PBLIS Comparison Study

Landside Container Management

11th May 2022

Transport for NSW

311015-00022-MA-PRE-0001-1

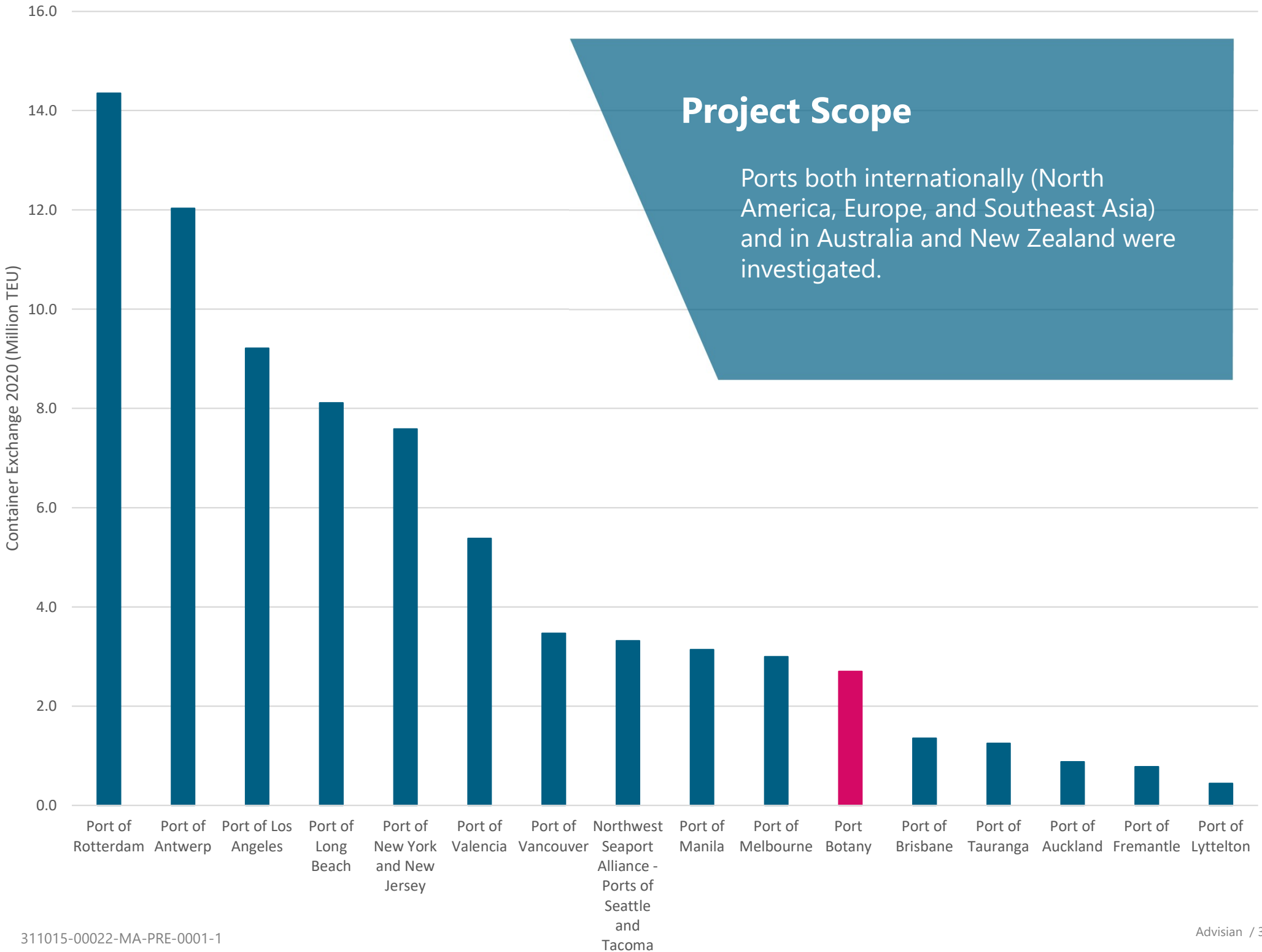**Advisian**
Worley Group

Project Scope

The NSW Government is undertaking a comprehensive review of the Ports and Maritime Administration Act (the Act) and the Port Botany Landside Improvement Strategy (PBLIS)

For input to the review of the Port Botany Landside Improvement Strategy (PBLIS) an analysis was completed of landside management for:

- International approaches

- Approaches in Australia and New Zealand

Key aspects of the study were:

- Port landside interface performance measures

- Management of landside interface through regulation

- Analysis of any management or regulatory frameworks

- Landside operational practice and experience

Project Scope

Ports both internationally (North America, Europe, and Southeast Asia) and in Australia and New Zealand were investigated.

