Logistics Databank Analytics Report- October 2018

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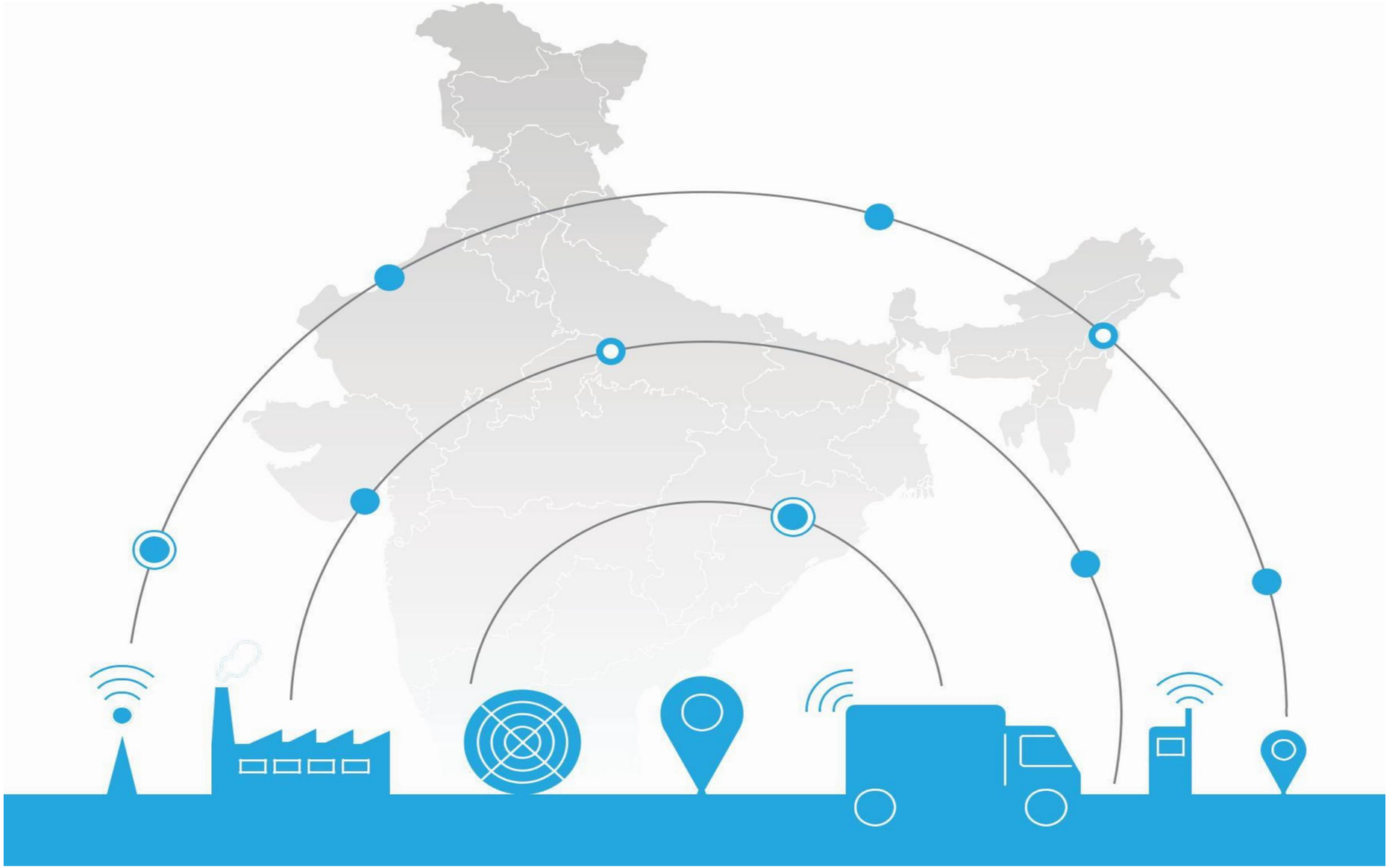

Executive Summary

Western Corridor (JNPT & Gujarat)

- Rail bound container handling performance in import cycle at western corridor ports has improved significantly by 35% as compared to previous month (55.9 hrs in Oct'18 from 85.9 hrs in Sep'18)
- Overall Port Dwell time performance of western corridor in import cycle has increased by 13% as compared to previous month (33.4 hrs in Oct'18 from 38.5hrs in Sep'18)
- Overall In-land container depot's (ICD) dwell time performance has decreased by 18% as compared to previous month

JNPT Port Terminals

- Rail bound container handling performance at JNPT in import cycle has improved significantly by:
  - 26% in Month-on-Month Analysis (Sep'18 vs Oct'18)
  - 55% in Year-on-Year Analysis (Oct'17 vs Oct'18)
- Dwell time performance of Direct Port Delivery(DPD) container has increased by 7% as compared to previous month. (49.5 hrs in Oct'18 from 53.2 hrs in Sep'18)

