



# LDB ANALYTICS : January Report 2018 for JNPT



DLDS's Logistics Databank Project(LDB) is currently providing Container visibility services for more than 70% of India's Container Volume and as on date has provided services for more than **6.5 million EXIM Containers of India** in the western corridor starting from the port till the ICD's through a single window([www.ldb.co.in](http://www.ldb.co.in)).

Pan India launch of DMICDC's Logistics Databank Operations was announced on 18<sup>th</sup> Dec 2017, this will enable in bringing Visibility & Transparency across the Indian Supply Chain and reduce the Container Transportation time and the costs.

With launch of LDB mobile App for android users, EXIM Containers can be tracked efficiently by the stakeholders.

Since the commencement of the Operations, DLDS Analytics reports have been able to bring in visibility to the stakeholders enabling them in improvising the key performance Indicators as below:

- Port Dwell Time Improvement of **42.86%** of Import bound Containers and **15%** improvement in Dwell time of Export bound Containers.
- Dwell time of ICDs & CFSs in western corridor has improved by **26.7%**.
- The LDB Congestion Analysis helped in reducing the transit time between Ports to CFS by around **12%**.
- LDB Analytics showcased that , Truck Transit Time between Toll Plazas improved by **25-27 %** in comparison to Pre GST scenario.



Performance of JNPCT Terminal in terms of overall Dwell Time , witnessed significant improvement in Jan 2018 in comparison to Dec 2017, due to improved handling of Export bound Containers.

Dec 2017	JNPCT Export Dwell Time Improvement	Jan 2018
	28.7 %	
	JNPCT Import & Export Dwell Time Improvement	
	29 %	

- Over all performance across the JNPT Port Terminals( JNPCT, APM, NSICT, NSIGT) witnessed an improvement of 13.4% reduction in Dwell time for handling the Export bound Containers.
- Improvement in the Import dwell time in Gujarat region in Jan 2018 in comparison to Dec 2017.

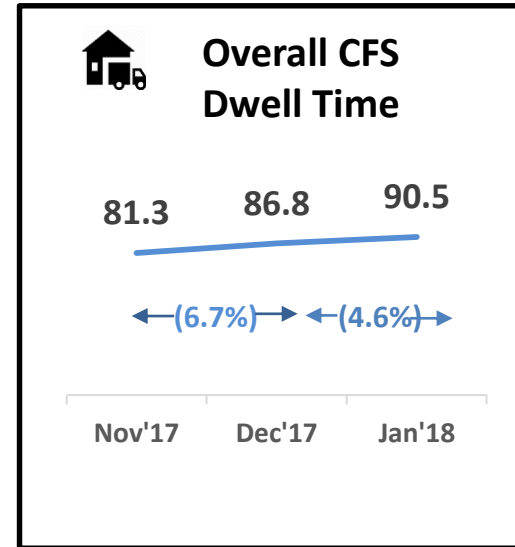
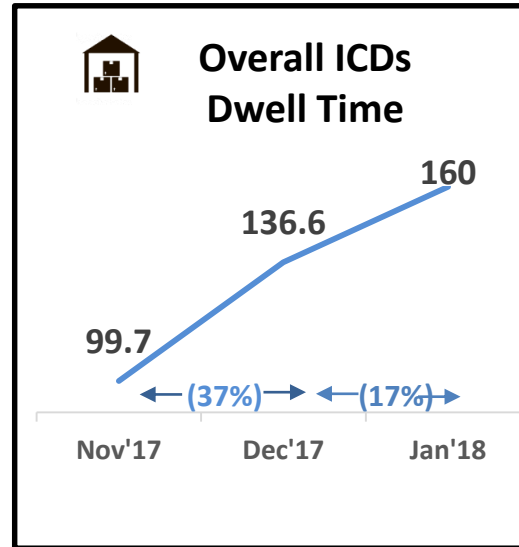
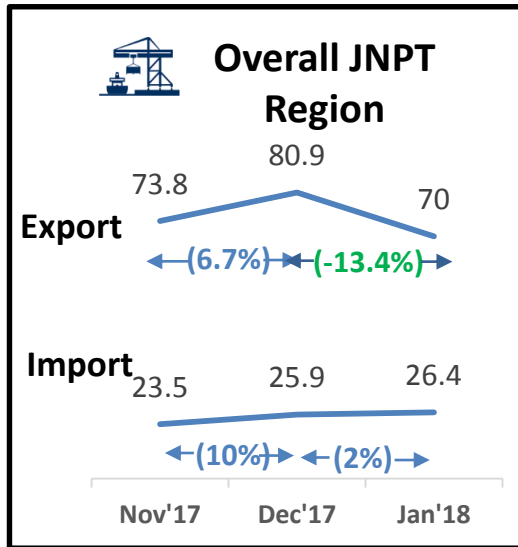
Dec 2017	Gujarat region Import Dwell Time Improvement	Jan 2018
	13%	



Performance Benchmarking

Performance Index

Container Clearance Time analysis

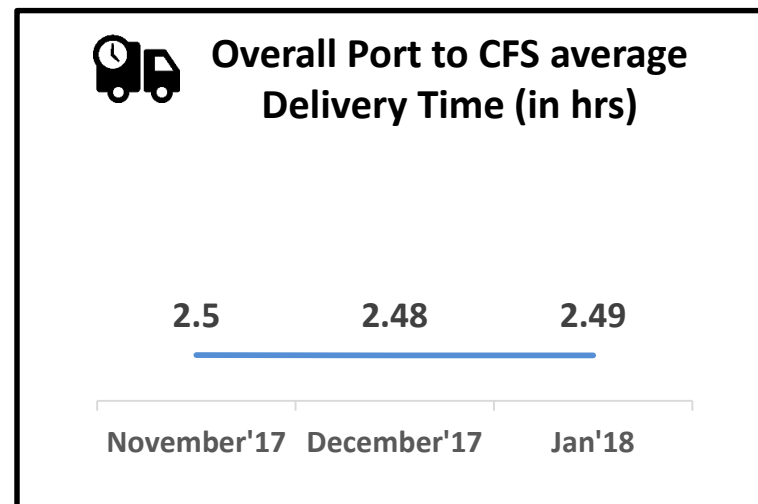
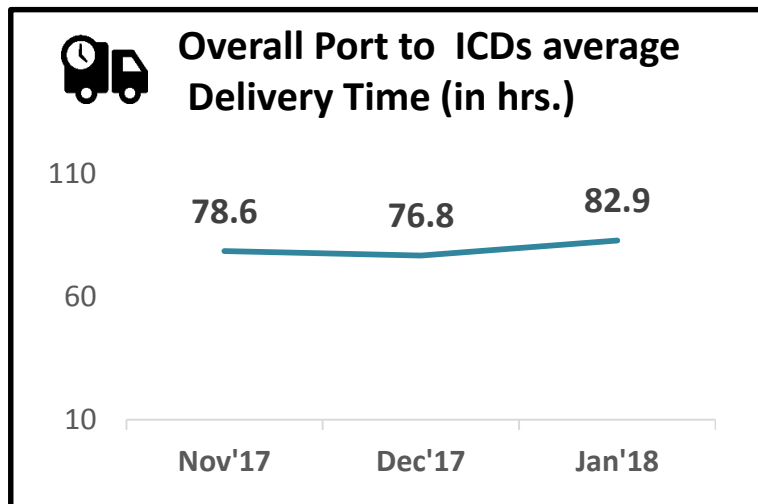


### Dwell Time

- **13.4%** improvement in JNPT region export cycle performance in January'18 month as compared to the previous month
- **17%** decline in overall ICD dwell time performance as compared to the previous month

Congestion Analysis

Bottleneck Identification



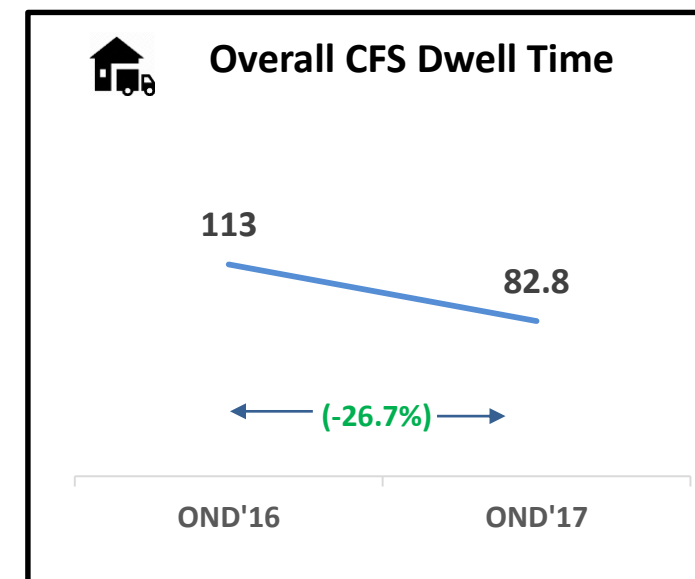
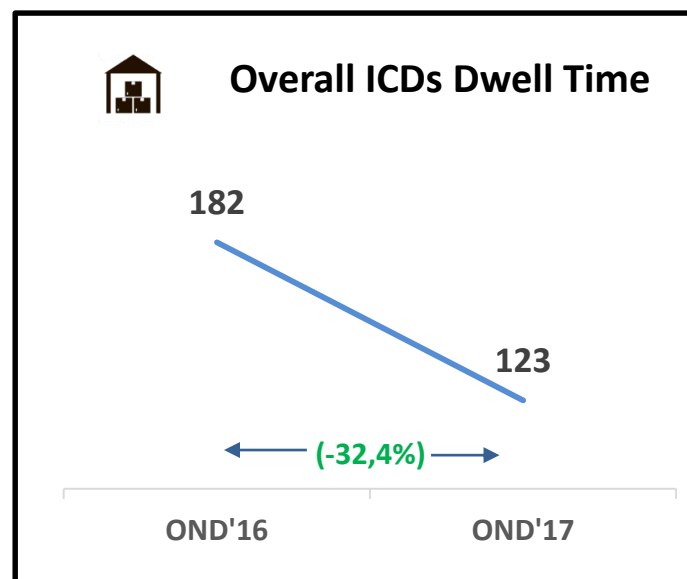
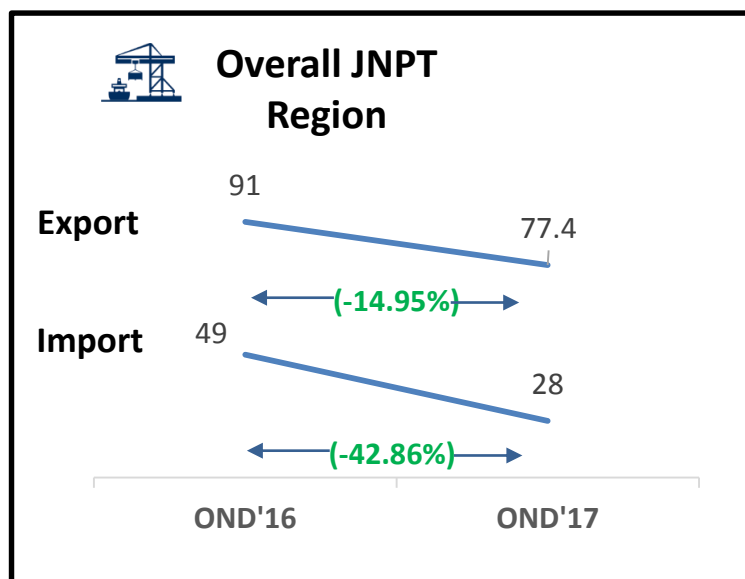
### Transit Time Reduction

- Transit time between port and CFS/ICDs has been in the same range in January'18 month as compared to the previous months

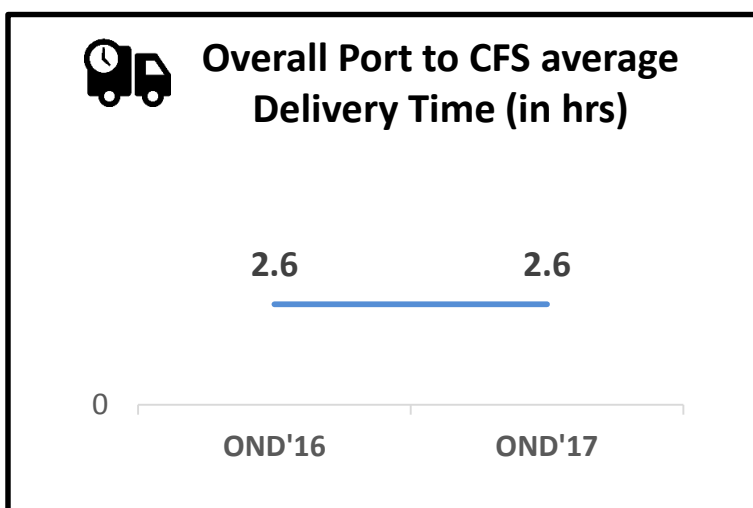


## Performance Metrics

The below graphs depicts the Y-o-Y progress of dwell time performance of JNPT region port terminals, ICDs and CFS under LDB



## Transit Time Metrics



### Dwell Time Reduction

- Significant improvement in Port dwell time for both Import and Export cycle by 42.86% and 14.9% for OND'17 quarter.
- CFS and ICD dwell time performance has also seen an improvement of approximately 27%



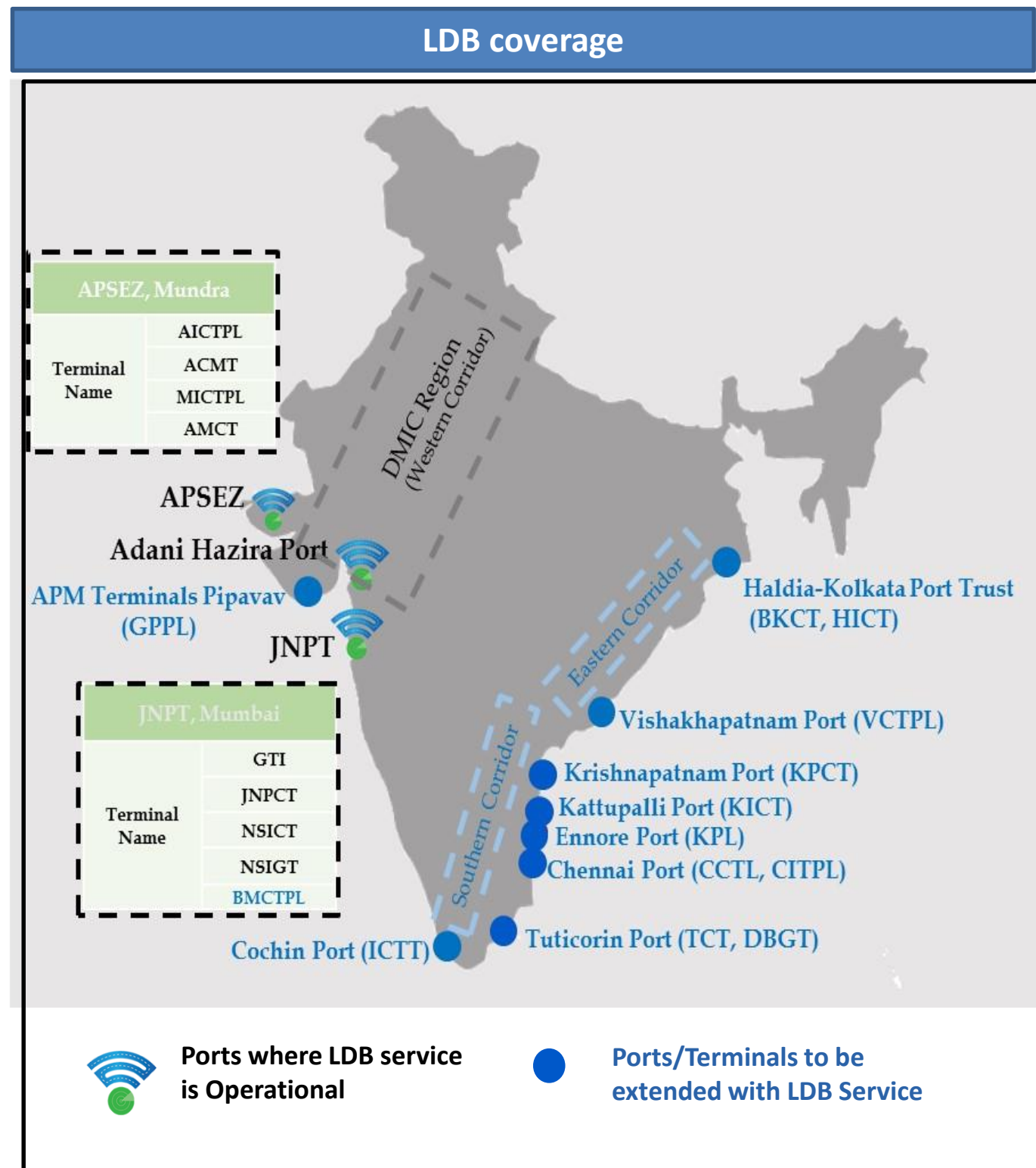


**9**  
Port Terminals

**10**  
In-land container Depots

**46**  
Container Freight Stations

**18**  
Toll Plazas



# Performance Benchmarking





Performance benchmarking for JNPT Region Port Terminals for month of January'18

## Port Terminals

### Top Performing Terminal

**Gateway Terminals India (GTI)**

Dwell Time : **45.8**  
hrs.

### Low Performing Terminal

**Nhava Sheva International  
Gateway Terminal (NSIGT)**

Dwell Time : **57.8** hrs.







Performance benchmarking for JNPT Region CFS for quarter January'18

## CFS

### Top Performing CFS's

**JWR CFS, Navi Mumbai**

Dwell Time : **54**  
hrs.

### Low Performing CFS's

**Vaishno Logistics CFS, Navi Mumbai**

Dwell Time : **153.1**  
hrs.





Performance benchmarking for ICDs for quarter January'18

ICD	
Top Performing ICD	
<b>CMA CGM Agencies ICD, Dadri</b>	Dwell Time : <b>87.6</b> hrs.
Low Performing ICD	
<b>CONCOR ICD, Aurangabad</b>	Dwell Time : <b>193.4</b> hrs.





