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THE PORT  
OF LOS ANGELES 



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Executive Editor

*Logistics Management and  
Supply Chain Management*

# Improving Port Efficiency

## The PBLIS story

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# It's a long voyage to Australia ...



- Australia is the 6th largest country in the world and is the only one of the top six completely surrounded by water.
- With 99% of Australia's international trade transported by sea, Australian Ports are critical to the security of Australia's economic future

# The Ports of Sydney

- Sydney was the nation's first major port more than 200 years ago.
- Sydney and Port Botany handle more than \$61- billion in international and domestic trade annually.



# Port Botany



- Facilities at Port Botany consist of two container terminals with six container vessel berths and 2 bulk liquids berths
- Sydney (Port Botany) 2011/12 = 30.6-million mass tonnes
- Past 2 years container throughput exceeded 2-million TEUs
- Handles nearly one-third of Australia's total containerised trade
- \$1-billion third Terminal opens late 2013
- Container volumes anticipated to increase to over three million within 10 years

# The Landside Challenge



- Road and rail inefficiencies
- Lack of motivation for change
- Lack of service standards
- Reluctance to operate 24/7

# The Growing Road and Rail Task

Year	Total Volume TEU	Landside Volume <i>(ie. less Transhipments)</i>		Rail	%	Road	%
2011/12	2,036,142	1,847,098	(189,044)	261,202	14.1%	1,585,896	85.9%
2019/20	3,015,932	2,828,932	(187,000)	792,101	28.0%	2,036,831	72.0%

TEU = Twenty-foot Equivalent Unit

# Port Botany Landside Improvement Strategy

- Sydney Ports Corporation introduced the Port Botany Landside Improvement Strategy (PBLIS) to make the landside supply chain at Port Botany more ***efficient, consistent, transparent***, and move towards ***24/7 operations***.
- In October 2008, the Port Road Taskforce and the Port Botany Rail Team (PBRT) was established.

# Port Botany Road Issues

- Inequality at the workplace - commercial
- Operational Visibility
- Data integrity

- Truck service delivery
- Inefficient landside interface
- Performance standards and Truck Turnaround Time (TTT)

- Trade volumes
- Road congestion
- Peak slot demands
- Port infrastructure utilisation