Gujarat Port Terminals (Adani Ports Special Economic Zone)

- Rail bound container handling performance in import cycle at Gujarat port terminals has improved significantly by 52% in Month-on-Month Analysis (Oct'18 vs Sep'18)

Container Transportation- Western Corridor Performance (JNPT + Gujarat)

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Port Dwell Time

IMPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	38.5	33.4
Truck	34.1	30.6
Train	85.9	55.9

EXPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	80.6	77.3
Truck	78.3	74.9
Train	96.1	93.7

Container Freight Stations(CFS)/Inland Container depots(ICD) – Dwell Time

Inland Container Depot (ICD)

Container Freight Stations

Entity	Sep'18 (in hrs)	Oct'18 (in hrs)
CFS	85.9	87.9
ICD	120.9	143.3

The marked entries showcase increase in performance in comparison to previous month

The marked entries showcase decrease in performance in comparison to previous month

Container Transportation- JNPT Port Terminals

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Container Lifecycle (Import Cycle)

Port Dwell Time

IMPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	40.6	34.9
Truck	37.3	32.8
Train	65.7	48.4

EXPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	67.4	67.8
Truck	65.4	66.0
Train	94.9	95.3

Transit Time

Towards ICD

Station

Transit Cycle	Sep'18 (in hrs)	Oct'18 (in hrs)
Port to ICD	63.9	73.9
Port to CFS	3.1	3.2

Towards CFS

From ICD

Station

Transit Cycle	Sep'18 (in hrs)	Oct'18 (in hrs)
ICD to Port	65.8	62.1
CFS to Port	6.1	6.0

From CFS

Container Freight Station (CFS) / Inland Container Depot (ICD) – Dwell Time

ICD

CFS

Entity	Sep'18 (in hrs)	Oct'18 (in hrs)
CFS	81.3	83.7
ICD	120.9	143.3

The marked entries showcase the increase in performance as compared to previous month

The marked entries showcase the decrease in performance as compared to previous month

Container Lifecycle (Export Cycle)

Container Transportation- JNPT Port Terminals

IMPORT CYCLE DWELL TIME (Oct'18 – in hrs)			Compared to Sep'18
PORT DWELL TIME	Overall Dwell Time of Truck and Train Bound Containers	34.9	14% ↑
	Port Dwell Time for Truck Bound Containers	32.8	12% ↑
	Port Dwell time for Train Bound Containers	48.4	26% ↑
	Port Dwell time Direct Port Delivery (DPD) containers	49.5	7% ↑
	Port Dwell time Containers bound for CFS	30.8	10% ↑
	Port Dwell time Containers bound for ICD	33.7	37% ↑

EXPORT CYCLE DWELL TIME (Oct'18– in hrs)			Compared to Sep'18
PORT DWELL TIME	Overall Dwell Time of Truck and Train Bound Containers	67.8	1% ↓
	Port Dwell Time for Truck Bound Containers	66.0	1% ↓
	Port Dwell time for Train Bound Containers	95.3	0.4% ↓
	Port Dwell time Direct Port Entry (DPE) containers	58.9	10% ↑
	Port Dwell time Containers bound from CFS	63.6	0.3% ↑
	Port Dwell time Containers bound from ICD	91.0	0.3% ↑

↑↓ The arrows depict increase/decrease in performance of the stakeholders in comparison to previous month

Container Transportation- APSEZ Port terminals Gujarat

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Container Lifecycle (Import Cycle)

Port Dwell Time

IMPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	35.3	31.3
Truck	30.3	27.5
Train	148.0	70.5

EXPORT

Mode	Sep'18 (in hrs)	Oct'18 (in hrs)
Overall	107.7	95.8
Truck	110.8	96.5
Train	96.8	93.1

Transit Time

Towards ICD

Station

Transit Cycle	Sep'18 (in hrs)	Oct'18 (in hrs)
Port to ICD	93.8	104.8
Port to CFS	1.4	1.7

Towards CFS

From ICD

Station

Transit Cycle	Sep'18 (in hrs)	Oct'18 (in hrs)
ICD to Port	88.7	92.6
CFS to Port	1.54	1.2

From CFS

Container Freight Stations(CFS)/Inland Container Depots(ICD)

ICD CFS

Entity	Sep'18 (in hrs)	Oct'18 (in hrs)
CFS	97.6	99.3
ICD	120.9	143.3

The marked entries showcase the increase in performance as compared to previous month

The marked entries showcase the decrease in performance as compared to previous month

Container Lifecycle (Export Cycle)