## Performance benchmarking across the Western corridor

### Port Terminals

#### Top Performing Terminal

**Gateway Terminals India (GTI)**

Dwell Time : **45.8**  
hrs.

#### Low Performing Terminal

**Adani International  
Container Terminal (AICT)**

Dwell Time : **73.4** hrs.

### CFS

#### Top Performing CFS's

**Adani CFS Eximyard, Mundra**

Dwell Time : **51.1**  
hrs.

#### Low Performing CFS's

**Vaishno Logistics CFS, Navi Mumbai**

Dwell Time : **153** hrs.

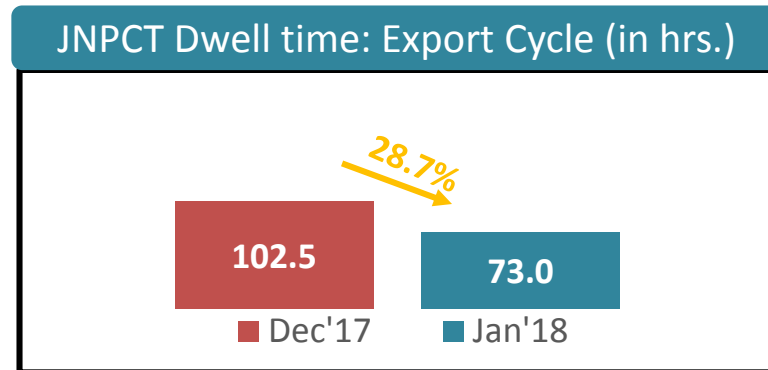




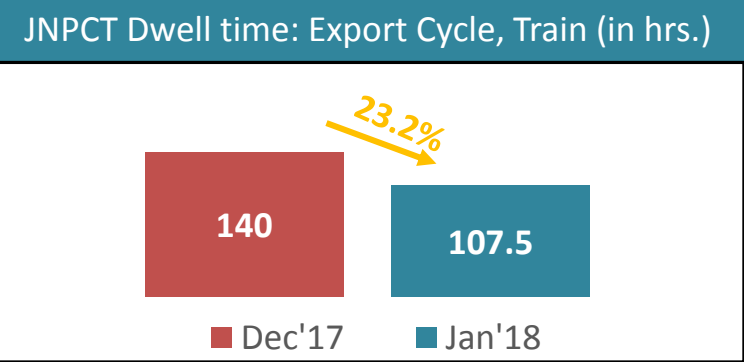
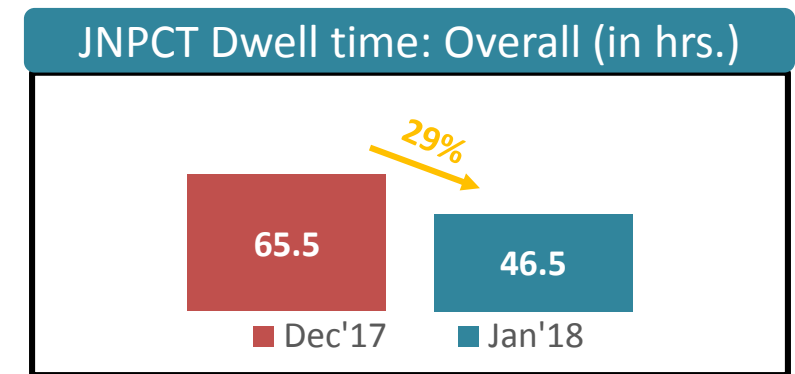
## 1 JNPCT port terminal has seen improvement in its export cycle port dwell time by around 28.7% in January 18

JNPCT port terminal has reduced its overall dwell time by **29%** in January '18 as compared to December '17. This improvement is majorly due to reduction in export cycle dwell time of both train and truck. The container clearance was done efficiently for both truck and train bound containers which led to this reduction in dwell time

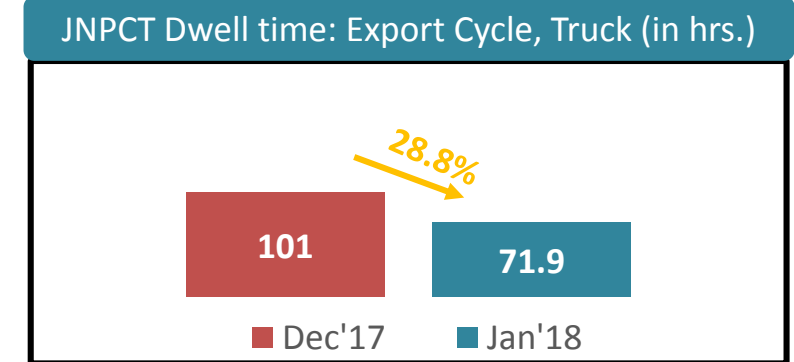
- JNPCT has reduced its export dwell time by 28.7 %



- JNPCT has reduced its overall dwell time by 29%



### Further Analysis



**Within 5 days**
**More than 5 days**

JNPCT : Export Train (jan'18)

57%

43%

JNPCT : Export Train (Dec'17)

38%

62%

**Within 5 days**
**More than 5 days**

JNPCT : Export Truck (jan'18)

90%

10%

JNPCT : Export Truck (Dec'17)

76%

24%

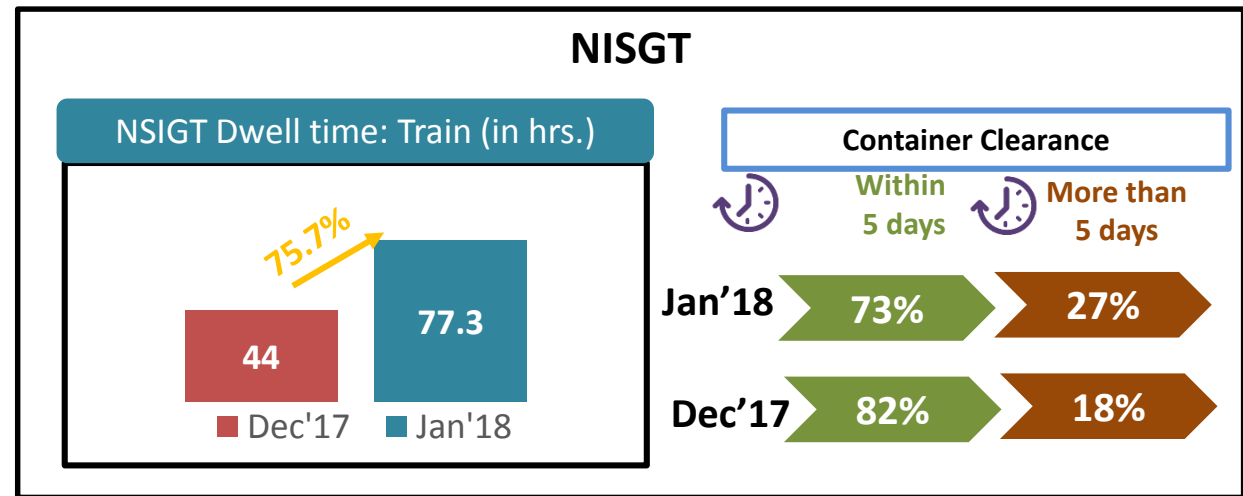
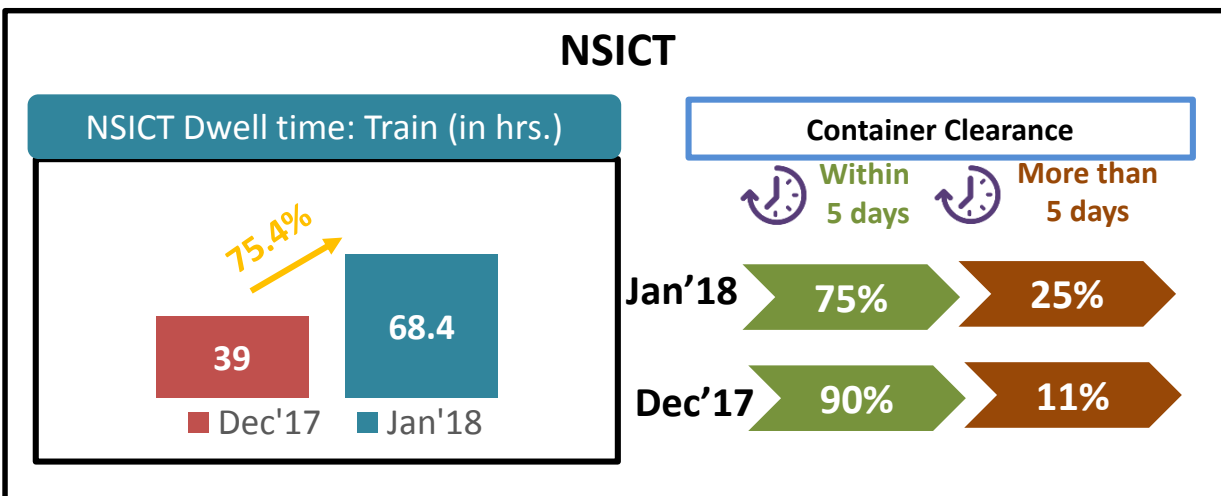
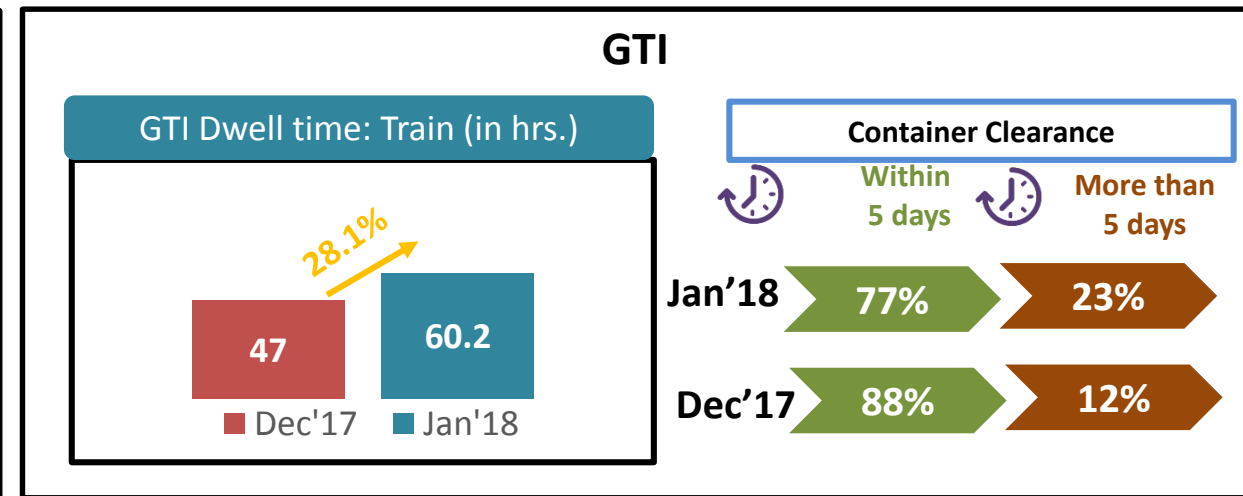
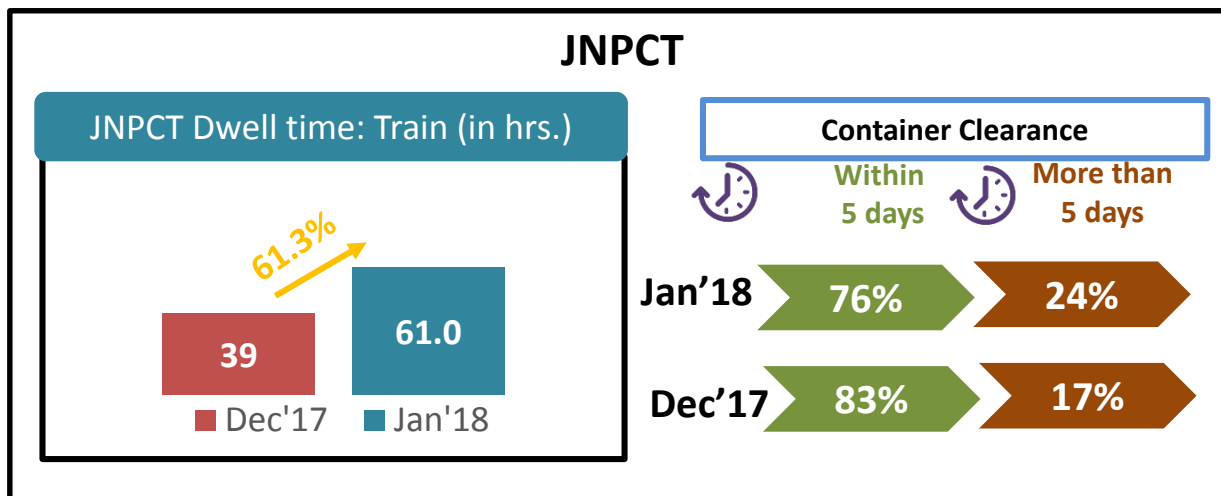


## 2 JNPT region port terminals has seen increase in its import cycle port dwell of train bound containers in Jan'18

All terminals in JNPT region has increased its import cycle port dwell time through train in Jan'18 as compared to Dec'17.

**However the overall import cycle dwell time has not been affected** as train bound containers in import cycle accounts for only **9% of import traffic of the JNPT region port terminals.**

Less containers were process within initial days i.e. within 5 days in month of Jan'18 in comparison to previous month which has led to increase in import dwell time of rail bound containers

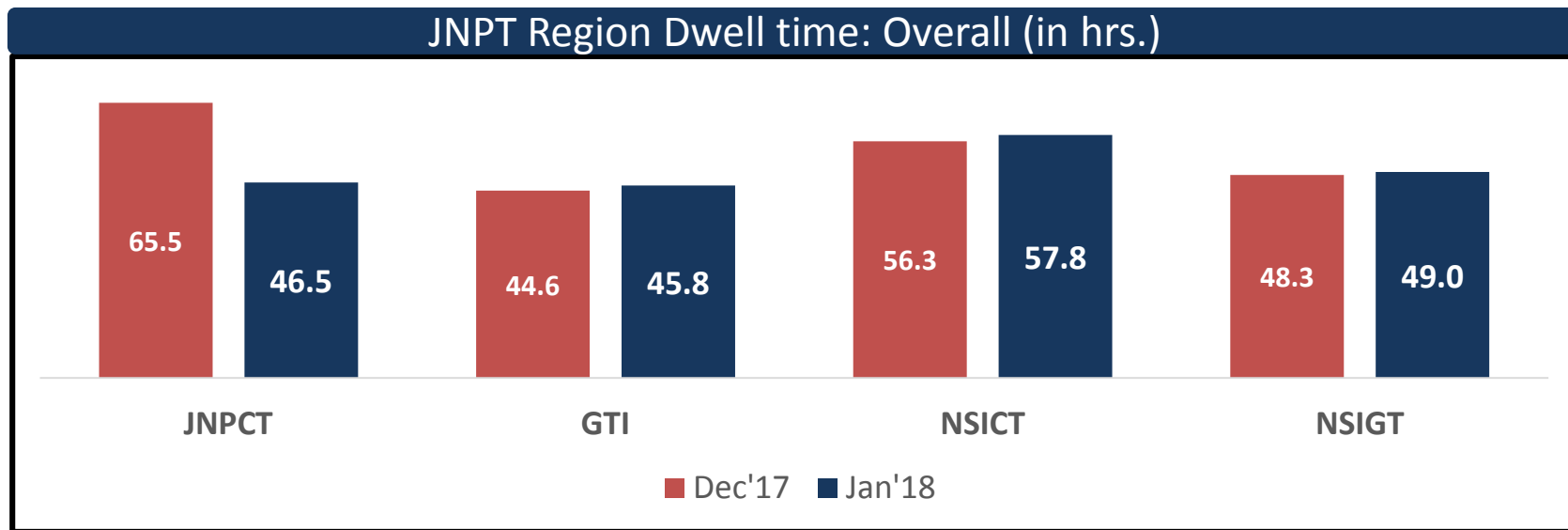






## JNPT port dwell time trend :

The below table shows the overall port dwell time (i.e. import and export cycle combine) trend of all the JNPT\* Port terminals for quarter Jan'17. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal



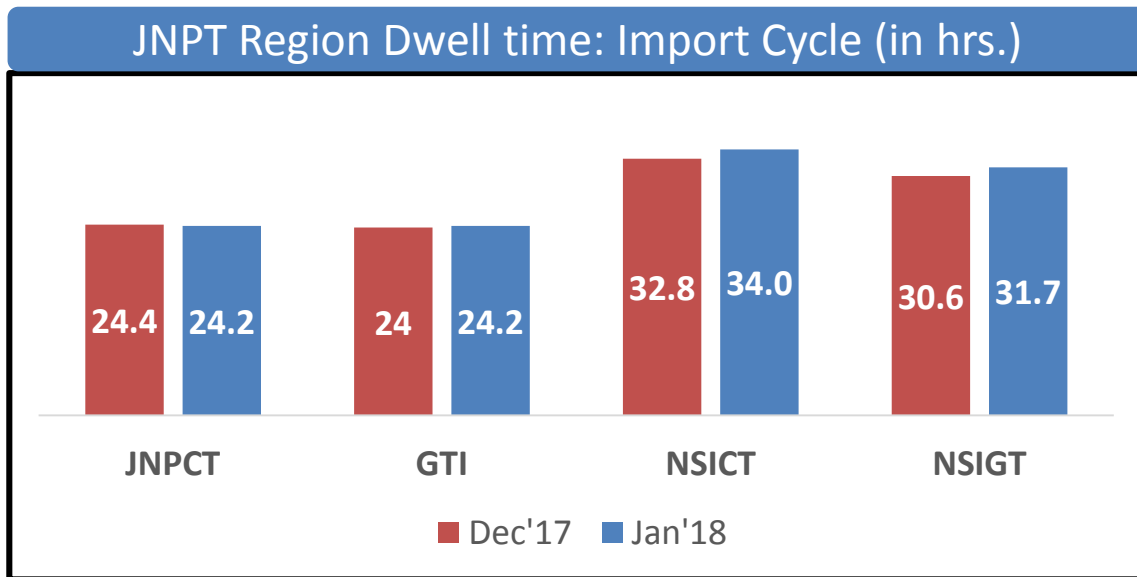
The overall JNPT region average dwell time for Jan'18 is 48 hrs as compared to last month dec'17 is 51 hrs

The below tables showcase the Import and Export cycle dwell time for both rail and truck bound containers for month of Dec'17 and Jan'18



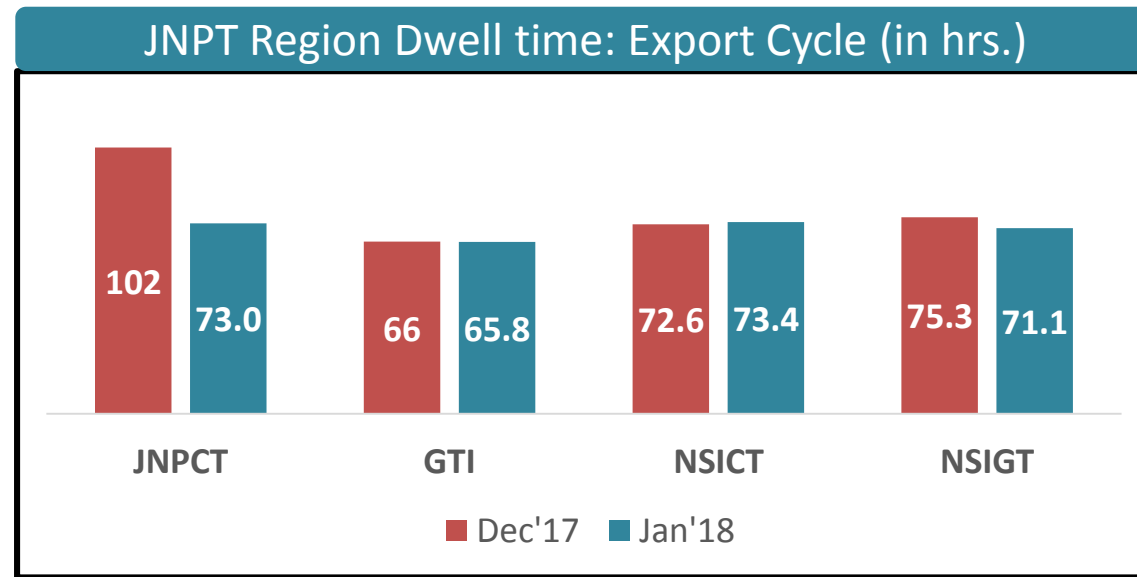
### JNPT Import cycle Trend

The average import cycle dwell time of JNPT region port terminals for Jan'18 is 26.4 hrs.



