existing container terminals through enhanced productivity increased channel capacity and developing supporting intermodal systems

The Swanson-Dynon container precinct is estimated to have a capacity when fully developed of between three million and four million twenty-foot eqivalents (TEUs) a year It is anticipated that the Westgate-Webb Dock precinct can be developed to provide similar capacity in the long term However forecasts of total container trade of between five and eight million TEUs by 2030 suggest that even with this development, there is likely to be a need to develop and bring on stream new container handling and storage facilities outside the Port of Melbourne beyond this time frame

The Government considers the Port of Hastings to be the preferred site for future container development once capacity at the Port of Melbourne is reached. Hastings would supplement rather than replace Melbourne and both ports would continue to operate in parallel. Hastings has the advantage of natural deep water (more than 14 m)[7] large areas of vacant land and proximity to the south east of Melbourne - the source and destination of a significant proportion of international container flows in Victoria.[8] However, the development of Hastings for international containers would require substantial supporting infrastructure expenditure and raises significant environmental management issues.[9] These challenges and their impact on logistics chain costs for Melbourne shippers warrant further assessment.

In the meantime, a key task for the newly created Port of Hastings Corporation (POHC) will be to quickly progress strategic planning activities necessary to preserve the capacity to develop the Port of Hastings to handle containers in the long term. In the short to medium term Hastings can be expected to focus on specific opportunities in the bulk and break bulk trades, adopting port design and operating practices appropriate to the environmental sensitivity of the area.

Develop Melbourne as Australia's premier container port while preserving options for Hastings in the longer term

BULK CARGO

Commercial trading ports in regional centres, with lower land costs, established bulk handling facilities and rail connections are well suited to the development of dry bulk trades. Fostering the development of these trades in regional commercial trading ports, through appropriate planning and investment in transport infrastructure, is consistent with Government's commitments in *Growing Victoria Together*.

The location and future of the liquid bulk trades is largely predetermined by sunk investment in existing terminal and processing facilities. These trades will remain in their current locations for the foreseeable future.

BREAK BULK AND COASTAL TRADES

Most of the break bulk trades require little in the way of specialised infrastructure and make relatively modest demands on supporting land transport systems. In these cases, the locational outcomes can be left largely to market forces to determine.

The location of the Bass Strait and other coastal trades are largely determined by existing investment in terminal facilities in the short to medium term. However, these trades could potentially be accommodated at either Hastings or Geelong should the current facilities at the Port of Melbourne be required for container shipping in the longer term.

Break bulk cargo – cars[10]

and support Victoria's regional commercial trading ports as the focus of the bulk trades

[7] In contrast, potential sites at the port of Geelong require extensive dredging and reclamation. This was a finding of the DOI and DTF (2000) *Victorian Ports Strategic Study Final Report*, prepared by Maunsell McIntyre Pty Ltd. January. The issue of developing the port of Hastings for containers was also considered in the NIEIR report into Port Phillip Channel Deepening.

[8] *Melbourne Port Container Origin Destination Study*, Sinclair Knight Merz, Nov. 2002.

[9] An economic study undertaken by NIEIR in 2001 for the Channel Deepening Project identified substantial transport costs for Hastings compared with Melbourne.

[10] The rapid growth in the import and export of motor vehicles has become a major use in the Webb Dock precinct and a critical element in the growth of the Victorian car industry which underpins thousands of jobs.

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PASSENGERS

Bass Strait passenger ferry and cruise-ship services currently accommodated at Station Pier will continue to be based in Melbourne for the foreseeable future The Port of Melbourne offers a central location and close proximity to many of Victoria's major tourist attractions a critical factor for time-constrained cruise-ship passengers Each cruise-ship visit generates on average $1 million in direct and indirect benefits to the Victorian economy and about 20 full-time equivalent jobs annually The *Victorian Cruise Shipping Strategy Destination Victoria 2002-05* addresses the future of Victoria's cruise-ship industry

Strategy 1

The Government will support future port development that builds on the existing capabilities and competitive strengths of Victoria's commercial trading ports by:

a. maintaining the Port of Melbourne as Australia's premier container port through support for developments to maximise the use of the Swanson Dock container facilities until these facilities are substantially utilised and demand for container services warrants the development of the Westgate-Webb Dock precinct for this purpose

b. protecting the future potential of the Port of Hastings to allow container trade to be accommodated in the longer term when the Port of Melbourne is fully utilised (noting that Hastings would supplement rather than replace the role of Melbourne)

c. maintaining the regional commercial trading ports as the focus of the bulk trades through planning and investment in connecting road and rail infrastructure

d. allowing market forces to determine the location of the break bulk and coastal trades in the longer term, noting the capability of the regional commercial trading ports to pursue opportunities in these trades in the short to medium term

e. maintaining the Port of Melbourne as the focus for Bass Strait passenger ferry and cruise ship services

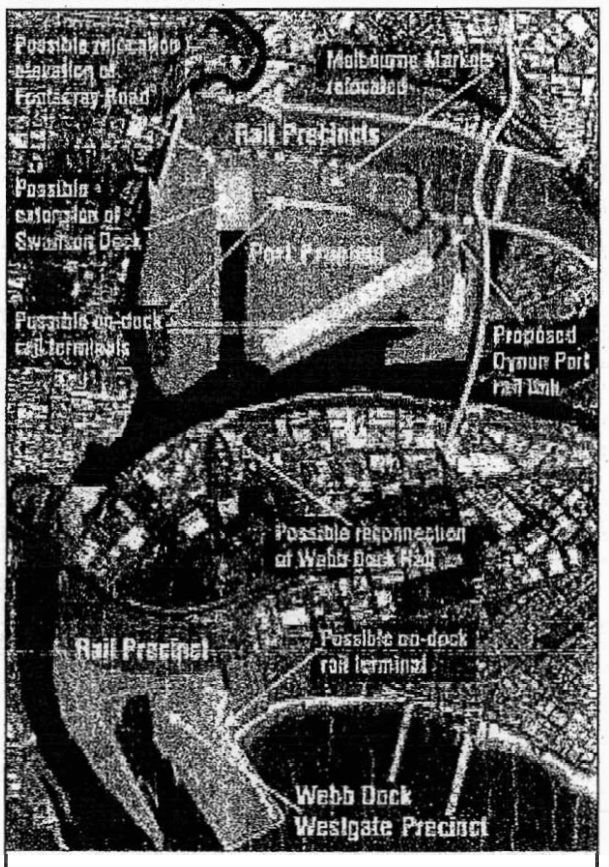
1 3 GETTING THE BEST USE OUT OF THE PORT OF MELBOURNE

Maintaining Melbourne as Australia s leading freight and logistics hub is of vital importance to the Victorian economy The Government is investing in freight infrastructure and systems to address identified performance gaps to maintain and enhance Melbourne s competitive strengths in container trade

MELBOURNE PORT@L

The Melbourne Port@L is a long-term strategic planning initiative to improve the efficiency of the Port of Melbourne primarily by integrating the port and the adjacent Dynon rail precinct into a single world-class inter-modal hub [11] The Port@L concept is illustrated in Figure 7

Figure 7. Melbourne Port@L - long term concept



[11] See: www.doi.vic.gov.au for the Melbourne Port@L blueprint

The Government has established the Melbourne Port@L Board which includes road port and rail track authorities to progress the concept Government initiatives will seek to:

> enhance rail and road access to and between rail and shipping terminals
> use information technology to improve logistics-chain performance
> reduce road congestion around the port
> free up strategic land around the port for freight-related activities
> encourage growth of outer metropolitan intermodal terminals servicing the port
> increase the Port of Melbourne s capacity including its container terminal capacity at Swanson Dock

The Melbourne Port@L Board will consider opportunities for private-sector investment in and around the precinct and work with the Victorian Freight and Logistics Council and other stakeholders to further shape and progress the development

Consistent with this long term vision. the Government will also protect future options to reconnect the ra l l nk to Webb Dock It will progress tn s project when there is a strong business case to do so and all necessary environmental clearances are obtained

PORT PHILLIP CHANNEL DEEPENING

One of the most significant changes to have taken place over the past decade nas been the dramatic increase in sn p size see f g re 5, [9] Th s nas mpl cations for the Port of Melbourne as it is currently limited by channel depth Already some 30 per cent of ships servicing the port cannot load to full capacity

The Government s 2004 economic statement *Victoria Leading the Way* announced that in-principle support has been given to deepening the shipping channels in Port Phillip Bay subject to environmental and other requirements being satisfied Figure 8 shows the areas of proposed dredging More than $20 million in Government and Port of Melbourne Corporation funding has been committed to date The Government has earmarked channel deepening as a priority State project with completion targeted for 2007

Protecting the precious environment of Port Phillip Bay is a key focus of the project One of Australia s most comprehensive environmental effects statements has been completed and is currently being reviewed by an independent panel State and Federal environmental clearances are required before the project can proceed

1 4 IMPROVING RAIL AND ROAD CONNECTIONS

Based on existing trends urban road freight tonnages are estimated to increase by more than 70 per cent between 2000 and 2020 in Australia [10] Road transport dominates urban freight given its inherent suitability for door-to-door pick-up priority delivery and delivery over relatively short distances Most non-bulk goods carried by other modes also use road transport for part of their journey

Expected growth in container traffic demands an expanded role for rail transport to help ease future capacity constraints for roads into ports

In its *Growing Victoria Together statement* the Government stated that better linking of Melbourne and regional ports to industry and agricultural centres across Victoria was a priority action The Government announced an ambitious target to move 30 per cent of port-related freight by rail by 2010 To achieve this the Government is facilitating extensions and upgrades of the intrastate and interstate rail network which enhance the competitiveness of rail transport to and from Victorian commercial trading ports

urban road freight tonnages are estimated to increase by more than 70 per cent between 2000 and 2020

