# DARWIN PORT EXPANSION PLAN: AUSTRALIA'S GATEWAY TO ASIA

## INTRODUCTION

There is a range of options for the expansion of Darwin's port capacity, ranging from inexpensive and targeted investments to more expansive, long-term options.

Darwin is one of Australia's major ports for trade with the Asia-Pacific region. As a naturally occurring deep water port, Darwin is strategically placed to become a vital link with the international marine shipping trade.<sup>1</sup> The port is also a major supply centre for Australian oil and gas projects, as well as other cargoes.<sup>2</sup> The Darwin port ships more than 4,577,000 tonnes

of cargo annually and is capable of handling over half the nation's livestock exports.<sup>3</sup>

LNG exports will become a major part of the Northern Territory economy. Three years ago, exploration licenses covered 20% of the territory's land mass; now they extend to 90%.<sup>4</sup>

Despite the quality of Darwin Port's facilities the Northern Territory government predicts Darwin will need major infrastructure investment to cater for Darwin becoming '[a]n international hub for exports, education and health services, tourism, operations and maintenance.'<sup>5</sup>



**Image 1:** Darwin is a hub for international arrivals and trading

<sup>1</sup> Darwin Port Corporation, *Fact Sheet 1: Port of Darwin*. Available here: <u>http://www.darwinport.nt.gov.au/sites/default/files/documents/publications/DPC fact sheet1x.pdf</u> (accessed 20 August, 2012).

<sup>4</sup> The Economist,

<sup>&</sup>lt;sup>2</sup> These include, but are not limited to dry bulk imports and exports, bulk liquids, containers, general cargo and livestock exports.

<sup>&</sup>lt;sup>3</sup> Darwin Port Corporation, *Fact Sheet 1: Port of Darwin*.

<sup>&</sup>lt;sup>5</sup> Northern Territory Government, *Greater Darwin Plan 2012*, 7. Available here: <u>http://www.dlp.nt.gov.au/strategic-planning/future/darwin-region/greater-darwin-plan</u> (accessed 20 August, 2012)

Federal funds are necessary to improve Darwin Port. This includes funding the East Arm Port expansion project to increase conveyer belt capacities, room for tug boats and other such measures. Loading infrastructure is also important for the viability of Darwin Port as it provides greater industrial capacity.

The Northern Territory Government has created a timeframe listing a number of Port related projects for Darwin's continued expansion.<sup>6</sup> In 2013 there are planned rail upgrades, a Darwin port Iron Ore expansion and new ports are planned for 2020.



Image Source: Northern Territory Government, East Arm Wharf Expansion Project: Draft Environmental Impact Statement Summary Booklet. Available here: http://www.eastarmwharfeis.com.au/documents/East%20Arm%20Wharf%20Summary%20Boo

## ADVANTAGES OF PORT EXPANSION

The Northern Territory Government's report *Greater Darwin Plan 2012*<sup>7</sup> outlines key advantages of expanding Darwin's port infrastructure. These include the following:

- 1. Increased capacity for exports and trade;
- 2. Increased capacity for major gas and oil projects in the Darwin region; and,
- 3. Cater for growing demand for Australian exports in the Asia-Pacific region.<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Ibid, 25.

<sup>&</sup>lt;sup>7</sup> Northern Territory Government, *Greater Darwin Plan 2012*.

<sup>&</sup>lt;sup>8</sup> Ibid, 4.

#### INCREASED CAPACITY FOR EXPORTS AND TRADE

The Northern Territory Government (NT Government) announced in March 2011:

'Darwin Port's East Arm Wharf facilities, developed during the 1990s, have recently experienced an exceptional surge in demand, largely reflecting strong growth in Northern Territory and South Australian bulk mineral export volumes, and the oil and gas industry.'<sup>9</sup>

As the graph below shows (**Image 3**), total cargo trade through Darwin ports has steadily increased from 2002/03 to 2009/10 and is projected to increase in the future.



