

# **Location Options Report for Newcastle Harbour Cruise Ship Terminal**



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# **Executive Summary**

Newcastle has been welcoming cruise ships to the Port since 2001. What started as a "one off" visit has grown to become more than ten vessels a year and a decision by Carnival Australia, operators of P&O Cruises, to trial home berthing in Newcastle. This did not happen by luck or coincidence. Strong government, business and community effort have driven and supported this growth. The original efforts of the Hunter Economic Development Corporation, and Newcastle Council, and then the Honeysuckle Development Corporation and in most recent times Cruise Hunter, Newcastle Port Corporation and Industry and Investment NSW have underpinned the port's successes.

The next phase in the development of the cruise industry in Newcastle is the identification of a preferred site for a permanent home berthing cruise ship terminal and from there the development of a funding strategy and a package of measures to ensure it is well managed, promoted and achieves optimal community and economic benefits.

A Reference Group was established by the Minister for the Hunter, to oversee this task which included the Department of Premier and Cabinet, Hunter Development Corporation, Industry and Investment NSW, Newcastle City Council, Newcastle Port Corporation and Cruise Hunter. They set and managed the brief engaging specialist consultants to undertake the investigations and prepare a report.

On the whole the Newcastle community has been supportive of the cruise industry in the city. Popular media have supported the sector, thousands of people have "turned up" to see ships in and welcome them to the city, local businesses have been most welcoming and developed special experiences for visitors and many thousands have taken cruises either from or returning to the city. Debate however still remains around the best location for a terminal. This report helps clarify the issues, evaluates the options and makes a clear case for a preferred location. With this information available an informed community discussion can commence.



### **Preliminary Options Evaluated**

During 2010 eight sites were assessed by the Reference Group for their capacity to service cruise visits and home port operations:

Throsby Wharf	West Basin 4
Queens Wharf	Tug Berths
Channel Berth	Dyke No 1 Berth
Mayfield Berth	Walsh Point

Only three sites were identified as being able to be made physically capable of operating a cruise terminal for cruise visits and home porting. The other sites could not be made suitable because of the significance of their berthing and navigational constraints.

### **Three Options Evaluated in Detail**

The three options which could be made capable of accommodating a permanent cruise terminal were then assessed in detail:

Tug Berths:	located on the southern side of the harbour some 1.8km west of the port entrance and adjacent to the open park land know as the Foreshore.
Queens Wharf:	located on the southern side of the harbour some 2.2km west of the port entrance and adjacent to the open park land know as the Foreshore.
Channel Berth:	located on the northern side of the harbour some 3 km from the entrance to the port and extending along a peninsular of land known as Dyke Point.

This project evaluated those options to determine the preferred option.



### Key evaluation criteria and considerations

Cruise ships require:

- A minimum 8m water depth or draft
- Air draft of at least 55m
- A berthing box 300m in length
- 150m of wharf face for multiple gun port door access
- Channel access for vessels 300m in length
- A wharf structure capable of safely tying up and bearing a large vessel

Cruise terminals require approx 2ha of land and are best constructed on one ground level. If a terminal building is to be more than one level it must have a minimum floor plate in excess of  $2,000m^2$ . The terminal building itself should be  $6,000m^2$  with parking for 400 cars, 20 coaches, 8 trucks and 20 taxis. Cruise terminals require perimeter fencing, lighting, 24/7 security and general exclusion. They generate traffic, noise, congestion and waste. These must all be considered and managed.



### **Option 1 Tug Berths and Option 2 Queens Wharf**

Site Strengths

• Proximity to city centre for passengers

Site Weaknesses:

- Draft of 5m (Tug Berths) and 2.1m (Queens Wharf)
- Need to blast and dredge in excess of 77,000 cubic meters of rock, sand and silt
- Environmental damage and disturbance to residents during construction
- Need to construct berthing box, wharf, dolphins and seawalls
- Impacts of noise, lights and traffic on city centre and surrounding residential communities
- Significant site work costs in the order of \$18m to \$20m, for dredging and seawall stabilisation works etc, before building and land facilities construction commences
- Alienation and community exclusion of up to 2ha of land now in community use
- Negative visual impacts of constructing a 6000m<sup>2</sup> on The Foreshore



### **Option 3 Channel Berth**

Site Strengths:

- Existing draft in excess of 8m
- Existing berthing box of 280m
- Potential for multipurpose use of berthing facility and resultant economic benefits
- Utilisation of existing infrastructure, including adequate wharf, berth box and channel dredging

Site Weaknesses:

- Perceived "less attractive" location
- Need for improved road access



### **Conclusions and Recommendations**

The Channel Berth site is the preferred and recommended option for the development of a passenger cruise ship terminal in the Port of Newcastle.

The Tug Berths and Queens Wharf sites would require alienation of public open space and car parks and the rerouting of the road system to a achieve the terminal and surrounding land requirement on one level and or a construction and operating premium if multi-level or options building over the water were adopted.

In addition, the Channel Berth site is superior because:

- It is the only option to offer the required 8m of water draft required for cruise ships thereby negating the need, cost, environmental and community effects of blasting and dredging in excess of 77,000m<sup>3</sup> of rock, sand and silt.
- It is the only option where realistically the facility buildings, traffic, parking and servicing requirements can be accommodated on the site on one level.
- Operators and passengers will get a better level of service at the Channel Berth site delivered through good design and layout.
- It minimises the negative impacts on residential communities of reduced waterfront access, perimeter fencing, noise, lighting, traffic, parking, visual impact and loss of amenity.
- It offers the most efficient site for the design construction and operation of a terminal facility from the cruise sector's perspective.
- The potential economic benefits are greater at Channel Berth largely because of the ability to use the berth for cargo purposes, naval ships, queuing and arrested vessels when not in use for cruise ships.
- It avoids the duplication of existing channel and berthing infrastructure when satisfactory facilities already exist.
- It is the only option to offer genuine alternate long term cargo / marine uses should in long term the cruise sector fail to grow or be sustainable.
- In governance terms Channel Berth is the most achievable, affordable and flexible option.



# **PART 1 Introduction**

Since 2000 Newcastle harbour has accommodated an increasing number of visiting cruise ships and over the last 6 months it has been the home port for the Carnival Lines, Pacific Sun. Over these ten years the berthing locations and facilities have changed along with changes in the industry, the size of ships and the city. The cruise market in Newcastle is at a level of critical mass and also has considerable expansion potential. A decision on a longer term berth, terminal and facilities is now required. Planning for the urban development of the southern side of the harbour; the revitalisation of the central business district; the release of final water front sites on Honeysuckle; and the planning for cargo berths on the northern and western port areas, further empathise the need to achieve clarity and confidence in terms of a passenger cruise ship berth location.

Following a decade of studies, reviews, government reports and private sector operation, the options for a terminal have been narrowed to three (3) possible sites: two on the southern side of the port near the former Tug Berth moorings and the other near Queens Wharf, and the third on the northern side of the port at the Channel Berth. These are depicted in Figure 1.

A Reference Group was formed by the Minister for the Hunter, to examine which of these options for the establishment and operation of a cruise passenger terminal in Newcastle could meet the technical requirements for such a facility and would deliver the optimal outcomes for the community, the local economy, the tourism industry and the cruise ship sector, while protecting the future of the port both environmentally and in terms of its bulk and general cargo trade.

This report will examine those options against a set of financial, economic, social, environmental and strategic criteria and objectives, and make recommendations on the preferred site. While investment in a new facility is the desired outcome, the importance of this report, and its subsequent consideration and endorsement, lies in its ability to provide the sector and the community with confidence moving forward; enable longer term financial planning; and ensure the cruise sector that the port has a site which will be protected for this purpose into the future.





Figure 1: Cruise Berth Option Locations 1) Tug Berths, 2) Queens Wharf and 3) Channel Berth



### 1.1 SCOPE

The CDU-AEC group report defines cruise shipping as: "a vessel undertaking scheduled deep water cruises of two or more days with a passenger capacity of 100 or more." This definition has been adopted for this report.

There are two principle forms of passenger cruise ship facility.

**Cruise Ship Terminal** – for turnaround visits - where passengers and crew either disembark the vessel having reached their final destination, or embark the vessel for the beginning of their journey. The home berth is used for the cruise ship's arrival and departure from voyages and requires a specific level of stevedoring, provisioning, long-term car parking and other logistical support facilities and services to operate adequately.

**Visiting Facility** - for transit visits - where passengers and crew temporarily disembark for perhaps a day and return to the vessel to journey on to their next destination. Day visit cruise ships generally only berth for a period of up to 12 hours and require suitable ingress and egress for passengers and dispatch by bus to scattered tourism locations.

This report focuses on the establishment of a cruise ship terminal for home berthing. The logic for this is as follows:

- Visiting ships can use terminal facilities but turnaround visits cannot be serviced at typical visiting facilities.
- The economic, multiplier and employment benefits are far greater from home berthing operations than from visiting ships.
- Terminal facilities can also accommodate visiting domestic and international naval vessels because of the added security.
- Given the seasonal use of cruise ships facilities the opportunity and capacity to use the wharf facility as a shared commercial facility makes economic and operational sense, however this requires on shore cargo/operating space not usually provided for visiting cruise ships.
- The national cruise market is growing significantly, as is the need for additional home berthing facilities in the South Pacific and on the eastern seaboard of Australia.
- Having a terminal facility in Newcastle is part of wider state and national tourism strategies.



### 1.2 BACKGROUND

The concept of developing a cruise industry in Newcastle was conceived during the late 1990's by the Hunter Economic Development Corporation (HEDC) and the then NSW Department of State and Regional Development (DSRD). It, like many other economic development initiatives of the time, was in response to the pending closure of BHP; the desire to diversify the region's economy; a strategy to assist in addressing the then relatively high levels of unemployment in the region; the utilisation of wharf areas including the Lee and Throsby as general cargo activities were concentrated on the northern side of the port; the development of Honeysuckle, and the emergence of a growing tourism sector across the Hunter Region. Feasibilities were funded by three levels of government and *Cruise Hunter* was established to help facilitate the attraction of cruise ships and to support and coordinate tourism and business opportunities arriving with those cruise ships and their passengers.

*Cruise Hunter* was initially accommodated within the Newcastle City Council (NCC) having secured State and Federal funding through HEDC. It had the support of local government tourism managers and the Honeysuckle Development Corporation. Their activity focussed on the opportunity of using the Throsby Wharf at the western end of the main harbour frontage to Honeysuckle. During the period 2004 to 2007, when NCC managed Cruise Hunter, it grew the business from virtually nothing to an average of seven visiting ships per year. As cruise ships became much larger and "outgrew" the Throsby wharves, the obvious synergistic relationship with the Newcastle Port Corporation (NPC) was further enhanced and NPC became the host of *Cruise Hunter*. Since 2007 NPC has worked through *Cruise Hunter* to secure a long term sustainable model for home berthing and hosting cruise ships in the port.

In 2009, NPC and the NSW Government, through *Industry and Investment NSW*, announced a \$2.55 million investment to re-commission the Channel Berth (Dyke 1) to establish a home port deployment for the P&O Ship the "Pacific Sun" on a trial basis. This berth is one of the options being considered in this study.

Over this same decade the size, popularity and the value of the cruise ship sector has grown significantly across the globe and in the Australian market. What seemed a good idea in 1999 and 2000 has emerged in fact to be a great idea for the future of the region. Yet the course of growing the passenger cruise ship business in Newcastle has not all been smooth sailing. It has needed and relied on the ongoing support and motivation of government and a measure of tenacity and risk taking by the stakeholders and the private sector.



### **1.3 STRATEGIC CONTEXT**

The facilitation and expansion of the cruise ship sector is supported and provided for in a range of strategic planning documents for the Hunter Region. Most recently the *Newcastle Renewal Report* highlighted the role of the cruise ship sector as a catalyst project for the economic revitalisation of Newcastle. It recommended building on the existing trade and business generated by visiting cruise ships and developing a cruise terminal to leverage greater benefits for the city centre and region. The plan has a principle focus on the renewal of the City Centre and as such, suggests that the cruise facility should be located and used to generate retail and hospitality spending in the CBD. Consequently, it has a preference for the options on the southern foreshore of the harbour but the real key is business growth and visitation generation as a part of overall renewal.

Tourism Hunter's strategic plan makes it clear that Newcastle Airport and the Port of Newcastle continue to be key infrastructure developments crucial to the sustainability and further growth of the Hunter's tourism market. It also explicitly states the continued value and need for *Cruise Hunter* in the context of the Region's tourism plan.

Successive Newcastle City Council Economic Development strategies have recognised the potential and role of the cruise ship sector. In the decade of repositioning Newcastle post BHP, tourism including cruising has played an important part in widening and strengthening the region's economic and employment base.