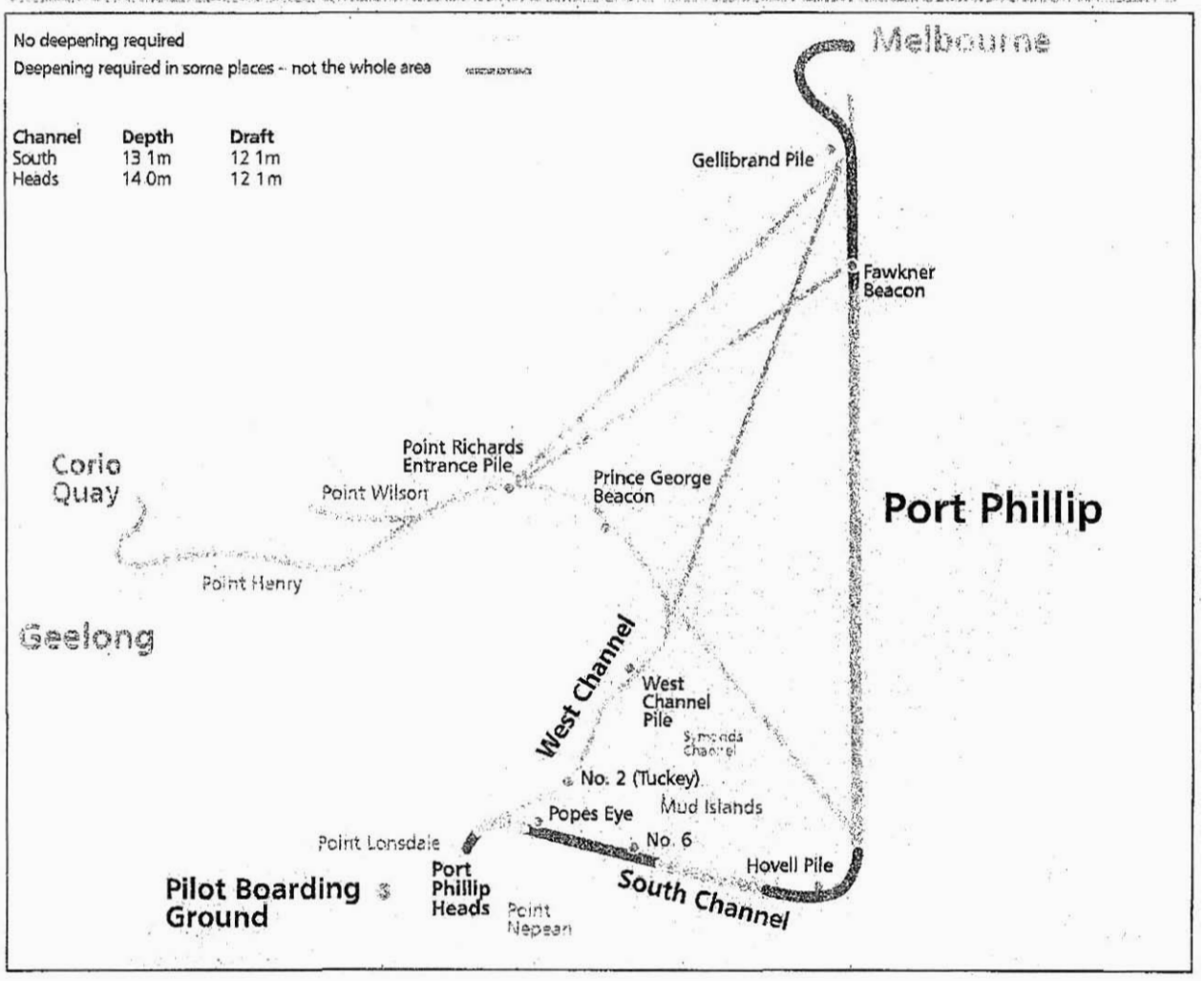
MELBOURNE

The Bureau of Transport and Regional Economics has forecast a tripling of the cost of road congestion in Melbourne over a 20-year period and VicRoads has estimated that the length of road freight routes operating

[9] By the mid-1970s the 1 000 and 1 500 TEU ships of the first and second generation were being replaced by ships of 2000+ TEU leading to the 4000+ TEU Panamax vessels of the 1980s (4th generation) Now there are vessels with an estimated capacity of more than 7 000 TEU (6th generation)

[10] Department of Transport and Regional Services (2004) *AusLink White Paper* Commonwealth of Australia p 6

Figure 8. Proposed Port Phillip channel deepening

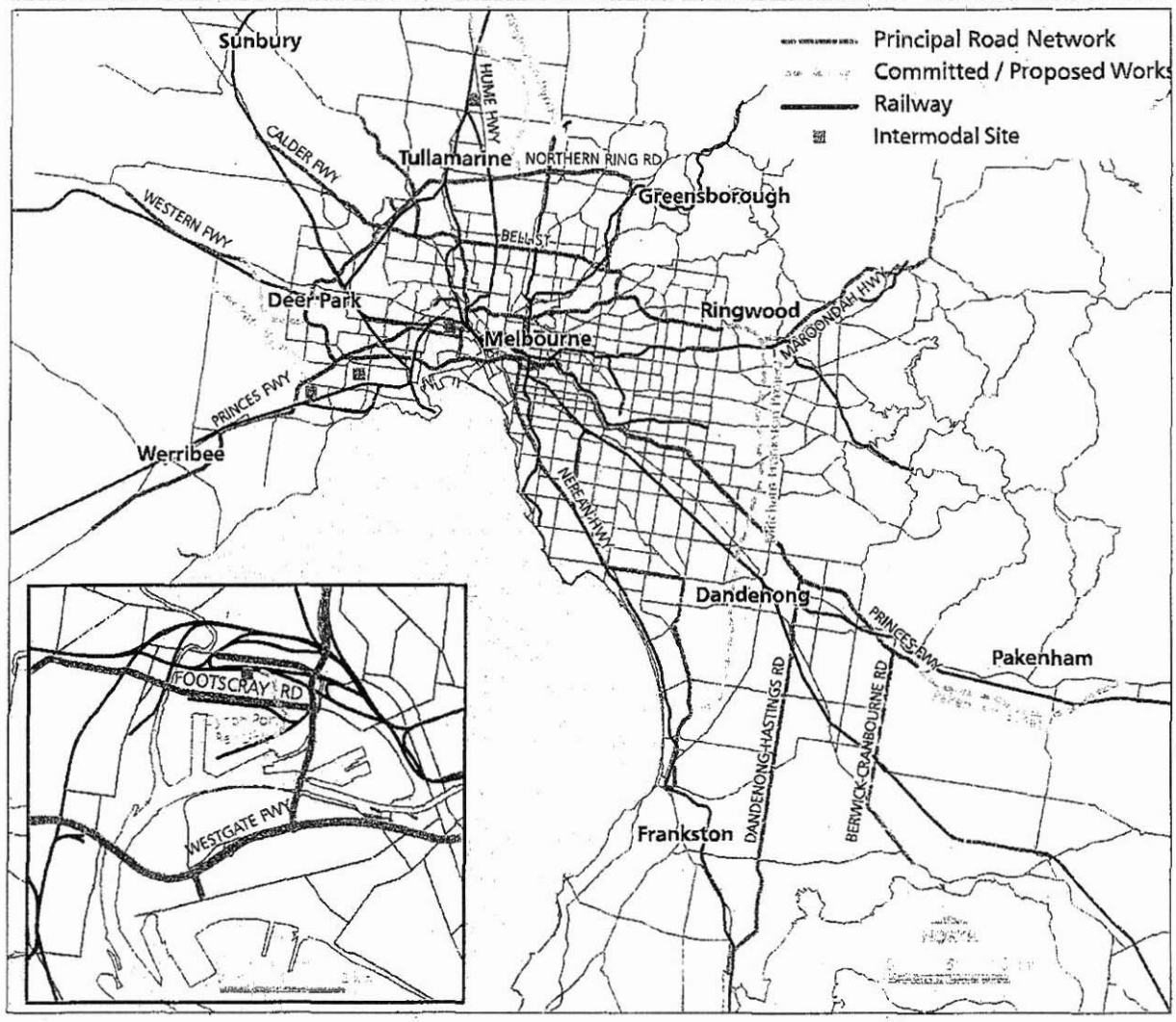


under congested conditions will double from 200 km in 2003 to 400 km by 2020. Future freight performance will depend to a large degree on how Melbourne's road congestion is addressed.

Melbourne 2030 outlines broad strategies for the management of future traffic demand through road improvements focusing development in major activity centres connected by improved public transport and provision of road and rail upgrades to serve growth corridors. The massive Mitcham-Frankston project will provide major traffic relief through a wide sector of eastern Melbourne. Government measures to improve freight and commercial transport in congested metropolitan areas will be further developed in the *Metropolitan Transport Plan* which is currently being prepared.

More than 80 per cent of container movements to and from the Port of Melbourne are by road and 89 per cent of containers handled in the port involve multiple moves before reaching their destination. Rail's share of Melbourne's port traffic is growing – assisted by a new

Figure 9 Metropolitan Melbourne road and rail connections to the port



rail link servicing West Swanson Dock, the use of long trains into the port and the start of port shuttle services. Figure 9 illustrates the Port of Melbourne's road and rail connections.

Increasing rail market share at the Port of Melbourne is vital to accommodating future trade, addressing road congestion and amenity concerns in nearby residential areas and improving the overall efficiency of the Victorian freight and logistics sector.[14]

A key project under the Melbourne Port@L banner is the Dynon Port Rail Link (Figure 10) (due for completion in 2008-09) which has also been strongly supported by the Australian Government contribution of $110 million.

[14] Victorian Government (2004) *Economic Statement: Victoria· Leading the way*, April. Action 2: Improving access to the port pp 6-7

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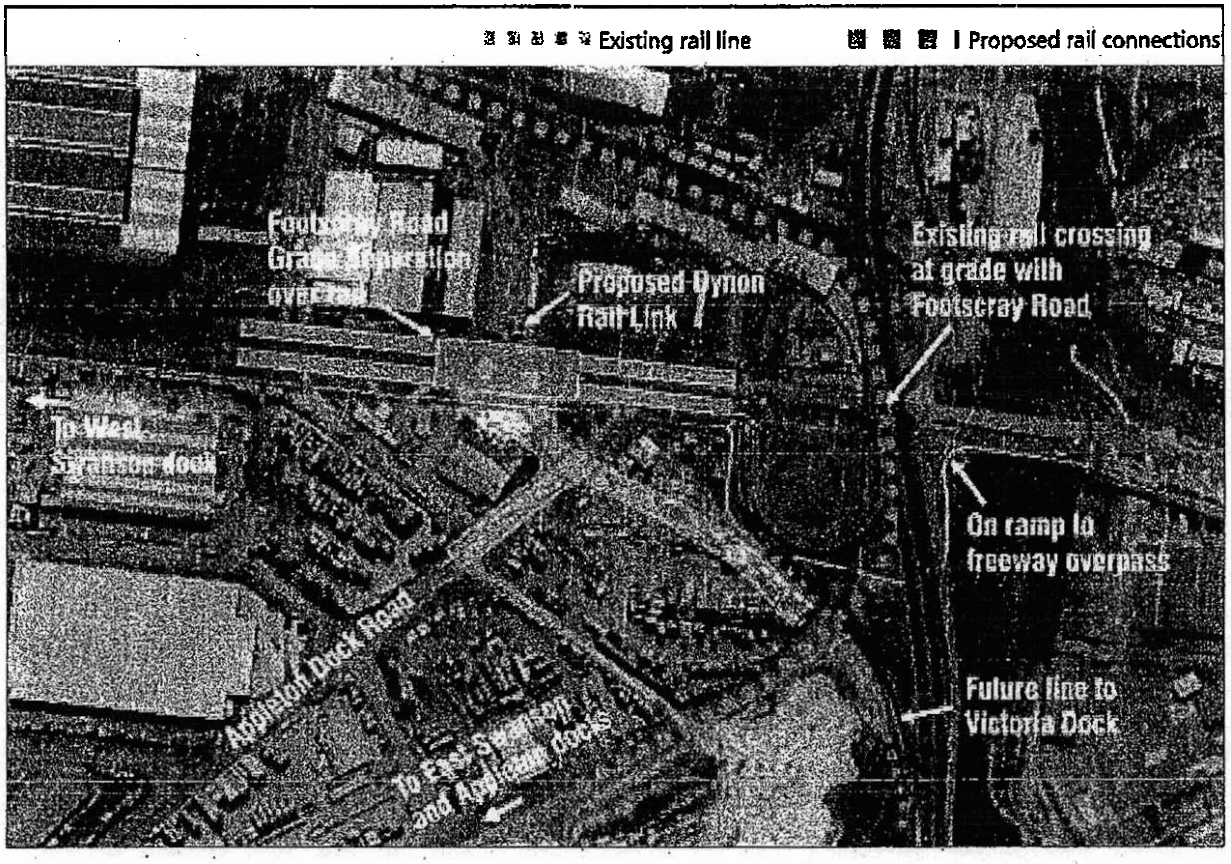
Figure 10. Dynon Port Rail Link