Darwin Ports – Total Cargo Trade 2002-2010 (Mass Tonnes)

The NT Government outlined in the report that '[i]ncreased trade through the Port of Darwin follows significant Government investment in East Arm Port,' and other infrastructure projects.<sup>10</sup> The need for investment in infrastructure is urgent, as trade tonnages have quadrupled in the past eight years to more than four million tonnes handled annually.<sup>11</sup> The report predicts this will increase and could reach over eight million tonnes

annually, above Darwin Port's current capacity.<sup>12</sup>

Image 4: Cargo holding at Darw



<sup>&</sup>lt;sup>9</sup> Northern Territory Government, *East Arm Wharf EIS – Community Announcement* (March, 2011), 1. Available here: <u>http://www.eastarmwharf-eis.com.au/documents/East%20Arm%20Wharf%20Newsletter%20No%2001.pdf</u> (accessed 2012)

<sup>11</sup> Ibid, 14.

<sup>12</sup> Ibid, 14.

<sup>&</sup>lt;sup>10</sup> Northern Territory Government, *Greater Darwin Plan 2012,* 14.

The report forecasts that the Port Masterplan will develop the East Arm Port and include the following:

- The construction of a marine supply base with up to 45 ha of land available;
- The development of shipping channels to support growth in commercial shipping;
- The establishment of a purpose-built marine facility to deliver all-weather berths and tug mooring pens that separate liquid and dry bulk berths from general cargo; and,
- The identification of an amphibious craft land area to be used by the Australian Defence Force and other commercial operators.<sup>13</sup>



## INCREASED CAPACITY FOR MAJOR GAS AND OIL PROJECTS IN THE DARWIN REGION

An expansion of Darwin's Port infrastructure would increase capacity for large oil and gas projects, which would then encourage increased investment in the Northern Territory economy. There are a number of projects planned for the Darwin region that call for more port capacity:

- Ichthys Project (\$35 million)
  - Substantial construction phase
  - Long term operational phase

<sup>&</sup>lt;sup>13</sup> Ibid, 14.

- Shell Prelude (FLNG)
  - Targeting Darwin as operation and maintenance base
- Sunrise (FLNG)
- Petrel/Tern/Frigate (FLNG)
- Future Expansion of DLNG
   Approvals up to 10Mtpa
- Ongoing Exploration Activity in the Region (e.g. Total Exploration in the Browse Basin)

By expanding port facilities there is an opportunity for the Northern Territory to play a major role in the future of the gas and oil industries. This would also capture long-term service, supply business and associated jobs and give the Northern Territory economy a major boost.

The NT government has indicated that it is willing to work with companies on projects such as Ichthys and build infrastructure that would benefit the Northern Territory.<sup>14</sup>

# INCREASED ABILITY TO CATER FOR GROWING DEMAND FOR AUSTRALIAN EXPORTS IN THE ASIA-PACIFIC REGION

Darwin is emerging as a major port and trade hub in the Asia-Pacific region.

The map at right (**Image 5**) details Darwin's trade links with other economic centres. The majority of these trade links are with Asian nations and there is potential for these links to be expanded as exports and imports increase with the Asia-Pacific region.

The Northern Territory government reported that Darwin is 'strategically placed as Australia's closest capital to Asia,' and that therefore, 'high quality planning is vital.'<sup>15</sup>

The NT government believes that expansion would strengthen Darwin's links with the rest of the world, 'particularly South East Asia'.<sup>16</sup>



<sup>&</sup>lt;sup>14</sup> Ibid, 23.

<sup>&</sup>lt;sup>15</sup> Ibid, 7.

<sup>&</sup>lt;sup>16</sup> Ibid, 17.

### CURRENT STATUS OF THE \$50 MILLION - \$150 MILLION PROPOSAL

Among the proposals to be adopted to improve the Port of Darwin is the expansion of the East Arm Wharf, projected to cost between \$50 million.<sup>17</sup>

The Northern Territory Department of Lands and Planning (DLP), the Darwin Port Corporation (DPC) and the Department of the Chief Minister (DCM) proposed the project. In March 2011 a 'Community Announcement' (CA) was released in which the report was outlined.<sup>18</sup>

The CA outlined that a Draft Environmental Impact Statement was commissioned by interested parties to assess the environmental viability of the expansion. In July 2011 the authorities released a second 'Community Announcement' calling



for submissions to the Draft Environmental Impact Statement.<sup>19</sup>

The Darwin Port Authority and the Northern Territory Government negotiated assistance from the Federal Government of approximately \$50 million for the East Arm Wharf Expansion Plan.