Performance measures

Most ports have publicly available landside interface performance measures. For some terminals these are live while others are provided on a historic basis. Data is usually collected directly by the terminal.

- Truck Turn Time (TTT) is the most common metric (gate to last box or gate to gate).

- The data can be provided by the terminal or independently.

- An example of real-time independent data is through tracking tags on trucks (RFID or GPS).
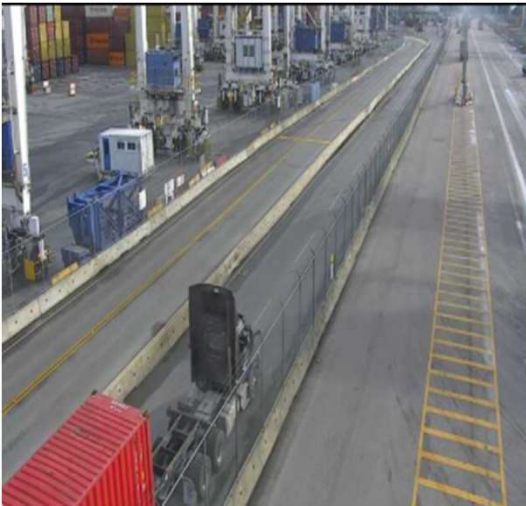
Port of Vancouver Deltaport camera example

Today's Average Turn Time **20m** , total **185** trucks.
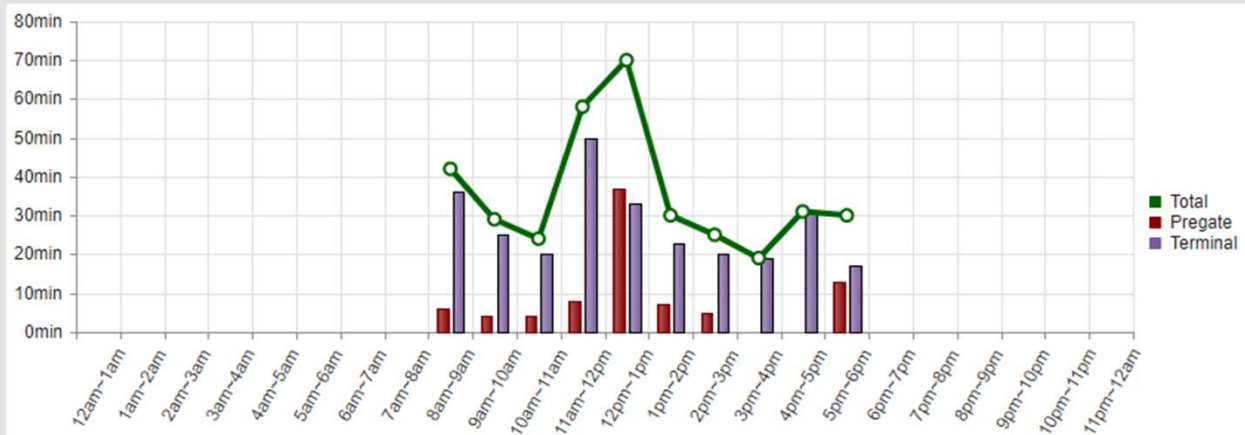
Port of Vancouver Deltaport Camera Hourly truck waiting times Example

Example;

Port of Fremantle reported to use performance requirements to influence behaviour at its leased facilities, setting targets associated with improving cargo flow through the port.

Landside Management

Government regulation for landside performance is uncommon. The management of the landside service levels is generally left to terminal operators.