under the *AusLink* program The new dual-gauge rail link between the Dynon intermodal precinct and the port will involve a major grade separation of the junction of Footscray Road and the railway It will provide for significantly enhanced movement of rail traffic to existing container terminals and reduce the multiple handling of freight It will also allow for future Internal transfer vehicle access between the port and the Dynon precinct

The Australian Rail Track Corporation has also been a located $40 million under *AusLink* for the insta ation of a new bi-directional rai. line between Tottenham junction and West Footscray to reduce congestion for rail traffic entering and leaving the terminal [15]

The Australian Rail Track Corporation and the Australian Government have allocated $79 million to develop extra standard-gauge capacity on the Melbourne- Sydney rail line This will complement the joint State-Federal Wodonga rail bypass project and will greatly increase capacity and reduce travel times in the corridor

Increasing rail transport s share of port-related freight requires greater adoption of intermodal transport practices Intermodal practices can provide significant cost and time savings and reduce business risks through greater flexibility in freight transport planning To this end the Government has worked with the Victorian Freight and Logistics Council's Freight Intermodal Efficiency Group to develop the Industry Intermodal Awareness Program The program

[15] Department of Transport and Regional Services (2004) *AusLink White Paper* Commonwealth of Australia p 54

delivered a series of seminars in 2004 outlining the benefits available to transport operators logistics managers and businesses of using a combination of road and rail services [16]

The Victorian and Australian Governments have agreed to joint funding of $242 million towards a Pakenham bypass to provide an uninterrupted link between Melbourne and the Latrobe Valley and Gippsland In the next five years the Australian Government will provide $80 million to begin the construction of a bypass on the Western Freeway between Deer Park and Ardeer and a grade-separated interchange at Leakes Road in Rockbank These projects will improve freight flows and safety and will reduce congestion and conflict with local traffic in outer metropolitan Melbourne The Victorian Government is strongly advocating the construction of the Deer Park bypass to start sooner than envisaged under the *AusLink* program

The Victorian Freight and Logistics Council has noted that the recently announced Mitcham Frankston Project will significantly increase accessibility to industrial-zoned land and provide opportunities for the development of more efficient intermodal solutions for transport of containers shipped through the Port of Melbourne destined for the outer south-eastern suburbs

Current road improvement projects in the port precinct include extension of Mackenzie Road and part closure of Coode Road, and the extension of Dockside Road to the West Gate Freeway interchange ramps

Increasing rail market share at the Port of Melbourne is vital to addressing road congestion and amenity concerns

GEELONG

The absence of dual-gauge rail access to Lascelles Wharf and Corio Quay is a constraint on Geelong's ability to compete for some bulk cargoes.[17] The Government's Port of Geelong Rail projects (included in Figure 11) will connect port facilities to standard and broad-gauge networks via:

> the North Geelong track modifications

> the Corio independent goods line

> Lascelles Wharf rail connection

The Victorian Government has allocated $18 6 million to start these works and is now actively pursuing plans for these projects with the new intrastate rail lessee, Pacific National

The Victorian Government's rail improvement projects also include the proposed upgrade of the Geelong to Mildura railway line Under its *AusLink* program the Australian Government has allocated $20 million towards the cost of the Mildura line project A joint Victorian and Australian Government study is currently under way to investigate the scope and costs of freight improvement works including possible standardisation of the Mildura line

Road connections to the Port of Geelong have been improved by the recent completion of the major Geelong Road upgrade project

The Geelong Bypass will also improve the efficiency of local road freight transport to the benefit of the port (Figure 11) The Victorian Government has committed $190 million towards the cost of this project together with Federal AusLink funding of $186 million

PORTLAND

At Portland a key issue is the capacity of the intersection of Henty Highway and Cliff Street and Wellington Road which suffers truck congestion to and from the port at certain times of the year The Government has committed $15 million to the construction of the Cliff Street overpass - to reduce freight congestion at the Port of Portland and enable the port to develop and improve its standard-gauge rail facilities

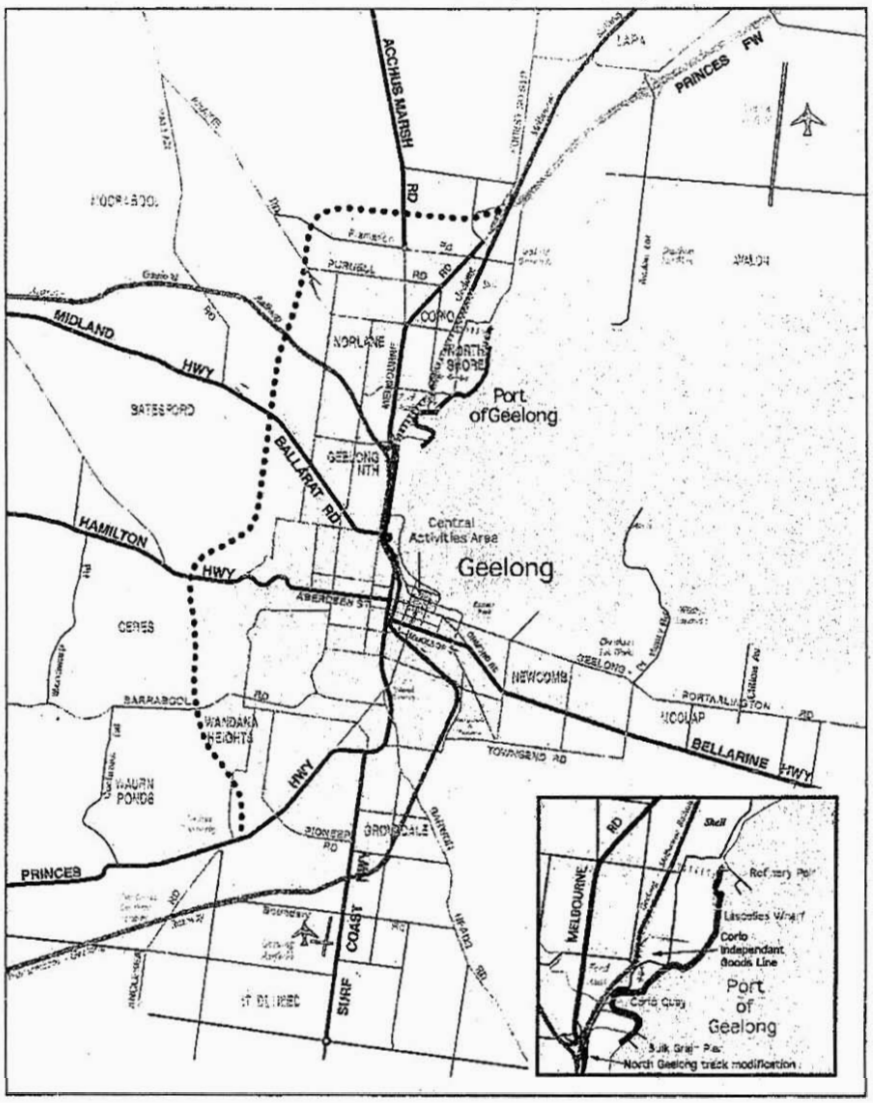
Significant road strengthening works to improve Henty Highway access to the Port have been completed

Efficient transport links to the port's hinterland are especially important given Portland's focus upon the export of low-margin bulk products The Victorian Government understands that the Port of Portland would gain greater access to trades suited to rail transport, such as wood chips if the Heywood to Mount Gambier line was reopened and standardised (Figure 12) The Government has indicated a preparedness to work with local stakeholders and the South Australian Government to seek *AusLink* regional funding for the project

[16] Minister for Transport (2004) *Media Release: Freight Industry Launches Intermodal Awareness Program* Thursday 1 July