Since 2007 the Newcastle Port Corporation has expanded its strategic and operational role in attempts to diversify and gain additional economic benefit from port related activities. The growth and development of the cruise sector is identified in these strategies. The Port Corporation has continued to support the development of a sustainable model for hosting and accommodating cruise ships.



### 1.4 REFERENCE GROUP AND STAKEHOLDERS

The preparation of this report has been guided by the Cruise Facility Reference Group. ADW Johnson acknowledges the input of the Reference Group's member organisations including:

- Regional Development Australia Hunter.
- NSW Department of Premier and Cabinet.
- The City of Newcastle.
- Industry and Investment NSW.
- The Hunter Development Corporation.

Other significant stakeholders who contributed to the process include:

- Tourism Hunter.
- Newcastle Airport Limited.
- Carnival Lines.



### 1.5 **OBJECTIVES**

The project Reference Group identified the following objectives for the project:

To determine, through stakeholder engagement, national and global research and benchmarking, investigation and spatial testing, the optimal location for a passenger cruise ship terminal in Newcastle have regard to:

- The likely development of the cruise sector over the next 20 years;
- The strategic planning and development of the port; and
- The strategic planning and renewal of the city and region.

The Reference Group also aimed to ensure that this analysis and final recommendation considered the desirable and essential criteria including:

- Physical berth and water based capacity;
- Land based capacity and suitability;
- Environmental impacts;
- Social and Community impacts;
- Economic impacts;
- Financial costs and income streams; and
- To ensure as much as possible that the project also facilitates the attraction and berthing of naval vessels and accommodates other potential revenue generating uses including conference and exhibition uses.

It is worth noting that the objectives reflect both the importance of process and the diverse criteria to be considered in identifying a preferred solution and location. Further the objectives help set the research and analysis process and framework ensuring that the final recommendations are transparent and objective.



### 1.6 **PROCESS**

The process for assessing, evaluating and prioritising options for a longer term passenger cruise ship terminal reflects the following:

- the evolutionary nature of the industry, both the Newcastle experience and the changes that have occurred globally
- the range of community, financial, economic, social and environmental objectives and hurdles required for feasibility and sustainability
- the significant body of work already completed
- the large and diversified number of stakeholders with significant experience and data
- the high level of community interest and expectation surrounding the project, and
- the need for a rigorous business case to substantiate any submission for public sector funding.

The process included:

- Market research into the sector, globally, nationally and regionally. This helped define the projected demands of the sector and future facility requirements in terms of visitation, shipping/berthing parameters and services; and
- Contextual analysis of the parallel development and planning for the surrounding residential communities, the CBD and commercial port operations and expansion. This helps to refine the assessment of 'big picture' suitability and compatibility and relationships.

The document was developed with the input and review of the Reference Group and key stakeholders. This process and the options also underwent third party review in terms of technical and engineering requirements.



### **1.7 PREVIOUS STUDIES**

Over the ten year evolution of the cruise ship sector in Newcastle a series of studies and reports have been completed to help scope, direct and support the attraction of vessels as well as guide the development of infrastructure and the growth of support businesses and activities.

The most recent analysis determined the short list of three options considered in this report. Tables 1 and 2 summarise the results of the analysis completed by the Reference Group in early 2010.

It is important to recognise that other options often favoured in the popular media and wider community discussions are either technically and financially unachievable or prohibitive. This report does not review or repeat the decision making that lead to the elimination of these sites and accepts the validity of the three options which it considers should be carried forward for the purposes of analysis in this report.

Analysis of berths in Port of Newcastle for cruise ships

Home Port requirements

TABLE 1:

Must have Desired 1 х V **Throsby Wharf** 1 N х 1 West Basin 4 х х V х х х х х V х 1 V V 1 1 **Queens Wharf** V х V х V 1 **Tug Berths** V V **Channel Berth** V 1 J 1 J 1 1 V х х х х 1 х х х х Dyke No. 1 Berth Mayfield Berth V V х х х х х х х х х х х Walsh Point х х х



# Analysis of berths in Port of Newcastle for cruise ships

Day Visit requirements

TABLE 2:

				122.20		Must have		1				Desire	d
		In the second	ous of the series	Sales States of Contract of the States of th	A Parting of all	or service on the part of the service of the servic	Sources tors	of the series of	Shippon Course	Sala and all	ope course	area on and	superson of the second second
Throsby Wharf	<b>PPP</b>	<b>2</b> 0	<b>2</b> 0		<u> </u>			<b>e</b>	The los for		MIL	100	1
West Basin 4	1	1	1	x	1	1	x	1	x	x	1	x	
Queens Wharf	~	1	V	1	V	4	1	1	V	~	V	1	
Tug Berths	~	1	1	~	~	4	V	V	V	~	V	V	
Channel Berth	~	1	~	$\checkmark$	1	4	~	~	~	~	~	1	
Dyke No. 1 Berth	V	×	х	х	V	х	1	V	х	x	~	x	
Mayfield Berth	V	1	1	х	V	×	~	V	x	x	x	x	
Walsh Point	~	1	1	х	x	x	V	1	х	x	x	x	



### 1.8 **OPTIONS**

The three (3) short listed options for analysis and evaluation include:

- Tug Berths
- Queens Wharf and
- Channel Berth.

Tug Berths:	located on the southern side of the harbour some 1.8km west of the port entrance and adjacent to the open park land know as the Foreshore.
Queens Wharf:	located on the southern side of the harbour some 2.2km west of the port entrance and adjacent to the open park land know as the Foreshore.
Channel Berth:	located on the northern side of the harbour some 3 km from the entrance to the port and extending along a peninsular of land known as Dyke Point.

The Figures 2, 3 & 4 depict the detail of the respective locations in a local context.





# Figure 2: Tug Berths





Figure 3: Queens Wharf





Figure 4: Channel Berth



# PART 2 Cruise Industry Dynamics

# 2.1 DIFFERENCES BETWEEN A CRUISE SHIP TERMINAL & A VISITING PORT FACILITY

The focus of this report is on establishing a long term location for a cruise ship terminal for home berthing. The distinction between this form of berth use and that of a visiting cruise ships is summarised in the Table 3 and helps explain and establish some of this report's location selection criteria.

	Characteristic	Impacts
Visiting cruise ship facility	<ul> <li>Approximately 50 to 70% of passengers (1,000 to 1,400) disembark ;</li> <li>Minimal land based facilities are required (if customs have already been cleared);</li> <li>Activity directly employs 15 to 20 local staff;</li> <li>Minimal parking required;</li> <li>Facilities required for coaches, taxi and private pick up; and</li> <li>Crew remain on board with minimal or no spend.</li> </ul>	<ul> <li>Need for fast access to one day tours/experiences etc.</li> <li>Relative spend per person is less than for embarking passengers.</li> <li>Flexibility in mooring facility, minimal land side space requirements.</li> </ul>
Cruise ship Terminal Home berthing	<ul> <li>About 150 tonnes (or the equivalent of 6 shipping container loads) of food and beverage stores, plus fuel, fresh water to supplement onboard evaporator plants and technical supplies are loaded each time a ship turns around;</li> <li>Approximate movement of 4,000 passengers get on and get off (2,000 each cruise);</li> <li>600 to 1,000 bus and passenger vehicle movement in a turnaround day;</li> <li>30 van and lorry movements;</li> <li>Facilities required for baggage handling, security and customs;</li> <li>Facilities typically employs up to 100 ground staff;</li> <li>Significant land area required for private vehicle parking, coach and taxi drop off;</li> <li>Facilities for cleaning and servicing ship; and</li> <li>Between 650 and 700 crew, significant on shore crew spend.</li> </ul>	<ul> <li>Requirement for pre and post ship berthing logistics and set up.</li> <li>Intense activity over a short period</li> <li>Additional noise and traffic impacts not typical in visitation events.</li> <li>Significant space requirements.</li> <li>High volume of traffic movements.</li> <li>Longer shore time stays.</li> <li>Greater diversity in demand for services (passenger &amp; crew)</li> </ul>

## TABLE 3: DIFFERENCES BETWEEN A CRUISE SHIP TERMINAL & A VISITING PORT FACILITY



### 2.2 GLOBAL MEASURES OF CRUISE SHIP SECTOR GROWTH

In 2009, the total value of the global cruise ship industry was estimated at \$40 billion annually. The global cruise industry is growing at a rapid pace. In 2006, the total global market generated 15.2 million passenger cruises, reflecting a 9.2% compound annual growth rate since 1996. Passenger numbers worldwide are expected to grow to 20 million by 2012 as ships increase in size up to 220,000 tons or almost five times the size of the legendary *Titanic*. The largest new cruise ship, launched in November 2010, *The Allure of the Seas*, is over 360m in length compared with the typical length of ships of around 240 metres 15 years ago. *The Allure of the Seas* is over 225,000 ton and carries 5,400 passengers. Capacity in the world market has increased over the period 2000 to 2005, with capacity expected to increase again over the period 2005 to 2010 see Table 4.

Year	Ships	Berths (000) Average capacity		Growth in Average capacity % pa		
2000	245	241	983			
2005	253	332	1312	6%		
2010	274	440	1606	4%		

#### TABLE 4:WORLD BERTH CAPACITY, 2000-2010

Source: The Future of Cruising Boom or Bust? A Worldwide Analysis to 2015

Globally the largest market is North America, with 10.38 million passengers in 2006. The prime activity in North America is concentrated in Florida and the Caribbean playing host to the majority of global activity. The 2006 contribution of the North American cruise sector to the US economy has been estimated at US\$35.7 billion; up from US\$32.4 billion in 2005. The 2006 contribution is based on US\$17.64 billion in passenger and cruise line expenditure. The size of the contribution – measured in total output – has increased from US\$20.4 billion in 2002. Compared to the 2006 figure and this represents an increase in the industry of about 75%.



An economic contribution assessment of the European cruise industry found the sector was worth a total of  $\notin$  23.9 billion (\$32.11 billion); including a direct contribution of  $\notin$  10.6 billion (US\$14.24 billion). This assessment was based on a passenger purchases, cruise line purchases, employee expenditure and the value of ship building. Moreover, the sector contributes a total of 225,586 jobs; with 107,780 employed directly in the sector. Manufacturing the largest employer with almost 70,000 persons employed, followed by transport with just over 66,000 employees.

### 2.3 NATIONAL GROWTH OF THE CRUISE SHIP SECTOR

The growth in the passenger cruise ship national market has been significant and sustained for almost a decade and all projections indicate that this trend is set to continue. Table 5 summaries data provided by research commissioned by Cruise Down Under (the peak national cruise body) and Tourism Australia.

### TABLE 5: AUSTRALIAN RESEARCH COMMISSIONED BY CDU & TOURISM AUSTRALIA 2010

Australian Cruise Market	2004-5	2009-10	
Number of Australian Ports Visited	16	30	
Number of Visiting Cruise Ships	23	34	
Passenger capacity on cruise ships in Australia	22,000	42,000	
Total number of Cruise Ship Visits nationally	310	590	
Total number of Passenger days in Port nationally	360,000	1,080,000	
Estimated national passenger expenditure	\$80m	\$262m	
Total estimated crew expenditure	\$15m	\$39m	
Total estimated port supplier expenditure	\$50m	\$362m	
Estimated Total Expenditure	\$150m	\$662m	



The Australian Cruise industry is vastly different to the northern hemisphere environment and characterised by the following:

- Australia and the South Pacific represent only 4% of the global cruise market.
- The cruise market in Australia is highly seasonal with the peak between November and April.
- The market is made up of three major segments: firstly, round the world cruises that transit Australia in the northern hemisphere winter; secondly, seasonally based regional cruises accessing a number of ports (October to April); and thirdly, year round home based vessels.
- In 2008/9 home based vessels represented over 47% of all visits, 29% were seasonally deployed visits and the remaining 24% around the world cruising vessels.
- The market has grown over 18% between 2002 and 2008.
- Carnival Line cruises represents between 70% and 80% of NSW annual cruise ship revenue.
- Cruising is now the largest "off shore" market for Australian travellers.
- Compared with the American and European market the Australian market is relatively immature.
- The ships visiting and based in Australian ports are smaller than those in the European and American markets.
- Cruise ships are not built for the Australia and Pacific market but evolve to the market following the introduction of new larger vessels in northern hemisphere markets.

In summary the Australian passenger cruise market is growing in:

- Passenger numbers;
- Number of vessels;
- Number of routes;
- Cruising frequency;
- Ship capacity;
- Ship size; and
- Market segments and cruise offers.