### JNPT Export cycle Trend

The average export cycle dwell time of JNPT region port terminals for Jan'18 is 70 hrs



# JNPT region PORT Terminals : Performance Index

In order to assess the relative performance Port, Container Freight Station and Inland Container Depot ,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.

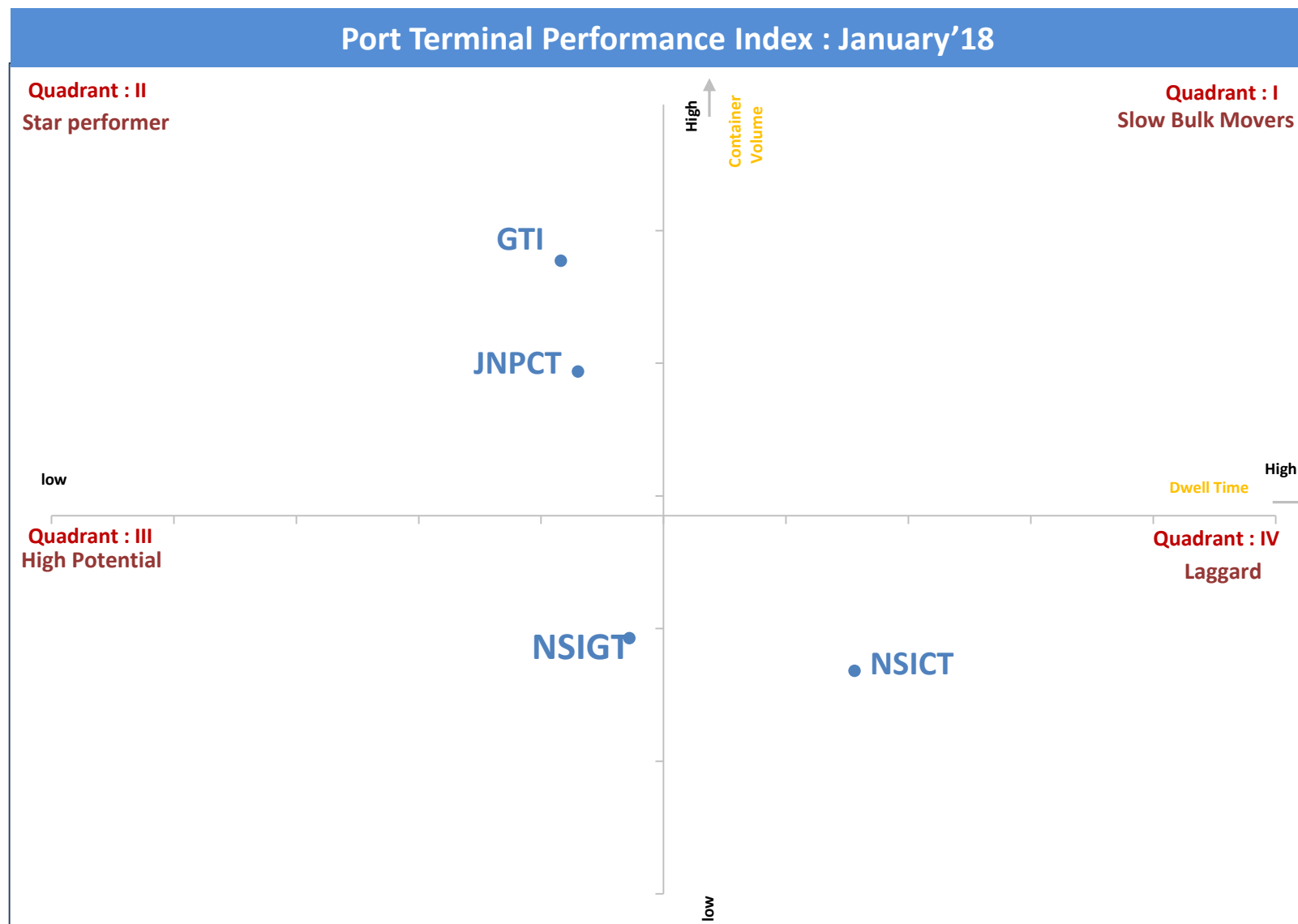
The figure depicts the Frequency Index i.e. volume by dwell time performance for JNPT Port terminals for January '18. The Quadrant II represents the high performing ports with high frequency Index i.e. high container volume at lower dwell time

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

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

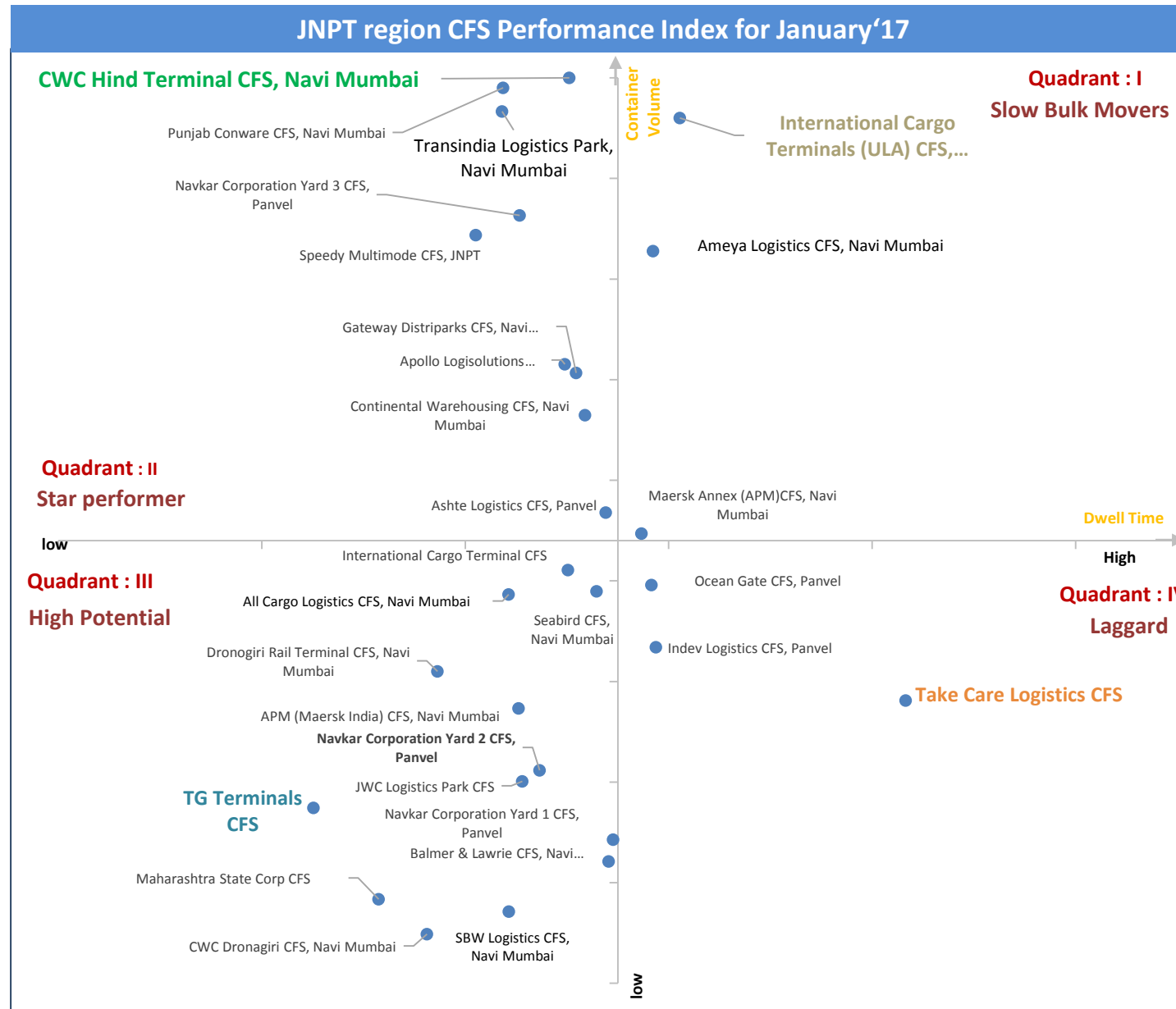
High Potential : consist of Ports which have catered relatively lower container volume in lower dwell time

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



# JNPT region CFS : Performance Index

The below graph depicts the Performance Index for all CFS for Jan'18. The Quadrant II represent the best CFS with high frequency Index i.e. high container volume at lower dwell time



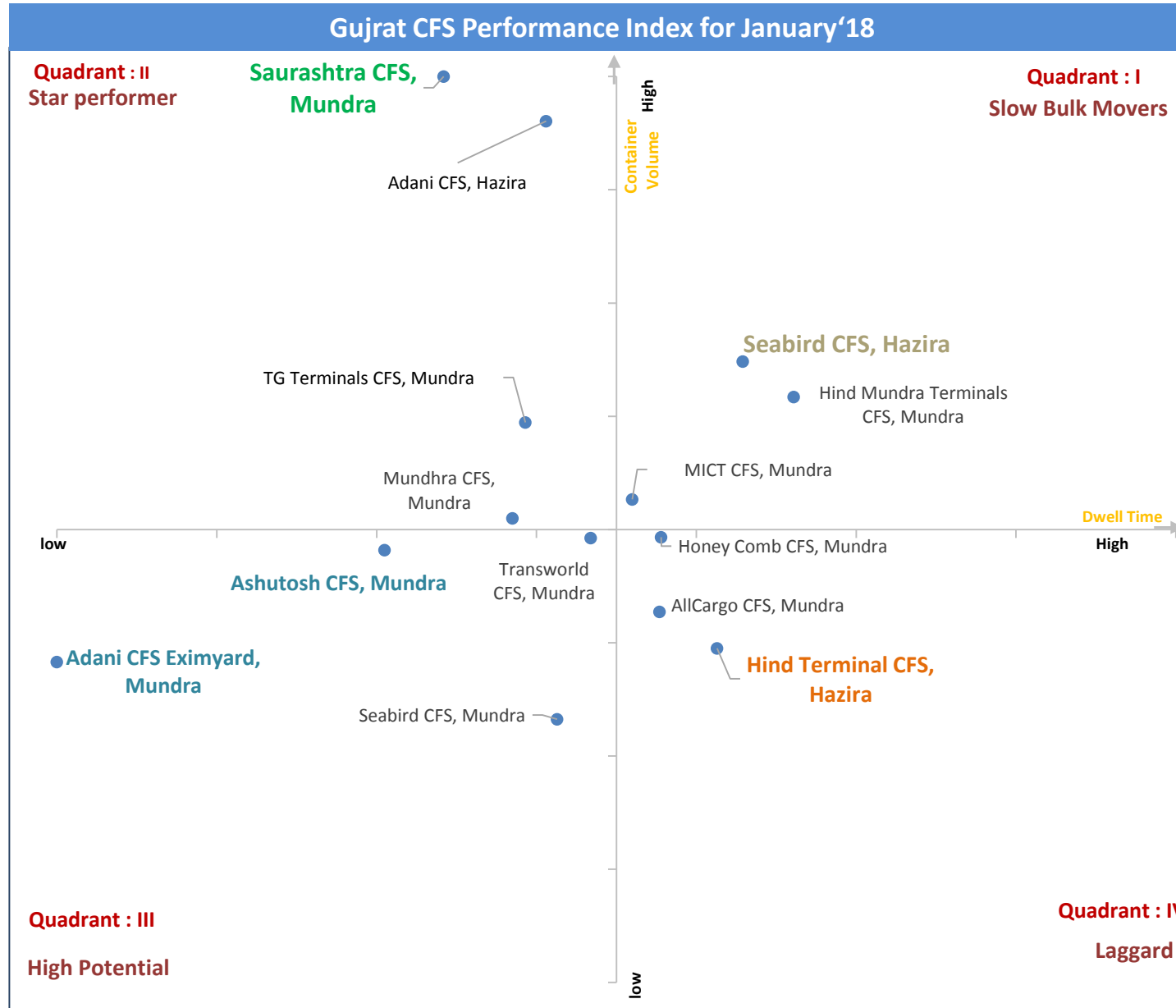
**Legends**

- Top in category
- Star performer
- Slow bulk mover
- High potential
- Laggard



# Gujrat region CFS : Performance Index

The below graph depicts the Performance Index for all CFS for month of January'18. The Quadrant II represent the best CFS with high frequency Index i.e. high container volume at lower dwell time