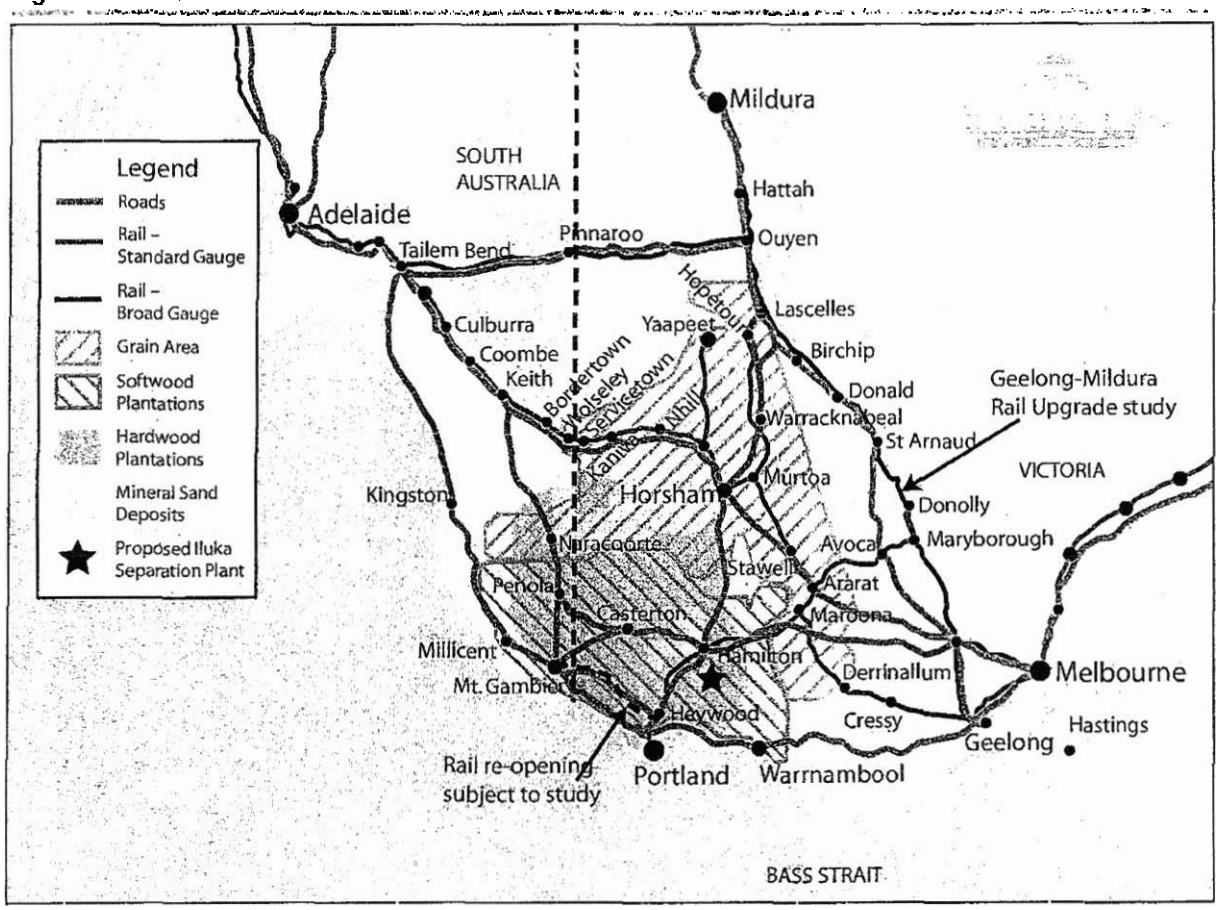
[17] DOI and DTF (2000) *Victorian Ports Strategic Study Final Report* prepared by: Maunsell McIntyre Pty Ltd January - Port of Geelong fact sheet available at www.doi.vic.gov.au

Figure 11. Port of Geelong terminals and connections



Geelong Western Bypass
Port of Geelong
Port of Geelong Projects
Existing Rail

Figure 12. Port of Portland's trade catchment and access



HASTINGS

The new Port of Hastings Corporation has begun major strategic planning work. A Port Strategic Land Use Plan and an Access Corridor Plan will be developed with government support (discussed in section 2.3 of this Framework). Appropriate infrastructure projects to optimise utilisation of the Hastings port area can then be developed.

In the meantime, the recently announced Mitcham-Frankston Project, including the Southern Dandenong bypass, as well as the progressive duplication of the Westernport Highway will provide more efficient road connections to the Port of Hastings for the substantial freight industry in the south-east of Melbourne.

connecting Victoria's commercial trading ports to their markets

5 WORKING SMARTER

Increasing efficiency of existing infrastructure often requires investment to make more intensive use of facilities However, greater utilisation of existing port assets can also be achieved by working smarter The Victorian Government seeks to be a leader in the promotion of integrated freight and logistics practices in partnership with industry

and working smarter along sea freight logistics chains

BUSINESS HARMONISATION

The Victorian Government is supporting the Business Activity Harmonisation Study[18] The study will tackle the mismatch of operating hours along the sea freight logistics chain connecting to the Port of Melbourne an ongoing problem for all port users - from stevedores and transport distribution and logistics operators to importers and exporters

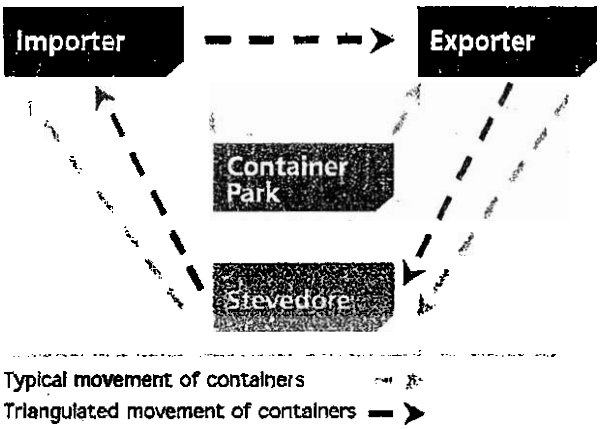
INTELLIGENT FREIGHT SYSTEMS

As part of the Innovation Statement *Victorians Bright Ideas Brilliant Futures* the Government has provided $4 million over four years for intelligent freight systems projects. While the projects current focus is to generate major efficiency gains and reduce freight congestion in and out of the Port of Melbourne proposed solutions may be applicable to other elements in the freight logistics chain and to both regional ports and non-containerised trades

Current projects include:

- an information and communication technology mapping and modelling study of the Port of Melbourne logistics chain - to foster interoperability of platforms and standards for the seamless transmission of data along the chain
- pilot projects in electronically-based container management systems, including testing the feasibility of container triangulation (Figure 13) - direct transport of empty containers between importers and exporters to reduce container traffic

Figure 13. Container triangulation process



Strategy 2

The Government will act to enhance access to and productivity of existing port assets by:

a. developing and investing in Melbourne Port@L projects

b. undertaking the Port of Melbourne channel deepening project, subject to environmental and other approvals

c. protecting options to reconnect the rail link to Webb Dock and progress this project when there is a strong business case to do so

d. investing in improved road and rail infrastructure connecting to Victoria's commercial trading ports for the transfer of container and bulk cargoes, including major upgrades of the freeway network and continued upgrades and gauge standardisation as appropriate of the rail network to provide improved access

e. promoting innovative solutions to improve port productivity and competitiveness through:

- support for research and development initiatives in collaboration with industry
- facilitation of integrated freight and logistics practices in partnership with industry

[18] The Study is funded by government and was jointly developed by the Victorian Freight and Logistics Council and Transport Distribution and Logistics Industry Roundtable

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FRAMEWORK DIRECTION 2 — ANTICIPATING AND PLANNING FOR FUTURE LAND, ACCESS AND INFRASTRUCTURE NEEDS

The Government will plan the land and infrastructure resources in and around ports to facilitate efficient port operation and access and minimise adverse impacts on surrounding communities

2.1 THE NEED TO PLAN

Planning is an ongoing responsibility required in the medium term to optimise the use of existing facilities In the long term planning for the development of new facilities in existing ports and new port areas is vital to ensure infrastructure development to maintain an effective freight logistics chain

The Victorian Government is committed to an adaptive and responsive planning system,[9] based on developing strong strategic frameworks at State and local levels

The Victorian Ports Strategic Framework has identified the pressing need for the Government to provide greater future planning certainty for port managers businesses local councils and neighbouring communities

The *State Planning Policy Framework* (SPPF) provides a Statewide context for spatial planning and decision-making It continues to evolve as the Government develops and refines policy and as the needs of the community change The SPPF contains general principles for land use and development planning and specific sectoral policies that must be taken account of and given effect to when considering land use matters The SPPF includes objectives for port planning (in clause 18.05 reproduced in Box 1) and specific strategies for the Port of Hastings

A number of Government strategies either flow from or sit alongside the SPPF *Melbourne 2030* and the *Victorian Coastal Strategy* are examples of such strategies and they also interface with issues important for Victorian ports Such strategies will at least in part rely on effective port land-use planning for their success Similarly, the effectiveness of local planning frameworks relies on appropriate strategic frameworks and policy directions at a State leve

Box 1. State Planning Policy Framework - Clause 18.05 Ports

18.05-1 Objective

To recognise the importance to Victoria of economically sustainable major ports (Melbourne, Geelong, Portland Hastings) by planning for appropriate access terminal areas and depot areas

To plan the land resources adjacent to ports to facilitate the efficient operation of the port and port-related uses and minimise adverse impacts on surrounding urban development and the environment

18.05-2 General implementation

The land resources adjacent to ports should be protected to preserve their value for uses which depend upon or gain significant economic advantage from proximity to the ports' particular shipping operations

Port and industrial development should be physically separated from sensitive urban development by the establishment of appropriate buffers which reduce the impact of vibration, intrusive lighting noise and air emissions from port activities

Planning for the use of land adjacent to ports should aim to achieve and maintain a high standard of environmental quality be integrated with policies for the protection of the environment generally and of marine environments in particular and take into account planning for adjacent areas and the relevant catchment

18.05-3 Geographic strategies

Planning for land-based port and port-related facilities adjacent to the deep channel in the North Arm of Western Port Bay (the mainland between Hann s Inlet and Watson's Inlet and to the east of the Tyabb Fault and the Clyde Monocline) should have regard to Statement of Planning Policy No 1 - Western Port (1970-varied 1976)

Planning for the future development of the Hastings port industrial area is to be undertaken in accordance with the Hastings Port Industrial Area Land Use Structure Plan (Department of Planning and Development 1996)

[9] Victorian Government (2004) *Victoria: Leading the way* Economic Statement April 2004 Action 16: Cutting red tape in development approvals pp 26-27

(61)

Local councils have generally recognised the strategic significance of Victorian commercial trading ports in their relevant Municipal Strategic Statements (MSSs) and other planning scheme provisions. The MSSs encapsulate local community values and provide an agreed strategic vision for the municipality and the basis for implementing land use controls within their planning schemes. However, land use zones and other controls often do little more than identify land owned and operated by port operators. Local policies that manage the use of land adjacent to or nearby the port need it to be fully developed and implemented if long term sustainable outcomes are to be achieved.

need to provide greater future planning certainty for port managers, businesses, local councils and communities

2.2 SUSTAINING PORT OPERATIONS IN URBAN ENVIRONMENTS

Historically, ports have developed as part of the cities they serve. Today, many ports now find themselves within the inner urban areas of those cities and increasingly constrained by surrounding uses and changing community expectations. The Government understands the importance of ensuring that development close to key port facilities recognises the need for efficient and effective port operations. Nevertheless, ports throughout Australia and the world are under increasing pressure as urban communities expect that governments will resolve the amenity impacts at the port land and water interfaces.

Melbourne 2030 provides a metropolitan development framework to address land use conflicts. It also recognises the need to protect and invest in the long-term potential of the region's ports and to improve road and rail links serving the ports and key metropolitan industry areas.