History, climate, natural landscape and strong government policy has underpinned NSW strength in the cruise ship market. NSW holds the largest share of the national market including:

- 3 ports;
- 125 visits per year;
- 90 vessels based in Sydney;
- 384,692 passenger days;
- 78,058 crew days; and
- \$298m expenditure (Cruise Down Under 2010).

## 2.4 LOCAL MARKET OVERVIEW

Cruise tourism in Newcastle has emerged since the inception of Cruise Hunter in 2001. The initial berth used for cruise shipping was Throsby Wharf, which had the capacity of berthing vessels up to 210 metres in length. Throsby Wharf hosted a small number of cruise ships annually between 2003 and 2007 Table 6. Further research identified Throsby Wharf and nearby city-side wharves would not meet the future size of cruise ships deployed to Australia due to wharf length limitations and port navigation constraints.

Newcastle Port Corporation took over the management of Cruise Hunter in late 2007. Because the majority of cruise ships being deployed to Australia were greater than 210 metres in length, cruise ships began being berthed in other locations. The Dyke No. 1 Berth hosted several large cruise ships between 2007 and 2010, the largest the *Millennium* at 297 metres in length

In 2010 the Channel Berth, located at the end of Dyke Point, was re-commissioned to provide a more suitable berth for cruise shipping. This berth demonstrated the ability to berth large cruise ships and provides the necessary land space to home port cruise ships. A trial of Home berthing commenced in 2010.



# TABLE 6:CRUISE SHIPS VISITED NEWCASTLE SINCE 2001

Vessel Name	Date	Berth	LOA (m)	Pax.**	Crew**
Europa	24-Jan-03	Throsby Wharf	198	450	267
The World	15-Apr-03	Throsby Wharf	196	616	343
Silver Shadow	21-Jan-04	Throsby Wharf	186	388	295
Silver Shadow	19-Feb-04	Throsby Wharf	186	388	295
Silver Cloud	06-Jan-05	Throsby Wharf	157	296	196
Pacific Princess	10-Oct-05	Throsby Wharf	180	658	353
The World	13-Sep-06	Throsby Wharf	196	616	343
Silver Cloud	06-Jan-07	Throsby Wharf	157	296	196
Silver Cloud	23-Jan-07	Throsby Wharf	157	296	196
Silver Cloud	19-Feb-07	Throsby Wharf	157	296	196
Silver Shadow	13-Mar-07	Throsby Wharf	186	388	295
Pacific Star	27-Nov-07	Throsby Wharf	205	1022	550
Mercury	21-Dec-07	Dyke 1 Berth	265	1870	908
Mercury	18-Jan-08	Dyke 1 Berth	265	1870	908
Silver Whisper	02-Feb-08	West Basin 4	184	388	295
Mercury	15-Feb-08	Dyke 1 Berth	268	1870	908
Albatros	08-Mar-08	Throsby Wharf	177	884	340
Millennium	06-Jan-09	Dyke 1 Berth	294	1950	999
Silver Whisper	19-Jan-09	Throsby Wharf	184	388	295
Seven Seas Mariner	27-Mar-09	West Basin 4	213	708	445
Sun Princess	18-Oct-09	Dyke 1 Berth	261	1950	900
Orion	16-Nov-09	West Basin 4	103	106	71
Dawn Princess	10-Dec-09	Dyke 1 Berth	261	1950	900
Dawn Princess	07-Mar-10	Dyke 1 Berth	261	1950	900
Volendam	15-Mar-10	Dyke 1 Berth	238	1440	647



Pacific Sun	08-Sep-10	Channel Berth	223	1896	670
Pacific Sun	18-Sep-10	Channel Berth	223	1896	670
Pacific Sun	28-Sep-10	Channel Berth	223	1896	670
Pacific Sun	08-Oct-10	Channel Berth	223	1896	670
Rhapsody of the Seas	17-Oct-10	Channel Berth	279	2441	765
Pacific Sun	18-Oct-10	Channel Berth	223	1896	670
Pacific Sun	28-Oct-10	Channel Berth	223	1896	670

TOTAL

36,851

16,826

\*\* = assuming 100% occupancy



### 2.5 IMPACTS OF MARKET TRENDS ON THE NATURE AND LOCATION OF PASSENGER CRUISE SHIP TERMINALS

The global, national and regional cruise ship sector is growing. It is growing in passenger number, number of trips, number of routes, frequency, ship capacity and ship size. This growth has profound impacts on the demand for and nature of facilities. A summary of the growth characteristics and demands on port infrastructure are summarised in Table 7.

### TABLE 7: GROWTH IMPACTS ON PORT FACILITIES REQUIRED

The cruise market is growing globally and nationally in terms of:	This growth impacts on port infrastructure requiring:
• Number of vessels;	• Longer berths;
• Number of routes and destinations;	• Deeper berths;
• Numbers of passengers;	• More berths;
• Cursing frequency;	<ul> <li>More on shore service facilities and parking;</li> </ul>
• Ship capacity;	Improved efficiency in turn around facilities;
• Ship size; and	• Diversification in current activity and focus; and
• Market segments and offers.	Global circulation of vessels (displacement evolution).

The port infrastructure requirements of a large, modern cruise ships are significant. As well as loading and unloading several thousand passengers and crew onto coaches, dozens of trucks require access in order to supply the ship with fuel, food, water and to off load waste. Land-side heavy vehicle access is an important aspect of planning a cruise terminal. The larger ships now entering the international cruise shipping fleet are too tall to pass under the Sydney Harbour Bridge and Brisbane's Gateway Bridge. There are already 10 to 12 port calls per annum to Sydney and Brisbane that are too tall for the bridges in those ports. The pipeline of new ships under construction indicates a trend towards even larger ships. Carnival Lines have stated numerous times that within a decade 85% of cruise ships visiting Australia will be too tall to pass under the Sydney Harbour Bridge.



The global and national growth of the cruise ship sector provides a range of opportunities for the Port of Newcastle including:

- Providing a comparatively affordable and easily accessible, well designed home berth facility;
- Capturing flow on visitation from Pacific and eastern Australian ports and particularly Sydney and Brisbane;
- Capturing cruise ships too tall to sail under the Gateway Bridge in Brisbane and Sydney Harbour Bridge; and
- Packaging integrated rail, air and cruise packages with the capacity to service regional markets.

Newcastle has an opportunity to develop a facility that will satisfy market growth for the next 10 to 15 years. Its fundamental success will rest in the suitability and attractiveness for the emerging market. This means ensuring an optimal location in terms of water and land based functional requirements, minimising existing and potential land use conflict and incompatibilities and targeting financial sustainability.

Some relevant national and international examples are provided in Table 8.



# TABLE 8: NATIONAL AND INTERNATIONAL COMPARISONS

Location	Description	Facility floor area (sqm)	Berth length (m)
Southampton – Ocean terminal	New terminal, completed in 2009. One of four in Southampton. Capable of handling 4,000 passengers. Terminal not designed for multipurpose use but can accommodate if required.	9,100	480
Amsterdam	Established terminal, one of four in Amsterdam. Used as a multipurpose facility (conferences, exhibitions, events).	15,000	600
Barcelona	Purpose built terminal, exclusive for Carnival. Not a multipurpose facility, but generous space provided for passenger services.	10,000	580
New York - Brooklyn	New terminal, dedicated cruise use. Designed to handle 4,000 passengers.	18,500	345
Sydney - Circular Quay	One of two established terminals in Sydney. Designed for transit visits, but now being used for turnaround visits and is at capacity. Used as a multipurpose facility (events, parties).	3,000	300
Auckland	In the Hilton Hotel. Handles one vessel at a time 2,700 passengers.	3,800	300
Brisbane	20 check in counters. Seating for 500.	3,000	240



### 2.6 LESSONS FROM OTHER CITIES PLANNING AND MANAGING CRUISE SHIP TERMINALS

Other cities have spent a considerable amount of time determining the characteristics that constitute an optimal facility. The location, facility size, terminal building flows, access and logistics are each important considerations that will provide leads, directions and lessons for Newcastle. The summary of these characteristics include the following:

- Recent new builds of fully serviced facilities are averaging between 6,000 to 15,000 sqm.
- Often these facilities are multifunctional and can generate income from 'non cruise' activities.
- New build designs show the following common elements:
  - Buildings have open flow designs and are capable of being adapted for other uses;
  - --Construction across one level;
  - A terminal that is two-way which reduces crowds/queues;
  - Sufficient space for waiting passengers, crew and support personnel;
  - Sufficient separation of activities (passengers, crew and operations);
  - Significant wharf space allocated to re-provision the vessel efficiently;
  - Separate zones for vehicles including taxis, coaches, passenger drop offs and pickups and security purposes; and
  - Supporting visitor information services.
- Some cities are refurbishing their existing terminals to address issues that that have evolved post development such as:
  - Double handling of luggage (Sydney); and
  - Managing cruise and non cruise activities when a vessel is in at berth (Sydney, Brisbane).
- Support infrastructure is as important as the on shore facilities. The success of a facility is often reflected in the passenger's ease of access in terms of parking, taxi and bus set downs, proximity and connections to airports.
- Success of a cruise ship terminal does not lie with one measure but in the complex interrelationship of a range facilities and services.



### 2.7 HOW CRUISE SHIP COMPANIES RATE TOP FACILITIES

Based on the priorities expressed by the Carnival Group the 'top 10' features of a world class cruise facility are as follows.

- 1. Competitive port and terminal fees: The most successful international ports attract cruising companies by offering competitive fees that are independently benchmarked against similar ports in other parts of the world.
- 2. Care of passengers: The primary goal of passengers is a quick, hassle-free process through the cruise terminal; avoiding crowded check-in areas, long check-in queues, slow security screening and unfamiliar boarding processes. Passenger satisfaction depends to a large extent on how quickly they can get their boarding passes, how simple it is to check in luggage and how much control they have over the process. Passengers first and last experience of a cruising holiday can be influenced by the available facilities, comfort and ambience of the cruise terminal.
- 3. Dedicated luggage collection zone: A spacious area for passengers to easily pick-up their luggage, in compliance with government border security requirements, is important to the smooth running of a facility. This area needs to be separate from passengers queuing to embark the ship.
- 4. A dedicated luggage zone of about 2,000 square metres allows bags to be colour-coded and picked-up as passengers progressively disembark. This process can take up to three hours.
- 5. Dedicated passenger check-in zone. Space is also the key to an efficient check-in zone. An area of about 2,000 square meters, in compliance with government border security requirements, allows up to 3,000 passengers to queue without feeling crowded and allow for a two-way terminal; processing embarking passengers whilst disembarkation is underway.
- 6. Easy loading of stores. About 150 tonnes (or the equivalent of 6 shipping container loads) of food and beverage stores, plus fuel, fresh water to supplement onboard evaporator plants and technical supplies are loaded each time a ship turns around. An area of about 1,000 square metres, in compliance with government border security requirements, provides enough space for this process to happen as quickly and efficiently as possible. The ships are generally only at a terminal for between eight to 10 hours, which means stores are being moved at the same time as passengers are embarking/disembarking.
- 7. Separate air-bridge gangways leaving the wharf. It is necessary to have two air-bridge gangways to ensure a safe continuous passenger/crew movement and a degree of redundancy within the operation. Allows vehicle flow and management. Traffic management is important at a cruise facility. The world's most efficient facilities have separate zones for different sorts of vehicles stores vehicles, taxis, coaches, mini vans and passenger drop-offs and pickups.
- 8. Equipment storage on site. It is necessary to store equipment on-site to be used for passenger logistics movements. An efficient port provides adequate access for vehicles and cranes on the quayside next to the vessel.


- 9. Access for services. About 100 tonnes of fresh water is loaded onto a ship such as the Pacific Dawn each hour. In addition, we are also landing up to 60 m3 of treated and sorted rubbish, 15 cubic m of waste oil from the vessels. World class cruising facilities ensure there is easy access for these important services.
- 10. Long and short term parking facilities. Successful ports overseas offer passengers the ability to park their vehicles in secure parking facilities. In Southampton in the UK, about 1,000 vehicles are parked in long-term facilities each week, which is proving to be a significant revenue raiser for ports authorities. This is no different to services offered at Australian airports.

#### 2.8 WHAT PASSENGERS WANT/EXPECT

Surveys undertaken in Auckland (2009), Darwin (2010) Melbourne (2010) Tasmania (2010) have consistently identified what passengers want and expect at a cruise ship facility. These include (in no particular order):

- To be greeted with some fun & fanfare;
- Quick and hassle free processing;
- Comfortable waiting areas (seating);
- Safe and easy access to the ship;
- Easy access to phones, currency exchange, ATM, tourist info, shops, cafés;
- Choice around shore excursions;
- Easy access to/from airport or city; and
- Good signage and directions.