## PBLIS Objectives

Transparency

Consistency &  
Efficiency

24 x 7 operations

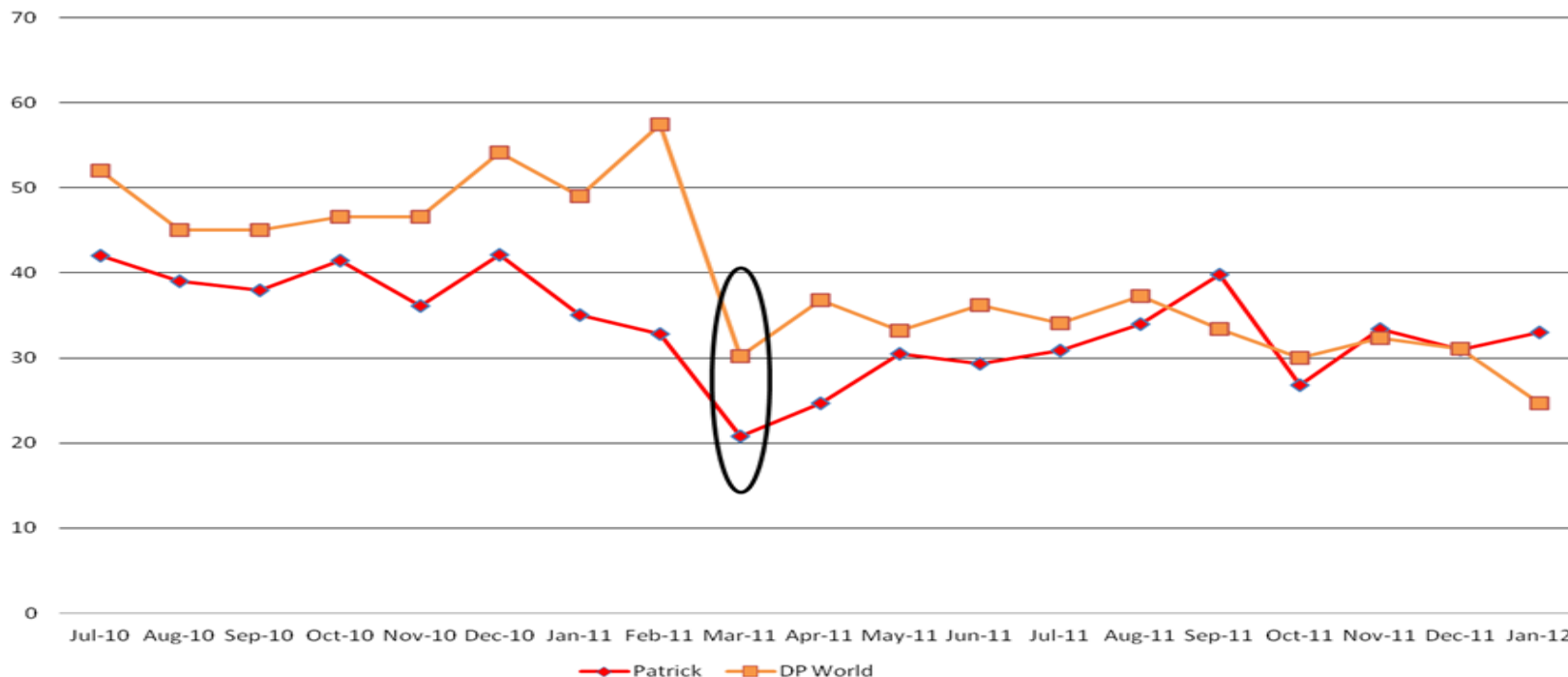
# OPM - Carriers

Carriers Performance Measures			Penalty
1	<b>Early Arrival</b>	<p>No trucks to arrive before booked time slot.</p> <p>Trucks may be accepted into the terminal at the stevedore discretion. Truck Turnaround Time (TTT) applies.</p>	<p><b>\$100 per truck</b> Payable once a Truck Marshalling Area is operating</p>
2	<b>Late Arrival</b>	<p>No trucks to arrive after booked time slot.</p> <p>Trucks may be accepted into the terminal at the stevedore discretion. TTT applies. If the truck is accepted, the slot(s) booked for the truck will be deemed a Late Arrival. TTT to apply from time of truck entry.</p> <p>If not accepted by the stevedore then the “No Show” penalty applies.</p>	<p><b>\$50 per slot</b> Payable to stevedore</p>
3	<b>No Show</b>	<p>Truck fails to arrive within 1 hour of the end of the booked time zone or where the truck is late and not accepted by the stevedore will be deemed a “No Show”.</p>	<p><b>\$100 per slot</b> Payable to stevedore</p>
4	<b>Cancellation of Time Slots</b>	<p>Closer the carrier gets to the time slot the more restrictions apply.</p>	<p><b>\$50 per slot</b> Payable to stevedore</p>