A general land use principle is that users, particularly industry, should provide their own buffers to ensure they minimise possible negative impacts or costs on the broader community. Buffers have been described as the means through which risk, residual emissions to land, air and water from port operations and amenity expectations can be managed and protected.[20] However, while maintaining physical buffers between incompatible land uses can minimise impacts, the necessary separation distances may not always be available.

Port buffer strategies are becoming important tools to address these interface issues, and to be most effective in the long term, they rely on an understanding of the port's development potential.

The Port of Melbourne Corporation is working with the Government and councils to develop a Port of Melbourne Buffer Strategy to:

- manage issues affecting land nearby and adjacent to its operational areas
- balance the needs of the working port with the expectations of the community in terms of amenity, environment, recreation and open space, and port heritage

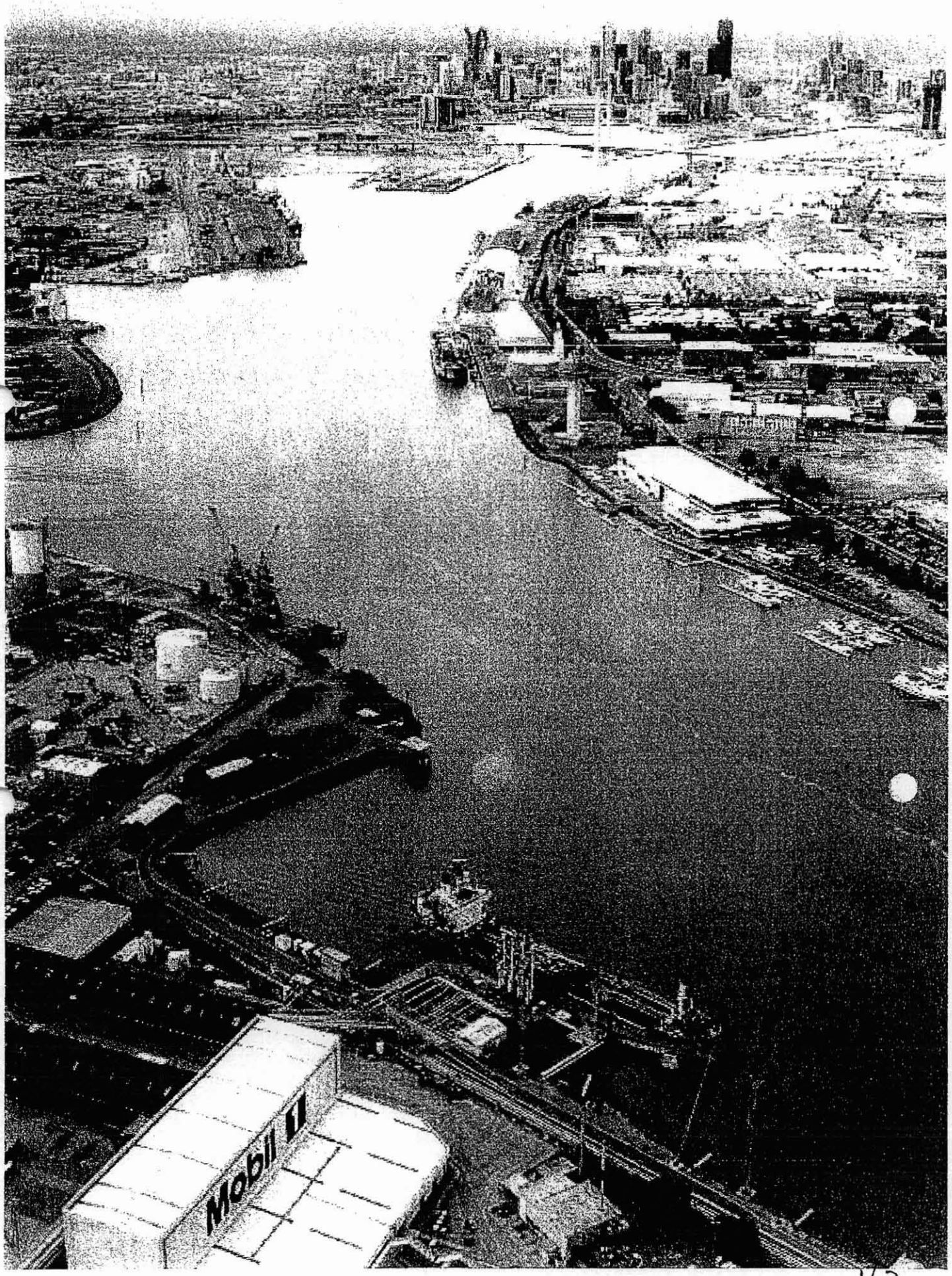
The range of issues, the diversity of adjoining areas and the need to address transport corridors serving the port and internal buffering issues makes the Port of Melbourne Buffer Strategy particularly complex. This complexity clearly demonstrates the need for ports to work with their neighbouring communities and to address broader regional influences, such as transport corridors.

REGIONAL PORTS

These same issues are important at the ports of Geelong and Portland and will need to be addressed for future planning at Hastings. Bulk movements have tended to attract less attention than containers. Regional communities have been more tolerant of port operations and more aware of the crucial role of the port in the local economy. However, without timely attention to the future needs of the bulk trades, it is only a matter of time before issues of access and land availability at these ports pose a threat to the movement of major commodities, including grain, forestry products and fertiliser.

to ensure development close to key port facilities recognises the need for efficient and effective port operations

[20] POMC (2004) *Buffer Strategy: Final*, prepared by Maunsell McIntyre Pty Ltd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2 3 A STRATEGIC PLANNING APPROACH

The Government considers a key instrument in achieving its objectives for planning and longer term development of port infrastructure is the Port Strategic Land Use Plan Port Strategic Land Use Plans should:

> identify key assets that support the port - such as transport corridors - and environmental values that will require protection

> take account of land use planning objectives in adjacent areas

> define appropriate buffers around port infrastructure and their transport corridors

> inform and identify land use and development issues requiring further action including recognition in state and local planning policy frameworks and implementation in planning schemes

The Government will work with the ports and local councils to ensure Port Strategic Land Use Plans are prepared for each commercial trading port

Strategic Land Use Plans are a key instrument in achieving sustainable long-term outcomes

Port planning has a number of key phases:

> The development of Port Strategic Land Use Plans will enable port stakeholders to inform land and infrastructure needs for sustainable port operations over 20 to 30 years

> Port development plans are undertaken by each port manager independently to establish their own commercial priorities and the needs of their lessees service providers and users From this planning work the port will develop programs to deliver the required port capacity

Port Strategic Land Use Plans will provide guidance to the port manager and operators in planning port-related development and to the community in understanding the port s development plans They can encourage private investment in new infrastructure provide more certainty in the approvals process for land use and development and identify appropriate buffers around port infrastructure and their transport corridors

MELBOURNE

The Port of Melbourne is most advanced in its planning among Victoria's commercial trading ports The *Port of Melbourne Land Use Plan* was completed in 2002 The Land Use Plan will be reviewed in conjunction with the preparation of a new port development plan by the Port of Melbourne Corporation anticipated for release in mid-2005

GEELONG

The Port of Geelong, City of Greater Geelong and the Government are jointly developing a Strategic Land Use Plan The Minister for Transport released a draft of the Plan for wider community consultation in September 2004 The Plan will provide a coordinated and integrated approach to future development and management of the port consistent with the *Victorian Coastal Strategy* and the *Corio Bay Coastal Action Plan* as well as other planning policies at the State and local level

The draft recommends a land-use vision for the port a priority area for port-related development guiding principles for port-related industry and activities and an overall strategic framework addressing:

> port facilities

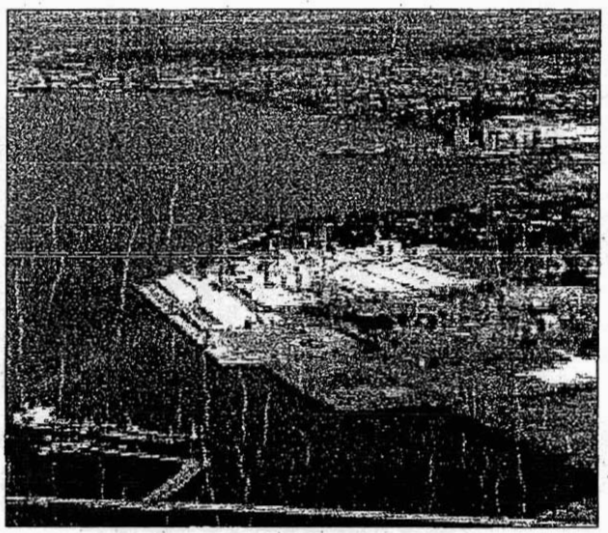
> land use supporting the port

> port transport infrastructure providing access to the port

> the need to enhance and strengthen buffers

> development approval for port and port-related activities

> recognition of the plan in state and local planning policies



Port of Geelong and metropolitan Geelong

PORTLAND

There is no obvious opportunity for expansion of the Port of Portland precinct given the present pattern of town development Residential areas to the south of the port precinct are as close as 150 metre The proximity of the port precinct to residential and retail precincts will require careful placement of future expansion In addition there is a relative shortage of land for stockpiles for trades such as woodchips or mineral sands In peak periods large numbers of trucks and other wheeled equipment will be required to use port roads and wharf aprons Careful design and disciplined use of available roads will be necessary to ensure all users can achieve export standard performance

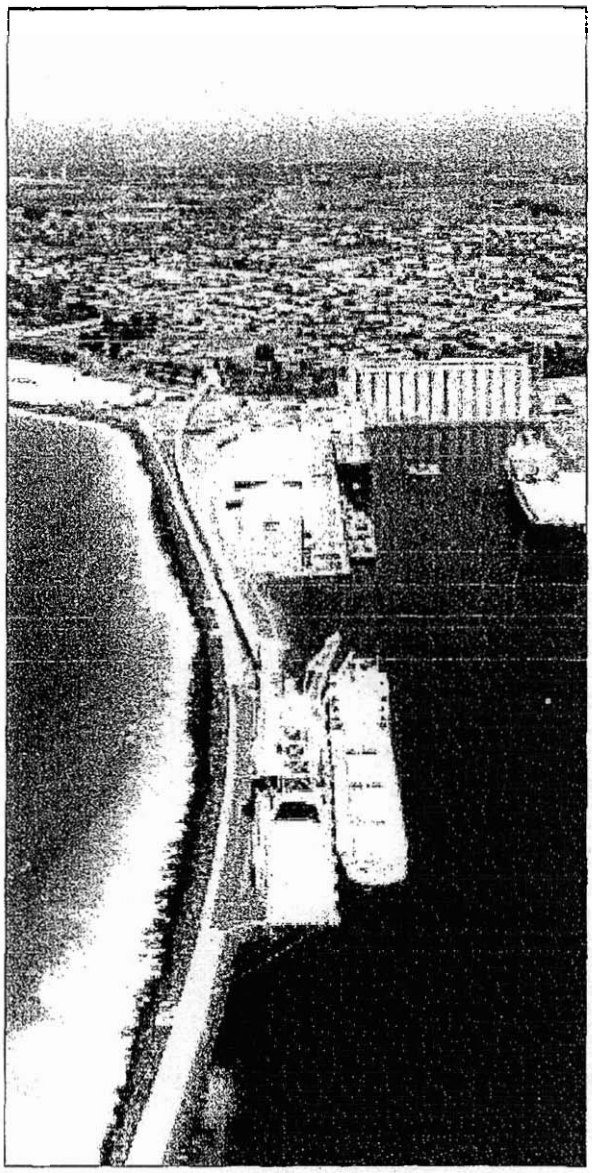
The Port of Portland is progressing its port development planning As has occurred for Geelong, the next step will be for the Government to work with the port and Shire of Glenelg to develop a Strategic Land Use Plan A key focus of the Strategic Land Use Plan for the Port of Portland and any subsequent development processes will be the requirement to efficiently use remaining unoccupied land to ensure that expected export growth trades can be accommodated