Container Transportation- APSEZ Port Terminals

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IMPORT CYCLE DWELL TIME (October'18– in hrs)			Compared to Sep'18
PORT DWELL TIME	Overall Dwell Time of Truck and Train Bound Containers	31.3	11% ↑
	Port Dwell Time for Train Bound Containers	70.5	52% ↑
	Port Dwell time for Truck Bound Containers	27.5	9% ↑
TRANSIT TIME	Port to ICD	104.8	12% ↓
	Port to CFS	1.7	24% ↓

EXPORT CYCLE DWELL TIME (October'18– in hrs)			Compared to Sep'18
PORT DWELL TIME	Overall Dwell Time of Truck and Train Bound Containers	95.8	11% ↑
	Port Dwell Time for Train Bound Containers	93.1	4% ↑
	Port Dwell time for Truck Bound Containers	96.5	13% ↑
TRANSIT TIME	ICD to Port	92.6	4% ↓
	CFS to Port	1.2	22% ↑

↑↓ The arrows depict increase/decrease in performance of the stakeholders in comparison to previous month

Western Corridor- Port Performance Benchmarking & Performance Index

Performance Benchmarking - Port Terminals

Performance benchmarking for Port Terminals covered under LDB project for Oct'18

Top Performing Terminal	
Gateway Terminals India (GTI)	
Sep'18	Oct'18
51.6 hrs	50.6 hrs ↑

Low Performing Terminal	
Adani CMA Mundra Terminal (ACMTTL)	
Sep'18	Oct'18
85.7 hrs	72.6 hrs ↑

Note: The performance benchmarking is based on performance index

↑↓ The arrows depict increase/decrease in overall performance of the stakeholders in comparison to previous month

Performance Index-Port Terminals

In order to assess the relative performance of Port terminals, the relative Dwell time as well as the volume of containers handled by them are depicted graphically in the form of an index to portray the performance of a particular organisation on the basis of these two combined factors i.e. Dwell time and Volume

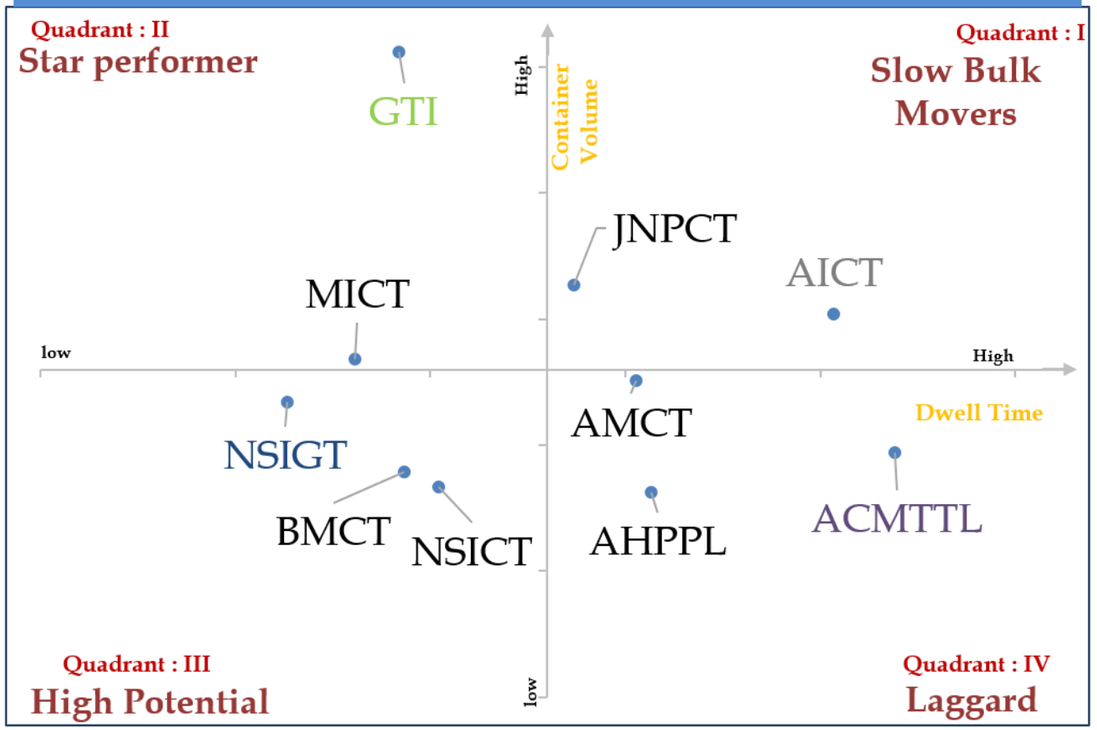
Star Performer: consist of Ports which have catered relatively high container volume in lower dwell time

Slow Bulk Movers : consist of Ports which have catered higher container volume at higher dwell time

High Potential : consist of Ports which have catered relatively lower container volume in lower dwell time

Laggard : consist of Ports which have catered relatively lower container volume at higher dwell time