Despite this, in the lead up to the Federal Budget in May 2012, federal Minister for Infrastructure Anthony Albanese announced that:

"We have also agreed to the Northern Territory Government's request to reallocate the \$50 million originally earmarked for the Darwin Port expansion to a package of road works which will support the Ichthys LNG project."<sup>20</sup>

<sup>&</sup>lt;sup>17</sup> Gerry McCarthy, Minister for Transport, 'East Arm Wharf Facilities Masterplan 2030' *Media* Release (11 June 2011). (accessed 22 August 2012). Available here:

<sup>&</sup>lt;u>http://newsroom.nt.gov.au/index.cfm?fuseaction=printRelease&ID=7037</u> For more information visit the project's website: <u>http://www.eastarmwharf-eis.com.au/</u>

<sup>&</sup>lt;sup>18</sup> Northern Territory Government, *East Arm Wharf EIS* (March 2011).

<sup>&</sup>lt;sup>19</sup> Northern Territory Government, *East Arm Wharf* (July, 2011). Available here: <u>http://www.eastarmwharf-eis.com.au/documents/East%20Arm%20Wharf%20Newsletter%20No.02.pdf</u> (accessed 27 August, 2012)

This change was the result of separate lobbying by the Northern Territory Government. The proposal to expand Darwin's Marine supply base is no longer an issue for the Territory government or the Darwin Port Corporation, as it will now be completed by the private sector in September 2013.<sup>21</sup>

As a result the Port Expansion proposal now consists of the following objectives:

## BARGE RAMP AND HARDSTAND AREA

The draft summary statement outlines that '[t]his facility is designed to allow for the loading and unloading of cargo' by government departments, including the Department of Defence. It

will be made up of 'a hardstand area, barge ramp and access channel to the site.'<sup>22</sup>

The report also details that this facility will require security infrastructure (fences, gates etc.)

# CONSTRUCTION OF SMALL VESSEL BERTHS

The Darwin Port Corporation and the NT Government have identified the need for 'dedicated berths...for tug boats and other smaller vessels at East Arm Wharf.'<sup>23</sup> This part of the



<sup>20</sup> Anthony Albanese, Minister for Infrastructure, 'Nation Building Infrastructure for the Future: The Territory,' *Media Release* (8 May 2012). Available here:

http://www.minister.infrastructure.gov.au/aa/releases/2012/may/budget-infra 13-2012.aspx (accessed 20 August, 2012)

<sup>21</sup> MacMahon. *Darwin Marine Supply Base: Dredging Fact sheet* (July 2012). Available here: <u>http://www.growingnt.nt.gov.au/major\_projects/docs/msb-fact-sheet-web.pdf</u> (accessed 27 August, 2012)

<sup>22</sup> Northern Territory Government, East Arm Wharf Expansion Project: Draft Environmental Impact Statement Summary Booklet, pp. 2. Available here: <u>http://www.eastarmwharf-</u> eis.com.au/documents/East%20Arm%20Wharf%20Summary%20Booklet.pdf (accessed 27 August, 2012)

<sup>23</sup> Ibid, 2.

project involves extending the quay line of the East Arm Wharf, and '[the] construction of small vessel moorings' that will provide room for at least 12 tug boats and involves constructing 'dredged channel access'.<sup>24</sup>

#### RAIL LOOP AND SPUR

Bulk trains and other equipment are important for the future viability of the oil and gas projects in the region. The draft summary statement says that '[t]o improve the operational capacity and efficiency of East Arm Wharf, a rail loop is proposed that will provide additional standing and manoeuvring space within the wharf precinct.'<sup>25</sup> This phase also involves the construction of a rail dump facility and other expansion projects.<sup>26</sup>

In the final stage the draft summary statement states that the 'construction of the rail loop is expected to commence in 5 to 10 years.'<sup>27</sup> This rail loop will meet a predicted increase in freight demands.

The project is not under construction at this time as the Federal Government's contribution was shifted to other priorities. The Territory Government has said it is unable to fund the \$50 million project so there is a role for the Federal Government in the funding arrangements.

#### SUMMARY OF LARGER PROPOSALS AND PLANS

The *Greater Darwin Plan 2012* contains a number of more expansive reforms. The Darwin Plan outlines an 'Action Plan' consisting of seven strategies, two of which are relevant to Darwin Port.