HASTINGS

To protect Victoria s competitive position in container trades it is crucial that adequate land and transport corridors are reserved for the long-term development of the Port of Hastings *Melbourne 2030* acknowledges the long term potential for the Port of Hastings The need for associated transport corridors is being addressed in planning for the south-east metropolitan growth areas

POrtC ntends to start deve opment of a comprehensive Port Strateg.c Land Jse Plan and Corridor Plan in 2004-05 To identify areas and corridors crucial for future development it will review the *Hastings Port Industrial Area Land Use Structure Plan* (1996) analyse long-term future requirements for bulk break bulk and container handling terminals and supporting road rail and channel access and seek recognition in state and local planning policies incl.d.ng growth area planning frameworks under *Melbourne 2030*

WesternPort is a wetland (of almost 60 000 hectares) of international importance listed under the internationa. *Convention on Wetlands of internat onal importance especially as Waterfowl Habitat* (Ramsar Convention) and a critical feeding and breeding ground for a large number of migratory shore birds



Port of Portland and residential area

Port of Hastings and surrounding environment

The internationally acknowledged environmental significance of the WesternPort area will attract international and national interest and oversight. It will be particularly important to act to protect options for developing the port in an environmentally sensitive way.

Mornington Peninsula including most of WesternPort Bay and French Island is also listed as a UNESCO Biosphere Reserve [21]

Strategy 3

The Government is committed to working with port managers, industry stakeholders, local councils and communities to position Victoria's commercial trading ports for long term sustainable development by:

a. ensuring that effective Port Strategic Land Use Plans are prepared and in place for each commercial trading port;

b. supporting port managers during plan development by facilitating collaboration with key state and local government authorities and, where appropriate providing assistance with funding and expertise;

c. using the outputs of the Port Strategic Land Use Plans to inform and reinforce protections for ports in State level strategic frameworks and policy directions particularly the State Planning Policy Framework;

d. working with port managers and local councils to ensure that agreed Port Strategic Land Use Plan outcomes are implemented in local planning schemes; and

e. in the meantime continuing to work with port mangers and local councils within the existing planning frameworks to ensure that appropriate port related developments can proceed and to address any inappropriate development proposals which may adversely impact on or unreasonably constrain the future development of commercial trading ports

2.4 IMPROVING CONSULTATION AND INFORMATION FLOWS

The Government supports the development of effective approaches to consultation for all ports. It is essential that the views of port stakeholders and local communities are taken into account in planning for port and related infrastructure needs, identifying the impact of solutions and generally maintaining community support for the port's operation and development.

Early and effective consultation that recognises the many groups directly or indirectly affected by port developments

[21] Biosphere Reserves are areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use. They are internationally recognised, but remain under sovereign jurisdiction of the states where they are located. Unlike a Ramsar listing, they are not covered by an intergovernmental convention but form a world network where exchanges of information, experience and personnel are promoted.

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can help not only to ensure that urban encroachment impacts are taken into account but also to adapt project specifications in a timely manner in response to feedback Establishing and maintaining collaborative relationships between the commercial trading ports and their communities is critical to ensuring long-term sustainability

The Government will encourage ports to establish and build on existing consultation mechanisms such as community forums and reference groups in order to further develop cooperative working relationships with port neighbours and local communities. These processes will be reinforced through Strategic Land Use Planning initiatives and legislative requirements related to Safety and Environmental Management Plans

Engagement through education programs and community project sponsorship initiatives will also be encouraged to better communicate the economic and social benefits that ports deliver to their regions and the broader community

Effective planning requires contributions from all stakeholders

The Government provides forums and communication channels by which the initially disparate agendas of the wide range of industry stakeholders can be brought together to achieve workable solutions. One of the key mechanisms bringing together many of these groups is the Victorian Freight and Logistics Council The Council's objective is to advance the freight and logistics sector as an efficient effective and innovative industry sector through providing a conduit between the industry and government It provides broadly based industry advice on the development, planning regulation and operation of freight and logistics transport, infrastructure and services to raise strategic issues impacting on the efficiency and future of the freight and logistics sector

To support effective consultation processes improvement is needed in the availability of accurate consistent and timely information on Victorian commercial trading ports This is also essential for the development of appropriate policy and regulation The Government will facilitate the development of consistent data definition and the collation analysis and dissemination of key port trade and performance data not currently readily available to policymakers planners and the public - it will develop protocols with port managers to ensure that confidentiality requirements and commercial interests are adequately protected

Strategy 4

The Government will promote improved communication and understanding between Victoria's commercial trading ports, their communities and industry stakeholders, by:

a. encouraging ports to adopt a range of community engagement mechanisms and ensuring that effective consultation is undertaken in the preparation of Port Strategic Land Use Plans and Safety and Environment Management Plans

b. continuing to support the role of the Victorian Freight and Logistics Council in acting as a conduit for industry advice to government

c. working with port managers to improve the consistency and availability of information about the ports for consultation planning and policy development purposes

FRAMEWORK DIRECTION 3 — PROVIDING THE RIGHT REGULATORY AND INSTITUTIONAL SETTINGS FOR A SUSTAINABLE PORT SYSTEM

The Government will provide a regulatory and institutional environment for a productive and sustainable port system - conducive to business development while ensuring a balanced outcome for all stakeholders

3.1 REGULATORY AND INSTITUTIONAL ENVIRONMENT

Getting the regulatory and institutional environment right is necessary to ensure the port sector is able to operate sustainably to maximise the economic well-being of the entire Victorian community

The institutional environment for Victoria's commercial trading ports has changed significantly in recent years with the implementation of the Government's response to the Russell Review of port reforms, *The Next Wave of Port Reform in Victoria* (2001). This process resulted in the establishment of three new port corporations - the POMC from 1 July 2003, the POHC from 1 January 2004 and the Victorian Regional Channels Authority (VRCA) from 1 Apr. 2004. This new set of administrative arrangements has created a set of port management entities with the appropriate charters, incentives and capabilities to take the Victorian port system forward.

The Government is also committed to a regulatory environment that provides for fair competition between Victoria's commercial trading ports and maintains appropriate environmental, safety and security standards.

A productive and sustainable port system needs regulation that provides for fair competition and maintains appropriate environmental, safety and security standards

3.2 REGULATING PRICES AND ACCESS

The competitiveness of Victoria's economy requires fair and reasonable port charges and that the market power port operators and service providers have is not abused. The sustainability of Victoria's ports requires that port charges are sufficient to fund efficient infrastructure needs. Consistent with the recommendation of the Russell Review, the Government has entrusted this balance to the ESC.

Independent oversight of port prices and fair access to port and related freight infrastructure

COMPETITIVE PORT PRICING

In comparison with other capital city ports, the charges imposed by the Port of Melbourne (and other port service providers) on container trades remain relatively low (Figure 14).[22]

Following a recent review[23] the ESC has decided to change its approach to port price regulation to one of 'price monitoring' - supported by a requirement to maintain a published set of reference tariffs, appropriate information disclosure requirements and a threat of re-regulation in the event that the systematic misuse of market power becomes evident. The regulatory threat is to be supported by a scheduled review in five years and the ability for the Government or the ESC to initiate inquiries prior to the review if concerns are raised that port operators have misused market power.

The ESC will also require the POMC to prepare a public 'Pricing Policy Statement' conforming to pricing principles to be enunciated by the ESC. This is designed to act as a further check on the substantial market power retained by the POMC over the port's berth and channel services. The Port of Geelong channel manager, the VRCA, is also required to conform to the principles.

[22] The 'port related charges' measured by the Bureau of Transport and Regional Economics is a small proportion of total port interface costs (see figure 6). The port charges oversighted by the ESC (Victoria) are a significant proportion of 'port-related' charges set out in Figure 15.

[23] ESC (2004) *Regulation of the Victorian Ports: Final Report*, June.