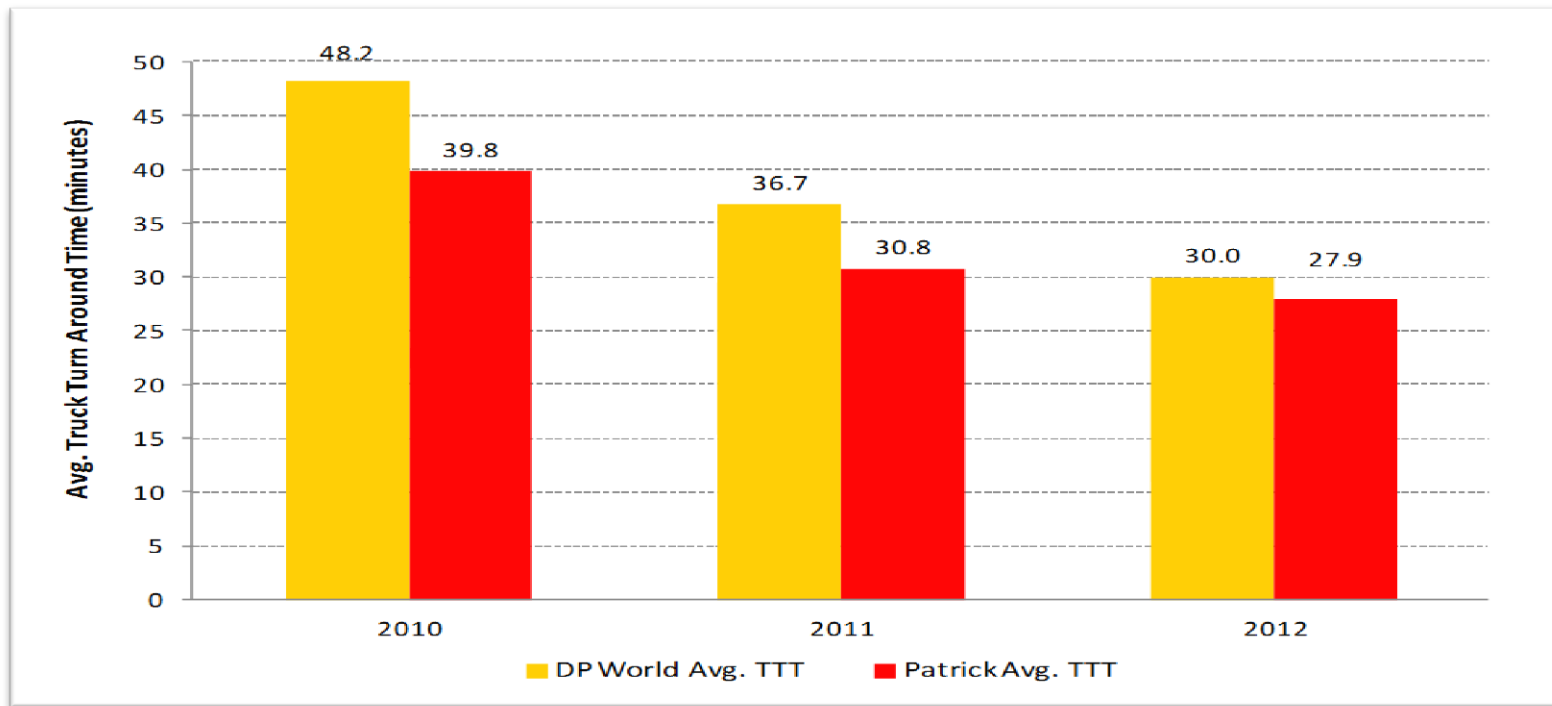
# OPM - Stevedores

Stevedores Performance Measures			Penalty
1	<b>Truck Turnaround Time (TTT)</b>	Gate In to Job Complete 50 min for first container plus 10 min per additional container (Phase 1)	<b>\$100 per truck</b> Increments of \$25 per 15 minutes
2	<b>Minimum Slots Offered</b>	Minimum of 50 slots per hour must be offered 24/7.	<b>Regulated penalty</b> for any infringement
3	<b>Truck Non-servicing</b>	Stevedore fails to service a truck that has a slot booking. Truck Turnaround Time (TTT) also applies.  Stevedore must provide replacement slot to be provided within 24 hours.	<b>\$100 per slot</b> Payable to the road carrier
4	<b>Cancellation of Time Zones</b>	Closer the stevedore gets to the time zone the more restrictions apply.  Example: time zone cancelled less than 2 hours then Truck Non-service penalty applies, greater than 2 hours 50% of Truck Non-service penalty applies.	<b>\$100 per slot</b> Payable to the road carrier

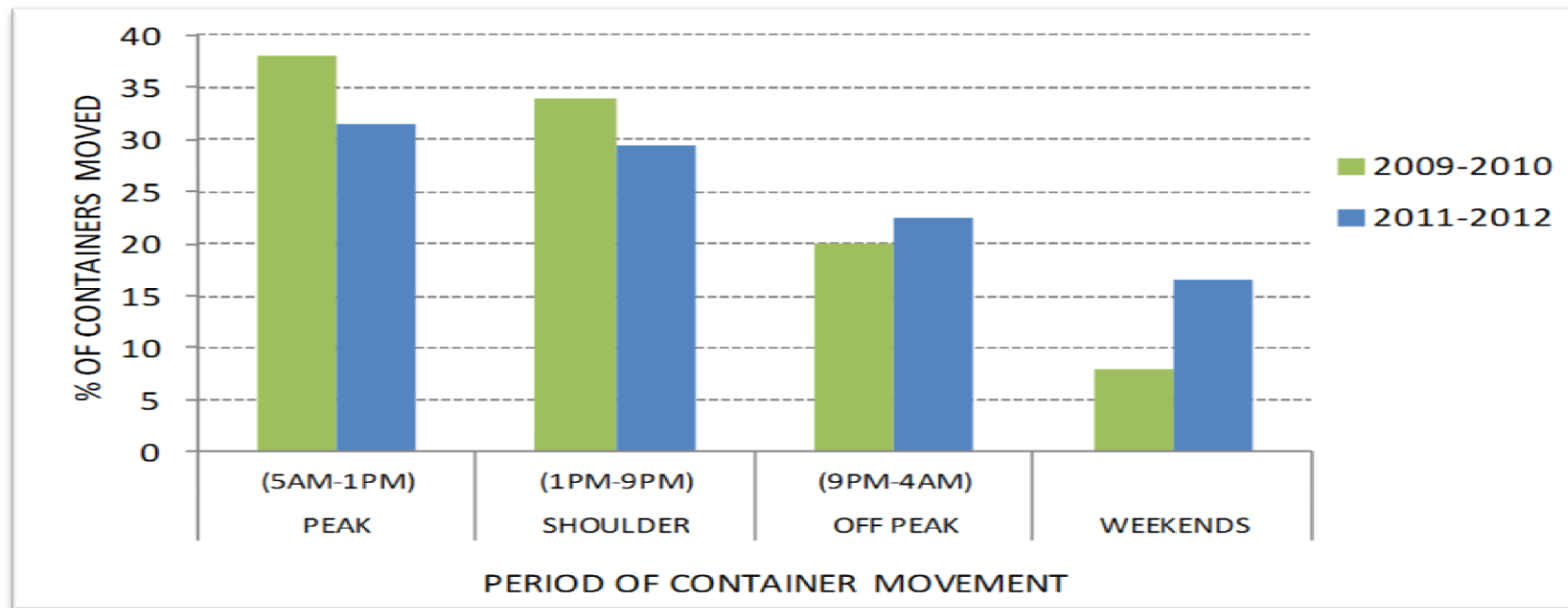
# Truck Turnaround Times - July 2011 to January 2012