Interestingly they do not rate the view, local ambience or surrounding uses as important.



# PART 3 Establishing the Options Evaluation Criteria

## 3.1 INTRODUCTION

The success of the final location of the passenger cruise ship terminal will depend on the veracity of the evaluation criteria used. This section establishes and explains those criteria. The criteria have been developed through international benchmarking, stakeholder engagement, analysis of global and national trends and projections, consideration of strategic planning for the city (commercial and residential uses) and the port. Of primary importance was the establishment of the functional brief for both water and land based activates for a cruise passenger terminal.

The assessment criteria include:

- Functional brief for water and land elements;
- Social and community impacts considerations;
- Environmental impact and considerations;
- Economic impacts;
- Strategic context and opportunity costs; and
- Financial cost.

Some criteria are essential (such and minimum water depth), others are desirable and can be achieved on a scale of outcomes.



#### 3.2 FUNCTIONAL BRIEF WATER AND LAND BASED

The functional requirements/specifications were established in the project brief and refined and confirmed through a Reference Group workshop. Physical berthing capability and requirements are essential or desirable. The project team took the view that the terminal location and eventual development needed to be able to accommodate both the current and medium term trends in the industry as they relate to Newcastle. Table 9 indicates the requirement, its importance and makes explanatory comments.

#### TABLE 9: PHYSICAL BERTHING REQUIREMENTS

Physical berthing capability and requirements	Importance Essential or desirable	Comments
Minimum length of berthing box required (mooring for 1 vessel) is 300m.	Essential	Ports across the globe and in Australia are suffering a loss of visitation due to their inadequate berthing box length. Relevant examples include Brisbane and Auckland.
Port access (manoeuvrability to berth) Max vessel length 300m. This is the maximum length currently accessible to the port.	Essential	Options should be assessed on existing and proposed access routes to berthing including safety, financial and environmental costs to enable vessels, journey distance, impacts on other activities.
Min draft depth 8m.	Essential	Existing and medium term vessels that would look to use home berthing facilities in Newcastle require a minimum draft depth. Options should be assessed on current water depths and the financial and environmental costs of dredging to deepen the harbour.
Berth to allow for potential gun port access for a minimum 150m.	Essential	Access is required to at least two sites along the side of the vessel.
Vessel clearance height in excess of 55m.	Highly desirable	As the trend to larger vessels continues so does the vessels height above water level. The White bay and existing darling Harbour 5 wharf can only accommodate vessels under 49 m excluding (limited by the height of the Sydney Harbour bridge). In regard to this constraint the Tourism and Transport Forum said that within a decade 85% of cruise ships will be too tall to fit under the bridge. Vessels such as the Allure of the seas rise 72m above water level. Many current generation ships visiting Australian port cannot be accommodated west of the bridge e.g. Carnival Spirit 53m, Sun princess



Physical berthing capability and requirements	Importance Essential or desirable	Comments
		49.4m, Millennium 56m.

The project brief defined the desired and essential attributes and space/design requirements for a modern terminal facility. These were reviewed by key stakeholders and benchmarked with international and domestic projects and proposals. Of significant value and influence was the brief for the White Bay domestic passenger terminal and the Auckland City Council document "A Guide to Cruise terminal Planning" (August 2009). These requirements are set out in Table 10.

## TABLE10: BUILDING REQUIREMENTS

Terminal Building	Importance	Comments
Building should be linear (parallel to wharf) with the long side length to match ship access points	Highly desirable	Building length minimum 100m with capacity to extend the building in modules over time.
Arrival hall check in waiting area	Highly desirable	2000m <sup>2</sup>
Distinctive Customs and AQIS areas	Essential	200m <sup>2</sup>
Disembarkation hall	Highly desirable	300m <sup>2</sup>
Embarkation hall		300m <sup>2</sup>
Cargo hall	Essential	500m <sup>2</sup>
Baggage hall	Essential	2000m <sup>2</sup>
Total building area with internal flexibility	Highly desirable	5500 to 6000m <sup>2</sup>



There were also a range of general operating requirements and attributes identified including parking, security and safety Table 11.

## TABLE11:REQUIREMENTS FOR SERVICE FACILITIES

Parking	Importance	Comments
Parking for 200 vehicles inside the terminal precinct.	Highly desirable	Minimum land area for at grade parking 6,000m <sup>2</sup> .
Ability to add 200 vehicles for park and cruise.	Highly desirable	Minimum land area for at grade parking 6,000m <sup>2</sup> .
20 bus/coach spaces.	Desirable	Minimum area required with access 2, 000m2.
20 space taxi queuing bay and 10 drop off pick spaces.	Essential	Current survey estimates for Newcastle and Darling Harbour suggest 37% of arrivals come by taxi.
8 trucks for providores.	Highly desirable	
Security and safety.	Importance	Comments.
Perimeter fencing.	Essential	National port security protocols apply.
Lighting.	Essential	Both security and safety standards apply requiring 24/7 lighting.
Waterside and landside access control.	Essential	



#### 3.3 COMMUNITY IMPACTS AND CONSIDERATIONS

The evaluation of the sites for the location of the cruise ship terminal must consider social and community impacts. Cruise ship terminals generate noise, light, waste, traffic and parking. They limit or constrain community access to the water and adjacent foreshore. Cruise ship terminals can operate in conflict or restrict other users and activities. They require considerable areas of land that may have alternate value or use. They also affect the visual amenity of an area.

#### 3.4 ENVIRONMENTAL IMPACTS AND CONSIDERATIONS

The operation of cruise ship terminals generate impacts on the natural environment which must be considered and assessed in terms of determining a preferred location. The major impacts to be considered are those associated with blasting and dredging. The process and impact of deepening a harbour channel and berth depends on the increased depth required, the total area to be deepened, the nature and material of the harbour floor (solid rock or deposited materials) and the biodiversity of the site.

Other environmental considerations include the utilisation of embedded energy, drainage impacts, traffic and congestion, water turbulence, waste generation and disposal.

#### 3.5 STRATEGIC CONTEXT

The initial concept of trying to attract visiting cruise and naval ships to Newcastle, and the subsequent decision to develop a passenger cruise ship terminal for home berthing in the port, were very deliberate economic development and revitalisation strategies. It is therefore important to assess terminal location options in terms of the wider strategies, context and objectives.



#### 3.6 ECONOMIC IMPACTS and CONSIDERATIONS

The economic impact and benefit of the cruise ship industry is well documented globally and nationally. The positive benefits in terms of multiplier effects, direct and indirect jobs, tourism awareness and spending, flow on transport, the value add from servicing and provisions ships are substantial and the competition to attract cruise ships is strong.

Some locations have a greater opportunity to leverage additional economic benefit than others. Some locations actually compete with other commercial uses and have the potential to reduce the total capacity of a city/location to leverage the maximum or optimal economic benefit. Some locations offer greater opportunity to generate flow on economic benefit in the form of new associated business and property investment on adjacent lands and the flow on through increased land values to investors and governments. These are all important considerations in evaluating location options.

## 3.7 FINANCIAL and GOVERNANCE CONSIDERATIONS

Options assessments should consider the following:

- Establishment/construction and land acquisition costs;
- Operating costs for major stakeholders;
- Achievability;
- Timeframes and staging options;
- Capacity to grow and evolve with industry trends;
- Level of stakeholder and community support;
- Ability to leverage private sector and other government funding;
- Ability to attract other compatible uses and activities to generate income within the project; and
- Capacity to generate associated investment with income streams off site.



# PART 4 Overview of the Three Site Options

#### 4.1 OPTION 1 TUG BERTHS SITE



Figure 5: Tug Boat Site



Figure 6: LEP Zoning

**Tug Berths:** The site is located on the southern side of the harbour some 1.8km west of the port entrance and adjacent to the open park land know as the Newcastle Foreshore.

Approximate land area: Approximately 2 hectares.



**Existing development and uses:** The site is comprised water and land side elements. The water side was formerly used for the tugs berths however, this use ceased some years ago. The land side consists of a range of uses associated with the Newcastle Foreshore. These include the foreshore promenade and parkland; roadway and car parking; pathways; facility forecourts; recreation areas.

**Existing cruise ship infrastructure:** In only infrastructure in place is a rock retaining wall. The tug berth structures have recently been decommissioned and demolished by Maritime NSW. This site would have to be restabilised in order for cruise ships to visit and incorporate capital works including but not limited to dredging, wall stabilisation, wharf construction, services extension and recommissioning.

Zoning and any planning provisions: There is a distinction between the water and land side elements in terms of planning provisions and controls.

The water side element forms part of a state significant site under SEPP (Major Projects) Amendment (three Ports) 2009 Newcastle Port Site. The land part of the proposal is zoned under the Newcastle LEP 2008. As such any application concerning the area covered by the SEPP (inclusive of non SEPP areas) will require direction from the Minister to confirm the approval pathway for the entire development.

The land side section of the site is partly zoned RE1 Public Recreation Zone and unzoned (road reserves only) under Newcastle LEP 2008 (Figure 6).

The applicable land use definition for the proposed development based on definitions in Newcastle LEP 2008 is "Passenger transport facility". Passenger transport facility is defined as:

"means a building or place used for the assembly or dispersal of passengers by any form of transport, including facilities required for parking, manoeuvring, storage or routine servicing of any vehicle that uses the building or place."

Passenger transport facility is permissible in the RE1 zone with the consent of Council.

The site is also subject to the Newcastle Foreshore Plan of Management and use within the area is subject to the provisions of the Plan.



**Ownership**: Most of this site is classified as Community land and is owned by Newcastle City Council. Some of the site is owned by the NSW government. Council gave a strong indication of its attitude towards the location of a cruise ship terminal at the Tug Berths in its decisions of the meeting of July 6, 2010. Council officers recommended Council:

*"a. Receives and notes the update on the future cruise ship berth analysis.* 

b. Approves a feasibility study into a future cruise ship terminal at Queens Wharf. In addition, support the reference groups' study into the old tug berth location and the Channel Berth at Dyke point, owned by Newcastle Port Corporation (phase 2). Once completed the full feasibility and forward recommendation be brought back to Council.

*c.* Approves expenditure of up to \$20,000 on the feasibility study outlined in (b) above to be dollar for dollar matched with funding from the Department of Industry and Investment. This arrangement would be formalised through a future quarterly review."

The Council however resolved as follows:

"That Council recommends to the Cruise Ship Terminal Reference Group that the most suitable option is the Channel Berth at Dyke Point based on this analysis and note that this is Council's preferred site." Direct quotes form Council business papers.

As principal owner of the site council has made it clear it is not in support of this site being used as a permanent cruise berth.



## 4.2 OPTION 2 QUEENS WHARF SITE





**Queens Wharf:** This site is located on the southern side of the harbour some 2.2km west of the port entrance and adjacent to the open park land know as the Foreshore.

Approximate land area: Up to 2.4 hectares.



**Existing development and uses:** The site stretches from the existing Queens Wharf (Brewery) complex eastward along the foreshore and utilises part of the existing bus transit and Newcastle Station platform area. To this extent, the full layout relies on the termination of the use of the station and redevelopment for other uses.

The Queens Wharf section would be redundant and the existing wharf improvements demolished and either reconstructed or left as sea wall. The current wharf gets very little use by vessels for berthing and is mainly used as promenade associated with the Brewery pub and restaurant and the ferry service to Stockton (western component). Like the tug berths, extensive capital works would be required to bring the berthing area to standard as this sort of use was never contemplated when the wharf and landside facilities were constructed.

The land side area has been drafted to exclude the existing Queens Wharf buildings owing to the tenure arrangements that apply. It is understood that the Brewery lease includes the wharf area so this will be an issue should the facility require modification or demolition.

**Existing cruise ship infrastructure:** Nil. New retaining structures including wharf areas, seawall treatment and dredging are likely to be required in order to bring it into service for a cruise terminal. There is a popular misconception that the wharf itself could be used by cruise vessels. This is not at all possible. The structure would not support vessels of cruise ship tonnage and size.

**Zoning and any planning provisions:** Like the Tug Berths, the planning elements are distinctive across the water and land side components and the same provisions apply.

The land side site is zoned a mix of RE1 Public Recreation and SP2 Railway Infrastructure and unzoned (road reserve) under the Newcastle LEP 2008. The following is a zoning extract from the Newcastle LEP 2008 showing the sites zoning. See Figure 8.

The applicable land use definition for the proposed development based on definitions in Newcastle LEP 2008 is "Passenger transport facility". Passenger transport facility is defined as:

"means a building or place used for the assembly or dispersal of passengers by any form of transport, including facilities required for parking, manoeuvring, storage or routine servicing of any vehicle that uses the building or place."