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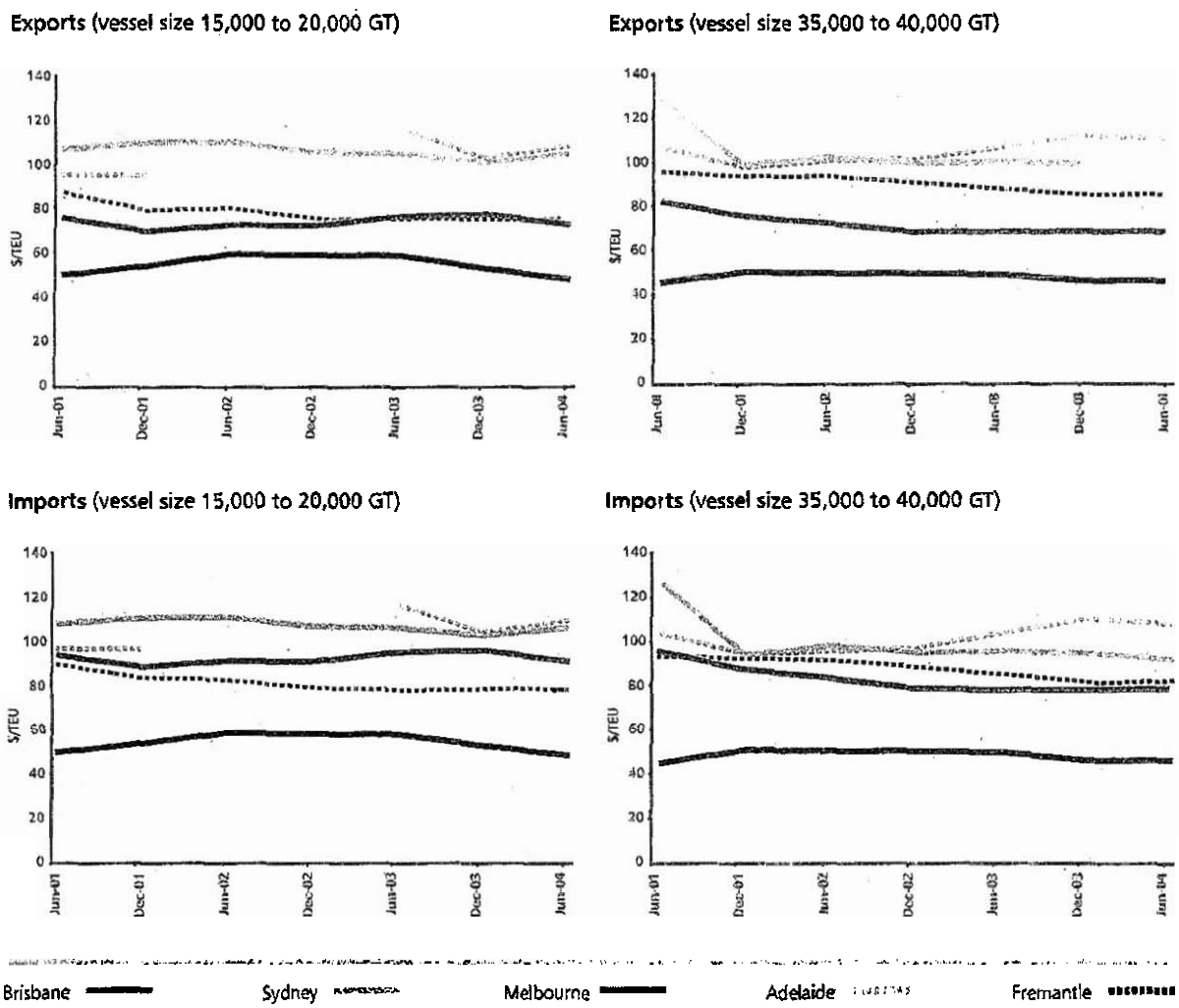
Figure 15. Port-related charges - Melbourne and other capital city ports (2001-04)



Source Bureau of Transport and Regional Economics (2004) Waterline Various issues to Issue 37 September 2004

ACCESS TO SHIPPING CHANNELS

The *Port Services Act 1995* contains an access regime covering commercial shipping channels in Victoria which becomes active upon the declaration of the specific channels to which it is intended to apply The ESC proposes that at this stage only the shipping channels of Port Phillip Bay and its entrance are declared In the ESC's view "this will ensure that the operation of the regime aligns with those situations where substantial market power and 'monopoly bottleneck' concerns are most significant"

The ESC s proposals are designed to ensure there is fair access for both Geelong-bound and Melbourne-bound vessels to the shared channels' at the entrance to the Bay as the POMC manages these channels

ACCESS TO RAIL INFRASTRUCTURE

As lessor of the regional rail network, the Government recently renegotiated aspects of the 45-year lease prior to providing consent for the transfer of Freight Australia's interests from Rail America to Pacific National. The Government sought the changes to improve competition and access, rail project delivery, and safety and maintenance investment. The Government is currently reviewing the Victorian rail access regime to maintain flexibility for intermodal development and ensure competitive access to the intrastate rail network. Under the renegotiated lease, Pacific National has agreed to:

- make available an additional 50 000 shipping containers each year for the next three years at the Dynon container handling terminal for rail competitors
- co-operate with the Victorian and Australian Governments' plan to invest in the overhaul of the Dynon rail precinct, which includes creating additional terminal capacity for other rail operators and additional rail access into the port

provide protected 15-year leases to independent regional intermodal terminals to secure their future, protect them from unreasonable rent rises and give regional customers choice of freight forwarders.

Strategy 5

The Government will ensure that port and related rail infrastructure is properly regulated by:

a. supporting continued independent economic regulation of commercial trading ports in Victoria by the Essential Services Commission (ESC) where market power exists that may limit competition between ports or result in unfair or unreasonable port charges being imposed on users

b. supporting the ESC's proposals to introduce a lighter handed 'price monitoring' approach to port price regulation, effective from 1 July 2005, subject to scheduled review and appropriate threat of re-regulation

c. supporting the ESC's proposals to declare the shipping channels of Port Phillip Bay and its entrance for the purpose of regulating access and, in particular, protecting the access rights of the users of the Port of Geelong

d. influencing the operation of the regional rail lease (as lessor) to facilitate fair rail competition and access, enable the delivery of rail and intermodal projects and investment in safety and maintenance

3.3 SECURITY, SAFETY AND ENVIRONMENT

Victoria's commercial trading ports operate close to major population centres. The standard of security, safety and environmental practices within the port sector is fundamentally important to the long-term sustainability of all Victorian ports.

The Government's role is to ensure that the obligations of Victoria's commercial trading port managers and operators are clear, that regulatory arrangements are coordinated and to assess and enforce compliance. The regulation of port and related operations should aim to meet the practical objectives of good regulation recently re-endorsed by all Australian governments (set out in Box 2). In particular, performance-based regulation focused upon security, safety and environmental outcomes for the ports is a key to encouraging innovation and efficiency.

Box 2. Objectives of good regulation

1. Minimising regulatory burden on the public
2. Minimising administrative burden
3. Regulatory impact assessment
4. Accountability
5. Compliance strategies and enforcement
6. Consideration of secondary effects
7. Inclusion of standards in appendixes to regulatory instruments
8. Performance-based regulations - they should focus on outcomes
9. Plain language drafting
10. Date of effect - carefully planned to avoid or mitigate unintended or unnecessary market consequences
11. Advertising the introduction of standards and regulations
12. Public consultation - important part of any regulatory development process

Source: Council of Australian Governments (2004) Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies, *endorsed by COAG April 1995, amended by COAG November 1997 and amended by COAG June 2004*

INTERNATIONAL SECURITY REQUIREMENTS

In December 2002, as a result of increased terrorism risks the International Maritime Organisation approved new measures to detect security threats and take preventive measures against security incidents affecting ships or port facilities used in international trade The measures are set out in the *International Ship and Port Facility Security Code* which took effect on 1 July 2004 The Australian Government has approved risk based plans required under the Code from all Victorian commercial trading ports [24] The Victorian Government will continue to support and advocate on behalf of port managers in the implementation and maintenance of these plans

PROACTIVE WHOLE-OF-PORT RISK MANAGEMENT

A key challenge for the commercial trading port sector is to encourage all participants to move beyond a compliance mentality towards a more proactive and imaginative approach to the management of environmental and social risks of port operations

The Government has enacted amendments to the *Port Services Act 1995* which require all ports to develop safety and environment management plans to ensure a whole-of-port perspective is brought to bear on important safety and environmental issues

The new management plans are intended to require port managers to examine the full scope of activities in their ports systematically to ensure that all significant risks are identified and controlled and that as far as practicable effective integrated risk management systems are in place across the whole port Key port regulators with whom port managers are encouraged to consult include the Environment Protection Authority the Victorian WorkCover Authority and Marine Safety Victoria [25]

Port managers have until 1 July 2005 to develop port management plans and have them certified as complying with the *Port Services Act 1995* The Government will assist port managers by coordinating consultations with relevant regulatory agencies and providing Ministerial Guidelines to support implementation of the new requirements

and proactive risk management by commercial trading port managers and operators

Strategy 6

The Government will continue to promote an integrated risk-based approach to managing security safety and environmental risks in Victoria's commercial trading ports by:

a. supporting and advocating on behalf of port managers in relation to security plans and measures required under international obligations and Federal legislation

b. assisting port managers with the preparation of mandatory safety and environmental management plans by 1 July 2005 through the publication of Ministerial Guidelines and coordination of consultation with relevant regulatory agencies

[24] Port Welshpool situated in Gippsland and oversighted by DSE also prepared a plan under the Code This plan was also approved

[25] The Environment Protection Authority administers the State Environment Protection Policy (Waters of Victoria) which includes specific requirements for ports to address whole-of-port environmental issues The Victorian WorkCover Authority regulates the requirement that an employer shall provide and maintain so far as practicable for employees a working environment that is safe and without risks to health and administers requirements of the *Dangerous Goods Act 1985* of specific relevance to port managers Marine Safety Victoria administers the marine safety requirements and standards set out in the *Marine Act 1988* — from harbour masters and pilots licences to navigation aids and dredging standards

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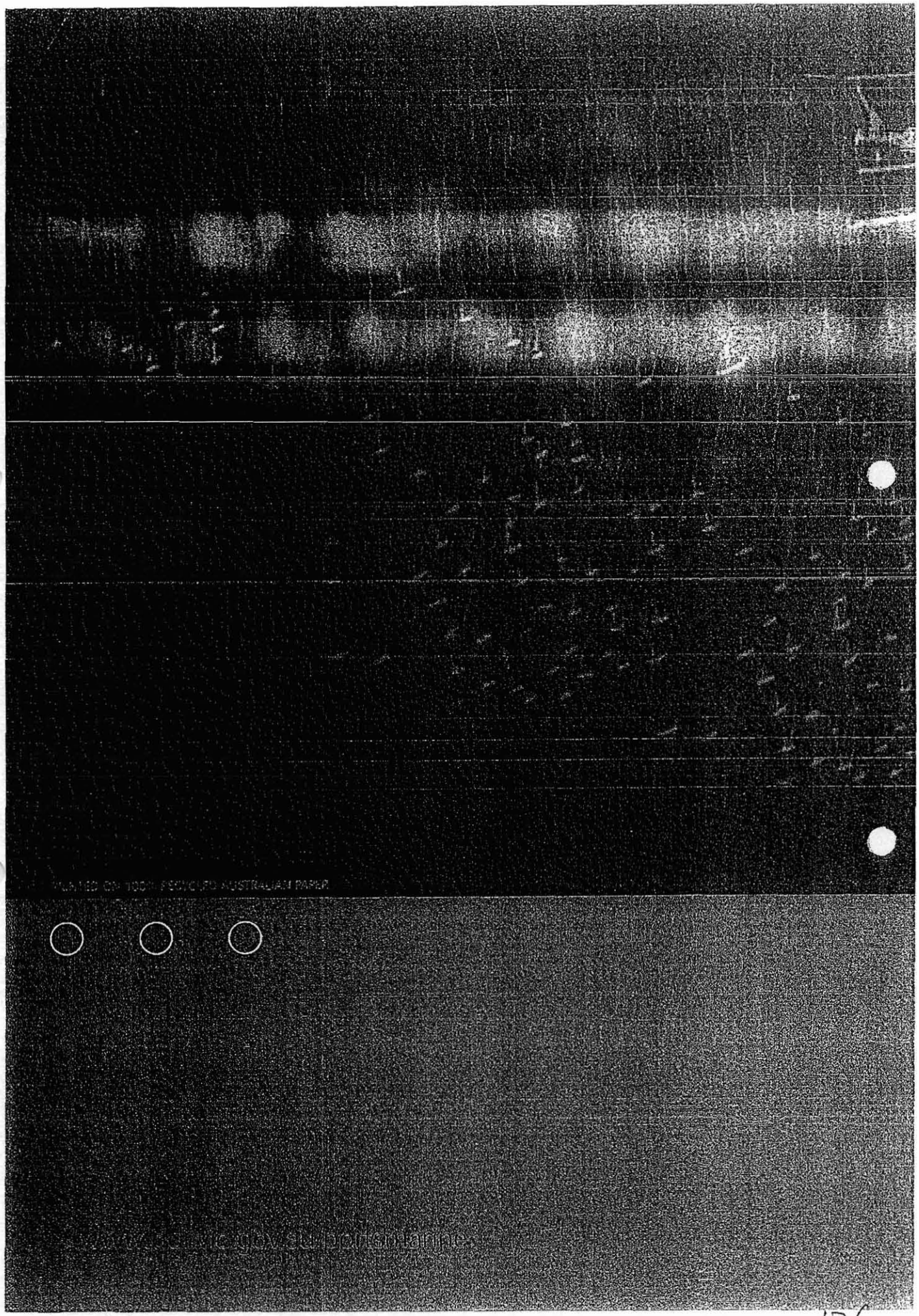

