

# SYDNEY TERMINAL - LANDSIDE PERFORMANCE METRICS

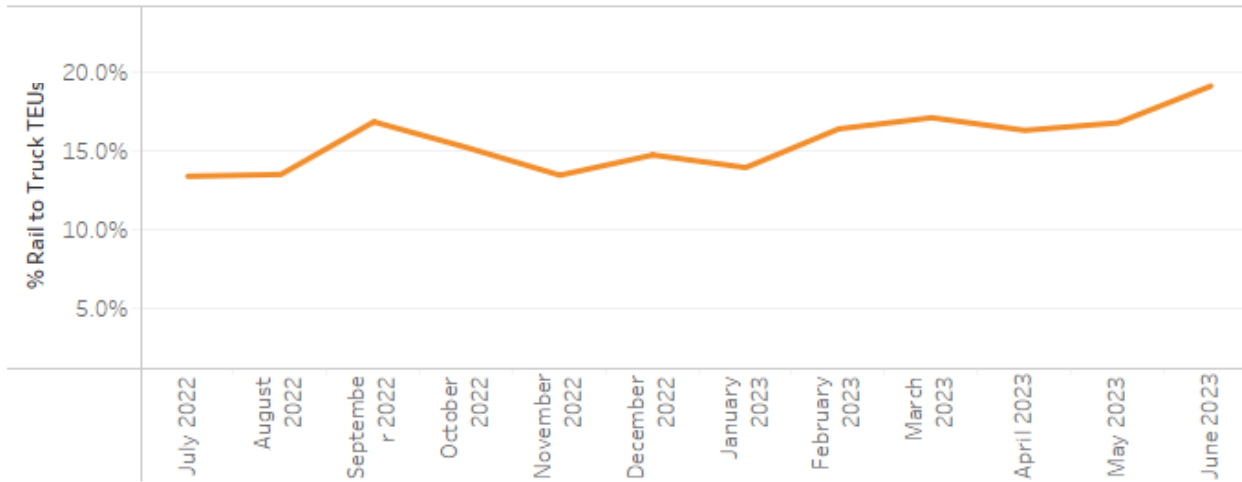
## Q2-2023



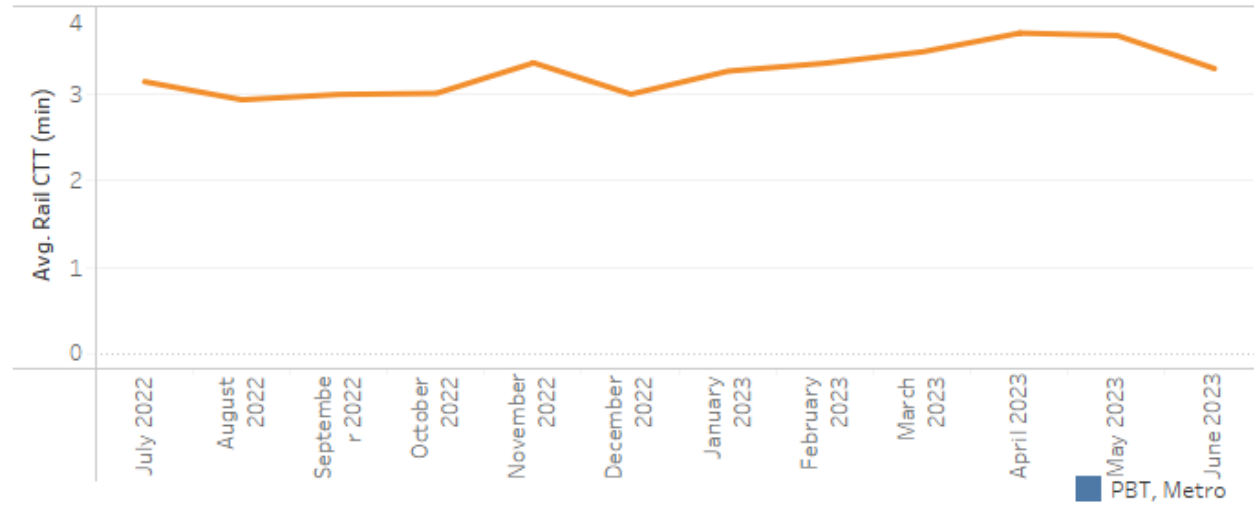
# Rail Terminal productivity



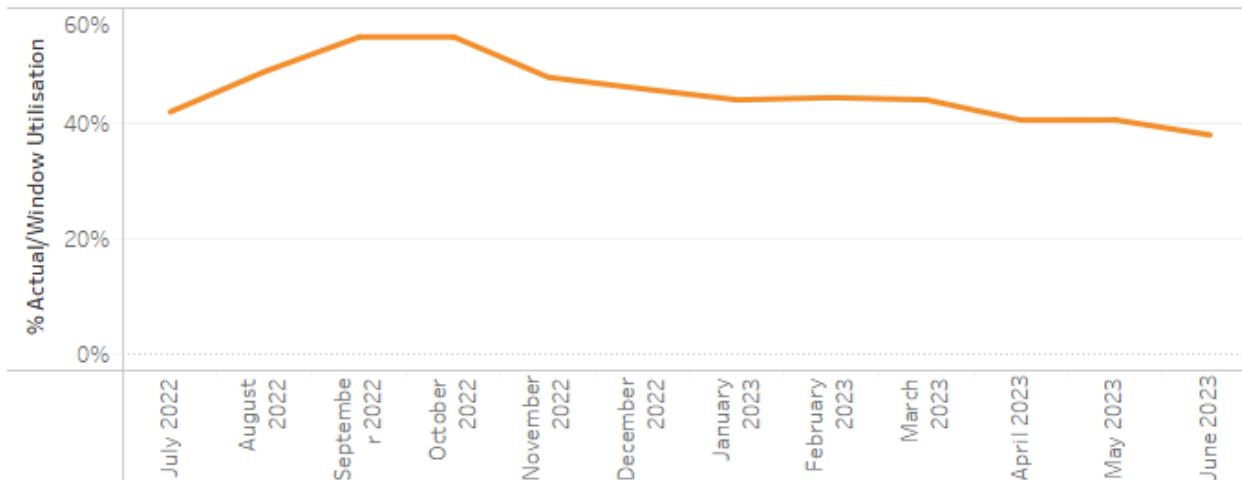