**Legends**

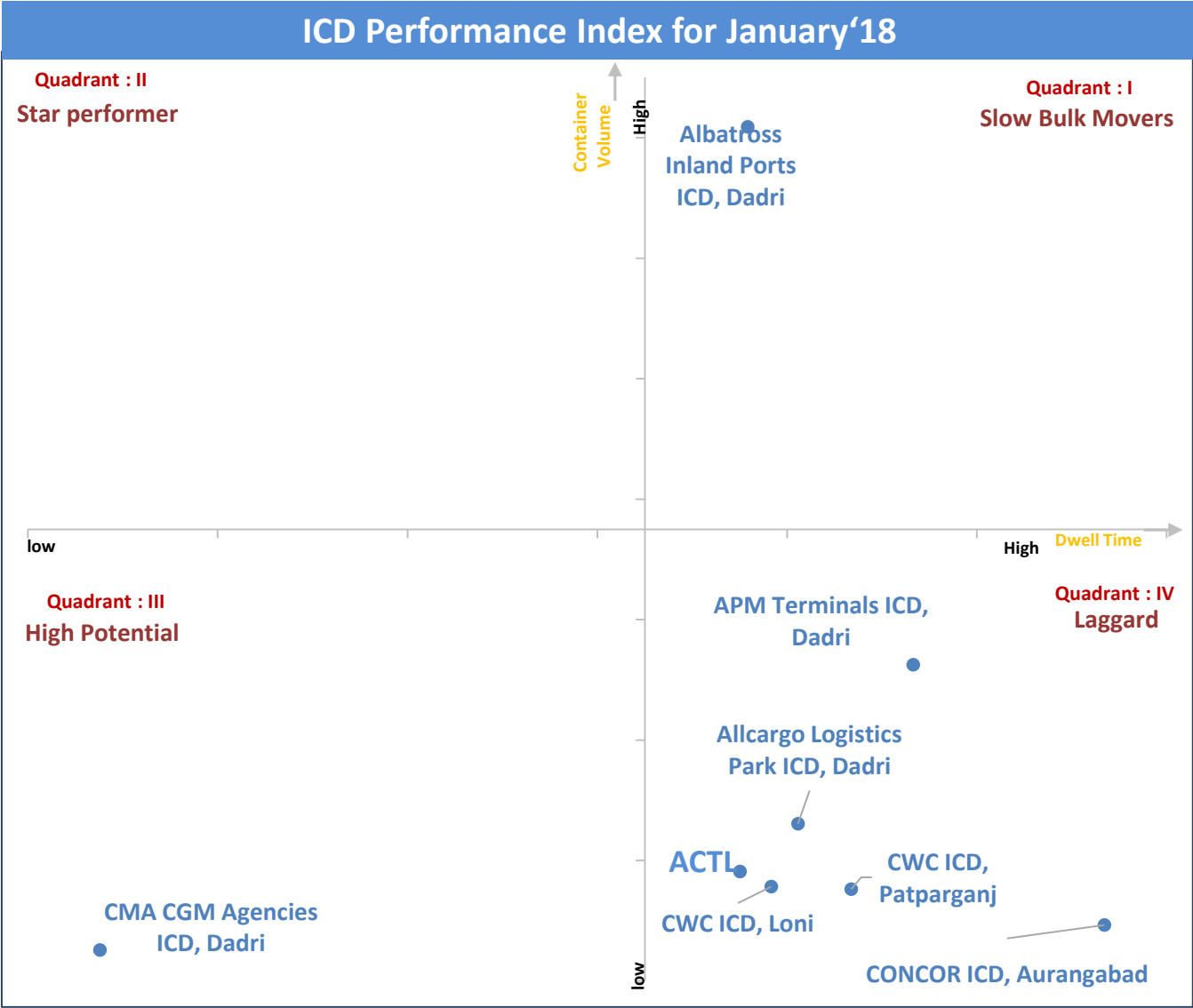
**Top in category**

- Star performer
- Slow bulk mover
- High potential
- Laggard



# ICDs : Performance Index

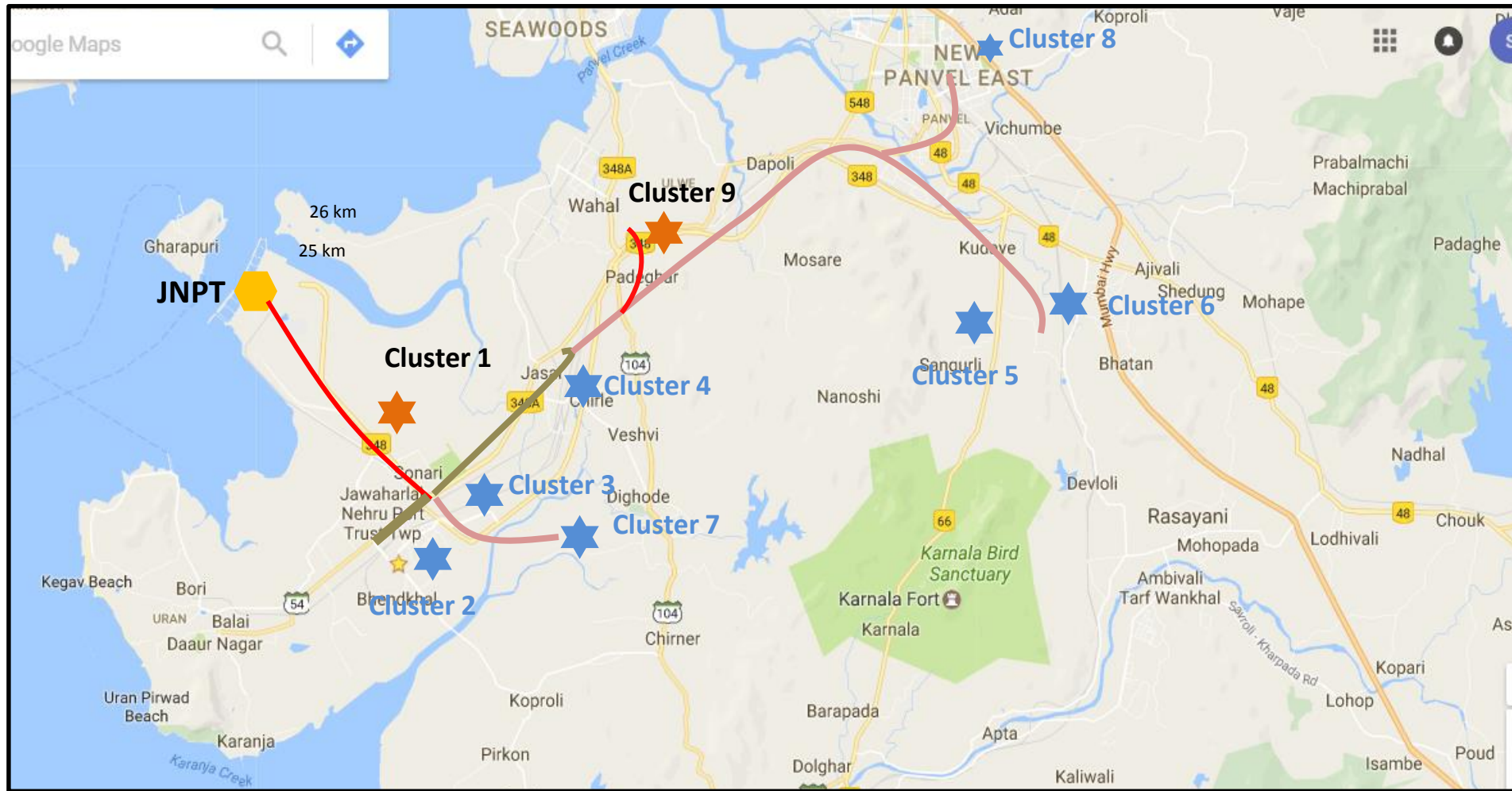
The below graph depicts the Performance Index for all ICDs for Jan'18. The Quadrant II represent the best ICD with high frequency Index i.e. high container volume at lower dwell time



















## Congestion Analysis around Mumbai Region








<b>Cluster 1</b>	<b>Cluster 2</b>
JNPT Area	Bhandkhal area, Khopate road
<b>Cluster 3</b>	<b>Cluster 4</b>
Sonari area, JNPT road	Chirle area, JNPT road
<b>Cluster 5</b>	<b>Cluster 6</b>
Plaspa area, Coachi kanyakumari Highway	Salva apta rd area, Bangalore highway
<b>Cluster 7</b>	<b>Cluster 8</b>
Patilpada area, Khopate JNPT road	Taloja, Navi Mumbai
<b>Cluster 9</b>	
Padhegar area	

Note : Please find the respective CFS in each cluster in annexure section

In the month of Jan 2018, Cluster 1 and 9 witnessed high congestions

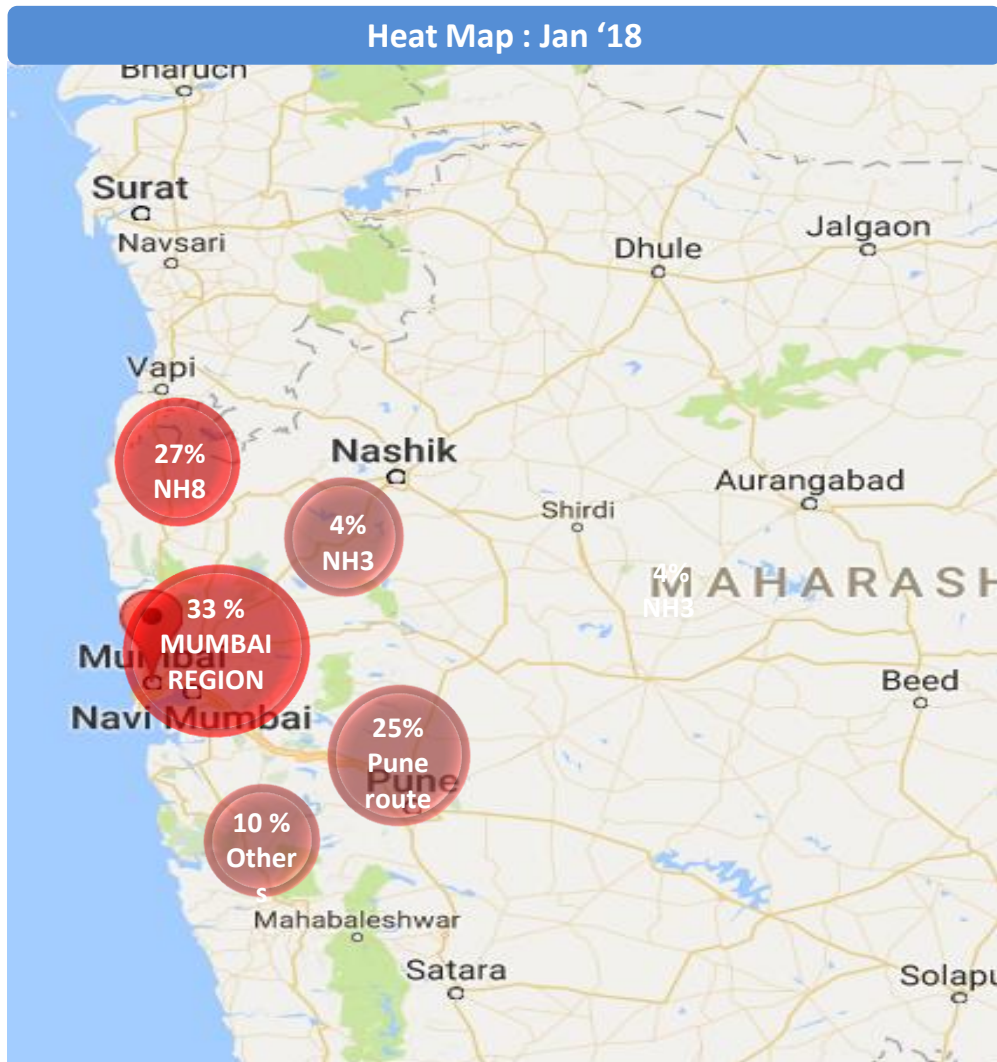
GTI Terminal	JNPCT Terminal	NSICT Terminal	NSIGT Terminal
			
<b>Congestion Level</b>	<b>Congestion Level</b>	<b>Congestion Level</b>	<b>Congestion Level</b>
Export Cycle :- 	Export Cycle :- 	Export Cycle :- 	Export Cycle :- 
Import Cycle :- 	Import Cycle :- 	Import Cycle :- 	Import Cycle :- 

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

Note : Congestion is measured w.r.t actual time taken to cover the respective distance between clusters and terminals{



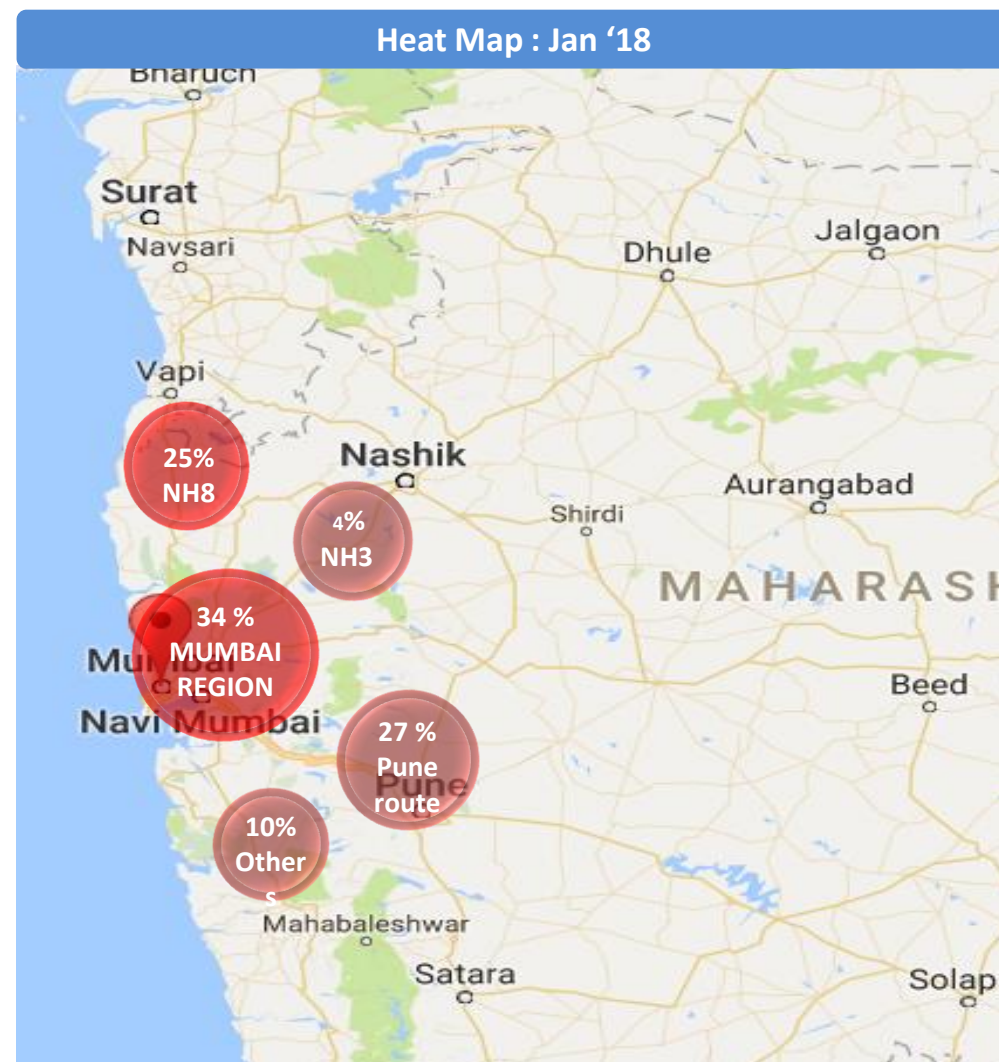
## HEAT MAP : JNPCT Port Terminal



Region	Jan'18	OND'17
Mumbai Region	33%	50%
Pune	4%	18%
NH8	25%	19%
NH3	27%	3%
Others	10%	10%

The heat map above depicts the movement of containers in and around the Mumbai region.

## HEAT MAP : NSICT Port Terminal



Region	Jan'18	OND '17
Mumbai Region	34%	47%
Pune	4%	20%
NH8	27%	20%
NH3	25%	3%
Others	10%	10%

The heat map above depicts the movement of containers in and around the Mumbai region.

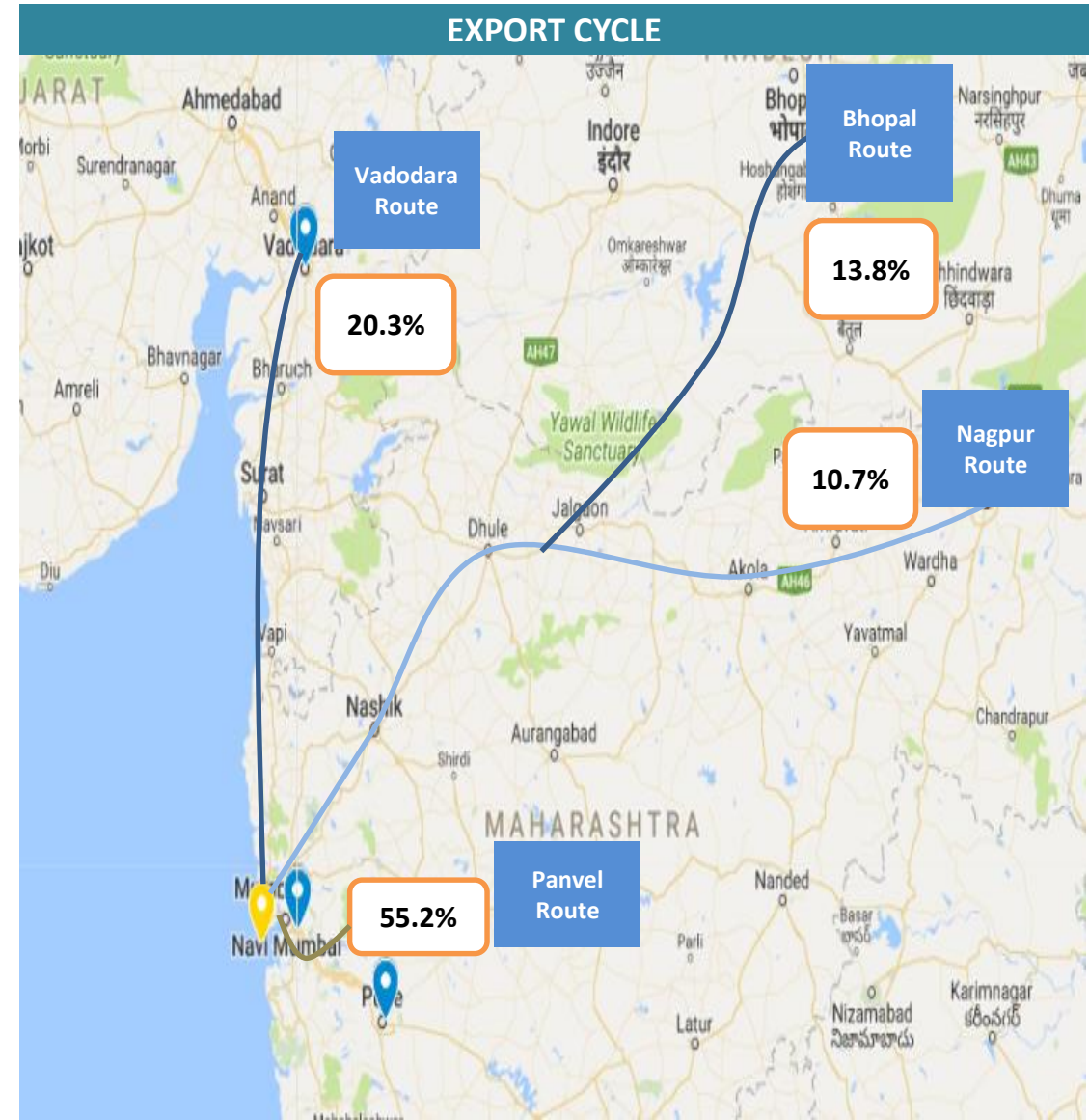
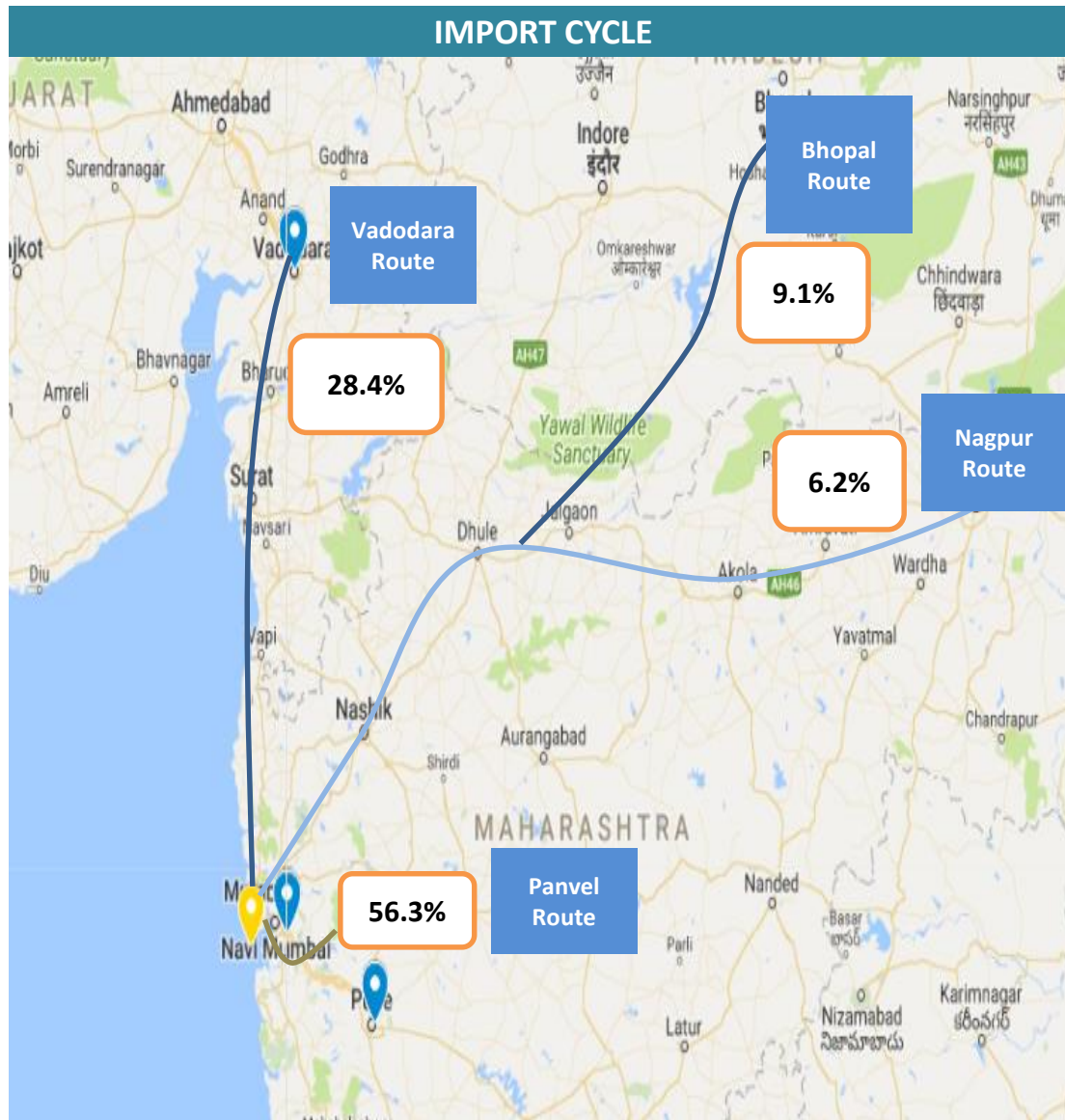