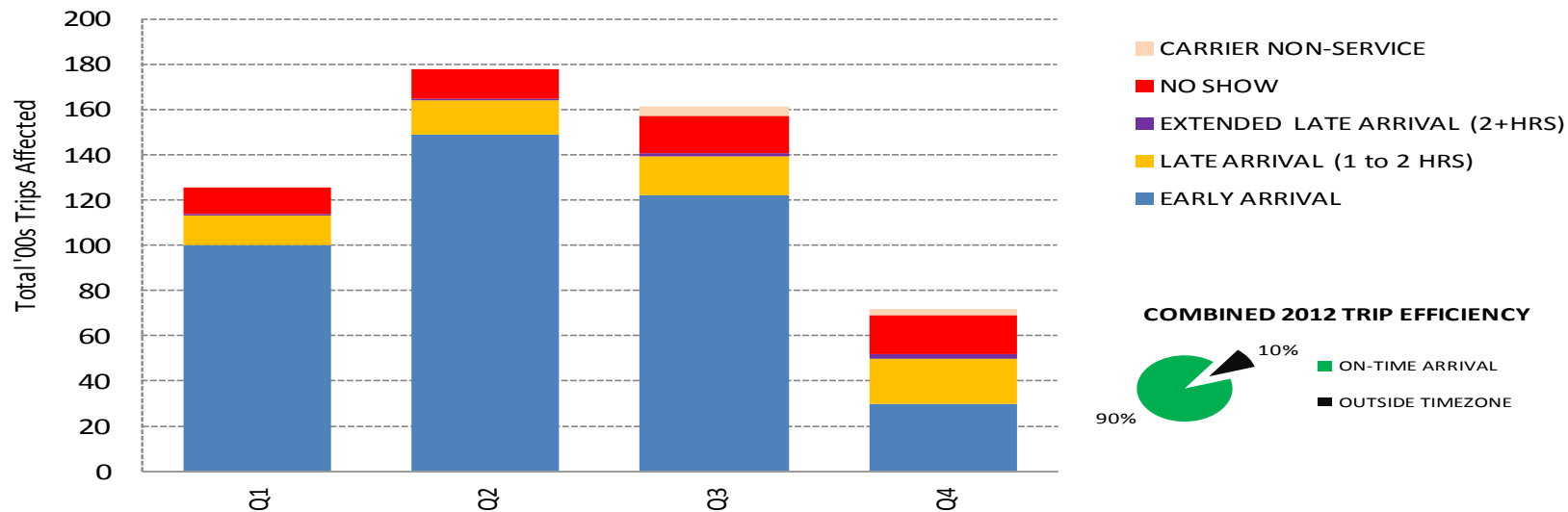
# Average Truck Turnaround Times (Yearly Comparison by Stevedore)



# Truck Distribution Comparison



# Carrier Performance 2012



# Sydney Ports Operational Performance System (OPS)

The Operational Performance System integrates:

- Stevedores' terminal operation data
- 1-Stop vehicle booking data
- Carriers' truck tracking data

The OPS benefits for supply chain participants include:

- An independent data source
- Truck tracking
- Transparency and visibility for carriers and stevedores
- User capable reporting and online training