Proportion Rail TEUs



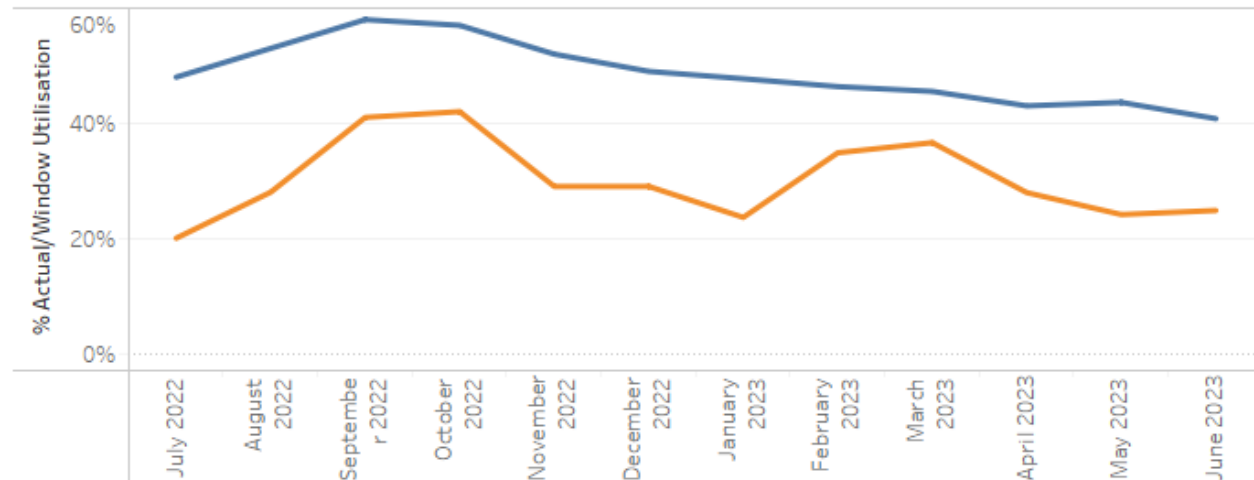
Rail CTT



Port Botany Rail: % utilisation per month actual vs window (Overall)



Port Botany Rail: % utilisation per month actual vs window (Regional vs Metro)