# Container Heatmap- JNPT Port terminal region via Train

## Container Movement around JNPT region via Train

The map shows the volume wise container movement through different railway routes in export and import cycle for Jan'18

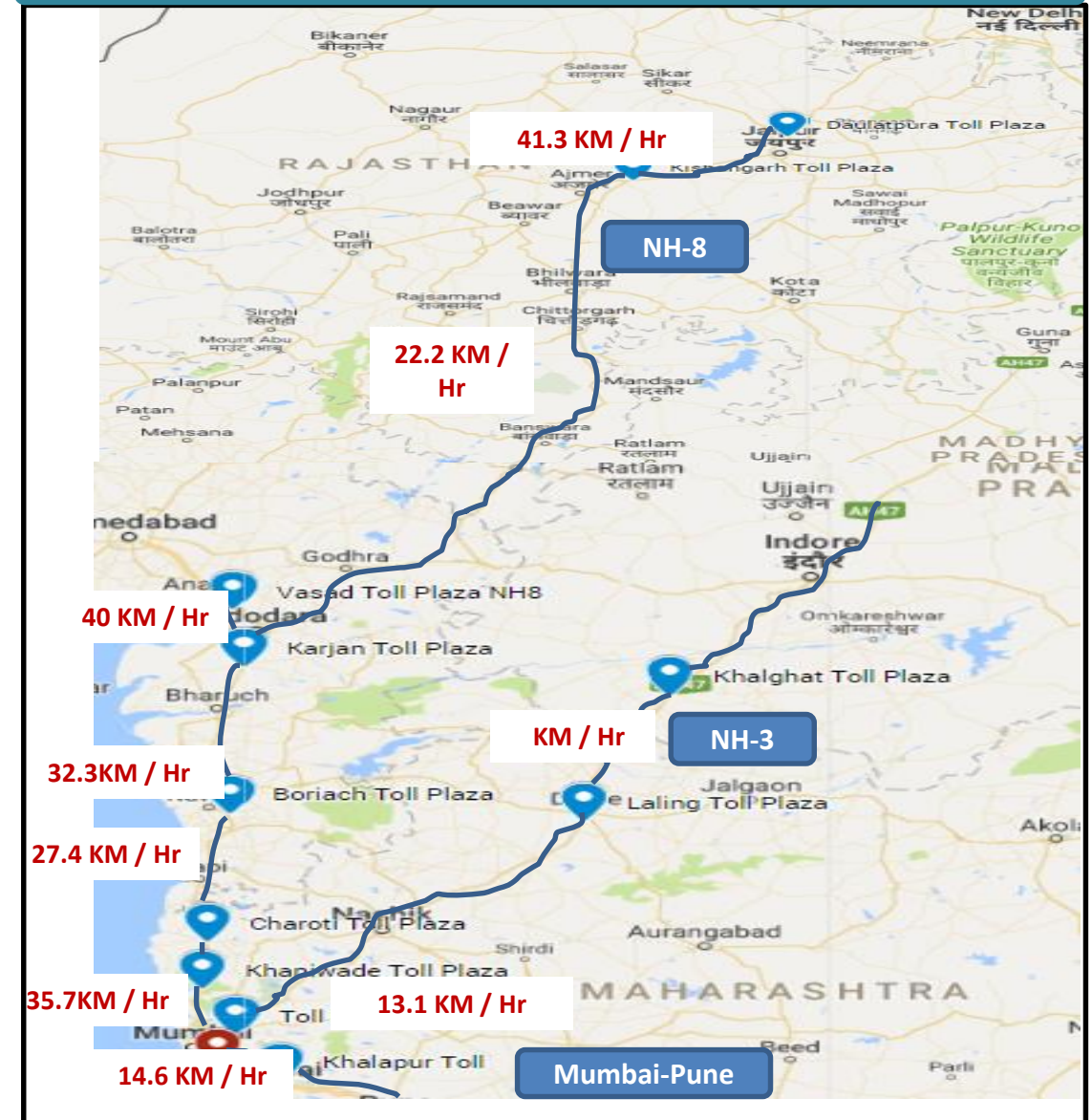


# Congestion Analysis : TOLL PLAZA (1/2)

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

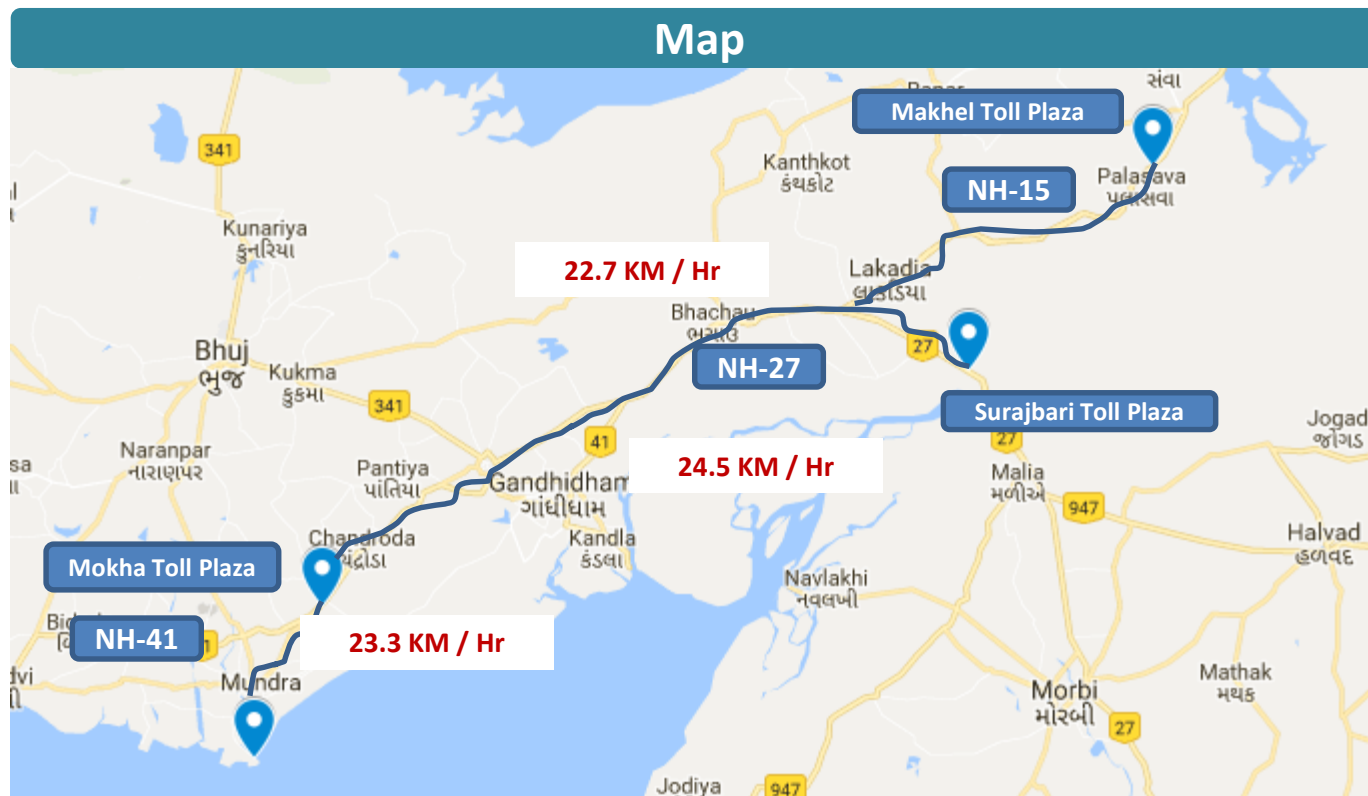
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	Jan'18 Avg. Speed (Km/Hr)	Dec'17 Avg. speed (km/hr)
JNPT	Khaniwade	94	7.3	13.1	13.6
JNPT	Khalapur	60	5	14.6	15.7
Khaniwade	Charoti	50	1.4	35.7	35.7
Charoti	Boriach	126	4.8	27.4	28
Boriach	Bharthan	142	4.4	32.3	33
Bharthan	Kishangarh	686	30.8	22.2	21.1
Bharthan	Vasad	60	1.6	40	37.5
Kishangarh	Daulatpura	128	3	41.3	40
Dhule	Khalghat	186	77.3	2.2	3.8

Map



The below table shows all the toll plazas covered under DLDS in **Mundra region**.

Avg. Travel Time & Speed between Toll Plazas (Jan'18)					
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	Avg. Speed Jan'18 (Km/Hr.)	Avg. Speed Dec'17 (Km/Hr.)
MICT	Mokha	28	1.2	23.3	21.5
Mokha	Makhel	150	6.8	22.7	23.4
Mokha	Surajbari	115	5.3	24.5	26.1





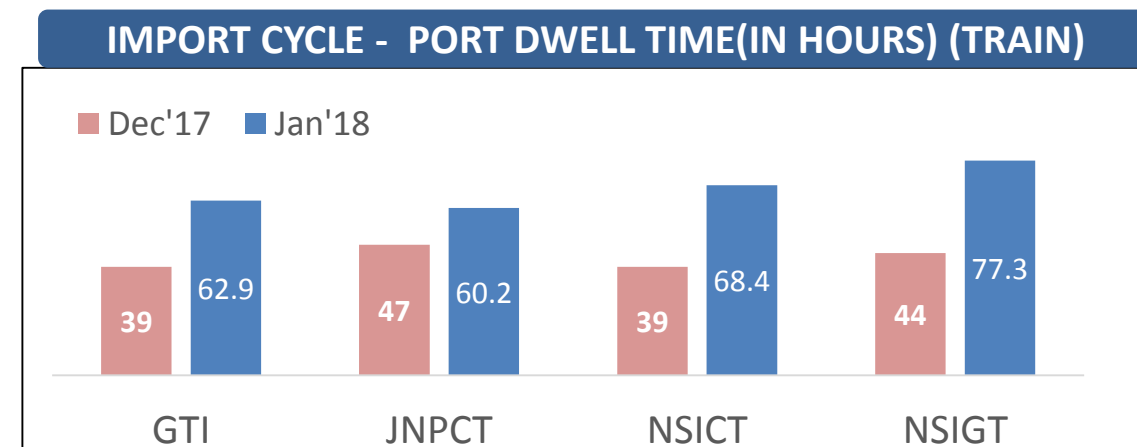




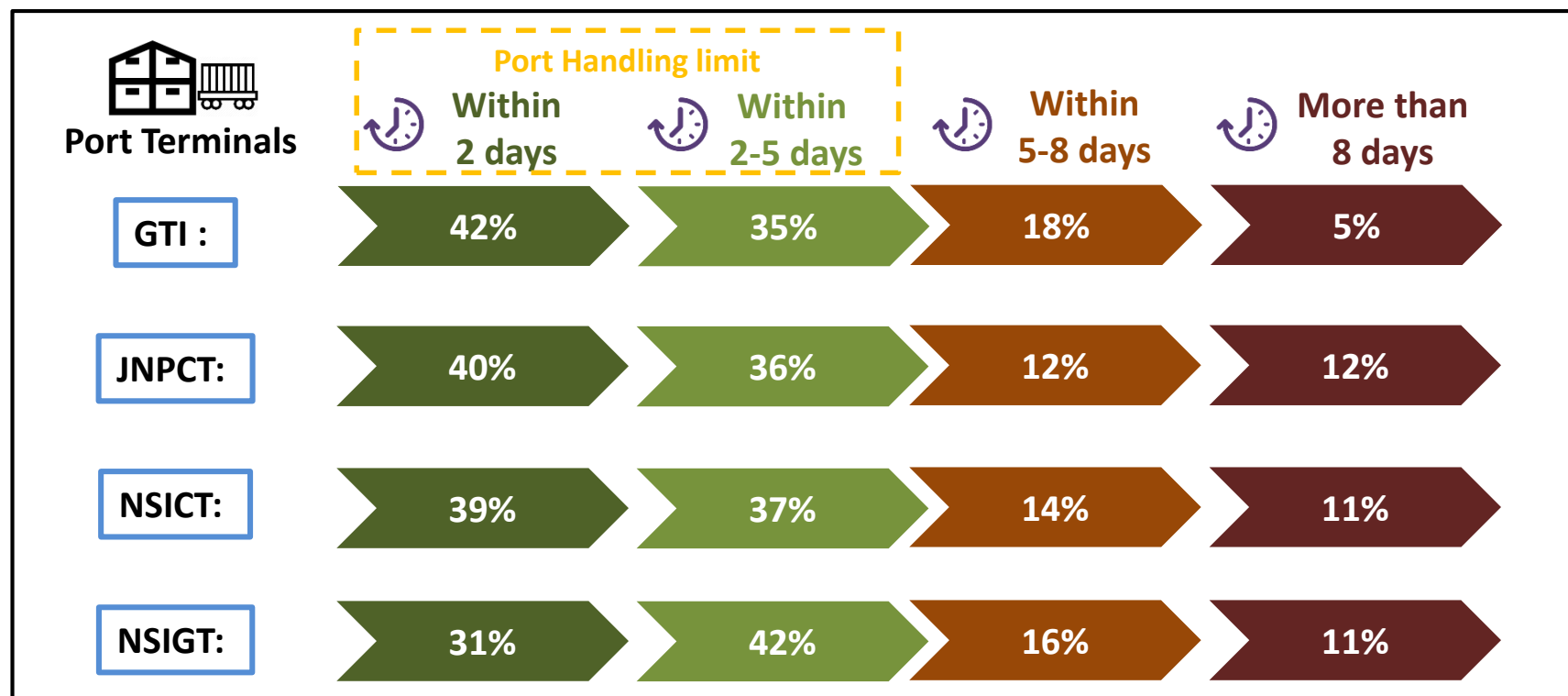
## PORT IMPORT via TRAIN

The Port Dwell time data for train movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Dec'17 (in Hrs)	Jan'18 (in Hrs)
GTI	39	62.9
JNPCT	47	60.2
NSICT	39	68.4
NSIGT	44	77.3



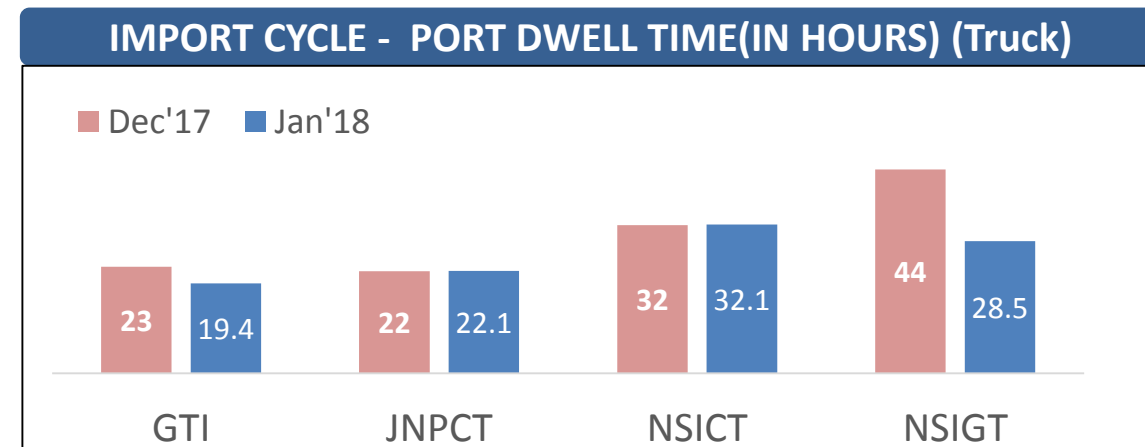
## Container Volume Handled : Day wise (via train)



## PORT IMPORT via TRUCK

The Port Dwell time data for Truck movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Dec'17 (in Hrs)	Jan'18(in Hrs)
GTI	23	19.4
JNPCT	22	22.1
NSICT	32	32.1
NSIGT	44	28.5