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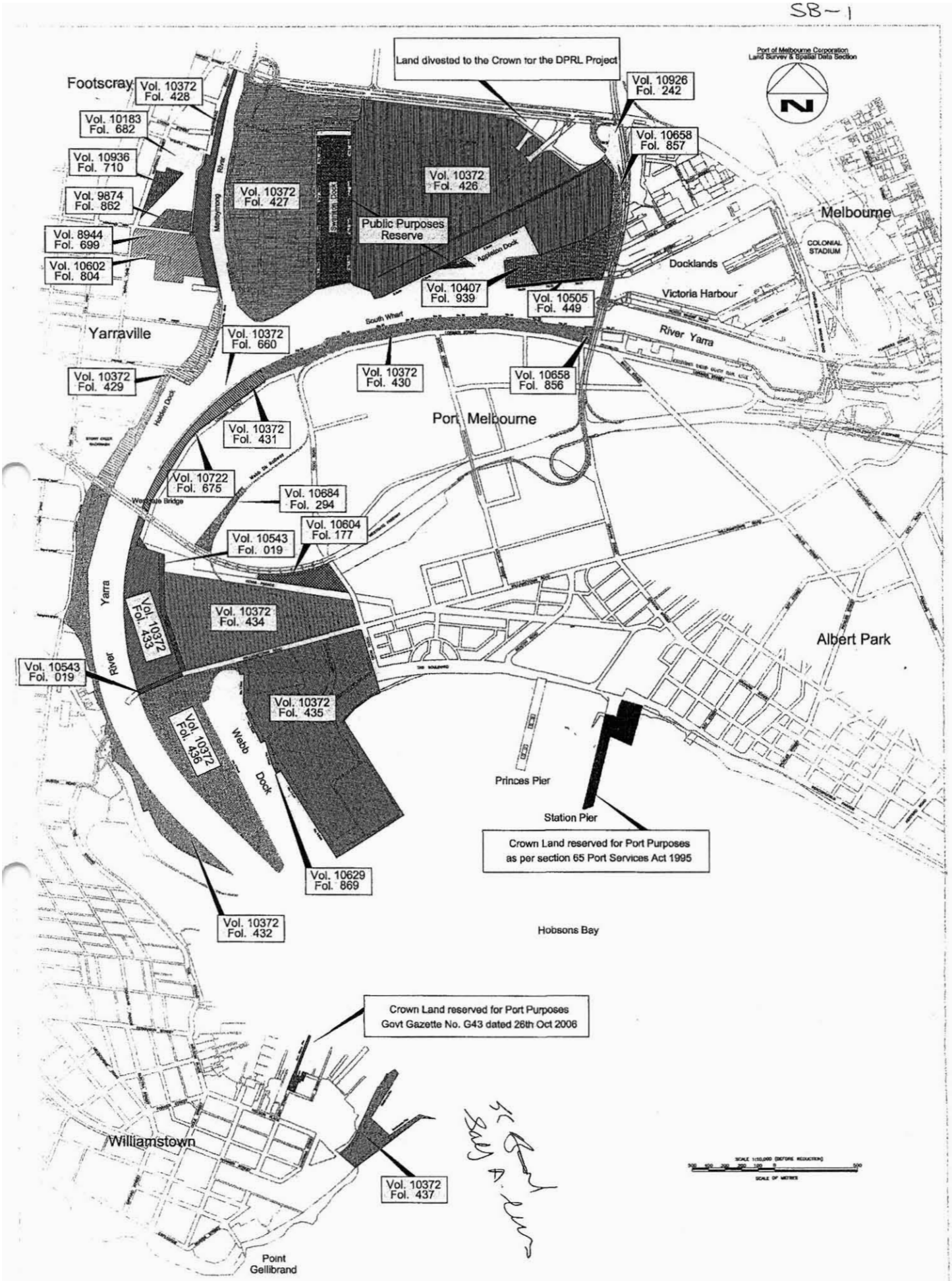

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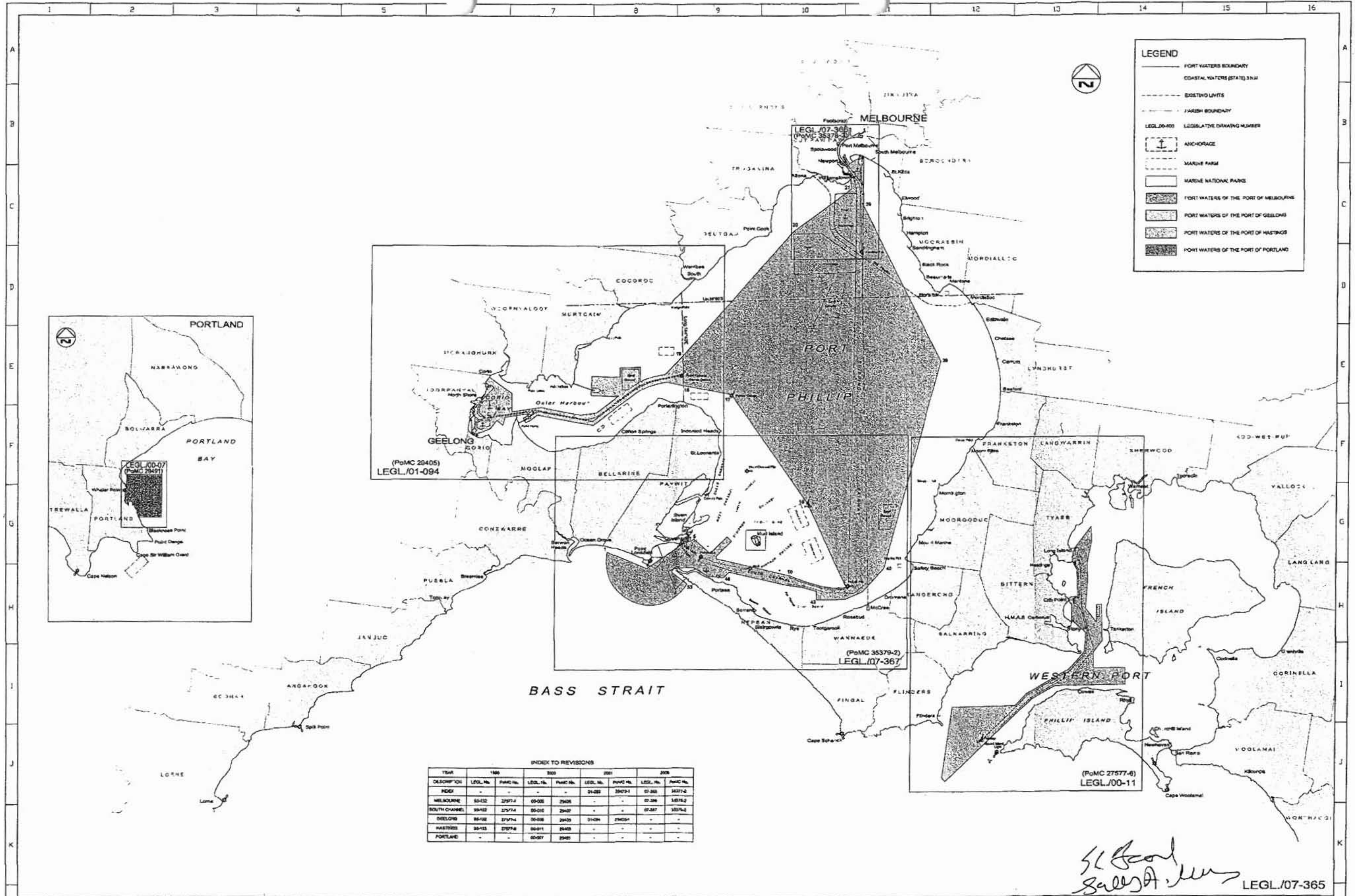

INDEX TO REVISIONS

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INDEX	-	-	-	-	01-093	29473-1	07-365	35377-2
MELBOURNE	99-032	27577-2	00-005	29406	-	-	07-366	35378-2
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GEELONG	99-100	27577-4	00-008	29405	01-094	29405-1	-	-
HASTINGS	99-103	27577-6	00-011	29403	-	-	-	-
PORTLAND	-	-	00-007	29401	-	-	-	-

LEGL./07-365

LOCALITY PLAN	PLAN No.	PREVIOUS PLAN TITLE	DATE
VICTORIA	35377-1	LEGISLATIVE DEFINITION REVISION AND KEY TO SHEETS	June 2008
	35377	LEGISLATIVE DEFINITION REVISION AND KEY TO SHEETS	May 2008

* Co-ordinate system is the MGA (GDA94), Zone 55, Central Meridian 147 degrees East.
All values are in metres.

SCALE 1:150,000 (SPRING REDUCED)

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PORT OF MELBOURNE CORPORATION
VICTORIAN PORT WATERS
LEGISLATIVE DEFINITION REVISION

SHEET SIZE	SCALE	PLAN No.	AMENDMENT
A0	1:150,000	35377	2

1.3

Port of Melbourne - 2008