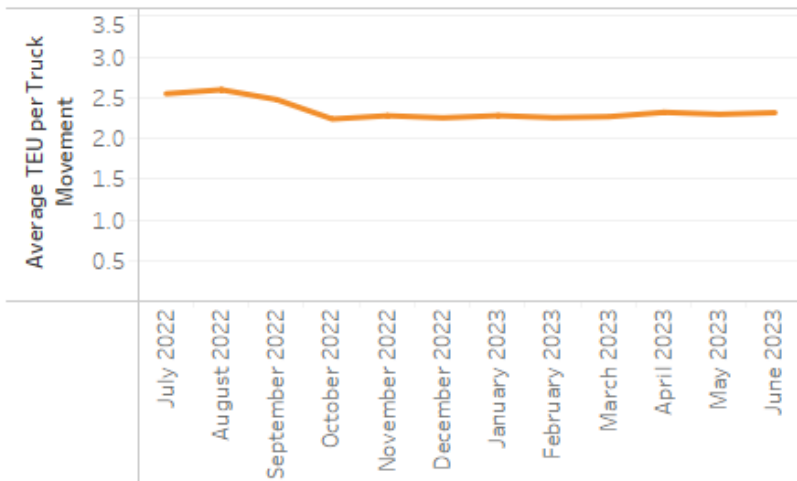




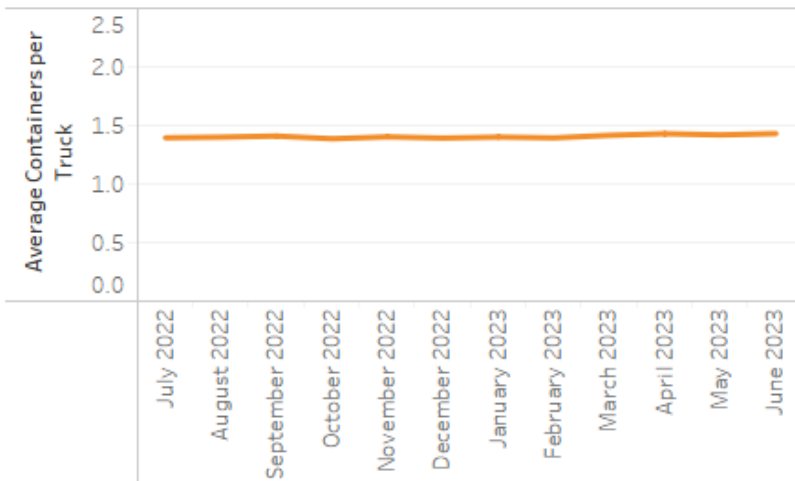
# Landside Performance Metrics



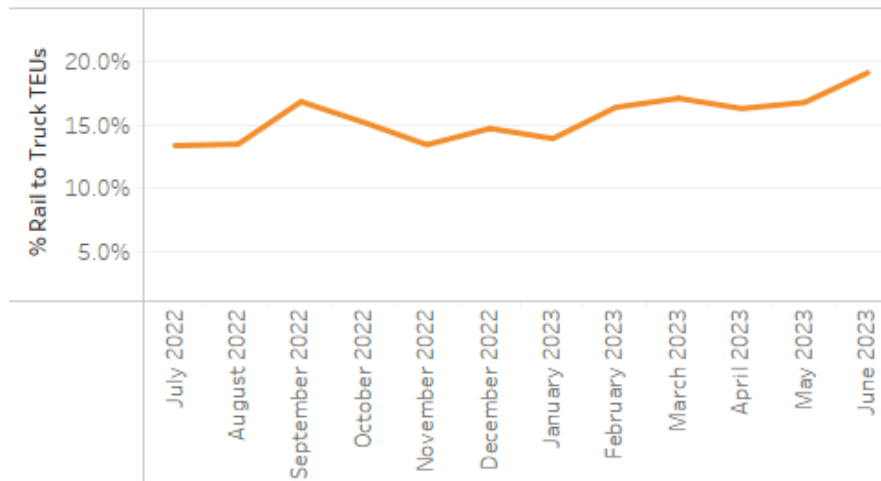
Average TEU per Truck Movement



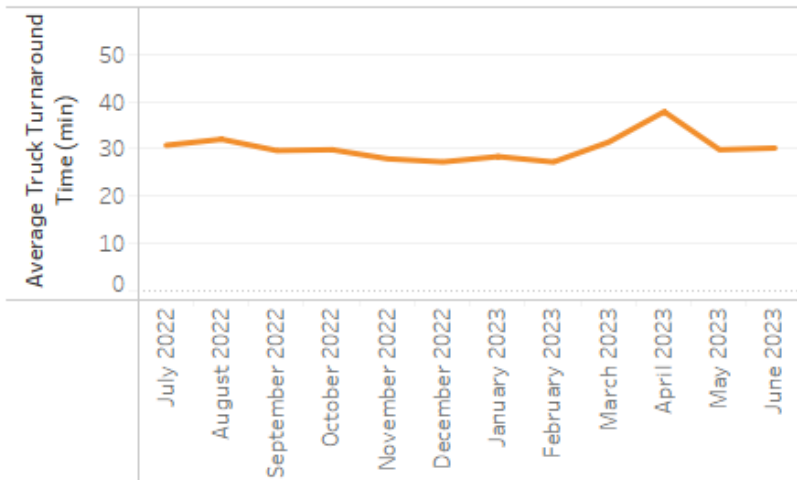