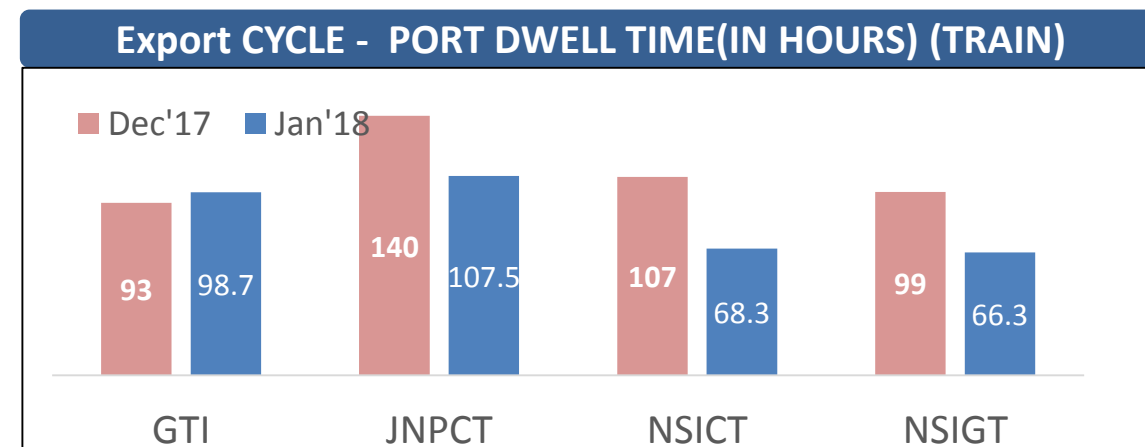
## Container Volume Handled : Day wise (via truck)



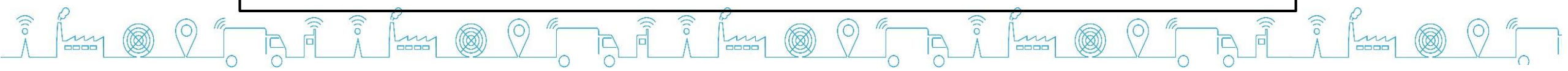
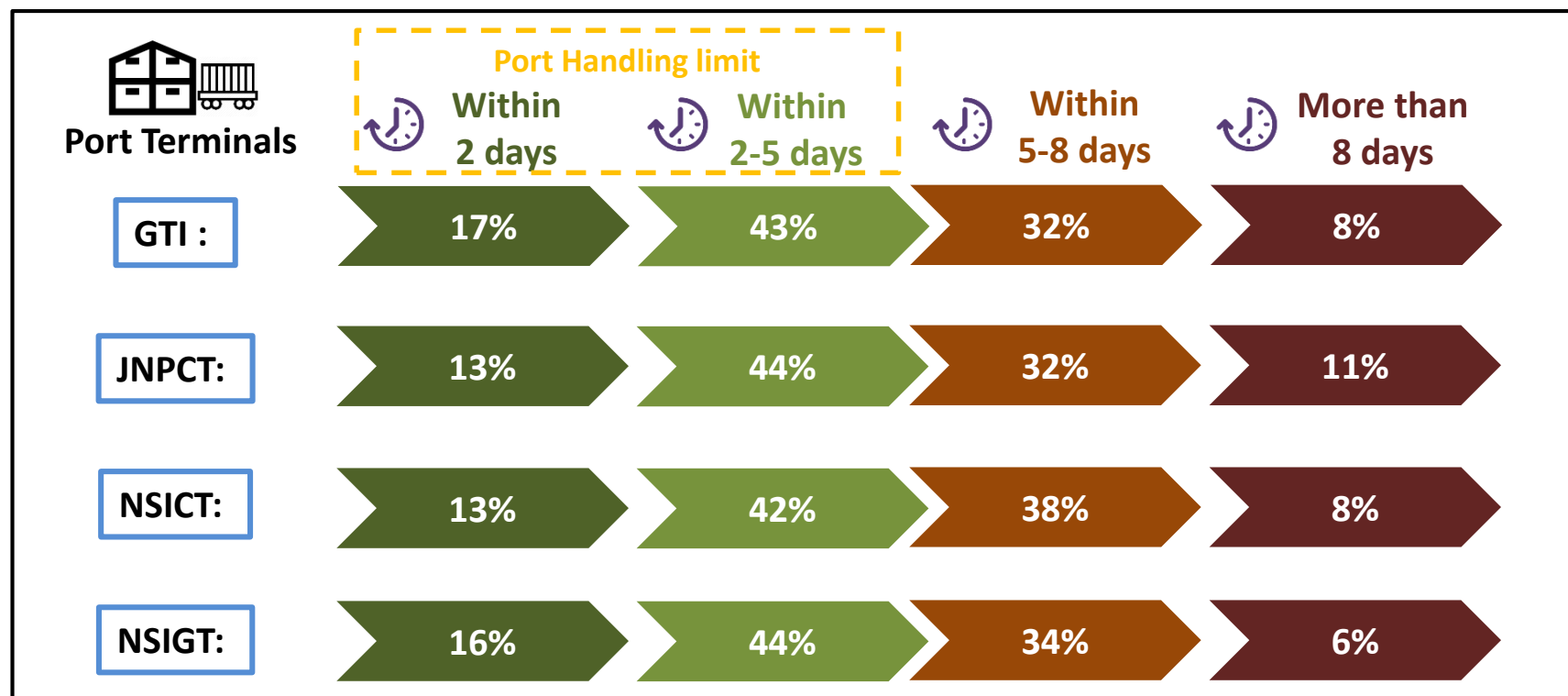
## PORT EXPORT via TRAIN

The Port Dwell time data for train movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Dec'17 (in Hrs)	Jan'18 (in Hrs)
GTI	93	98.7
JNPCT	140	107.5
NSICT	107	68.3
NSIGT	99	66.3



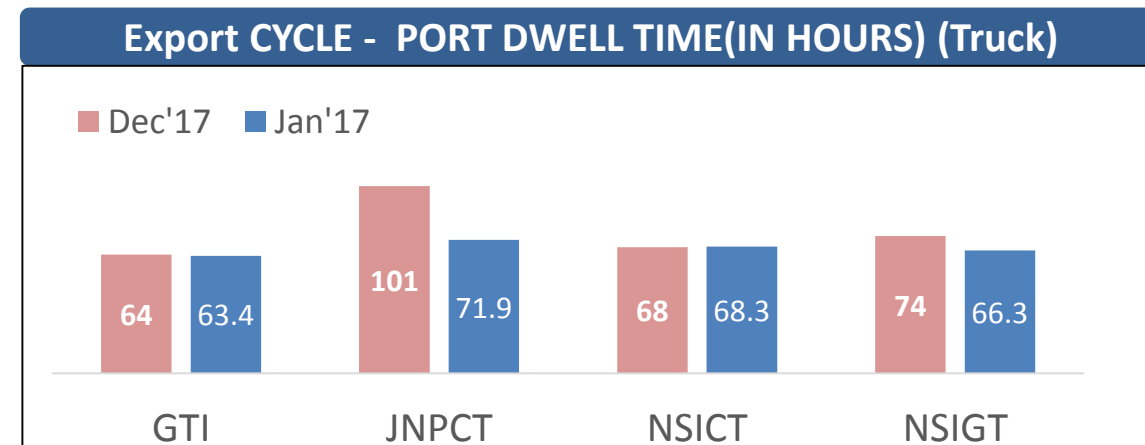
## Container Volume Handled : Day wise (via train)



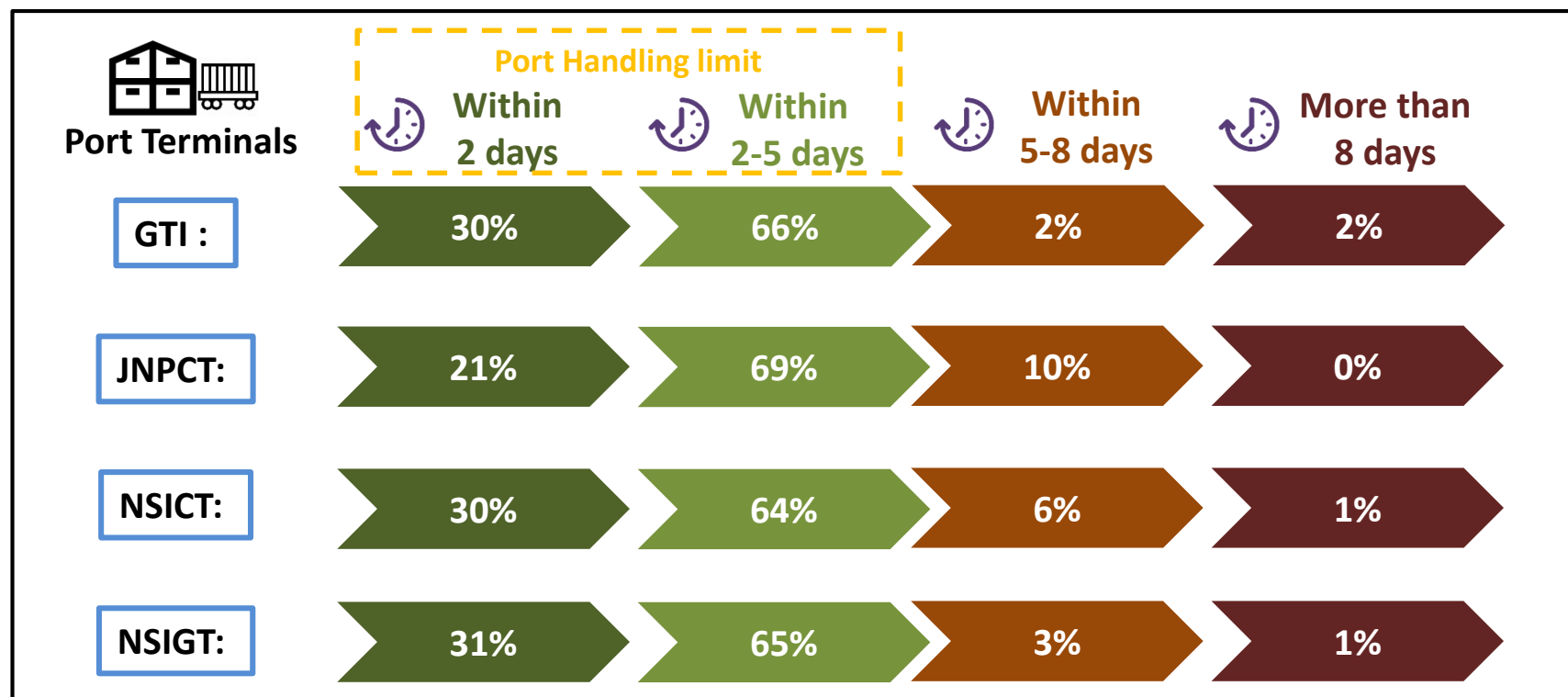
## PORT EXPORT via TRUCK

The Port Dwell time data for Truck movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Dec'17 (in Hrs)	Jan'18 (in Hrs)
GTI	64	63.4
JNPCT	101	71.9
NSICT	68	68.3
NSIGT	74	66.3

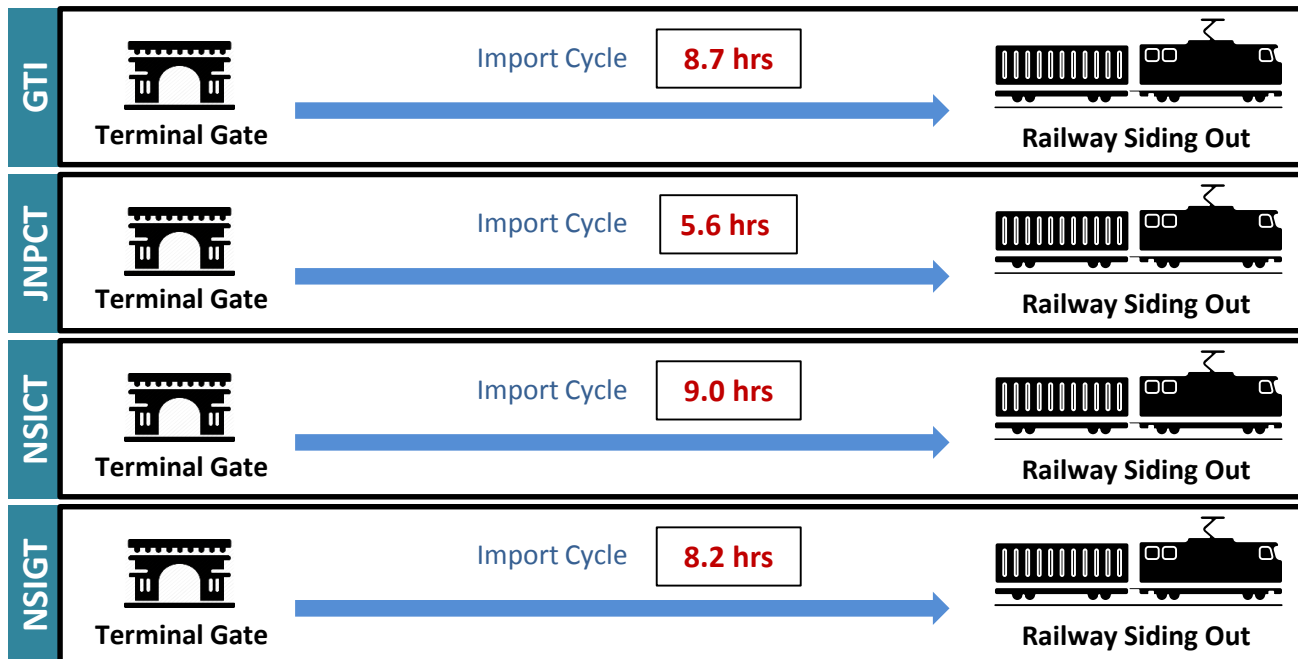


## Container Volume Handled : Day wise (via truck)



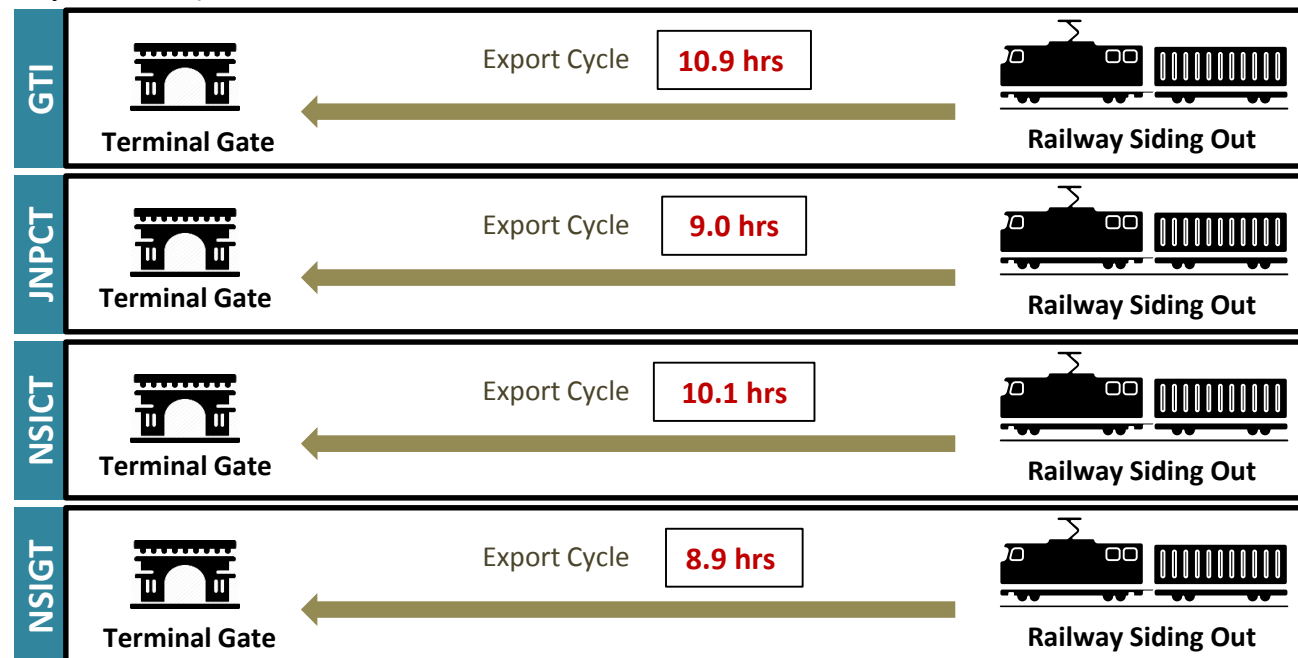
## Container Handling time : Import Cycle

Container handling time in import cycle refers to the time taken by container to reach 1<sup>st</sup> railway station (i.e. JNPT railway station) from the moment they have been cleared from Port (i.e. Port Out). The below data is for month of Jan'18



## Container Handling time : Export Cycle

Container handling time in export cycle refers to the time taken by container to reach Port terminal (i.e. Port In) from last railway station (i.e. JNPT railway station). The below data is for month of Jan'18



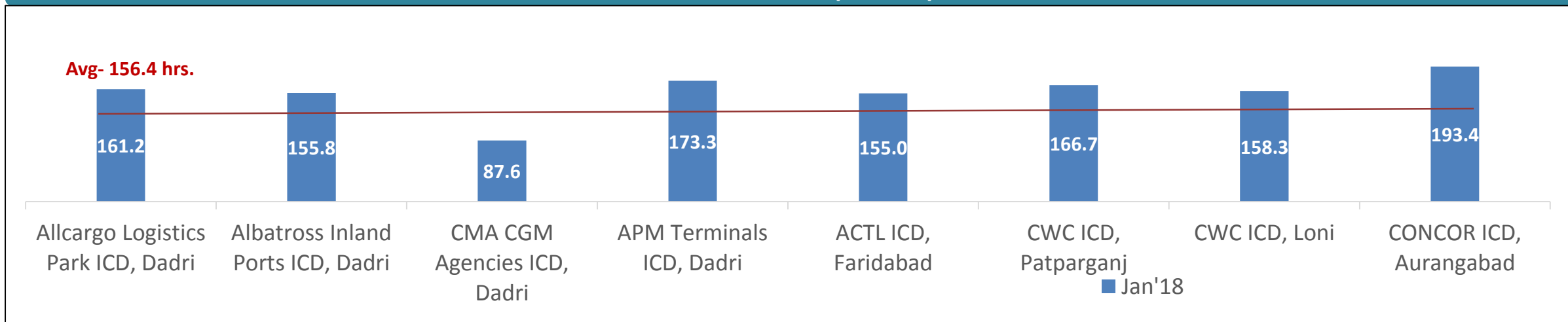
## ICD DWELL TIME ANALYSIS

The table below depicts the dwell of all ICDs for month of Dec '17 and Jan'18.