Passenger transport facility is permissible in the RE1 zone and the SP2 Infrastructure zone with the consent of Council.





#### Figure 8: LEP 2008 Queens Wharf Site

The Foreshore Plan of Management will also have jurisdiction in this area and any use will need to comply (or modify) its provisions.

**Ownership:** Queens Wharf and Foreshore lands are classified as Community and Operational lands and are owned by Newcastle City Council. Council gave a strong indication of its attitude towards the location of a cruise ship terminal at the Tug Berths in its decisions of the meeting of July 6, 2010. Council officers recommended Council:

## "a. Receives and notes the update on the future cruise ship berth analysis.

b. Approves a feasibility study into a future cruise ship terminal at Queens Wharf. In addition, support the reference groups' study into the old tug berth location and the Channel Berth at Dyke point, owned by Newcastle Port Corporation (phase 2). Once completed the full feasibility and forward recommendation be brought back to Council.



*c.* Approves expenditure of up to \$20,000 on the feasibility study outlined in (b) above to be dollar for dollar matched with funding from the Department of Industry and Investment. This arrangement would be formalised through a future quarterly review."

The Council however resolved as follows:

"That Council recommends to the Cruise Ship Terminal Reference Group that the most suitable option is the channel berth at Dyke Point based on this analysis and note that this is Council's preferred site."

As principal owner of the site council has made it clear it is not in support of this site being used as a permanent cruise berth. Newcastle Railway Station and bus transit area are owned by the NSW State Government.

**Other comments:** There are a large number of stakeholders to deal with in terms of property ownership and use under this option. Newcastle Council, State Rail, State Transit (buses and ferry's)) and leasehold interests within the Queens Wharf complex make this a difficult option. This is aside from the approval process or the matters to be dealt with under the Foreshore Plan of Management.



#### 4.3 OPTION 3 CHANNEL BERTH SITE



#### Figure 9: Channel Berth Site

**Channel Berth:** Located on the northern side of the harbour some 3 km from the entrance to the port and extending along a deep water channel known as the Steel Works Channel (Figure 9)

**Approximate land area:** Up to 2 hectares.



**Existing development and uses:** The Channel berth is located on Dyke Point and is adjacent to the main channel. Basic wharf facilities have been upgraded allowing the wharf to accommodate a range of ship types including cruise vessels. The land side improvements consist mainly of temporary installations to accommodate cruise ship needs. Parts of these facilities could also be used for general shipping (hardstand and car park areas). The facility is directly adjacent to an access road within the port area.

**Existing cruise ship infrastructure:** As above. The area is withi

As above. The area is within the port designated security zone.

**Zoning and planning provisions:** The site is zoned SP1 special Activities under SEPP (Major Projects) Amendment (Three Ports) 2009 Newcastle Port Site. The following is a zoning extract from the SEPP showing the sites zoning. (Figure 10).



Figure 10: Zoning extract from the SEPP



The applicable land use definition for the proposed development based on definitions in Newcastle LEP 2008 is "Port Facilities". Port facilities are defined as: "means facilities at, or on land in the vicinity of, a designated port (within the meaning of section 47 of the *Ports and Maritime Administration Act* 1995) used in connection with the carrying of freight and persons by water from one port to another for business or commercial purposes."

Port facilities are permissible in the SP1 Special Activities zone with the consent of the Minister.

**Ownership:** Newcastle Port Corp/State Government. NPC does not object to the use of the site for a cruise terminal and facilitated temporary use to this point in time.

#### 4.4 SUMMARY OF OPTIONS OVERVIEW

The Channel Berth site is considered to be the most appropriate site in terms of appropriate existing zoning, availability of unfettered land and berthing water, and the attitude/support of the land owner.



## Part 5 Assessment of Options in Terms of Functional Brief

## 5.1 WATER BASED FUNCTIONAL REQUIREMENTS

Water based functional requirements, those berth attributes that are required to accommodate a cruise ship such as channel access, berthing depth and length, provide the most immediate and essential criteria for evaluating options for a cruise ship terminal's location. If a ship can't get access (e.g. in Sydney many ships are too tall to fit under the Sydney Harbour bridge); if there isn't adequate water depth to berth; or if the ship is too long for the berth (Throsby Wharf) or if through engineering such as blasting and dredging these cannot be overcome other suitability factors are of little consideration. In previous studies, sites have been ruled out because of the existing and future inability to meet these requirements.

Table 12 shows how the three options fulfil these water based requirements.

## TABLE 12: OPTIONS ASSESSMENT WATER BASED FUNCTIONAL REQUIREMENTS

Water Based Functional Requirement	Importance	<b>Options 1 Tug Berths</b>	Option 2 Queens Wharf	Option 3 Channel Berth	Comments
Minimum length of berthing box required (mooring for 1 vessel) is 300m.	Essential	300m possible requires new berth.	300 possible requires new berth.	Existing capacity for ships up to 280m can be expanded 300m.	Channel berth offers most immediate option, greatest flexibility long term.
Port access (manoeuvrability to berth) Max vessel length 300m.	Essential	Achievable, swell & wave action may limit usage periodically.	Achievable, swell & wave action may limit usage periodically. The berth has to be kept well east to avoid compromising access through the Steel Works channel.	Achievable	Channel berth offers easiest manoeuvrability and is not affected by wave and swell action.
Min draft depth 8m.	Essential	Existing depth 5.1m. berthing box depths & approach channel depth averages 5 to 9m.	Berthing box area ranges between 2.1 & 4.1m. The approach channel has a depth of between 2.1 & 8m	Berthing box ranges between 8.6 & 9.6m& the approach channel drops to in excess of 14m.	Option 1 & 2 will require rock blasting and dredging. Channel Berth offers existing capability & suitability in terms of require draft depths.



Water Based Functional Requirement	Importance	Options 1 Tug Berths	Option 2 Queens Wharf	Option 3 Channel Berth	Comments
			with most of the channel substantially less than 8m in depth.		
Berth to allow for potential gun port access for approx 150m of the ships length.	Essential	Possible	Possible	Currently in place.	
Vessel clearance height in excess of 55m (air draft).	Highly desirable	No air draft limitations.	No air draft limitations.	No air draft limitations.	The Port of Sydney's current inability to find a second terminal location east of the bridge may well provide opportunities for Newcastle.



#### 5.2 LAND BASED FUNCTIONAL REQUIREMENTS

Cruise ports used for vessels stopping off on a journey, referred to as transit ports, have specific but minimal land based requirements. However, home berthing terminals require significant amounts of covered building area and space for servicing and access to operate efficiently. Briefs prepared for the White Bay and Auckland terminal projects, which propose to operate similar domestic cruise ship home berthing facilities, identify technical requirements very similar to those specified for the Newcastle terminal project. Section 2.7 of this report confirms the response from the Cruise industry in terms of the minimum land and building requirements for an efficient cruise ship terminal.

Table 13 shows how the three options fulfil these land based requirements.

Land Based Functional Requirement	Importance	Options 1 Tug Berths	Option 2 Queens Wharf	Option 3 Channel Berth	Comments
Building should be linear (parallel to wharf) with the long side length to match ship access points.	Highly desirable	Achievable	Achievable	Achievable	Options 1 & 2 require utilisation of land zoned for open space, community uses, road and parking. Option 3 offers an existing available floor plate of approx 4000m <sup>2</sup> on appropriately zoned land.
Arrival hall check in waiting area; 2000m <sup>2</sup> Distinctive Customs and AQIS areas; 200m <sup>2</sup>	Highly desirable Essential	Achievable. However the construction of a building at this site would occupy land	Achievable. To achieve the floor area required on one level the terminal would have to be	Achievable one level.	Options 1 & 2 while achievable require the use of land currently zoned and used for open space, roads & parking or the
Embarkation hall 300m <sup>2</sup>	Highly desirable Highly desirable	space & roads. There is an option of building a terminal over the water	open space and road way. If it were to be constrained to the		floor plate of 2000m <sup>2</sup> over three levels. Option 3 presents the most

## TABLE13:OPTIONS ASSESSMENT LAND BASED FUNCTIONAL REQUIREMENTS



Land Based Functional Requirement	Importance	Options 1 Tug Berths	Option 2 Queens Wharf	Option 3 Channel Berth	Comments
Cargo hall 500m <sup>2</sup> Baggage hall 2000m <sup>2</sup> Covered external set down/pick up coaches. Total building area with internal flexibility 5500m <sup>2</sup> to 6000m <sup>2</sup> .	Essential Essential Desirable Highly desirable	however this a highly unlikely scenario because of the difficulties associated with the wave regime in the area, the cost of piering & the potential conflict with the port's main access channel.	existing built area and adjacent car park maintaining the existing road the building would be need to be over three levels.		achievable and affordable option to develop the necessary building area on one level.
The ideal design solution in terms of operating efficiency and cost is a single story building.	Desirable	Achievable but requires land used for open space, roads & parking.	Achievable but requires land used for open space, roads & parking.	Achievable.	Option 1 & 2 could achieve a single story terminal but with significant loss of open space, & parking & disruption to the road network.
Parking for 200 vehicles inside the terminal precinct: 6,000m <sup>2</sup>	Highly desirable	Achievable most likely a multi level solution.	Achievable most likely a multi level solution.	Achievable and in place currently.	It is possible to provide space for the required number of vehicles for options 1 & 2 however this
Ability to add 200 vehicles for park and cruise: 6,000m <sup>2</sup>	Highly desirable	Achievable but will alienate areas of public domain and may require multi level solution.	Achievable but will alienate areas of public domain and may require multi level solution.	Achievable and in place currently.	would be in a multi decked car park & would involve the loss of open space. Option 3 can provide the parking area at grade.
20 bus/coach spaces: 2,000,m <sup>2</sup>	Desirable	Achievable with impacts on traffic	Achievable with impacts on traffic	Achievable and in place currently.	Option 3 provides the required space for these activities. These
and 10 drop off pick spaces.	Essential	Achievable	Achievable	currently.	options 1 & 2 however they will
8 trucks for providores.	Highly desirable	Achievable	Achievable	Achievable and in place currently.	involve greater cost, loss of public land, disruption to traffic flow and pedestrian access.
Perimeter fencing	Essential	Achievable	Achievable	Achievable	To achieve these requirements at
Lighting	Essential	Achievable	Achievable	Achievable	Options 1 & 2 would result in the



Land Based Functional Requirement	Importance	Options 1 Tug Berths	Option 2 Queens Wharf	Option 3 Channel Berth	Comments
Waterside and landside access control.	Essential	Achievable	Achievable	Achievable and in place currently.	community's loss of access of prime city waterfront. Option 3 achieves these requirements without alienation of existing open space and loss of public access.
Total Site area required 2 ha including building area. If the building was over two level this area could be reduced by up to 4000m <sup>2</sup> requiring 1.6ha.		Achievable using public open space, road reserve and parking areas.	Achievable using public open space, road reserve and parking areas.	Achievable	As the minimum floor plate for baggage handling and check in is approx 2000m <sup>2</sup> the building must have a floor plate of at least this area plus some service cores including stairs, elevators and escalators.

## 5.3 SUMMARY OF ASSESSMENT OF OPTIONS IN TERM OF FUNCTIONAL BRIEF

In assessing the three options for the location of a passenger cruise ship terminal the most important and essential requirement is vessel access. All the options are potentially capable of meeting the functional requirements of an 8m draft and a 300m berthing box. However, Options 1 and 2 require both significant capital works including blasting and dredging to achieve the draft depth and the construction of new berths. Option 3 offers both access and berth depth in excess of 8m and has existing berthing facilities for vessels up to 280m with capacity to increase. In terms of immediate and medium term ability to satisfy the water based requirements of cruise vessels Option 3 is the preferred option.

In terms of land based requirements, Option 3 is also the preferred option. It offers the ability to construct a terminal building of  $6000m^2$  on one level and provide at grade the associated parking, drop, servicing and storage facilities. Option 3 has adequate land which is zoned appropriately and construction of the terminal would not affect other existing uses on site or adjacent. Options 1 & 2 require rezoning of land and the use of road, parking and open space to achieve both single level and multiple building solutions. Further, Options 1 and 2 would require redesign of the exiting road, traffic management and parking networks.



To reduce the alienation of open space, the terminal building for Options 1 & 2 could involve building over the water. In option 2, Queens Wharf, this would not be possible without impacting on the main navigation channel of the port. For this reason alone building out into the port is not an acceptable solution. In terms of Option 1, Tug Berths, while possible this a highly unlikely scenario because of the difficulties associated with the wave regime in the area, the cost of piering, building maintenance.

