Cargo Efficiency Operations System (CEOS)
16 December 2019
Agenda

- Background
- CEOS Project overview – CMCC
- CEOS Road Functionality – 4Tel
- CEOS Transition to Operational use - CMCC
CMCC: TfNSW Objectives

• Improving the efficiency of freight movements through Port Botany is critical for supporting trade growth

• A network of efficient road & rail links that allows freight to be transported more efficiently from Port Botany to key freight centres will be vital to Sydney’s liveability and NSW’s economic success

Cargo Movement Coordination Centre (CMCC)

The Cargo Movement Coordination Centre (CMCC) was established in 2014 and works with road carriers, rail operators, stevedores and related supply chain stakeholders to maximise use of existing network capacity and continuously improve the efficiency of cargo movement through Port Botany, Port Kembla and regional NSW.

CMCC Performance Monitoring System

- The current system (OPM – Operational Performance Management Framework) has reached end of its life. Transport for NSW requires a modern system that can support landside operations performance monitoring into the future.
- New system is called CEOS: Cargo Efficiency Operations System.
- Past 9 months: Developing & testing CEOS system.
- Intend to:
  - ‘Go live’ with CEOS in late December 16th 2019.
A Connected Port to Maximise Efficiency

CEOS
Real-time Processing

Rail Planning
- Consolidation of
- Operator plans
- ARTC plans
- Stevedore plans

Train Tracking

Truck Movements
(captured by ANPR system)

Train Movements
(captured by ICE Radio and CMCC Rail Team)

Stevedore Business Systems
- Truck bookings

Independently Calculated Performance & Penalties
- Slow stevedores
- Cancelled truck slots
- Early/late truck arrivals
- Container lifts/hr
- Rail Planned v Actual

Consolidation of Operator plans ARTC plans Stevedore plans
Cargo Efficiency Operations System (CEOS)

- Integrates stevedore data with truck and train tracking data to provide an independent & comprehensive record of operations of the landside interface at Port Botany
- Independent data sources
- Truck and Train tracking at key port and network locations
- Transparency for stevedores, rail operators, freight owners & road carriers
- User capable reporting
- Information on truck, traffic and rail congestion
- Rail performance
- Real-time information made available to supply chain
- No paper!
Road Operational Performance Measures

- **Road carriers:**
  - Early arrivals
  - Late arrivals
  - No shows
  - Cancellations
  - Non Service

- **Stevedores:**
  - Slots / hr (offered to carriers)
  - Minimum lifts per hour (trains)
  - Truck turnaround time
  - Failure or refusal to service carrier
  - Cancellations
  - Non Service
Road Sensors

- Were RFID tags
- Now Automatic Number Plate Recognition (Cameras)
- Located at key road locations
Implementation

- Integrate with ANPR (Automatic Number Plate Recognition) at key port locations
- Electronic data interface between TfNSW & each stevedore
- Fully automated reporting system
- Measures KPIs according to the Regulations
Accessing CEOS

- User interface: web browser: Chrome (recommended) or Firefox
- URL: https://ceos.ot.transport.nsw.gov.au
Landing Page
Landing Page - Road

Help: Opens the online User Manual.
Real-Time Performance Monitors

- Tab based
- Real-time graphs of:
  - Queue times
  - Turnaround times
- Averages (30 min)
- Precinct: Comparison of four precinct facilities
- TMA: status & upcoming closures
Slot Booking List

- Filterable
- List of bookings & associated details, including those that did not eventuate
- Search function

<table>
<thead>
<tr>
<th>Date</th>
<th>Time Zone</th>
<th>Slot Booking</th>
<th>Manifest ID</th>
<th>Stevedore</th>
<th>Carrier</th>
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<tr>
<td>From</td>
<td>1 Sep 2019</td>
<td>08:00</td>
<td></td>
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<tr>
<td>To</td>
<td>2 Sep 2019</td>
<td>23:00</td>
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Empty

SLOT BOOKING DETAILS

SLOT BOOKING NO:
- SLOT KEY
- REGO
- CARRIER
- TIMEZONE
- MANIFEST ID
- CONTAINER NO
- SLOT TYPE
- SLOT STATUS
- CONTAINER CODE
- FULL/EMPTY
- UNFORESEEN EVENT
- MASTER BOOKING
- STACK RUN
- REEFER
- OUT OF GAUGE
- HAZARDOUS
Slot Booking List

Click here to "view truck details". This will then bring a pop up 'Current Truck' on the screen, shown in Figure 2.
Truck Trips

- Filterable
- List of Truck trips
- Booking details
- Penalty details
Penalty List

(This page contains test data only)
Port Calendar

• Filterable by stevedore
• Mouse over to obtain details
Apply for Requests

The following User groups can view and submit their own requests in the following categories:

Road Users
- Unforeseen Event

Stevedore Users
- Unforeseen Event
- Slot Reduction
- Slot Booking Cancellation
Landing Page - Rail

Click the + tab to access drop down menu

Help: Opens the online User Manual.
Rail Dashboard

- Tab based
- Planned trains & placements
- Trains in yard
- Trains arriving in next hour
- Current trains at facility
Rail Yard Map

- Rail Users can View current status of trains in Botany yard and connected terminals.
Plan Overview

- Rail users can use this screen to view each train’s plan details.
Live Window Management

- Real-time view of current train yard movements scheduled in the yard
- Mouse over for pop up details
CMCC: Management of Users

• Access is via: http://ceos.ot.transport.nsw.gov.au

• Chrome is the preferred browser

• All existing OPMS company admin account holders will receive a password email from CEOS and can then set up their other staff
Questions

Contact the CMCC for more information:

Road Team: P 82657920
E landsideimprovement@transport.nsw.gov.au

Rail Team: P 82657930
E rocc@transport.nsw.gov.au