Dwell Time (in Hrs)		
ICD	Dec'17	Jan'18
Allcargo Logistics Park ICD, Dadri	147	161.2
Albatross Inland Ports ICD, Dadri	128	155.8
CMA CGM Agencies ICD, Dadri	89	87.6
APM Terminals ICD, Dadri	134	173.3
ACTL ICD	144	155
CWC Loni	146	158.3
CWC ICD, Patparganj	-	166.7
CONCOR ICD	193	193.4

Top Performing ICD	
CMA CGM Agencies ICD, Dadri	87.6
Low Performing ICD	
CONCOR ICD	193.4

## ICD – DWELL OVERVIEW (JAN' 18) ( IN HRS )





## Transit Time Analysis

Below table shows the average delivery time of ICD in import cycle i.e. Port out to ICD in via rail transportation

ICD- AVG DELIVERY TIME PORT OUT TO ICD IN (TRAIN)	
Region	Jan'17
NCR region	3.77 days
Aurangabad	2.44 days

Below table shows the average delivery time of ICD in export cycle i.e. ICD out to port in via rail transportation

ICD- AVG DELIVERY TIME ICD OUT TO PORT IN (TRAIN)	
Region	Jan'17
NCR region	3.14 days
Aurangabad	3.4 days

## LEAD TIME ANALYSIS

Below table shows the average lead time of ICD in import cycle i.e. Port in to ICD out via train. The ICD's in NCR region have low dwell time as compare to Aurangabad region, thus making the lead time for the Aurangabad region higher as compare to NCR region

ICD- AVG LEAD TIME (TRAIN)	
Region	Jan'17
NCR region	11.2 days
Aurangabad	13.8days

Calculation :

Port Dwell Time + Port to ICD Delivery Time + ICD Dwell Time = Avg. Lead Time from Port to ICD

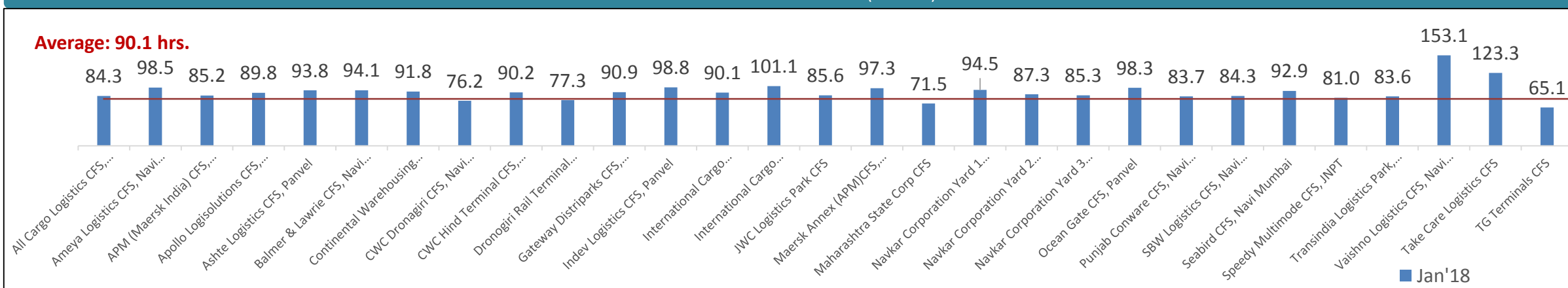


## CFS DWELL TIME ANALYSIS

Below table shows the dwell time for the respective CFS's .

CFS Dwell Time (in hrs)					
CFS	Dec'17	Jan'18	CFS	Dec'17	Jan'18
All Cargo Logistics CFS, Navi Mumbai	67	84.3	International Cargo Terminals (ULA) CFS, Navi Mumbai	84	101.1
Ameya Logistics CFS, Navi Mumbai	81	98.5	JWC Logistics Park CFS	82	85.6
APM (Maersk India) CFS, Navi Mumbai	96	85.2	Maersk Annex (APM)CFS, Navi Mumbai	94	97.3
Apollo Logisolutions CFS, Panvel	81	89.8	Maharashtra State Corp CFS	82	71.5
Ashte Logistics CFS, Panvel	87	93.8	Navkar Corporation Yard 1 CFS, Panvel	80	94.5
Balmer & Lawrie CFS, Navi Mumbai	90	94.1	Navkar Corporation Yard 2 CFS, Panvel	95	87.3
Continental Warehousing CFS, Navi Mumbai	78	91.8	Navkar Corporation Yard 3 CFS, Panvel	89	85.3
CWC Dronagiri CFS, Navi Mumbai	82	76.2	Ocean Gate CFS, Panvel	89	98.3
CWC Hind Terminal CFS, Navi Mumbai	88	90.2	Punjab Conware CFS, Navi Mumbai	80	83.7
CWC Impex Park CFS, Navi Mumbai	-	-	SBW Logistics CFS, Navi Mumbai	91	84.3
Dronogiri Rail Terminal CFS, Navi Mumbai	88	77.3	Seabird CFS, Navi Mumbai	81	92.9
Gateway Distriparks CFS, Navi Mumbai	83	90.9	Speedy Multimode CFS, JNPT	74	81.0
Indev Logistics CFS, Panvel	76	98.8	Transindia Logistics Park, Navi Mumbai	77	83.6
International Cargo Terminal CFS	84	90.1	Vaishno Logistics CFS, Navi Mumbai	97	153.1
TG Terminals CFS		65.5	Take Care Logistics CFS	111	123.3
			JWR CFS		54

### CFS – DWELL OVERVIEW ( IN HRS )



\*Note : Insufficient data entries were received in LDB system for CWC Impex Park CFS, Navi Mumbai in Jan'18



Below table shows the top performing CFS's

Top Performing CFS's w.r.t Dwell time (Jan 2018)	
JWR CFS, Navi Mumbai	<b>Dwell Time : 54 Hrs</b>
TG Terminal CFS, Navi Mumbai	<b>Dwell Time : 65.1 Hrs</b>

Below table shows the low performing CFS's

Low Performing CFS's w.r.t Dwell time (Jan 2018)	
Vaishno Logistics CFS, Navi Mumbai	<b>Dwell Time : 153.1 Hrs</b>
Take Care Logistics CFS, Navi Mumbai	<b>Dwell Time : 123.3 Hrs</b>



# CFS DELIVERY TIME ANALYSIS

## CFS - AVERAGE DELIVERY TIME - GTI TO ALL CFS's IN MUMBAI

Below table shows the average delivery time in import cycle from GTI to all the CFS's

AVERAGE DELIVERY TIME ( In Hrs )- GTI TO ALL CFS IN MUMBAI	
CFS	Jan'18
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	2.0
Balmer & Lawrie & Co. Ltd.,CFS	1.7
Gateway Distriparks Ltd	3.6
APM (Maersk India Pvt. Ltd)CFS	1.4
Continental Warehousing (Nhava Sheva) Ltd.	1.7
Seabird Marine Services Pvt Ltd.	2.5
JWC Logistics Park Ltd CFS	3.5
Ameya Logistics Pvt. Ltd.	3.1
Ashte Logistics Pvt. Ltd.	3.0
NAVAKAR CORPORATION LTD.,YARD-1 CFS	2.7
Apollo Logisolutions Ltd.	3.1
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.8
Indev Logistics Pvt. Ltd.CFS	3.8
Transindia Logistics Park Pvt, Ltd CFS	2.2
All Cargo Logistics Ltd., CFS	1.5
NAVAKAR CORPORATION LTD.,YARD-II CFS	5.5
PUNJAB CONWARE (PW)	1.9
DRONAGIRI RAIL TERMINAL	1.5
CWC LOGISTIC PARK - Opr.Hind Trmnl.	2.5
NAVAKAR CORPORATION LTD.YARD-III CFS	2.8
International Cargo Terminals & Infrastructure Private Limited-CFS	2.2
Maersk Annex (APM)CFS	2.0
International Cargo Terminal CFS	2.3
SBW Logistics CFS , Navi Mumbai	3.6
JWR CFS	5.7

## CFS - AVERAGE DELIVERY TIME - JNPCT TO ALL CFS's IN MUMBAI

Below table shows the average delivery time in import cycle from JNPCT to all the CFS's

AVERAGE DELIVERY TIME ( In Hrs )- JNPCT TO ALL CFS IN MUMBAI	
CFS	Jan'18
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	1.7
Balmer & Lawrie & Co. Ltd.,CFS	2.3
Gateway Distriparks Ltd	2.7
APM (Maersk India Pvt. Ltd)CFS	1.8
Continental Warehousing (Nhava Sheva) Ltd.	1.7
Seabird Marine Services Pvt Ltd.	2.3
JWC Logistics Park Ltd CFS	4.2
Ameya Logistics Pvt. Ltd.	2.8
Ashte Logistics Pvt. Ltd.	3.1
NAVAKAR CORPORATION LTD.,YARD-1 CFS	2.8
Apollo Logisolutions Ltd.	5.2
Ocean Gate Container Terminals Pvt. Ltd.CFS	3.1
Indev Logistics Pvt. Ltd.CFS	3.5
Transindia Logistics Park Pvt, Ltd CFS	2.4
All Cargo Logistics Ltd., CFS	1.6
Vaishno Logistics Yard CFS	1.3
NAVAKAR CORPORATION LTD.,YARD-II CFS	3.3
PUNJAB CONWARE (PW)	1.9
DRONAGIRI RAIL TERMINAL	1.4
MAHARASHTRA STATE WARE. CORP. CFS	1.7
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.7
NAVAKAR CORPORATION LTD.YARD-III CFS	2.9
International Cargo Terminals & Infrastructure Private Limited-CFS	3.0
Maersk Annex (APM)CFS	3.2
International Cargo Terminal CFS	2.2
SBW Logistics CFS , Navi Mumbai	3.8
JWR CFS	3.1



# CFS DELIVERY TIME ANALYSIS

## CFS - AVERAGE DELIVERY TIME - NSICT TO ALL CFS's IN MUMBAI

Below table shows the average delivery time in import cycle from NSICT to all the CFS's

AVERAGE DELIVERY TIME ( In Hrs )- NSICT TO ALL CFS IN MUMBAI	
CFS	Jan'18
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	2.3
Balmer & Lawrie & Co. Ltd.,CFS	1.4
Gateway Distriparks Ltd	2.7
APM (Maersk India Pvt. Ltd)CFS	2.1
Continental Warehousing (Nhava Sheva) Ltd.	1.4
Seabird Marine Services Pvt Ltd.	1.8
JWC Logistics Park Ltd CFS	4.4
Ameya Logistics Pvt. Ltd.	2.7
Ashte Logistics Pvt. Ltd.	3.1
Navakar Corporation Ltd.,Yard-1 CFS	3.7
Apollo Logisolutions Ltd.	3.2
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.6
Indev Logistics Pvt. Ltd.CFS	3.3
Transindia Logistics Park Pvt, Ltd CFS	2.2
CWC Dronagiri CFS	1.5
All Cargo Logistics Ltd., CFS	1.7
NAVKAR CORPORATION LTD.,YARD-II CFS	3.0
PUNJAB CONWARE (PW)	2.0
Dronagiri Rail Terminal	17.0
Maharashtra State Ware. Corp. Cfs	10.5
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.7
Navkar Corporation Ltd.Yard-iii Cfs	3.1
International Cargo Terminals & Infrastructure Private Limited-CFS	4.3
Maersk Annex (APM)CFS	2.2
International Cargo Terminal CFS	1.9
SBW Logistics CFS , Navi Mumbai	2.8
JWR CFS	33.6

## CFS - AVERAGE DELIVERY TIME - NSIGT TO ALL CFS's IN MUMBAI

Below table shows the average delivery time in import cycle from NSIGT to all the CFS's

AVERAGE DELIVERY TIME ( In Hrs )- NSIGT TO ALL CFS IN MUMBAI	
CFS	Jan'18
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	1.6
Balmer & Lawrie & Co. Ltd.,CFS	1.7
Gateway Distriparks Ltd	2.8
APM (Maersk India Pvt. Ltd)CFS	1.6
Continental Warehousing (Nhava Sheva) Ltd.	1.7
Seabird Marine Services Pvt Ltd.	2.2
JWC Logistics Park Ltd CFS	3.4
Ameya Logistics Pvt. Ltd.	2.3
Ashte Logistics Pvt. Ltd.	3.7
Navakar Corporation Ltd.,Yard-1 CFS	4.8
Apollo Logisolutions Ltd.	4.0
Ocean Gate Container Terminals Pvt. Ltd.CFS	4.2
Indev Logistics Pvt. Ltd.CFS	3.7
Transindia Logistics Park Pvt, Ltd CFS	2.3
CWC Dronagiri CFS	1.3
All Cargo Logistics Ltd., CFS	1.7
Vaishno Logistics Yard CFS	1.3
NAVKAR CORPORATION LTD.,YARD-II CFS	3.4
PUNJAB CONWARE (PW)	2.4
DRONAGIRI RAIL TERMINAL	1.3
Maharashtra State Ware. Corp. Cfs	1.7
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.8
Navkar Corporation Ltd.Yard-iii Cfs	5.1
International Cargo Terminals & Infrastructure Private Limited-CFS	3.5
Maersk Annex (APM)CFS	2.9
International Cargo Terminal CFS	2.3
SBW Logistics CFS , Navi Mumbai	4.5
JWR CFS	34.3



# CFS - AVERAGE DELIVERY TIME – all CFS in Mumbai TO JNPT Port

Below table shows the delivery time in export cycle from the CFS's to PORT terminals

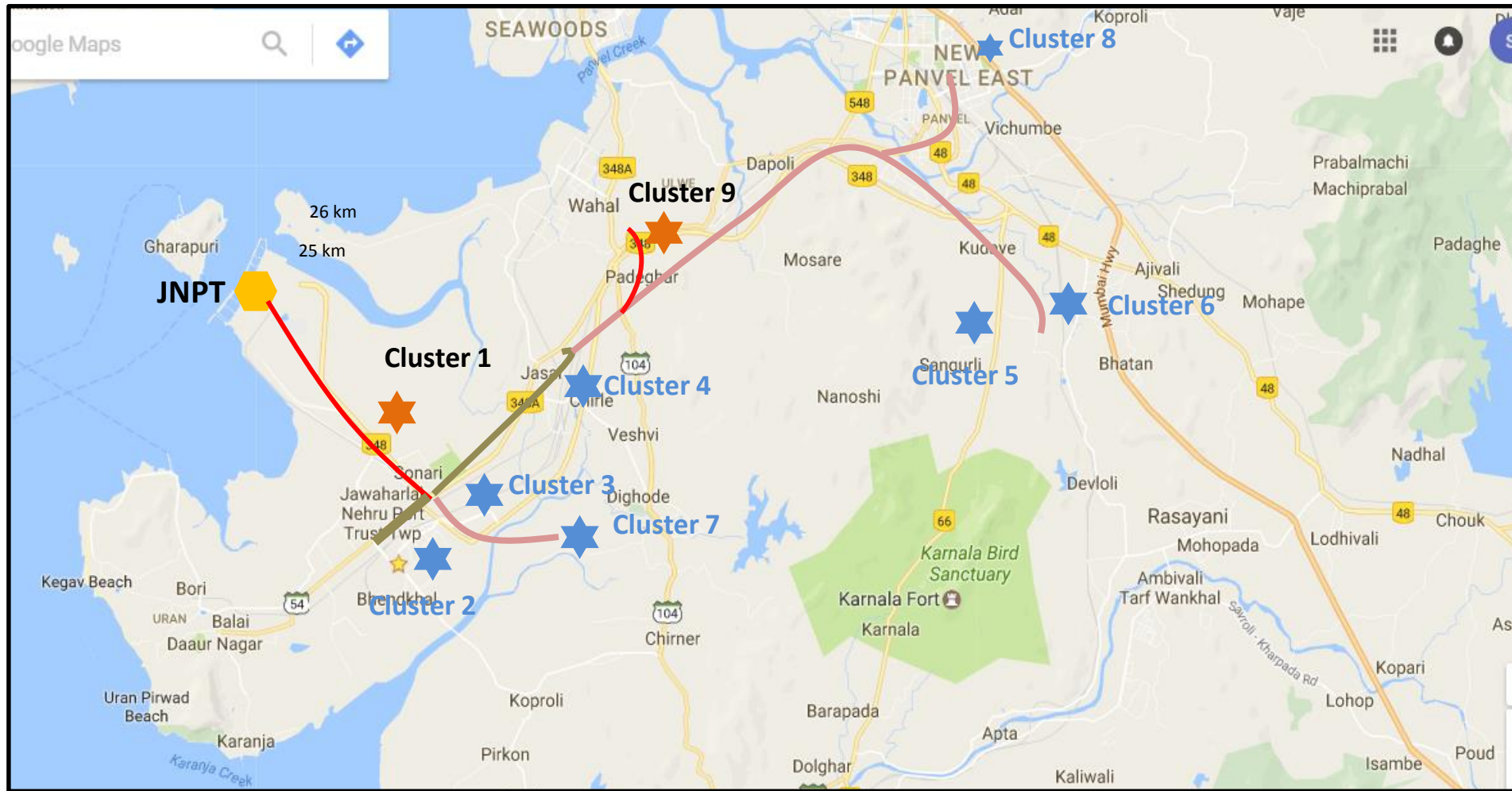
For Jan'18 quarter

CFS Out Port in (Export Cycle in Hrs)