Another solution for options 1 & 2 could be to construct an efficient three storey building which would reduce the overall foot print by up to  $4000m^2$  it would however increase design construction and operating costs. Such a building would need 150m water frontage and floor plate in excess of  $2000m^2$ . This adds significant cost and the building both to build and to operate (lifts and escalators) and it would still encroach on open space, public walkways and road and restrict community access causing other operational constraints, cost and difficulties.



# PART 6 Assessment in terms of Social, Environmental, Strategic, Economic & Financial Considerations and Impacts

## 6.1 ASSESSMENT IN TERMS OF COMMUNITY AND SOCIAL CONSIDERATIONS AND IMPACTS

Cruise ship terminal invariable mean the alienation of water front land and access to the water. The operation of the facility, the imperatives of security, safety, customs, commercial investment protection, all require that the terminal space, in part if not in full, be fenced and access controlled. This means an exclusion zone for the general community, for all or a significant part of the terminal land area, for significant periods of time. Some areas would enforce total exclusion all the time.

In terms of Option 1, the Tug Boat location, and Option 2 Queens Wharf, reducing the community's access to the water, the seawall, and the surrounding lands are perhaps the most significant negative community outcomes. These are iconic sites for the city. They are heavily used by a wide range of social and demographic groups for recreation, relaxation and entertainment. The Foreshore Park is a local, district and regional facility and is a major tourist attraction in its own right. Being able to see and access the port is its single greatest defining feature. The area is of primary historic importance to the city as the birth place of European settlement. It provides the backdrop and stage for Nobby's, the beach, the city centre and Fort Scratchley and sets the character and focus of the surrounding community.

It is most unlikely that the community would or should accept the construction of a  $5-6\ 000m^2$  building on the water front blocking views and access with perimeter fencing around up to 2ha of park land and foreshore. While it is possible to reduce the footprint of the building this would still result in a building with a water side length of up to 150m with a depth of in excess of 20m, a floor plate of more and  $2000m^2$  over 3 storeys. This could reduce land demand to approximately 1.6ha but it would still require use of open space and roads on both Option 1 & 2 sites.

In addition to the alienation of public open space another significant impact for Options 1& 2 would be the relocation of the area's main road network. The relocation of this road would cause the loss of more open space and require significant changes to the traffic dynamic of the area. Even if the road did not have to be moved, and it does, it already operates a capacity and the cruise terminal would result in significant congestion and parking problems during visitation.

The urban design, historic and community value of these sites means that any development in the area needs to be iconic in its own right. The nature of a domestic cruise ship terminal is that of an industrial building. With dimensions and proportions of an industrial shed the impact on the area's visual amenity would be



dominating. While construction of a more elaborate, contemporary and suitable structure is possible, the economics of the operation of a cruise terminal could not justify the cost.

It is not just the building that would affect visual amenity. While the idea of a cruise ship berthed in the harbour is generally thought of as an "attractive" one, cruise ships are like large floating building. The ships which mostly commonly visit Newcastle are in excess of 200m in length and rise some 48 meters and more from the water. They are equivalent to a 12 to 14 storey building and prospectively getting larger. Such a vessel would significantly obstruct views for the period it would be moored. Anecdotal evidence from the International Passenger at Circular Quay indicates that rents and visitation to terminal and neighbouring restaurants and cafes is dropping because of the continued obstructed view of the water. This terminal berthed 14 ships of the 28 ships to visit Sydney Harbour in February 2011 this impacts significantly on venue patronage and community amenity.

This loss of open space, disruption to transport systems and poor urban design and visual amenity impacts may, in some environments be reasonable outcomes for other greater social benefits. This is not the case for these two options. While the site does lend itself to use for conferencing and functions, which have been long term aspirations of business and the community, this shared use would slimily add to the size of the structure, the level of alienation and provide little net benefit to the community over a similar venue in a less intrusive location. The employment generated by the facility in either Option 1 or 2 would be no greater than the employment benefits of the same facility in another location and thus not net social benefit.

In comparison Option 3 the Channel berth is located in an industrial area which has for decades been identified, managed and zoned for port related uses. The site is currently not open for general community access and entrance to the area is regulated by the Newcastle Port Corporation. Continued commercial maritime use of the berth would not diminish the community's access to the water or foreshore from current levels. Moreover, Option 3 sits in an industrial context where a large building, even 6000m<sup>2</sup> on one level, would not be out of place, or present negative visual impacts. A single level design solution could be easily achieved offering passengers and cruise ship operators the most efficient and effect outcome.

Perhaps of relatively less significance are the noise and light impacts of a cruise ship terminal on the surrounding residential community and users of the adjacent park. Passenger cruise ships generate considerable noise during embarkation, disembarkation, servicing, and re supply/provisioning, cleaning. Indicative noise generation levels are provided in the White Bay Cruise Ship terminal proposal which has recently been approved. These are listed below. Levels are such that in residential areas with low background or ambient noise levels amelioration measures would need to be taken and some levels of disturbance to residents in close proximity would occur. Some of the noise levels projected for White Bay are listed below:



Cruise Ship 107db Large Forklift (diesel, no noise control) 106db Large Forklift (electric, gas, or diesel, no noise control) 95db Gas powered forklift 93db Refrigerated Trucks 103db Car park acoustic centre 92db Bus acoustic centre (at 30 to 40 kmph) 105db Car (at 40 kmph) 90db \*The car park noise was based on the CPT peak traffic generation of 57 cars arriving and leaving within a typical 15 minute period. (Source Wilkinson Murray)

Design and management solutions would help ameliorate the disturbance caused by these activities of a terminal. However, this is predominantly an industrial/commercial activity involving noise levels well above the local ambient noise levels and lighting that would impact beyond the site itself. Options 1 and 2 lie in close proximity to residential areas. Option 3 is in a predominantly industrial locality. While subject to regulating approval conditions, the impact of lighting and noise are marginal as the nearest residential community is 1 km away.

During visitation the precinct would need to be lit to a level which would ensure passenger safety, OH&S requirements are met, security and surveillance is maintained. Australia and maritime standards apply which require high level 24 hours light during mooring and a lower standard which enable security and surveillance to be maintained when the berth is unoccupied. Most activity on and around moored vessels would occur between 6:30 am and 9:30 pm. While lighting design would minimized "light" disturbance the impacts on residential communities and open space it would be remain an issue for Options 1 and 2.

All options will generate an equivalent level of need for passenger access. This estimated to be between 600 to 1,000 bus and passenger vehicle movement per vessel. The quantum of traffic generated by the proposed development has been based on the actual traffic movements recorded during a 'domestic' cruise ship visit (The Pacific Dawn) to the CPT at DH8 which is a similar size operation to that proposed in Newcastle. These have been calibrated with the Newcastle experience with the home berthing of the Pacific Sun over the 2010, 2011 season to date and appear consistent.

The figures below show two Way Traffic Movements (6:30am to 4:30pm) associated with a cruise ship visit at Darling Harbour 2010.

- Car/taxi 1,863
- Rigid Trucks, buses and coaches 255
- Articulated Truck 36
- Total 2,154



Sydney Ports carried out a study to understand the proportion of passengers taking public transport to DH8 for a typical domestic cruise ship berthing. The results were:

- 37% arrived in a taxi.
- 25% arrive by private transfer.
- 23% of passengers arrive by car, as driver or passenger.
- 14% arrived by public transport or walked from their hotel.

In summary, traffic impacts of cruise ship terminal while short term are significant and need both adequate infrastructure and management. Options 1 and 2 offer locations closer to rail and public bus transport facilities/routes. However, this would advantage a relatively small number of passengers as compared with those who access the terminal in a passenger vehicle: taxi, car or private transfer. The community transport impact of a cruise terminal is felt most severely in terms of road traffic, congestion and parking requirements. Newcastle City Council transport modelling shows that Wharf Road and Honeysuckle Drive are already operating near capacity. Parking studies have identified a parking shortage in the city centre which applies to both weekday commuter and weekend users. An additional 2000 plus vehicle movements in a 10 hour time frame would generate significant negative community impacts both for general road user accessing the area and the for surrounding residential neighbourhoods.

Option 3 has a lower level of road congestion and negative impact. Backing up and delays do occur on Cowper Street and Dyke Road, however the it is possible y to manage this and the impact on non cruise ship related communities and road users is considered marginal. Improved signage and management of embarkation and disembarkation, along with increased promotion and use of the free shuttle service, would ensure minimal congestion and negative impact in the area. When the Pacific Sun berthed and resupplied in Newcastle before sailing again on February 6, 2011, Cruise Hunter worked with local transport services and with NSW government assistance free public buses were provided between the Channel Berth and Newcastle railway station. This service was taken up about 650 passengers or 16% of the almost 4,000 passenger turn around.

The berthing of cruise ships, like other large commercial vessels, is not compatible with a wide range of other community uses including fishing (wharf & boat), recreational boating and swimming. In 1990 the NSW and Federal governments provided the Honeysuckle Development and Newcastle Port Corporations with in excess of \$2.5m to relocate industrial maritime uses from the southern side of the port to Dyke End with the aim of reducing the conflict between commercial port use and community use on the southern side of the harbour. It was acknowledged that large ships, servicing equipment and their associated road traffic, caused externalities and constraints on the community and their use of the harbour foreshore which as much as possible should be removed.



The selection of Options 1 and 2 would reinstate many of these conflicts and community disbenefits of large commercial vessels berthing on the southern side of the port. Option 3 enables the continued existing use of the port by the community by containing large commercial vessels to the northern side of the port.

Option 3 presents the option with the highest level of achievability in the short to medium term. It generates minimal negative community impacts. By comparison Options 1 and 2 generate significant negative externalities most importantly loss of public open space and amenity, reduced community access to the water front, congestion and parking problems.



#### 6.2 ASSESSMENT IN TERMS OF ENVIRONMENTAL CONSIDERATIONS AND IMPACTS

As identified in the assessment of water based requirements both Options 1 and 2 would require blasting and dredging to achieve the minimum depth of 8m required for cruise vessels. A full environmental impact assessment would need to be completed prior to any work. This assessment would need to consider the effects of blasting and dredging on: fluvial processes of the river, wave and tide action on site, up and downstream impacts particularly at the entrance to the port, the short and long term impacts on marine life, the impacts off site of blasting close to urban development. The extent of these impacts is unknown. In terms of options assessment these two options present a level of risk and associated cost which does not exist for Option 3 at Channel Berth.

While other environmental impacts should be considered the option which does not require rock blasting or extensive dredging is strongly preferred.

Cruise ships carrying several thousand passengers and crew have been compared to a "floating town," and the volume of wastes that they produce is comparably large, consisting of: sewage, wastewater from sinks, showers, and galleys (graywater), hazardous wastes, solid waste, oily bilge water, ballast water; and air pollution. If released without proper treatment, these wastes can put pathogens, nutrients, and toxic substances into the environment that could threaten human health and aquatic life. Therefore the waste streams generated by cruise ships are governed by a number of international protocols (especially MARPOL) and Australian laws, regulations, and standards.

Cruise ships represent a small portion of the international shipping industry globally and within the Port of Newcastle, and the waste streams described here are not unique to them. But cruise ships and their passengers and large crews generate more than average amounts of sewage, greywater, and solid waste of commercial cargo vessels. Also their effect is cumulative given the concentration of scheduled visits. Disposal of waste is of high priority and importance.

Some locations provide a greater level of ease and safety for the process of disposing of wastes. Presence of pump out facilities, distance and routes to waste facilities all impact on preferred location, risk and cost. All the options considered can satisfy operational and legislative requirement of the port in regard to the management and disposal of waste. There is however a level of risk is associated with the disposal of waste once a ship has berthed. Options 1 and 2 require that waste is transported via inner city, high density areas which implies a marginally higher level of transport related risk than Option 3 which is located in and industrial location and has main and arterial road access for waste disposal. Option 3, the Channel Berth also has existing sewerage pump out facilities which Options 1 and 2 presently don't have. Options 1 and 2 also suffered from flooding not experienced to the same degree in the northern side of the harbour. This is largely a result of urban runoff and drainage systems which have been built to drain to this area.



In environmental terms using the embedded energy of a site offers benefits over new development which demands the use of new resources and energy. In these terms use of existing infrastructure, including port depth, seawalls, berthing facilities, services and access generates a lower environmental impact during construction that new facilities. Option 3 has offers the highest ability to release embedded energy of the three options considered.

#### 6.3 ASSESSMENT IN TERMS OF STRATEGIC CONSIDERATIONS AND IMPACTS

There is an argument that the location of a terminal on the southern side of the harbour in close proximity of the City Centre would support the community and government long standing revitalisation efforts. It would deliver up to 2000 passengers plus crew to the centre of the city before and after each cruise. While there is merit in this argument there is a stronger case to suggest the specific advantages to the City Centre would not be as great as suggested.