### ECONOMIC DEVELOPMENT

The Darwin Plan contends that '[e]conomic development will be supported by providing certainty around land development and ensuring land is available for growth.' This includes growth in urban areas and industrial areas (such as where Darwin Port is located). The report also aims for greater transport infrastructure between industries and residential homes to facilitate growth in communities.<sup>28</sup>

<sup>24</sup> Ibid, 2.

<sup>25</sup> Ibid, 2.

<sup>26</sup> Ibid, 2.

<sup>27</sup> Northern Territory Government, *East Arm Wharf Expansion Project: Draft Environmental Impact Statement Summary Booklet*, pp.2.

<sup>&</sup>lt;sup>28</sup> Northern Territory Government, *Greater Darwin Plan 2012*, pp. 17.

## REGIONAL CONNECTIONS

The report aims to achieve greater links between regions and urban areas in the Northern Territory. Part of this process involves '[s]trengthen[ing] the economic, infrastructure, planning and transport connections between the administrative and trade centres of Darwin and Palmerston...'<sup>29</sup> The expansion of the East Arm Wharf and Darwin's international airport are important for achieving this end.<sup>30</sup>

## TIMELINE FOR MAJOR PROJECTS

On page 25 of the report there is a timeframe for major projects (reproduced below) impacting Greater Darwin. The projects directly relevant to port expansion have been bolded:<sup>31</sup>

	Confirmed Projects	Under Evaluation or Proposed
2012	<ul> <li>Ichthys onshore and offshore</li> <li>ERA Ranger expansion</li> <li>LEAP Housing</li> <li>Darwin Prison</li> <li>Crocodile Gold</li> </ul>	<ul> <li>Mt Todd Gold</li> <li>Livingstone Valley Abattoir</li> <li>Casuarina Shopping Centre expansion</li> <li>Darwin Marine Supply Base</li> <li>Clean Fuels</li> </ul>
2013	<ul> <li>Rail Upgrades</li> <li>Nolans Bore Phosphates</li> <li>Montara</li> </ul>	<ul> <li>Central Tanami Gold</li> <li>Crux</li> <li>Sherwin Iron Ore</li> <li>Darwin Port Iron Ore expansion</li> </ul>
2014		<ul> <li>McArthur River Mine Phase 3</li> <li>Western Desert Resources Iron Ore</li> </ul>
2015	<ul> <li>US Marines</li> </ul>	<ul> <li>Prelude FLNG</li> <li>Beetaloo Basin Oil, PetroFrontier &amp; Central Petroleum</li> </ul>
2016		<ul> <li>PTTEPAA FLNG</li> <li>Bonaparte FLNG</li> <li>Defence Force review and repositioning</li> </ul>
2017		<ul> <li>Mt Peake Iron, Vanadium &amp; Titanium</li> </ul>
2018		<ul><li>Sunrise FLNG</li><li>Wonarah Phosphate</li></ul>

<sup>29</sup> Ibid, 17.

<sup>30</sup> Ibid, 17.

<sup>31</sup> Ibid, 25.

2019	<ul> <li>Freight from Roxby Downs, Olympic Dam</li> <li>Adding value to gas – Dow petrochemicals and methanol</li> </ul>
2020	<ul> <li>New ports in Darwin region.</li> </ul>

A number of projects would be indirectly relevant to port expansion. For example, the numerous FLNG projects rely on trade through Darwin Port and greatly increase the traffic through the port. The report forecasts the construction of new ports in 2020, as these will cater to increased traffic and infrastructure produced by other projects.

Defence facilities will be an important influence on the growth of Darwin Port. The Darwin Plan foreshadows that '[n]aval shipping movements, logistic support operations and amphibious requirements near Defence and commercial port infrastructure' will increase.<sup>32</sup> Port facilities will need to be upgraded for this increased Defence presence.

It is imperative that the Northern Territory access Federal funding in order to fulfil these projects set out by the Greater Darwin Plan. The plan foreshadows this:

"The Northern Territory Government will also liaise with the Commonwealth Government to access funding for major infrastructure."