CFS	JNPCT	GTI	NSICT	NSIGT
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.7	5.6	3.5	5.6
CWC Dronagiri CFS	4.0	3.4	6.9	4.4
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	1.8	3.6	3.2	6.6
Indev Logistics Pvt. Ltd.CFS	4.5	4.6	4.0	4.6
Punjab Conware (Pw)	2.0	3.6	3.5	4.5
Transindia Logistics Park Pvt, Ltd CFS	4.9	2.6	7.5	4.1
Apollo Logisolutions Ltd.	5.4	10.8	4.6	9.0
JWR CFS	3.2	6.5	5.5	5.2
Navkar Corporation Ltd.Yard-III CFS	3.9	8.5	5.5	12.2
Ameya Logistics Pvt. Ltd.	3.5	4.9	4.9	7.8
Ashte Logistics Pvt. Ltd.	5.0	3.0	13.5	8.7
Dronagiri Rail Terminal	2.4	5.4	4.7	4.9
TG Terminals CFS	2.1	5.8	13.9	4.9
Vaishno Logistics Yard CFS	1.6	7.5	10.2	4.3
Navkar Corporation Ltd.,Yard-II CFS	5.6	8.8	8.9	7.0
Gateway Distriparks Ltd	2.9	4.7	10.4	8.1
All Cargo Logistics Ltd., CFS	3.0	4.4	3.7	4.5
International Cargo Terminal CFS	2.6	5.7	4.3	4.6
Balmer & Lawrie & Co. Ltd.,CFS	3.6	4.6	5.1	9.8
Continental Warehousing (Nhava Sheva) Ltd.	1.9	3.4	3.6	2.6
Seabird Marine Services Pvt Ltd.	4.4	5.3	5.4	14.9
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.4	4.2	6.6	3.7
Maharashtra State Ware. Corp. CFS	3.1	3.7	3.8	4.8
International Cargo Terminals & Infrastructure Private Limited-CFS	3.4	8.8	4.5	10.6
APM (Maersk India Pvt. Ltd)CFS	1.6	3.7	2.8	2.6
NAVAKAR CORPORATION LTD.,YARD-1 CFS	2.0	2.7		4.1
SBW Logistics CFS , Navi Mumbai	6.0	16.6	17.0	9.1
Maersk Annex (APM)CFS		3.3	3.8	
JWC Logistics Park Ltd CFS		23.2		6.5















## Congestion Analysis around Mumbai Region








<b>Cluster 1</b>	<b>Cluster 2</b>
JNPT Area	Bhendkhal area, Khopate road
<b>Cluster 3</b>	<b>Cluster 4</b>
Sonari area, JNPT road	Chirle area, JNPT road
<b>Cluster 5</b>	<b>Cluster 6</b>
Plaspa area, Coachi kanyakumari Highway	Salva apta rd area, Bangalore highway
<b>Cluster 7</b>	<b>Cluster 8</b>
Patilpada area, Khopate JNPT road	Taloja, Navi Mumbai
<b>Cluster 9</b>	
Padhegar area	

Note : Please find the respective CFS in each cluster in annexure section

It is seen that Cluster 1 and 9 have congestion bottleneck

GTI Terminal	JNPCT Terminal	NSICT Terminal	NSIGT Terminal
			
<b>Congestion Level</b>	<b>Congestion Level</b>	<b>Congestion Level</b>	<b>Congestion Level</b>
Export Cycle :- 	Export Cycle :- 	Export Cycle :- 	Export Cycle :- 
Import Cycle :- 	Import Cycle :- 	Import Cycle :- 	Import Cycle :- 

### Legends

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

Note : Congestion is measured w.r.t actual time taken to cover the respective distance between clusters and terminals{



Base on container movement from port to CFS in Mumbai region, 29 CFS's have been grouped into 9 Clusters on the basis of their vicinity. Below table shows all the clusters and the relevant data for GTI and JNPCT terminal

## CFS Cluster : GTI Terminal

- In export cycle the GTI terminal is having congestion for traffic from cluster 8, cluster 5
- In import cycle the movement of traffic towards cluster 9 is facing congestion

GTI terminal for month of Jan'18				
Clusters	No. of CFS's in Cluster	Distance from Port (Km)	Import cycle time (in Hrs)	Export cycle time (in Hrs)
Cluster 1	1	8	2	3.6
Cluster 2	6	13	2.2	4.7
Cluster 3	6	11	1.5	3.7
Cluster 4	1	13	-	7.5
Cluster 5	2	25	3.2	13.7
Cluster 6	6	25	3	6.6
Cluster 7	4	12	2	3.9
Cluster 8	1	34	3.6	16.6
Cluster 9	1	20	5.7	6.5

## CFS Cluster : JNPCT Terminal

- In export cycle the JNPCT terminal is having traffic congestion from cluster 8

JNPCT terminal for month of Jan'18				
Clusters	No. of CFS's in Cluster	Distance from Port (Km)	Import cycle time (in Hrs)	Export cycle time (in Hrs)
Cluster 1	1	8	1.7	1.8
Cluster 2	6	13	2.3	2.6
Cluster 3	6	11	1.7	3.1
Cluster 4	1	13	1.3	1.6
Cluster 5	2	25	3.6	1.2
Cluster 6	6	25	3.2	5
Cluster 7	4	12	2	3.2
Cluster 8	1	34	3.8	6
Cluster 9	1	20	3.1	3.2

Export container usually aren't allowed in the port before the arrival of their respective vessel so this unplanned transportation of the export containers from the CFS's to Port can cause **bottlenecks**



Base on container movement from port to CFS in Mumbai region, 29 CFS's have been grouped into 9 Clusters on the basis of their vicinity. Below table shows all the clusters and the relevant data for NSICT and NSIGT terminal

## CFS Cluster : NSICT Terminal

- In export cycle the NSICT terminal is having congestion for traffic from cluster 8 and cluster 4
- In import cycle the movement of traffic towards cluster 9, cluster 6 is facing congestion

NSICT terminal for month of Jan'18				
Clusters	No. of CFS's in Cluster	Distance from Port (Km)	Import cycle time (in Hrs)	Export cycle time (in Hrs)
Cluster 1	1	8	2.3	3.2
Cluster 2	6	13	2.1	4.4
Cluster 3	6	11	1.9	4.7
Cluster 4	1	13	-	10.2
Cluster 5	2	25	3.5	3.3
Cluster 6	6	25	3.2	5.5
Cluster 7	4	12	1.9	4.3
Cluster 8	1	34	2.8	17
Cluster 9	1	20	33.6	5.5

## CFS Cluster : NSIGT Terminal

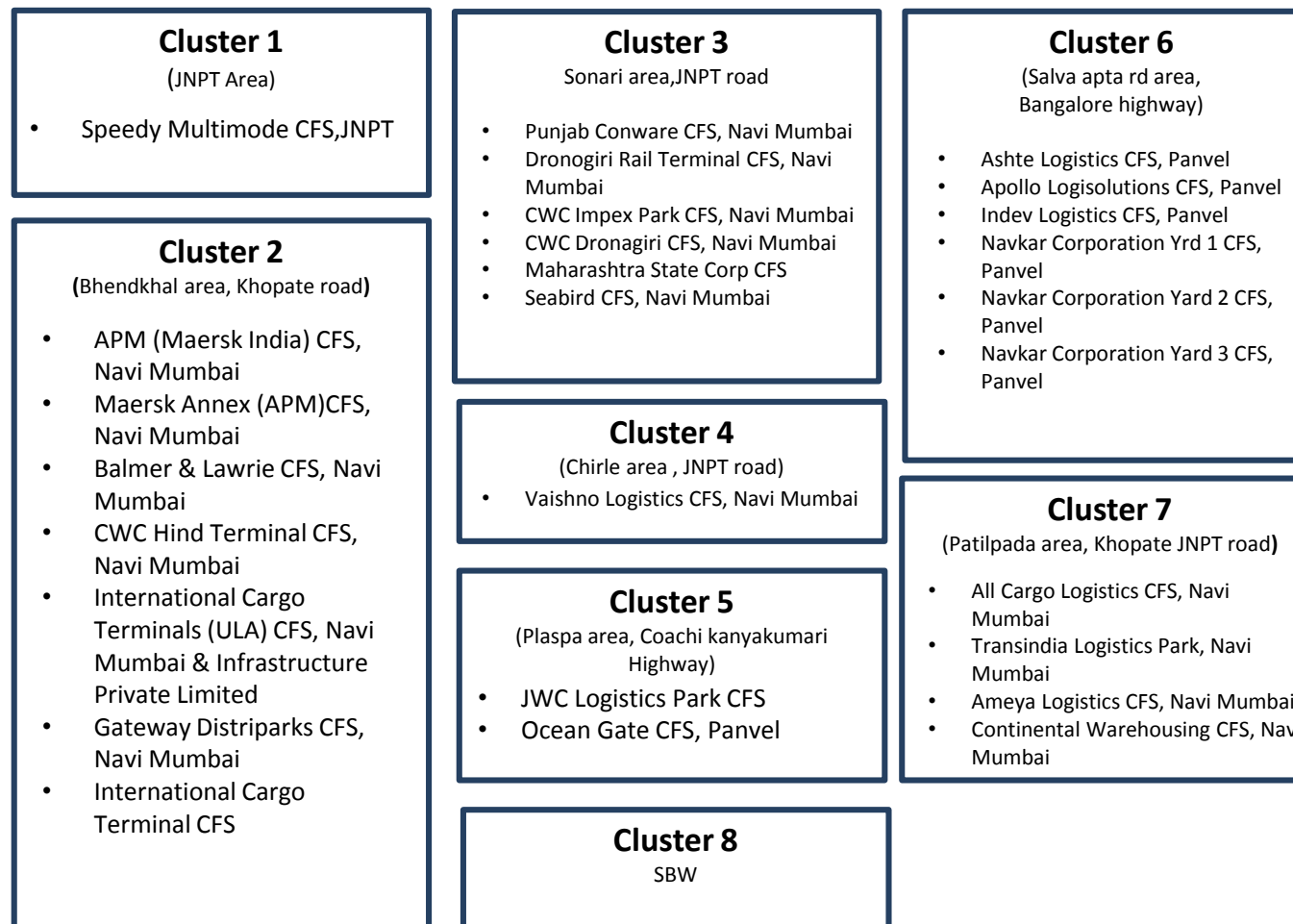
- In export cycle the NSIGT terminal is having traffic congestion from cluster 8
- In import cycle the NSIGT terminal is having traffic congestion from cluster 9

NSIGT terminal for month of Jan'18				
Clusters	No. of CFS's in Cluster	Distance from Port (Km)	Import cycle time (in Hrs)	Export cycle time (in Hrs)
Cluster 1	1	8	1.6	6.6
Cluster 2	6	13	2.3	6.8
Cluster 3	6	11	1.7	4.8
Cluster 4	1	13	1.3	4.3
Cluster 5	2	25	3.8	5.1
Cluster 6	6	25	3.9	7.8
Cluster 7	4	12	2	4.3
Cluster 8	1	34	4.5	9.1
Cluster 9	1	20	34.3	5.2

Export container usually aren't allowed in the port before the arrival of their respective vessel so this unplanned transportation of the export containers from the CFS's to Port can cause **bottlenecks**

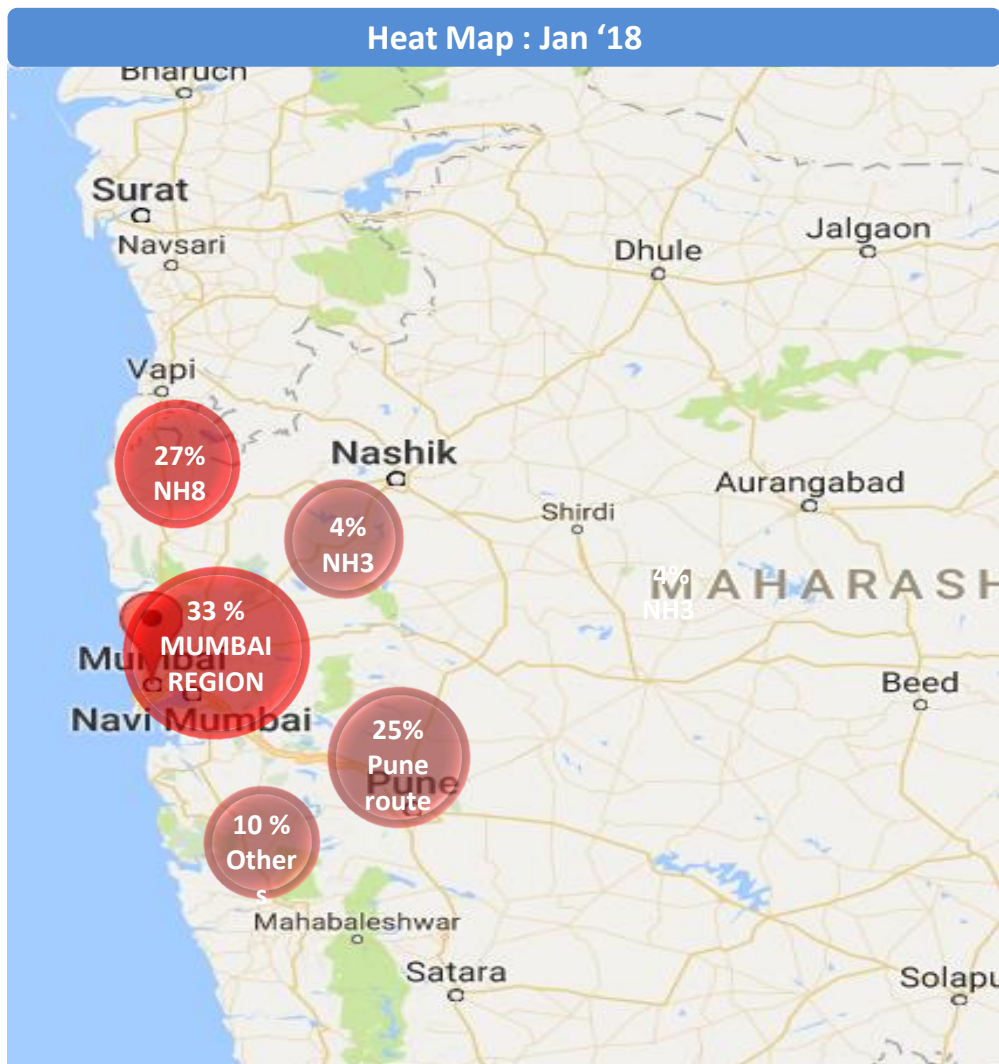


Below mentioned are all the CFS in the respective Clusters :





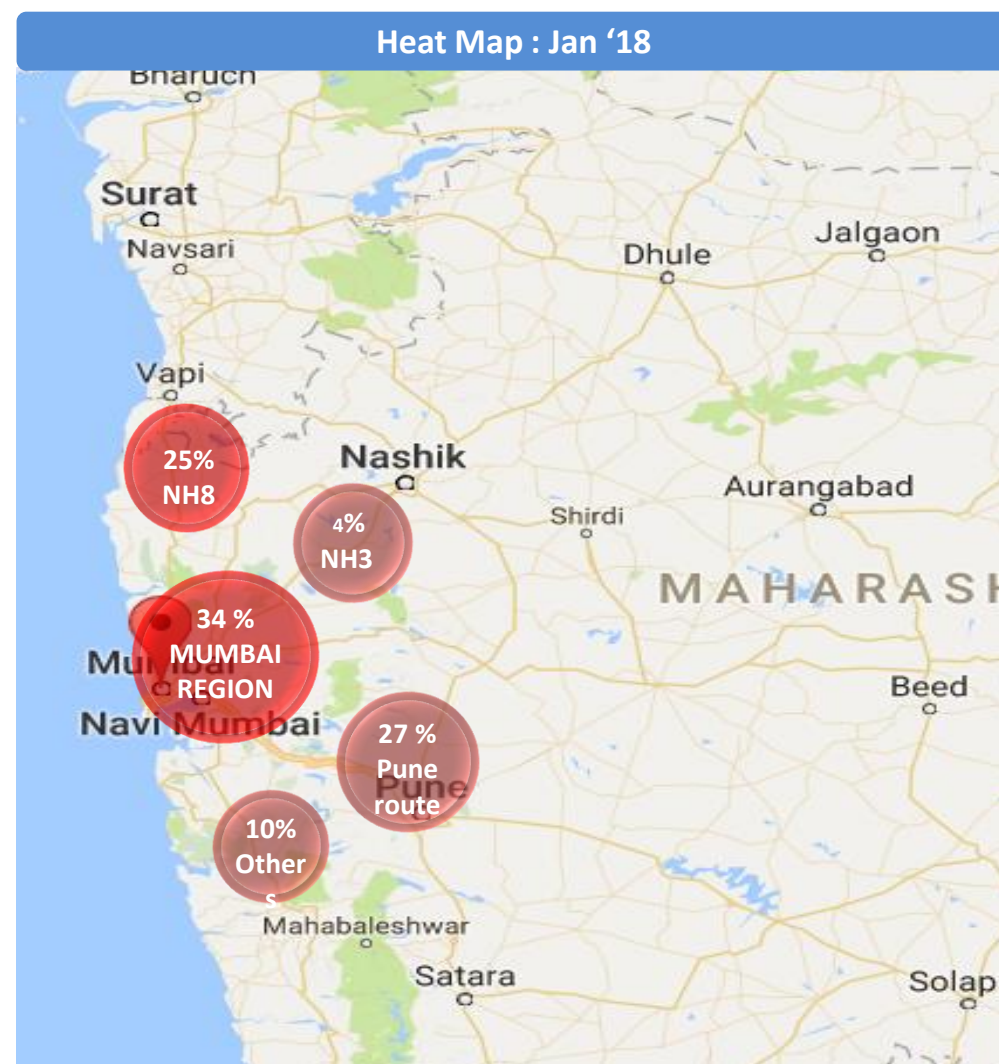
## HEAT MAP : JNPCT Port Terminal



Region	Jan'18	OND'17
Mumbai Region	33%	50%
Pune	4%	18%
NH8	25%	19%
NH3	27%	3%
Others	10%	10%

The heat map above depicts the movement of containers in and around the Mumbai region.

## HEAT MAP : NSICT Port Terminal



Region	Jan'18	OND '17
Mumbai Region	34%	47%
Pune	4%	20%
NH8	27%	20%
NH3	25%	3%
Others	10%	10%

The heat map above depicts the movement of containers in and around the Mumbai region.





**Thank You !!**