Port Terminal Performance Index : Oct'18



Western Corridor- CFS Performance Benchmarking & Performance Index

Performance Benchmarking – CFS(s)

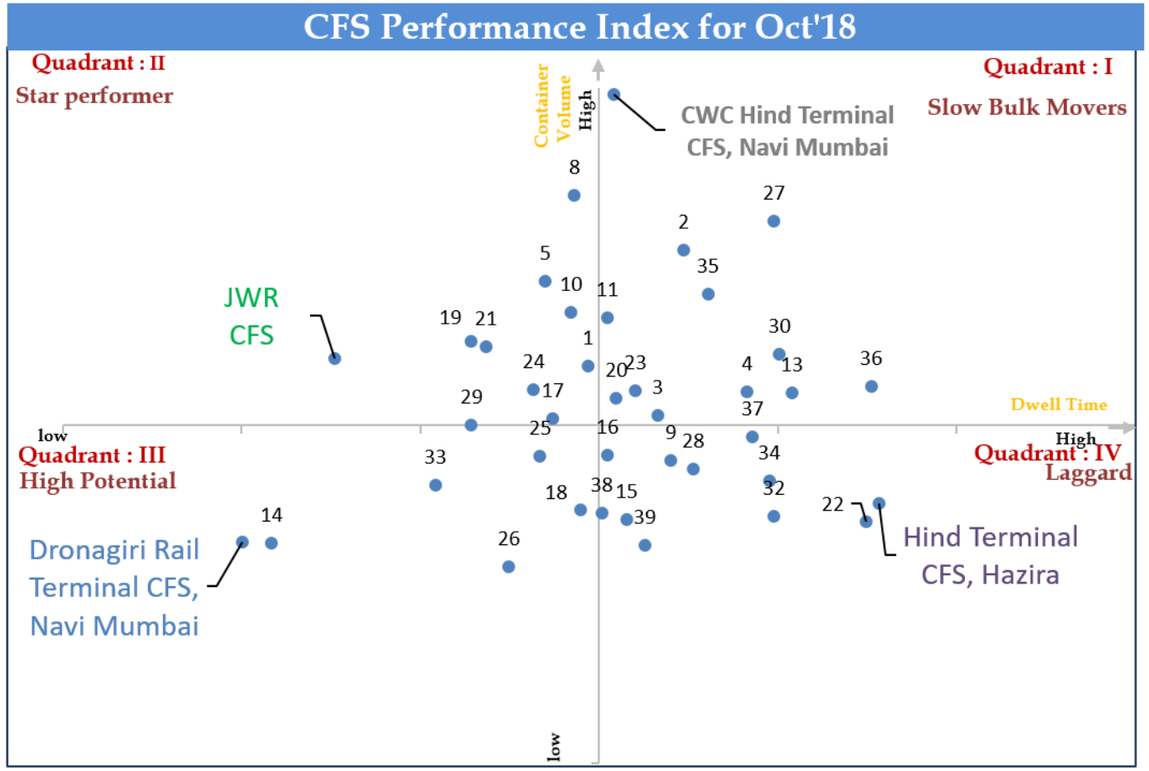
Performance benchmarking for CFS(s) covered under LDB project for October'18

Top Performing Terminal	
JWR CFS	
Sep'18	Oct'18
58.9	56.7 ↑

Low Performing Terminal	
Hind Terminal CFS, Hazira	
Sep'18	Oct'18
91.2	116.3 ↓

Note: The performance benchmarking is based on performance index

The arrows depict increase/decrease in overall performance of the stakeholders as compared to previous month