Reports and assessments will need to be conducted to study the viability of certain projects and assess how much they will cost. The Darwin Plan aims to '[d]evelop a Dawin Harbour Masterplan to guide future development for community consultation.'<sup>34</sup>

The following actions are outlined as necessary by the Darwin Plan:

- Undertake long-term infrastructure planning for roads, power, water, sewerage and telecommunications in Darwin. (0-5 years)
- Ensure there is sufficient serviced land in Darwin to support investment and population growth. (0-5 years)
- Investigate the role of Development Contribution Plans land servicing and social infrastructure provision in the urban and rural areas of the Region. (0-5)
- Review and update the Greater Darwin Plan very five years following the completion of the Greater Darwin Regional Transport Plan. (5-10 years)
- Review of the Northern Territory Infrastructure Strategy every two years, which will contribute to the two-yearly Territory 2030 scorecard progress report. (0-5 years)

<sup>&</sup>lt;sup>32</sup> Northern Territory Government, *Greater Darwin Plan 2012*, pp. 31.

<sup>&</sup>lt;sup>33</sup> Ibid, 76.

<sup>&</sup>lt;sup>34</sup> Ibid, 81.

- Review and update the Darwin Regional Transport Plan every five years. (5-10 years)
- Develop a regional land use plan for the Finniss and Coomalie region and determine links to the Greater Darwin Region.<sup>35</sup>

## RECOMMENDATIONS

The following are options for Federal involvement in the expansion of port capacity in Darwin. The first is a more expansive and long-term proposal. The second is a more short-term and targeted set of options.

## **OPTION 1**

- That the Federal Government provides funding for three separate minor studies to feed into a major study into the infrastructure needs of Darwin's ports, including the possibility of new ports, including:
  - 1. A minor study into expanding the Iron Ore capacity of Darwin Port. This should be done in close cooperation with the Darwin Port Corporation;
  - 2. A separate minor study into the future infrastructure needs of the increase in offshore gas and oil projects; and,
  - 3. Another separate minor study, in conjunction with the Department of Defence, into future requirements defence in the Darwin region, particularly where port facilities are concerned.
- That the Federal Government establishes closer links with the Darwin Port Corporation to ensure that funding is well-placed and suited to the needs of port expansion.
- That the Federal Government invests an initial \$50 million into developing the East Arm Wharf expansion project in cooperation with the NT government and Darwin Port Corporation.
- That the Federal Government commission Infrastructure Australian to complete a report assessing infrastructure in the Darwin region, particularly focusing on the potential to involve private investment.

<sup>&</sup>lt;sup>35</sup> Ibid, pp. 82-83.

## OPTION 2

- That the Federal Government invests \$50 million into developing the East Arm Wharf expansion project in cooperation with the NT government and Darwin Port Corporation.
- That the Federal Government provides funding for a study into the need for and requirements of future ports in the Darwin region (location, labour costs, etc).
- That the Federal Government commission Infrastructure Australian to complete a report assessing infrastructure in the Darwin region, particularly focusing on the potential to involve private investment.

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#### IMAGES

Image 1: Darwin Port Corporation, Fact Sheet 1: Port of Darwin. Available

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Image 2: Darwin Port Corporation, Fact Sheet 1: Port of Darwin. Available
here: <u>http://www.darwinport.nt.gov.au/sites/default/files/documents/publications/DPC\_fact\_sheet1x.pdf</u>
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Image 3: Darwin Port Corporation and the Northern Territory Government, *Display Boards for the East Arm Wharf Expansion*. Available here: <u>http://www.eastarmwharf-</u> eis.com.au/documents/East%20Arm%20Wharf%20Display%20Boards.pdf Page: 8. (accessed 27 August, 2012)

**Image 4:** Northern Territory Government, *East Arm Wharf* (July, 2011). Available here: <u>http://www.eastarmwharf-eis.com.au/documents/East%20Arm%20Wharf%20Newsletter%20No.02.pdf</u> (accessed 27 August, 2012).

Image 5: Darwin Port Corporation, *Fact Sheet 1: Port of Darwin*. Available here: <u>http://www.darwinport.nt.gov.au/sites/default/files/documents/publications/DPC\_fact\_sheet1x.pdf</u> (accessed 20 August, 2012).

Image 6: Northern Territory Government, *East Arm Wharf* (July, 2011). Available here: <u>http://www.eastarmwharf-eis.com.au/documents/East%20Arm%20Wharf%20Newsletter%20No.02.pdf</u> (accessed 27 August, 2012).

Image 7: Darwin Port Corporation and the Northern Territory Government, *Display Boards for the East Arm Wharf Expansion*. Available here: <u>http://www.eastarmwharf-eis.com.au/documents/East%20Arm%20Wharf%20Display%20Boards.pdf</u> Page: 4. (accessed 27 August, 2012)