Containers per Truck



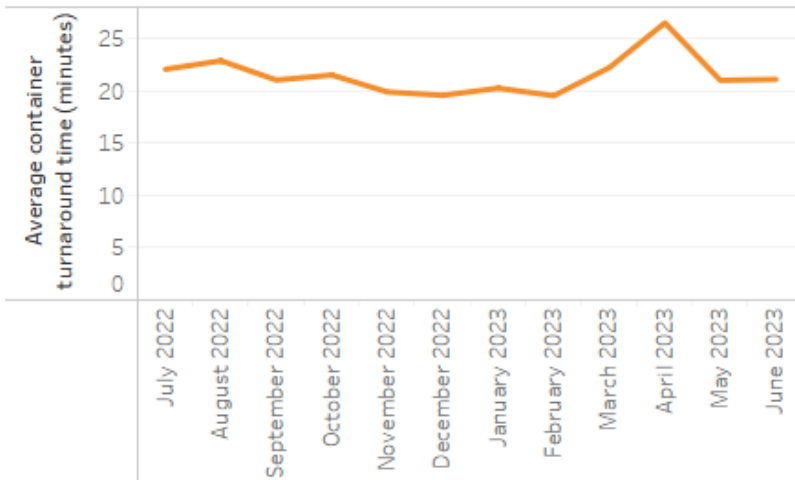
Proportion Rail TEUs



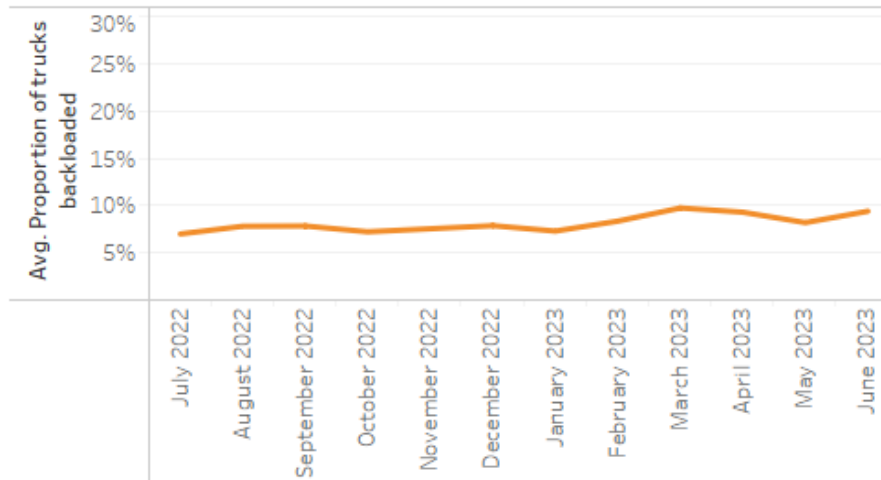
Average Truck Turnaround Time (minutes)



Average Container Turnaround Time (minutes)