Western Corridor- ICD Performance Benchmarking & Performance Index

Performance Benchmarking - ICD

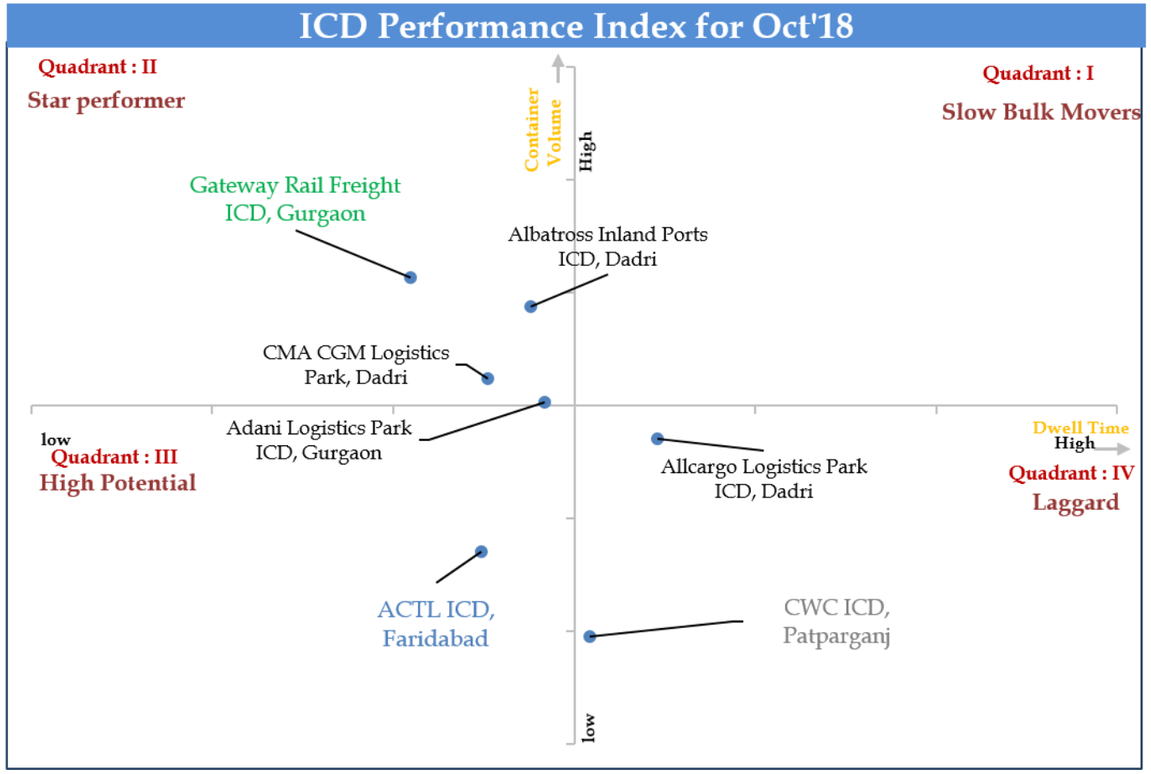
Performance benchmarking for ICDs covered under LDB project for October'18

Top Performing Terminal	
Gateway Rail Freight ICD, Gurgaon	
Sep'18	Oct'18
137.0 hrs	109.5 hrs ↑

Low Performing Terminal	
CWC ICD, Patparganj	
Sep'18	Oct'18
167.2	149.8 ↑

Note: The performance benchmarking is based on performance index

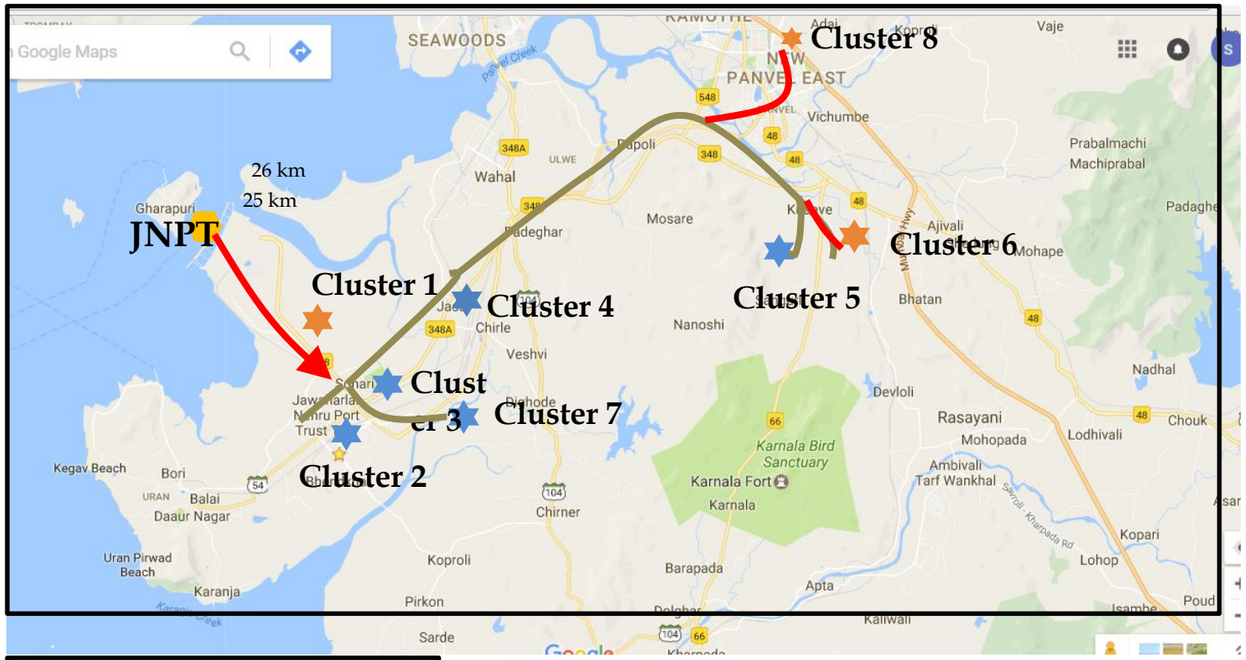
↑↓ The arrows depict increase/decrease in overall performance of the stakeholders in comparison to previous month