While businesses would receive a boost from cruise ships passengers the cruise season is relatively short and the number of ships still limited. Businesses would need to have an existing base to build on. Surveys of passengers indicate that while many people visit the City Centre to eat and shop the much larger proportion tend to visit regional attractions such as the Vineyard, Port Stephens and Lake Macquarie. Further, passenger surveys revealed disappointment in the City's retail offer; this is a chicken and egg situation but the current level of cruise visitation could not underpin new investment in retail. As the terminal is envisaged to operate as a home berth many passengers from outside the region would either arrive in time to embark or disembark and leave planning not to spend time on land and therefore negating any location based spending prior to or after arrival. Alternately passengers build in time to stay in Newcastle prior to or after a cruise. This involves making choices about activities and accommodation. The majority of this accommodation is in the inner city. Having the terminal also in the inner city would generate minimal additional spend than it being located within close proximity of the city centre.

While having a cruise ship berthed in walking distance of the inner city may generate a business advantage for some local businesses, the impact of a large land area and building sitting dormant for months of the year would have a far more negative impact on the city's revitalisation efforts which focus on reconnecting the city with the water. It is possible that development of a terminal in these locations could generate negative externalities and visual effects that devalues adjacent land and property rather and adds value.

The region has a strategic agenda to grow the tourism sector. Establishing a home berthing terminal in Newcastle helps achieve this objective. The specific location of the terminal on one site or another would not make a significant difference to total levels of visitation, visitor nights or visitor spend. In absolute terms the location of a terminal for home berthing in the port will have a significant impact on growing the tourism sector, however this will be marginally affected by the choice of one of the three options being considered.



The Port of Newcastle is a strategic asset for the city, region and the state. Its continued efficiency and competiveness are fundamentally important to these economies. The assessment of options must recognise the strategic importance of the port's cargo trade as its core business. All three options are considered consistent with the Port's ability to operate efficiently. The three options also provide the opportunity to be used for visiting naval vessels which may not otherwise be able to secure berthing at cargo facilities. While options 1 and 2 may be able to berth naval vessels Option 3 offers the port a strategic advantage that the other two options do not offer. That is the ability to use the cruise ship berthing facility for queuing ships, arrested vessels and other general cargo when not being used for cruise ships.

#### 6.4 ASSESSMENT IN TERMS OF ECONOMIC CONSIDERATIONS AND IMPACTS

The shipping channel in Newcastle Port is relatively narrow being a river mouth. Large vessels require tidal movements to allow for draft considerations. As the port significantly expands the coal trade up to 200 million tonnes per annum the number of vessel movements will increase greatly. These vessels will require efficient operations in order to remain globally competitive. The location of the terminal and its capacity should take into account the parallel objective of maintaining the efficiency and competitive advantage of the port as a commercial cargo facility. The three options considered enable the continued efficient and competitive operation of the port of cargo. There is however a requirement that Option 2, Queens Wharf have facilities located as far to the east as possible so as not to encroach on the ports major shipping channel and the squeeze point at Dyke Point known as The Cut.

The location of a permanent cruise ship facility at the Channel Berth operates without detriment to major trade and helps to achieve the regional and Newcastle Port Corporation aims of diversifying port trade activities. The operation of the cruise ship terminal is not a significant income producer for NPC. Nationally cruise ships in 2009-10 spent collectively \$25.5m on port and port related charges in Australia. This represented 3.8% of the \$662.7m total direct national expenditure of the cruise shipping industry in Australia. (*Economic Impact of the Cruise Shipping Industry in Australia, 2009-10 Final Report, AEC group 2010*). It is the economic flow-on of the cruise sector that drives its worth to the regional economy. The economic value of the sector is well documented and not the specific focus of this report. What is important is consideration of where a location has the potential to drive greater economic benefit than another. Table 14 seeks to identify potential value drives specific to each option.



## TABLE 14:VALUE DRIVERS

Potential Value Driver	Option 1 Tug Berth	Option 2 Queens Wharf	Option 3 Channel Berth
Potential to generate value through conferencing & functions.	Moderate	Moderate	Minor
Ability to be used by naval vessels.	Moderate	Moderate	Moderate
Ability to be used for other cargo related activities.	Nil	Nil	Significant
Potential to generate linked tourist accommodation.	Minor	Minor	Moderate
Ability to generate uplift in land values.	Perhaps but also potential to devalue adjoining lands	Perhaps but also potential to devalue adjoining lands	Nil
Ability to grow and expand operations.	Minor	Minor	High
Ability to spur new associated transport business e.g. water taxi.	Minor	Minor	Moderate
Potential to develop tourist accommodation on site.	Nil	Nil	Nil
Potential to develop tourist accommodation nearby.	Moderate	Moderate	Moderate



Using the terminal as a conference venue is often raised as an option. We believe there is not a highly realistic expectation for several reasons:

- The space configurations are different, conferencing needing flexible small spaces, breakout rooms as well as large spaces and the terminal need big open industrial spaces.
- Conferencing requires high levels of technology, amenities, service facilities including storage, food preparation and kitchens which terminal do not require.
- The standard of fit out and finish for a terminal is far less than that of a conference venue.
- The 2000m<sup>2</sup> arrival hall would seat over 1000 people (using industry standard of 1.5m<sup>2</sup> per person banquet style)this far exceed the existing Newcastle conference market demands.
- The conferencing market prefers accommodation in or adjacent to the complex this is not proposed.
- Conference centres and cruise terminals do not need windows and views, function centres do.

The more realistic expectation is that the terminal could be used in its 'terminal' format as a venue for large conference dinners, functions or exhibitions which would employ external catering and be transformed for the event. There is a variable demand for space of this nature.

Dredging, the construction of new seawalls, wharves and/or structure over the water would generate more construction jobs that the construction of a building on an existing site with existing berthing capacity. Options 1 and 2 may have higher running and maintenance costs associated with new wharf facilities and multi level structures. However, once complete the ongoing jobs generated by each option would be comparatively equal.



#### 6.5 ASSESSMENT IN TERMS OF FINANCIAL CONSIDERATIONS AND IMPACTS

#### Capital Costs

To make relative comparisons a set of estimates has been prepared that show the basic cost for construction of a facility delivering the specified minimum requirements as outlined in this report on ground level applied to each site. In addition any works which are specific to the site for this generic proposal have been estimated and presented: for example necessary dredging to get to a depth of over 8m and site specific design or servicing solutions.

Table 15 shows a comparison of the three site options building the same  $6,000m^2$  building and other necessary site works. This would be the least costly option in each location. Cost estimates have also been prepared for alternate development/construction scenarios to reduce the land foot print of the building and thus reducing the amount of land taken for each site. Two options are presented: a wharf and podium construction and land based development.

#### TABLE 15: TERMINAL FACILITIES AND BERTH CONSTRUCTION COST SUMMARY

	Option 1 Tug Berths	Cost \$	Option 2 Queens Wharf	Cost \$	<b>Option 3 Channel Berth</b>	Cost \$
Base Case						
Building construction (1)	6,000m <sup>2</sup> building; consultancy fees; DA and CC costs; fit out including air conditioning	\$7,500,000	6,000m <sup>2</sup> building; consultancy fees; DA and CC costs; fit out including air conditioning	\$7,500,000	6,000m <sup>2</sup> building; consultancy fees; DA and CC costs; fit out including air conditioning	\$7,500,000
Parking at grade (2)	Additional 164 spaces at grade	\$680,000	Additional 110 spaces at grade	\$460,000	Minor improvements to existing (3)	\$150,000
Connection of services (3)	Extension	\$50,000	Extension & relocation	\$50,000	Upgrade – temporary services currently	\$200,000
Sub Total Building costs		\$8,230,000.00		\$8,010,000.00		\$7,850,000.00



	Option 1 Tug Berths	Cost \$	Option 2 Queens Wharf	Cost \$	<b>Option 3 Channel Berth</b>	Cost \$
Dredging (4)	Approx 78,642 $m^3$ to be	\$12,600,000	Approx 77,103 $m^3$ to	\$12,400,000	No additional dredging	\$0
	dredged. It is estimated	(plus	be dredged. It is	(plus	required	
	75% of material is rock &	mobilisation &	estimated 75% of	mobilisation &		
	25% compacted sediment	demobilisation	material is rock &	demobilisation		
	or silt.	costs)	25% compacted	costs)		
			sediment or silt.			
Wharf Construction	Assumes some use of	\$4,420,000	Demolition and	\$5,500,000	No work in short term	\$0
(5)	redundant tug wharves.		reconstruct piers,			
	New deck and piers		jetty deck $(2,000m^2)$			
	$1,700m^2$		and bollards. Very			
	Very basic wharf.		basic structure only.			
Seawall	300 lm (assumes repair	\$2,130,000	300 lm (assumes	\$2,130,000	Not required	\$0
stabilisation works	rather than replacement)		repair rather than			
(6)			replacement)			
Road reconstruction	New access road (180 lm)	\$520,000	Use existing –	\$115,000	Minor Upgrade	\$170,000
(7)	behind facility.		adjustments only			
Sub Total		\$19,670,000		\$18,145,000		\$170,000
Allowers						
Alternatives						
Premium for	3 level construction with	Total \$14,040,000	3 level construction	Total	Not relevant	\$0
possible multi level	2,000m <sup>2</sup> footprint, lifts etc,	(additional	with 2,000m <sup>2</sup>	\$14,040,000		
construction (8)		\$6,540,000)	footprint, lifts etc	(additional		
				\$6,540,000)		



	Option 1 Tug Berths	Cost \$	Option 2 Queens Wharf	Cost \$	Option 3 Channel Berth	Cost \$
Premium for possible construction over water (9)	Construction of a podium partly over the water and building over	Additional \$3,000,000	Construction of a podium partly over the water and building over	Additional \$3,000,000	Not relevant	\$0
Premium for upgrade to conference and function use (10)	Fit out and services upgrade	\$1,200,000	Fit out and services upgrade	\$1,200,000	Fit out and services upgrade	\$1,200,000
Estimated land value (11)	2 hectares (open space/community use) and new road @\$100 per m <sup>2</sup>	\$2,000,000	1.5 hectares (exclusive of rail station land) @ \$100 per m <sup>2</sup>	\$1,500,000	Waterfront industrial at 2 hectares @ \$150 per m <sup>2</sup>	\$3,000,000

#### Explanatory Notes to Table15:

In the absence of detailed site assessments being available, the estimates exclude contingency, site and ground condition costs; specialised consultancy and investigations e.g. soil testing; project management; builders profit and risk; financing costs; escalation; or mine subsidence investigations. These may apply to some or all of the options but the scope is subject to more detailed analysis beyond the realm of this report.

Costs have been derived from a range of sources with reference to the following specific allowances:

- (1). Building cost based on rate for 6m clearance shed with concrete slab, zincalume roof and precast walls at \$850 per m<sup>2</sup>; 12% allowance for consultants and fees; \$150 per m<sup>2</sup> for fit out/services; \$300 per m<sup>2</sup> for air conditioning/ventilation.
- (2). Parking: allowance of 120 per m<sup>2</sup> based on at grade asphalt, minimal drainage, including kerb and gutter
- (3). Parking: estimated item cost
- (4). Dredging; based on advice from NPC using contemporary commercial rates.
- (5). Wharf construction: Cost for concrete deck wharf and concrete piling with vehicle axel load to 20 T at \$2,600 per m2 inclusive of design and engineering fees
- (6). Seawall stabilisation to account for extra depth; deep rock revetment (no sheet piling) \$7,100/lm inclusive of design, documentation and fees. Sheet piling would entail additional costs of over \$10,000 per lineal metre subject to depth and ground conditions.


- (7). Road construction; assumes 12 metre carriageway; kerb and gutter; minimal drainage; services trenching and minimal relocation; \$2,500 per lm;15% for designs, approvals etc
- (8). Multi story building construction costs; basic building; high clearance ground level; cold shell; minimal services; \$1,600 per m<sup>2</sup>; consultant fees and charges at 15%; fit out premium inclusive of air conditioning of \$50 per m<sup>2</sup>.
- (9). Item rate at \$500 per  $m^2$
- (10). Increased services including toilets, kitchen and prep areas, storage, power and lighting, BCA services. Item rate at \$200 per m<sup>2</sup>
- (11). As detailed open space value references improvements (services) and does not allow for alternative uses.