Regulation is more common through a licence requirement for port access

- Port licences commonly are primarily focussed on clean engine requirements

  - They provide a mechanism for additional requirements, such as requiring:

    - The use of a booking system for terminal access

    - Trucks to be equipped with tracking tags

  - Licence requirements and compliance costs lead to limited carriers accessing the port

It is uncommon for port operators to require any specific service levels from terminals

Vehicle Booking System (VBS)

There has been an industry movement towards VBSs in the last 1-2 decades

Booking window and applicable fees example

A booking window of one-hour with allowance (<60 minutes) each side is typical.

- Internationally it is common for only the booking window to be provided, with the booking fee forfeited if missed.

- Within Australia/NZ it is normal to allow arrivals after the window for a limited period (<4 hours) at additional cost.

  - A penalty for missing the booking window is common.

Differential pricing is uncommon:

- At the ports of Los Angles and Long Beach a higher fee is charged during peak periods and used to cover off- peak landside operating expenses.
- The Port of Manila offers off-peak booking zones where the booking fee is free or a rebate, encouraging off-peak container movements.

Advanced booking

- Bookings are made for a specific module for containers with a yard position e.g., when containers are available.

- A benefit is carriers can only make a booking when a container is available, reducing wasted slots.

- High demand for slots can mean a wait to pick up containers until the next available slot.

Advanced Booking

Systems generally offering the ability to make bookings for the delivery or collection of containers to the terminal.

More commonly:

- Carriers can book slots without an attached container but based on their available labour force

- The container can be attached after a booking is made. Therefore, containers can be picked up as required.

- Slots are wasted if a suitable container is not available to be attached to the booking.

- Payment transactions for port services are generally invoiced following the completion of the container exchange activity.

- The Port of Manila is unique in requiring all VBS transactions to be completed using pre-purchased points.

Points Payment System

VBS payment transactions are completed using pre-purchased points. Points are credited or debited based on the activity.

- Users purchase points which are then used to pay for the associated payment transactions in the VBS.

- Each point is equivalent in value to the local currency.

- The use of points simplifies transactions with debits and credits occurring direct to the user account.

- There is no minimum top-up amount and points can be added to the account at any time.

- Sufficient points must be available in the user account prior to booking.

Staging of containers

Containers are initially transported to/from the terminal to the carrier's depot. They are transported from the depot to/from the cargo owner

Allows carriers to utilise specialist fleets for specific destinations

- Within Australia there has been a move to staging containers from at a depot (normally carrier's depot) rather than transporting directly between the terminal and the end-user customer.

- High Productivity Freight Vehicles (HPFV) are commonly used for carrier fleets focused on container movements to and from the port.

- Lower-capacity trucks for movements between the depot and customer.

- Similarly, country or long-haul carriers not setup for access to the port can drop containers to a carrier that can access the terminal.

- Limited operating hours at Empty Container Parks (ECP) and the requirement that specific empty containers be returned to specific ECPs, also drives staging of empty containers.

Port Community System (PCS)

The PCS is primarily used for the exchange of information between all parties within the port supply chain.

- All the European ports investigated had a Port Community System (PCS).

- PCS is a technological platform providing services designed to streamline and facilitate logistics planning and exchange of information between companies and government within the port community.

- Sharing information through the PCS allows the maximum reuse of information and has reduced the number of communications required among stakeholders.

- Any company can participate in the development and implementation of services with proprietary systems able to be integrated with the platforms.

- The availability of real-time information about container status and congestion levels (Valencia) has improved the ability of carriers to plan trips to the port.

- Only the Port of Rotterdam and the Port of Valencia had their respective booking systems integrated into the PCS.

DISCLAIMER

This presentation has been prepared by a representative of Advisian.

The presentation contains the professional and personal opinions of the presenter, which are given in good faith. As such, opinions presented herein may not always necessarily reflect the position of Advisian as a whole, its officers or executive.

Any forward-looking statements included in this presentation will involve subjective judgment and analysis and are subject to uncertainties, risks and contingencies—many of which are outside the control of, and may be unknown to, Advisian.

Advisian and all associated entities and representatives make no representation or warranty as to the accuracy, reliability or completeness of information in this document and do not take responsibility for updating any information or correcting any error or omission that may become apparent after this document has been issued.

To the extent permitted by law, Advisian and its officers, employees, related bodies and agents disclaim all liability—direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of Advisian and/or any of its agents)—for any loss or damage suffered by a recipient or other persons arising out of, or in connection with, any use or reliance on this presentation or information.