Congestion Analysis

JNPT Congestion Analysis

JNPT – Import – Oct'18

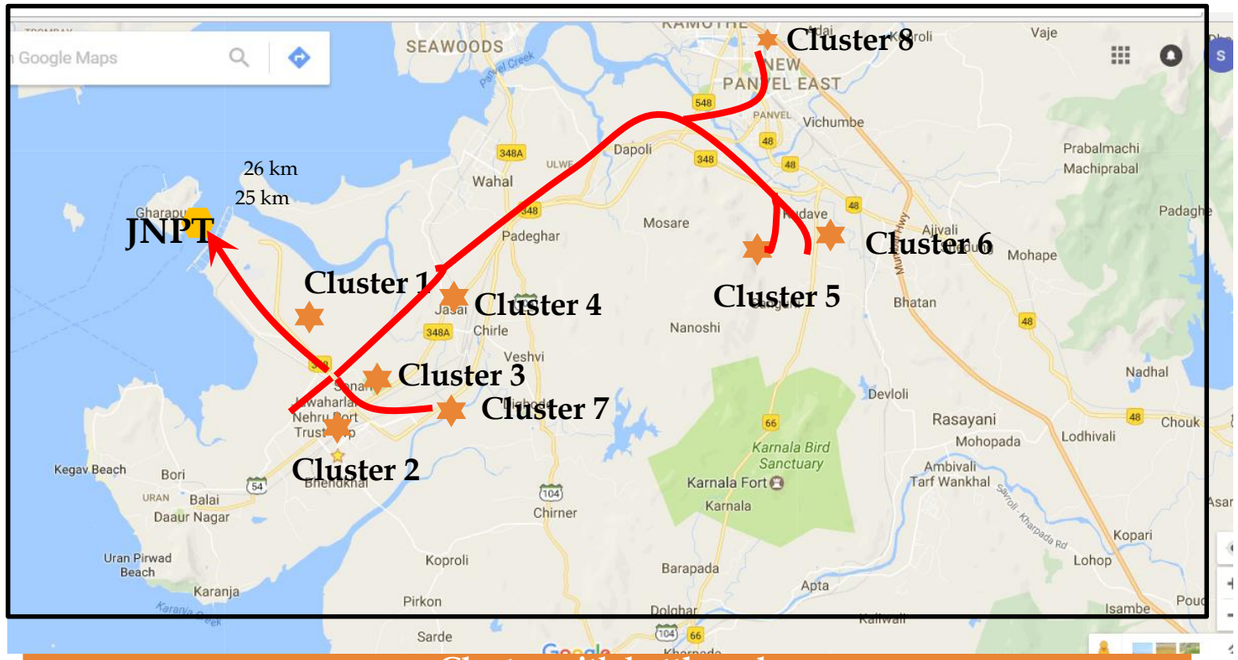


Legends
- High Congestion
- Medium Congestion
- Low Congestion
- Cluster with bottleneck
- Cluster without bottleneck

Clusters with bottleneck	
Cluster 1	JNPT Y Junction Area
Cluster 6	Salva apta rd area, Bangalore highwa
Cluster 8	Taloja, Navi Mumbai

Clusters without bottleneck	
Cluster 2	Bhendkhal area, Khopate road
Cluster 3	Sonari area,JNPT road
Cluster 4	Chirle area , JNPT road
Cluster 5	Plaspa area, Coachi kanyakumari Highway
Cluster 7	Patilpada area, Khopate JNPT road

JNPT – Export – Oct'18



Cluster with bottleneck	
Cluster 1	JNPT Area
Cluster 2	Bhendkhal area, Khopate road
Cluster 3	Sonari area,JNPT road
Cluster 4	Chirle area , JNPT road
Cluster 5	Plaspa area, Coachi kanyakumari Highway
Cluster 6	Salva apta rd area, Bangalore highway
Cluster 7	Patilpada area, Khopate JNPT road
Cluster 8	Taloja, Navi Mumbai