# Sydney Ports Truck Tracking System



- RFID tag technology
- Allows arrival in queue measurement

# Truck Trip Listings

Carriers can drill down to each individual truck trip and analyse the information in each trip

Road Operations > Truck Trip List
Current Time: 11:42:39 AM
Home
End Impersonation

Truck Trip List

\* Date From: 01/09/2011
Date To: 03/09/2011
Time Zone Start:
Arrival Status:

Start No.:
Rego No.:

Manifest ID:
TTT Range (Stops): From: To:
Stations:

Search

Trip Status	Time zone	Time zone (Opening)	Rego No.	Manifest ID	CPM TTT	Arrival Time	Arrival Status	Stations
01/09/2011	01/09/2011 11-0		555255	302093	00-07-00	01/09/2011 11-00	On Time	QPR
01/09/2011	01/09/2011 15-0		555255	302094	01-01-00	01/09/2011 15-00	On Time	Patric
02/09/2011	02/09/2011 06-0		555255	302123	00-04-00	02/09/2011 06-04	On Time	QPR
02/09/2011	02/09/2011 07-0		555255	302127	00-45-00	02/09/2011 07-45	On Time	QPR
02/09/2011	02/09/2011 17-0		555255	302091	00-18-00	02/09/2011 17-02	On Time	QPR
02/09/2011	02/09/2011 06-0		573159	302079	00-17-00	02/09/2011 06-04	On Time	Patric
02/09/2011	02/09/2011 06-0		555255	302084	00-18-00	02/09/2011 06-03	On Time	Patric
02/09/2011	02/09/2011 06-0		555255	302086	00-21-00	02/09/2011 06-06	On Time	Patric
02/09/2011	02/09/2011 06-0		573159	302078	00-23-00	02/09/2011 06-09	On Time	Patric
02/09/2011	02/09/2011 06-0		555255	302080	00-12-00	02/09/2011 06-12	On Time	Patric
02/09/2011	02/09/2011 06-0		555255	302087	00-25-00	02/09/2011 06-14	On Time	Patric
02/09/2011	02/09/2011 10-0		555255	302122	00-12-00	02/09/2011 10-04	On Time	Patric
02/09/2011	02/09/2011 10-0		555255	302121	00-12-00	02/09/2011 10-07	On Time	Patric
02/09/2011	02/09/2011 10-0		573159	302118	00-14-00	02/09/2011 10-10	On Time	Patric

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Road Operations > Truck Trip List
Current Time: 11:42:58 AM
Home
End Impersonation

Truck Trip List

\* Date From: 01/09/2011
Date To: 03/09/2011
Time Zone Start:
Arrival Status:

Start No.:
Rego No.:

Manifest ID:
TTT Range (Stops): From: To:
Stations:

Search

Start No.	Start Status	Container No.	Stations To Gate Time	Stations Out Gate Time	TTM Gate In Time	TTM Gate Out Time	Battery
01756687	Arrived	CHU0055190	01/09/2011 11-06	01/09/2011 11-43			
01180428	Arrived	CHU0000281	01/09/2011 15-05	01/09/2011 16-10			
040726677	Arrived	CHU0214480	02/09/2011 04-05	02/09/2011 07-05			
07493959	Arrived	CHU0540008	02/09/2011 07-18	02/09/2011 08-09			
170710403, 1709			02/09/2011 17-03	02/09/2011 17-25			
0007627	Arrived	CHU0009630	02/09/2011 06-03	02/09/2011 06-27			
0008101	Arrived	CHU0483493	02/09/2011 06-03	02/09/2011 06-28			
0008889	Arrived	CHU0076242	02/09/2011 06-06	02/09/2011 06-26			
0008902	Arrived	CHU0773014	02/09/2011 06-09	02/09/2011 06-31			
0008954	Arrived	CHU0102900	02/09/2011 06-12	02/09/2011 06-35			
0008989	Arrived	CHU0001008	02/09/2011 06-14	02/09/2011 06-49			
0007104	Arrived	CHU0000209	02/09/2011 10-03	02/09/2011 10-34			
0004676	Arrived	CHU0077134	02/09/2011 10-07	02/09/2011 10-26			
0004630	Arrived	CHU0000323	02/09/2011 10-09	02/09/2011 10-35			

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# After One Year of Operation

- Benefits of PBLIS estimated to be \$54.7 million over 10 years
- TTT down from 45-50 minutes to 30 minutes
- On time running and 24/7 operations have increased
- Densities and dual runs have not improved – the next challenge
- The Rail reform task is just beginning.

# Thank you

For more information on Sydney Ports visit [www.sydneyports.com.au](http://www.sydneyports.com.au)

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