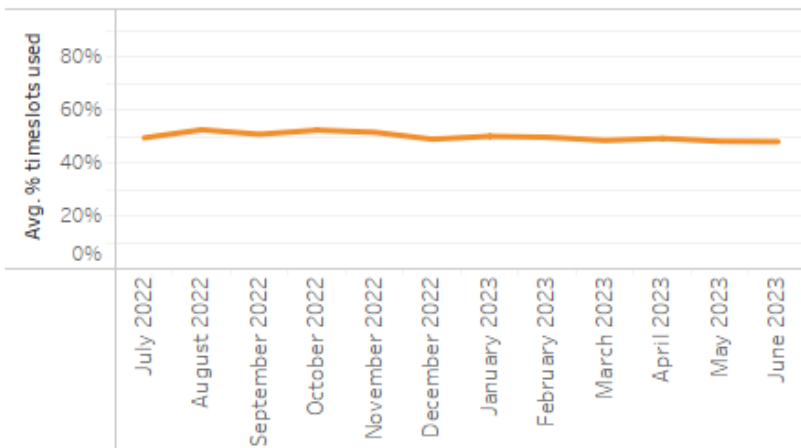
Proportion of trucks backloaded



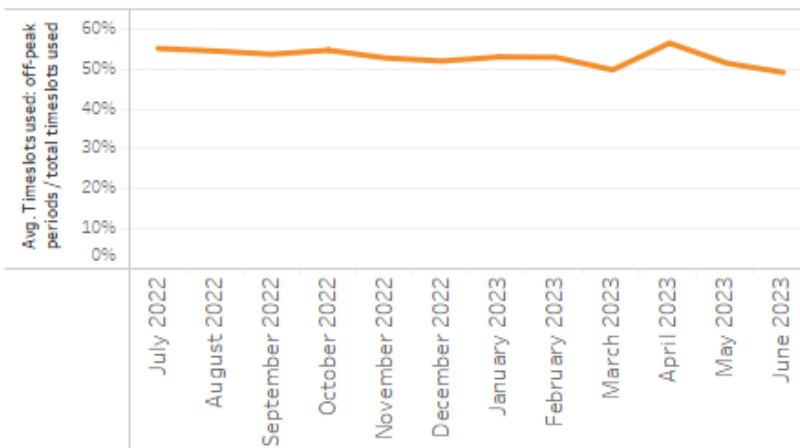
# Vehicle Booking System Operations



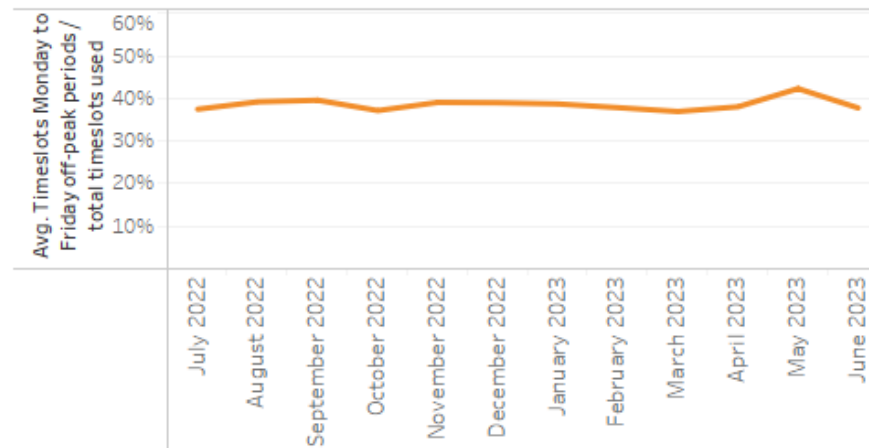
Proportion of truck timeslots actually used



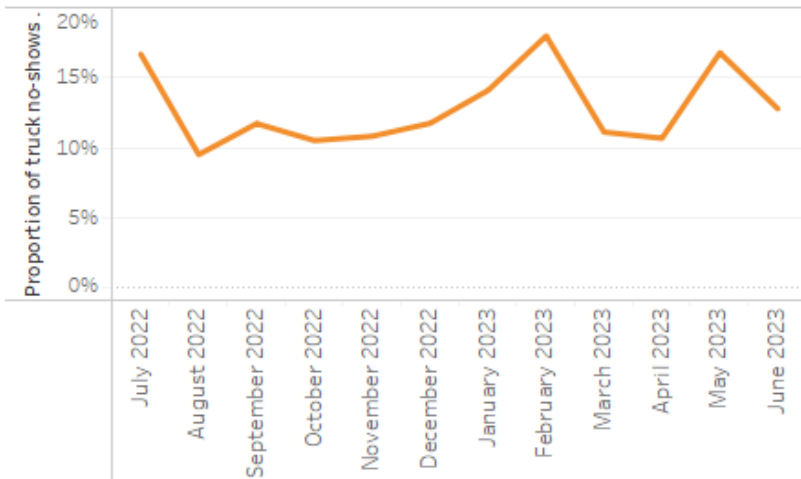
Proportion of truck timeslots actually used in all off-peak periods as proportion of total used