Western Corridor Toll Plaza Analysis

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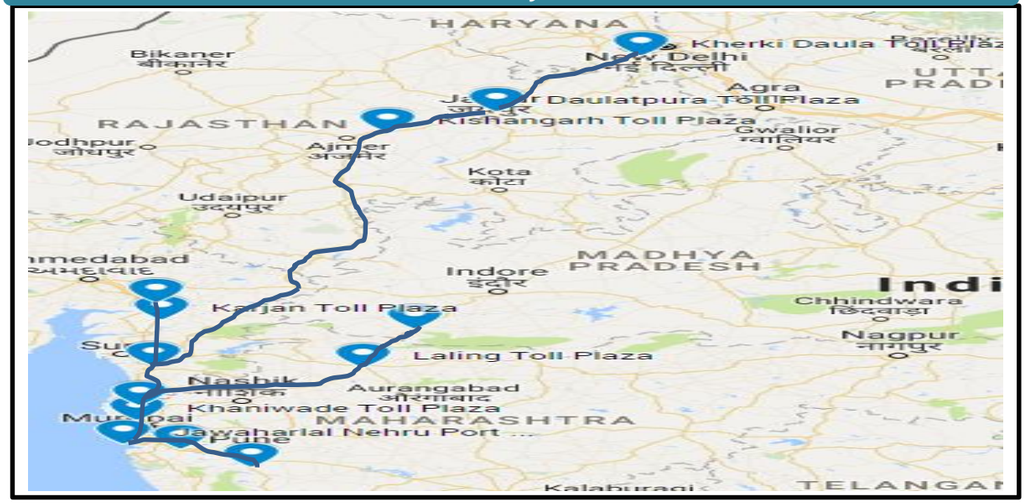
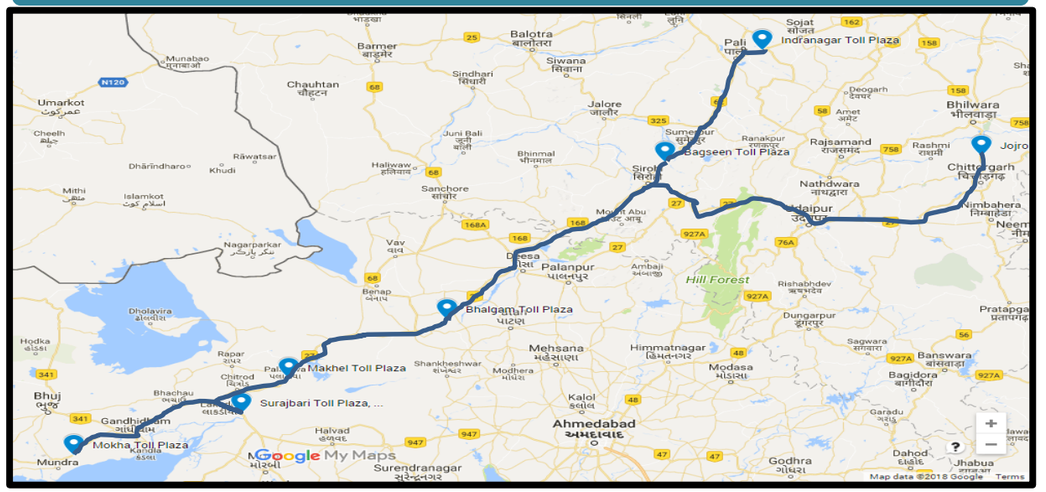
Avg. Travel Time & Speed between Toll Plazas (Oct'18)

	Source	Destination Toll Plaza	Inter Distance (Km)	Sep'18 Avg. Speed (Km/Hr.)	Oct'18 Avg. Speed (Km/Hr.)
JNPT	JNPT	Khaniwade	94	11.9	14.0
	JNPT	Khalapur	60	6.0	15.1
	Khaniwade	Charoti	50	36.2	36.6
	Charoti	Boriach	126	25.2	26.0
	Boriach	Bharthan	142	30.6	31.4
	Bharthan	Vasad	60	42.3	43.5
	Khalapur	Khedshivpur	105	28.6	27.2
	Daulatpura	Kherki	199	22.0	24.3
APSEZ	MICT	Mokha	28	22.6	22.6
	Mokha	Makhel	150	15.1	23.1
	Mokha	Surajbari	115	14.7	25.5
	Makhel	Bhalgam	108	33.1	38.4
	Bhalgam	Uthamam	209	24.6	29.2
	Uthamam	Indranagar	109	17.8	35.9