Comparison of the respective costs should be viewed in both absolute and relative terms. The new wharves proposed for Tug Berths and Queens Wharf are very basic and do not replicate the level of wharf available at Channel Berth. They are considered the minimum facility required. The Channel Berth option is significantly cheaper than the Tug Berths and Queens Wharf options. This difference is substantially based on costs to upgrade the shipping channel, construct a berth box and effect wharf and seawall improvements to accommodate ships. These works are already in place at Channel Berth. It is further worth noting that the purpose of this report was not to complete a full scope and cost of works but to develop a rigorous set of figures that would enable comparison and assessments to be made to identify the preferred terminal location. Once the preferred site is agreed a full scope of works, further investigations and design will enable a more comprehensive and detailed project budget. Additional costs for each site associated with contingencies, project management, design, documentation and approvals most commonly adds 40% to 50% to construction costs. This will not change the relatively of cost but the total budget to be set.



#### **Potential Income**

The main income streams will be derived from shipping fees and alternative use of the buildings for conference and functions. Options for complementary uses have been explored in an attempt to identify indicative income streams. National and international experience strongly indicates that income will not be the driver of this project or site location. Cruise ship terminal do not show commercial or attractive rates of return when compared to other forms of property investment. They are subsidised to ensure that a community achieves the economic and employment benefits of the cruise industry. Ancillary uses such as conference and functions can generate income but in their scale the outcome is minor. However, they may deliver wider economic and hospitality sector benefits.

Comparative berthing rates are below (this is exclusive of other port related charges):

- Melbourne \$405 per hour
- Sydney \$275 per hour
- Newcastle \$220 per hour

Newcastle cruise berthing charges are not dissimilar to its charges at other berths for cargo ship (\$198 to \$250) however the usage rates are far lower. Typically Carnival ships turn around in 10 hours and there have been a maximum of 10 visits in any one year. This generates gross revenue of \$22, 000.00 pa as detailed in table 16. At the broad level, the income streams will be similar for each option.

# TABLE 16: POTENTIAL INCOME STREAMS FOR TERMINAL FACILITY

Туре	Detail	Income \$pa
Cruise ships berthing fees	12 visits of 10 hours @ \$220 per hour	\$26,400
Occasional function /conference use	12 functions6 conference/exhibition @\$3,000	\$54,000
Total Per Annum		\$80,400

The potential exists for some options to be 'more attractive' as a venue option than others. However, there is a limit to the number of events the size and type likely to be attracted to a venue of this style.



## 6.6 GOVERNANCE CONSIDERATIONS

As part of the process of making a recommendation for the preferred site of a permanent cruise ship facility it is important to identify a range of governance considerations. Some of these are more subjective than others but are based on the collective professional experience of the consultants and the Reference Group.

# Staging

Option 3 offers the only option to continuously maintain home berthing facilities in a temporary facility prior to the erection of a permanent structure. The existing marquee is operationally, visually and structurally similar the facility at Barrangaroo/Darling Harbour 5 which has operated successfully and which is the model for White Bay until the permanent facility is completed. The temporary facility presently meets the current owner/operators needs (Carnival P&O). A temporary structure could be erected on the sites of Option 1 and 2 for the summer cruise season and dismantled during the remainder of the year. This is unlikely because of the impact of the process on the community and in terms of cost. Further it could be seen as a lack of commitment by government and not supported by the community or operators.

#### Achievability

The investment threshold for this project at Options 1 and 2 exceeds the total value of the new White Bay proposal. Estimates for that project indicated that the existing facility west of the Harbour Bridge will receive between 88 and 105 vessel 2011/12 and between 137 and 162 cruise vessels per year by 2020. This compares with 10 vessels for Newcastle 2009/10. With this relativity in mind it is unlikely government would fund this level of regional investment.

### Growth Capacity and Flexibility

The sites for Option 1 and 2 are constrained. If they were to proceed it is realistic to believe that the smallest site possible would be used. This would severely limit growth and expansion of activities in the future. Option 3 offers a large site with potential to grow and diversify.



# Alternate Long Term Uses

The future of the Australian and global cruise industry looks strong. All indications are for growth and diversification. However, there is a risk that the industry will not perform as well as expected or be affected by some significant global change. Given the level of capital investment required and the strategic nature of the sites being considered it is relevant to consider alternate uses for the berths and buildings should they not be required to the same extend for cruise ships in the future. Because of the limited land adjacent to the proposed berths in Options 1 and 2 and because of the residential and iconic nature of the sites, alternate port uses would be very difficult and limited. Option 3 offers the best opportunity to use the berth and facilities for other uses such as: maintenance, naval vessels, arrested ships and to reducing queuing time s for bulk cargo vessels, should alternate uses be required in the future.

### **Stakeholder Support**

Preliminary discussions with Cruise Hunter and Carnival Lines (P&O) indicate preferred support for Option 3. They both however place caveats on this support indicating that site access, public transport support, signage and beautification works are all required at Option 3. Other major stakeholders, including Newcastle Airport Limited and Tourism Hunter, are supportive of developing a terminal facility and strengthening the attraction of out of region passenger on Newcastle based cruises. They also support the attraction of visiting domestic and international cruise ships which would take advantage of the regions other attractions. The specific location is of less importance to these stakeholders. What is paramount is the achievability and success of the final facility. The principal owner of Options 1 and 2, Newcastle City Council, does not support the location of a terminal at these sites and has formally resolved to advise the Reference Group of this position and have identified their preference for Option 3, the Channel Berth site.

### **Community Support**

There appears to be a strong level of support in the general community for the establishment of a cruise ship terminal in the port and for the continued grow and diversification of the cruise sector. This support is evidenced in the print media editorial, written submissions and stories, talk back radio, and the level of patronage on cruises to date. The community however, has not yet been clearly informed of the options or their impacts and had the opportunity to discuss these. There is strong belief that once the community has this opportunity it will support Option 3 in preference to losing access to areas of the Foreshore or Queens Wharf and approving additional blasting and dredging on the southern side of the harbour as is required for Option 1 and 2.



# PART 7 Conclusions and Recommendations

# 7.1 WATER BASED TECHNICAL REQUIREMENTS

Option 3, the Channel Berth meets all the technical water based requirements for a cruise ship home berth terminal. It has more than adequate depth (in excess of 8m), clear deep water channel access for vessels up to 300m, an existing berthing box for ships up to 300m, unlimited air draft and is only affected by swell and wave action in severe events.

Neither Option 1 nor 2 provide adequate water depth with waters as shallow as 5m at Tug Berth and 2m at Queens Wharf. To bring either site to an adequate depth of 8m would require the blasting and dredging of rock, silt and sand in excess of 77,000 m<sup>3</sup> at either site.

In terms of water based technical requirements the Channel Berth offers an excellent immediate option for a cruise ship terminal. Neither Option 1 or 2 are immediately capable of hosting cruise ships and while technically possible in the longer term the required blasting and dredging and the construction of new seawalls and berths would generate such significant negative impacts, costs and complications to indicate that they are not desirable.

# 7.2 LAND BASED TECHNICAL REQUIREMENTS

Current estimates indicate that an area of some 2ha is required to accommodate the most efficient terminal facilities. These facilities should be constructed across one level with good road access, parking and servicing provided. Option 3 at Channel berth offers this land area. The land is appropriately zoned and its owner, the NSW government (NPC), supports uses of the site including cruise terminal purposes.

In contract, neither Option 1 nor 2 offer clear available land for terminal development. Both sites are largely owned by NCC which has advised that they do not support the proposal. Further, the sites are not appropriately zoned or classified. Existing development including roads, car parks, open space, promenades and commercial facilities preclude immediate access to the sites and would derive significant social and financial cost if relocated to make way for a terminal. Other options including multi storey development and building over the water are not considered viable from an operational, technical and financial perspective.

# On water and land based technical requirement alone Option 3 Channel Berth is the clear and unequivocal preferred option for the location of a cruise terminal.



# 7.3 SOCIAL IMPACTS

The most significant social impact of Options 1 and 2 is the loss of and alienation of land which is currently used and highly valued for community open space. It is considered that this impact would not be acceptable to the community. While there are measures which could be used to reduce the level of alienation, in view of the social and cultural importance of the site, its regional function, its amenity and visual significance, the impact would still remain unacceptable in our view. The alternate offered by Option 3 of the Channel Berth involves the continued use of land for commercial port related purposes and does not negatively impact on existing community access levels.

The negative externalities associated with fencing, noise, lighting, traffic, parking, and waste management are also significant at Options 1 and 2 but minimal and able to be managed at Option 1.

In terms of social impacts Option 3 Channel Berth is far superior to Options 1 and 2.

# 7.4 ENVIRONMENTAL IMPACTS

In operational terms the environmental impacts of the cruise industry are strongly regulated and managed. They encompass waste disposal, cleaning, defouling, and refuelling and consent conditions manage traffic, noise and light impacts. There is no particular extreme impact specific to any site although the impact on adjacent residents is far less at Channel Berth. However, it is the construction of the terminal that generates the most significant negative environmental impacts and these are specific to Options 1 and 2. The need to blast and dredge in excess of 77, 000m<sup>3</sup> of rock, sand and silt at those locations as opposed to using the existing deep water at the Channel Berth, make the Channel Berth the best option in environmental terms.



# 7.5 STRATEGIC CONSIDERATIONS AND ECONOMIC IMPACTS

While there has often been a suggestion that there could be economic and strategic benefits from locating a cruise terminal on the southern side of the port close to the City Centre our investigations do not confirm this. In fact there are likely greater strategic and economic benefits associated with a location at Channel Berth. We did not find that there was a potential to use the terminal building for conferencing per se except for a limited number of functions/events annually and that these could be achieved at all options. None of the sites offered the direct opportunity for associated accommodation and commercial facilities on any scale other than those that could and would be located in the wider area. In fact the location of the back of house and service functions of the terminal on the Foreshore may negatively impact on land values and development potential. City side options also offered limited opportunity for other port related uses. The Channel Berth in comparison offered significant economic advantages by being able to be used for arrested vessels, maintenance, naval ships and as a queuing berth to speed up turn around for coal and other cargo ships. Strategically and economically Option 3 is the preferred alternative.

# 7.6 GOVERNANCE CONSIDERATIONS

Options 3, the Channel Berth rates most favourably in governance terms. NPC as land owner supports the proposal while it is not supported on lands owned by NCC at Options 1 and 2. Option 3 avoids the alienation of public space and the duplication of infrastructure which already exists and satisfies the necessary requirements. Option 3 offers longer term growth and flexibility and alternate use options should they be required.

### 7.7 FINANCIAL CONSIDERATIONS

Because of the need for blasting and dredging and the requirement to re-establish seawalls and construct berthing Options 1 and 2 involve significant additional costs which would not be required at Option 3 the Channel Berth. Options 1 and 2 also require the relocation of roads, parking, pedestrian access, open space community facilities, and services. These costs exceed \$18m and would be required before construction of any terminal ground facilities could occur.

If like facilities were constructed at all sites and therefore the cost of construction of terminal buildings and service infrastructure like parking were relatively equal, Option 3 is the only financially realistic option because of the site specific costs associated with the other options.



More realistically construction of terminal facilities at Option 1 and 2 would not be the base level industrial scale building on one level as possible at Channel Berth, but involve: multi levels, building over the water, higher levels of design, superior fit-out and landscaping, decked parking and more elaborate traffic management systems, increasing cost by between \$3m and \$6.5m.

# 7.8 SUMMARY CONCLUSIONS

Option 3 the Channel Berth is the preferred and recommended option for the development of a passenger cruise ship terminal in the Port of Newcastle. This recommendation is based on the following:

- It is the only option to offer the required 8m of water draft required for cruise ships thereby negating the need, cost, environmental and community effects of blasting and dredging in excess of 77,000m<sup>3</sup> of rock, sand and silt.
- It is the only option where realistically the facility buildings, traffic, parking and servicing requirements can be accommodated on the site on one level.
- Options 1 and 2 would require alienation of public open space and car parks and the rerouting of the road system to a achieve the terminal and surrounding land requirement on one level and or a construction and operating premium if multi level or options building over the water were adopted.
- Operators and passengers will get a better level of service at Channel Berth delivered through good design and layout.
- Option 3 minimises the negative impacts on residential communities of reduced waterfront access, perimeter fencing, noise, light traffic, parking, visual impact and loss of amenity.
- Option 3 offers the most efficient site for the design construction and operation of a terminal facility from the cruise sector's perspective.
- The economic benefits are greater at Channel berth largely because of the ability to use the berth for cargo purposes, naval ships and arrested vessels when not in use for cruise ships.
- It avoids the duplication of existing channel and berthing infrastructure when satisfactory facilities already exist.
- It is the only option to offer genuine alternate long term cargo / marine uses should in long term the cruise sector fail to grow or be sustainable.
- In governance terms Channel Berth is the most achievable, affordable and flexible option.