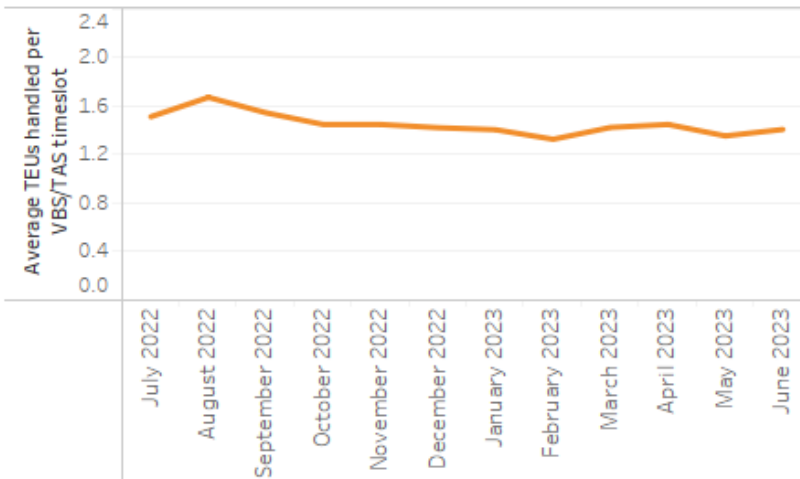
Timeslots used in Monday to Friday off-peak periods vs Total used



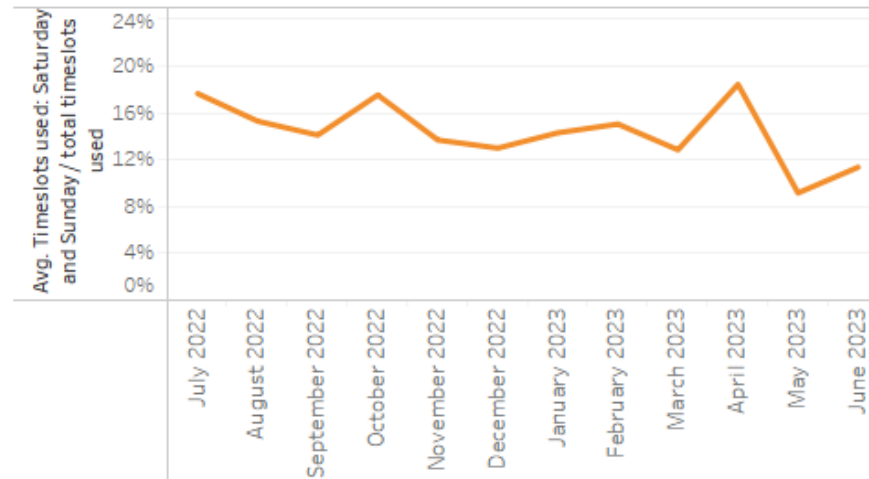
Proportion of truck no shows (% of used)



Average TEUs handled per VBS timeslot



Timeslots used by trucks on Saturday and Sunday vs Total used





# APPENDIX

## Definitions

**Average TEU per truck movement:** As per BITRE Waterline Indicator 2.9, this indicator measures the count of TEUs through the VBS system (Indicator 1.10) divided by the total number of VBS trucks used (Indicator 1.5). This indicator measures the truck efficiency in a standard unit, a TEU, and thus takes into account the different sizes of containers.

As per BITRE Waterline:

Indicator 1.10: This indicator includes the total number of TEUs transported by VBS trucks. Up to Waterline 55, this indicator included the number of TEUs transported by trucks undertaking bulk runs; this has been discontinued due to inconsistent data.

Indicator 1.5: This is the count of trucks processed through the vehicle booking system (VBS). This count excludes trucks that perform bulk runs of empty containers between the container parks and container terminals. This indicator counts trucks on a round trip. That is, a truck entering a container terminal and the same truck exiting the container terminal is counted as one truck.

**Containers per Truck:** As per BITRE Waterline 2.8, this indicator measures the count of containers processed through the VBS system divided by the total number of VBS trucks used.