Toll Plaza - JNPT Port



Toll Plaza – APSEZ Port

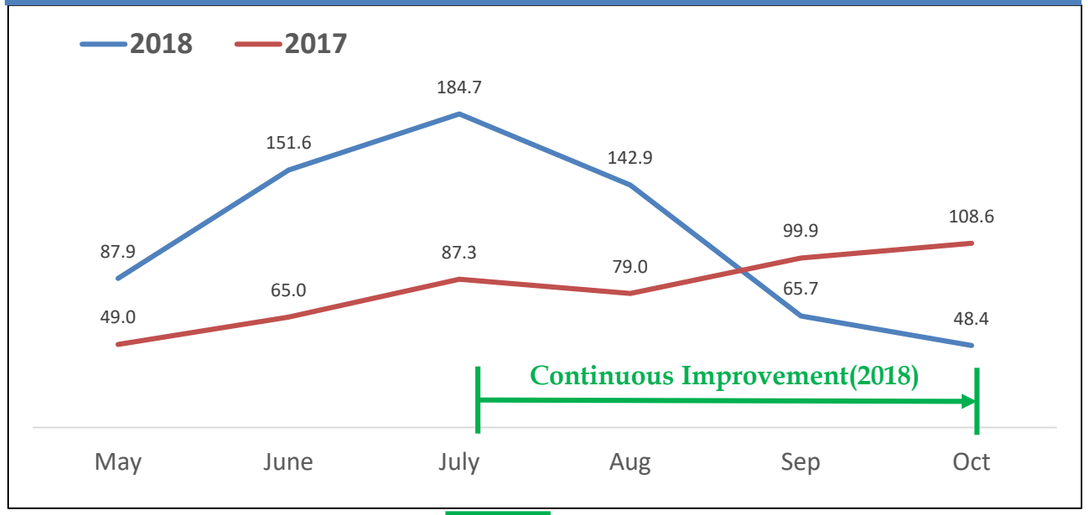


KEY FINDINGS

Trend Analysis: Train Bound Containers Dwell time

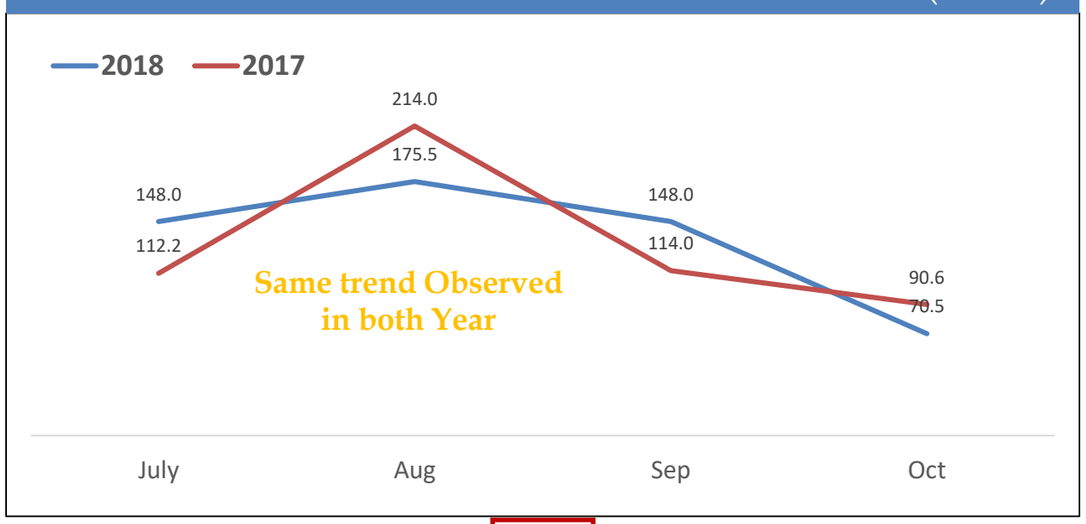
It is been observed that there is an improvement in performance of handling train bound containers at JNPT and APSEZ Port by 26% and 52% respectively as compared to pervious month, to better understand the situation, Year-On-Year trend has been analysed

JNPT Port Dwell Time: Train Bound Containers (in hrs)



It can be seen that from month of may the dwell time tends to increase, however in year 2018 post July period the dwell time is continuously decreasing, as compared to the last year trend

APSEZ Port Dwell Time: Train Bound Containers (in hrs)



A general trend has been observed from July to October month in both 2017 and 2018 for Port dwell time, which showcase the rise in dwell time till month of august and then gradually falls till October

Vessel Analysis

Through below component we are trying to observe the impact of 'vessel arriving on-time', on Import Cycle Lead time for ICD bound containers. The data below depicts the month with high % of on-time vessel arrival (sep'18) in comparison to month with low % of on-time vessel arrival (July'18)

July'18	
% of container arrived late	89%
% of containers arrived on-time	9%
% of containers arrived early	2%
Import Lead time for the month	10.4 Days

Sep'18	
% of container arrived late	48%
% of containers arrived on-time	38%
% of containers arrived early	14%
Import Lead time for the month	9.4 Days

It can be seen that in month with high percentage of containers arriving on-time, the import lead time is less (by 1day)

Definitions & Calculations –
Import Lead time – Port Dwell Time (import cycle) + Port to ICD Transit Time + ICD Dwell Time
ETA – Estimated time of Arrival
ATA – Actual Time of Arrival
On-Time Containers: when difference between ETA and ATA is less then 2hrs
Delayed Containers: when difference between ETA and ATA is more then 2hrs and ETA is greater ATA
Containers arrived early: when difference between ETA and ATA is more then 2hrs and ETA is less then ATA

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THANK YOU