**Average truck turnaround time (minutes):** As per BITRE Waterline Indicator 2.11, this indicator measures the time elapsed from when the truck enters the “in-gate” of a container terminal to the time when the last container is loaded, i.e., “job complete”. It does not include the time the truck waits outside the gate of a container terminal, nor does it include the time taken for a truck to exit the terminal following job completion. This is a measure of stevedoring efficiency and shows how quickly a stevedoring company processes trucks at a container terminal. It is noted that average truck turnaround time is influenced by the number of containers serviced per truck. It is recommended that this indicator be viewed in conjunction with ‘Containers per truck’. The measure excludes bulk run movements.

**Average Container Turnaround Time (minutes):** As per BITRE Waterline Indicator 2.12, this indicator is calculated as the ‘average truck turnaround time’ (Indicator 2.11) divided by ‘average containers per truck’ (Indicator 2.8). It is a measure of the stevedoring efficiency in handling containers at a container terminal. Container turnaround time improves (that is, it goes down) if either the truck utilisation rates improve, implying that the number of containers per truck increases, or the container terminal is faster in processing each truck.

**Proportion of trucks backloaded:** As per BITRE Waterline Indicator 2.10, this indicator shows the number of backloaded trucks as a proportion of the total VBS trucks (Indicator 1.5). Such operations make more effective use of trucks and landside infrastructure. ‘Backloaded operations’ refers to trucks which haul containers on both the inbound and outbound legs of a single trip to a terminal.

As per BITRE Waterline:

Indicator 1.5: This is the count of trucks processed through the vehicle booking system (VBS). This count excludes trucks that perform bulk runs of empty containers between the container parks and container terminals. This indicator counts trucks on a round trip. That is, a truck entering a container terminal and the same truck exiting the container terminal is counted as one truck.

**Proportion Rail TEUs:** This indicator includes the total number of Rail transported TEUs vs overall transported TEUs i.e. transported with Rail and Trucks.

**Port Botany Rail: % utilisation per month actual vs window:** This measures the number of actual rail lifts vs the window allocated rail lifts per month (overall vs Metro vs Regional). Utilisation percentage may be impacted by terminal volumes and introduction of new capacity across the period.

**Rail Container Turnaround Time (CTT):** This indicator is calculated as the average train turnaround time divided by the average number of containers handle by rail (in minutes)



**Proportion of timeslots actually used:** This is not a BITRE Waterline indicator. This indicator measures the count of timeslots actually used (BITRE Waterline Indicator 3.2) as a proportion of the number of timeslots available (BITRE Waterline Indicator 3.1). For manual terminals, the higher utilisation aligns to the requirement to match resourcing to forecast demand.

**Timeslots used in all off-peak periods vs Total used:** As per BITRE Waterline Indicator 3.3, this indicator is derived from BITRE Waterline Indicator 3.2 (Number of timeslots actually used) and gives the count of timeslots used during the off-peak period as a proportion of all timeslots used. The off-peak period is defined as all time periods except Monday to Friday 6:01 AM to 6:00 PM. Off-peak / weekend utilisation can be affected by the requirement to match resourcing to forecast demand. Off-peak utilisation can be affected by the requirement to match resourcing to forecast demand.

**Timeslots used in Mon-Fri off-peak periods vs Total used:** As per BITRE Waterline Indicator 3.4, this indicator is derived from Indicator 3.2 and gives a count of timeslots used during the Monday to Friday off-peak period as a proportion of all timeslots used. Off-peak / weekend utilisation can be affected by the requirement to match resourcing to forecast demand. Off-peak utilisation can be affected by the requirement to match resourcing to forecast demand.

**Proportion of truck no-shows:** This indicator is not included in Waterline reporting. This indicator represents the total number of no-shows as a proportion of total timeslots used over a given month, across each stevedore terminal. A no-show is defined as an instance in which a transport operator makes a timeslot booking to collect or dehire a container at a stevedore terminal but fails to arrive for the booking (excluding off-window or early/late arrivals).

**Average TEUs handled per VBS timeslot:** As per BITRE Waterline Indicator 3.6, this indicator is a measure of the intensity of usage of timeslots. The indicator increases as opportunities for out/return load carrying trips in one job increase. The calculation takes into account VBS timeslots actually used.

**Timeslots used on Sat-Sun vs Total used:** As per BITRE Waterline 3.5, this indicator is derived from Indicator 3.2 and gives a count of timeslots used during the Weekend (Saturday to Sunday) as a proportion of all timeslots used. Off-peak / weekend utilisation can be affected by the requirement to match resourcing to forecast demand.