

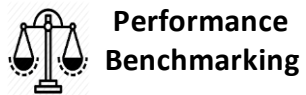


DLDS ANALYTICS : JFM Report 2018 for JNPT

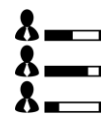


- DLDS commenced its operations across the Bharat Mumbai Container Terminal Private Limited (BMCTPL) at JNPT from 1st Apr 2018.
- LDB successfully commenced operations across the 4 Concor ICD's at Tughlakabad, Dadri, Kanakpura, Mulund.
- Vessel Tracking Integration with JNPT has been completed and LDB portal now provides visibility across the sea for export bound container movement.
- Pan India launch of DMICDC's Logistics Databank Operations was announced on 18th Dec 2017, this will enable in bringing Visibility & Transparency across the Indian Supply Chain and reduce the Container Transportation time and the costs.
- LDB service went live across ICD Tughlakabad from 11th March 2018 which will provide visibility of the EXIM container movement.
- Launch of LDB mobile App for android users, is enabling the stakeholders in tracking the EXIM Containers movement across the western corridor.
- Logistics Databank Project(LDB) as on date has provided visibility service for 7,676,212 EXIM Containers across the western corridor of India.





Performance Benchmarking

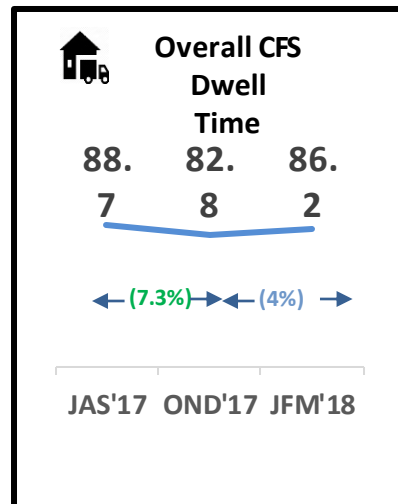
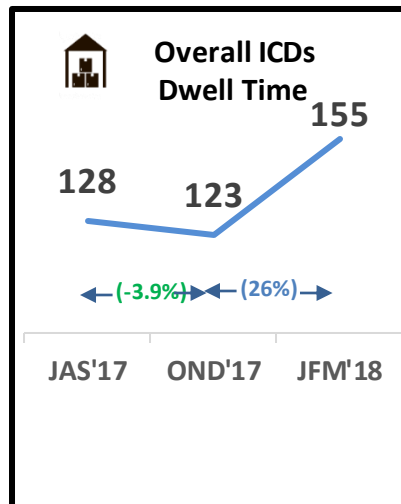
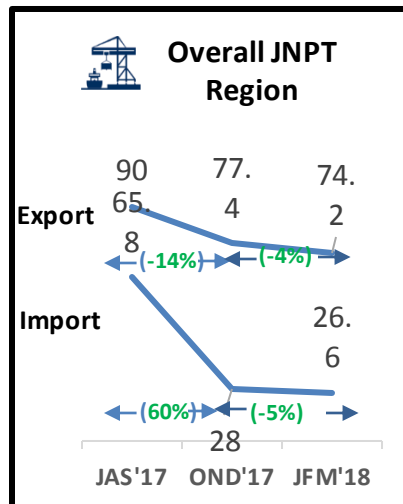


Performance Index



Container Clearance Time analysis

With help of above activities below results have been achieved :



Dwell Time

There has been an improvement in Port dwell time performance for both import and export cycle by 5% and 4% for JFM'17 quarter

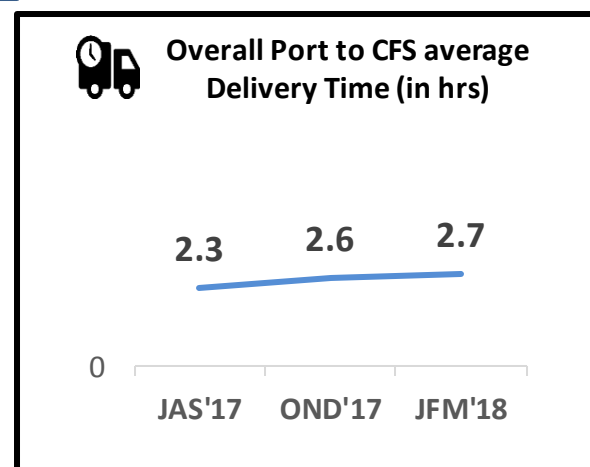
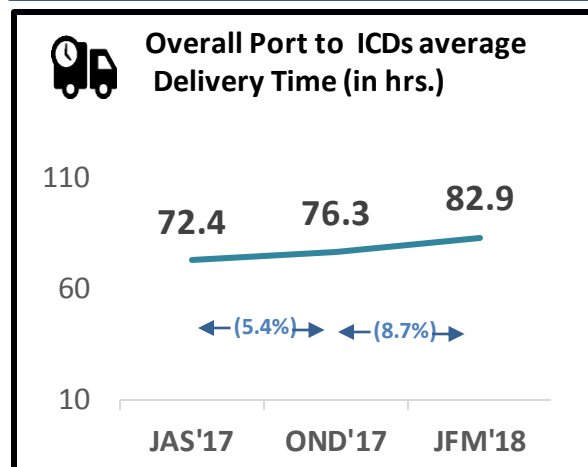
ICD dwell time performance has decreased by 26% in JFM '18 as compared to OND'17 quarter



Congestion Analysis



Bottleneck Identification



Transit Time Reduction

There has been an increase of 8.7 % in Port to ICD delivery time in JFM'18 as compared to OND'17



IMPLEMENTATION

- 5 Port Terminals at JNPT
- 4 Port Terminals at Mundra
- 1 Port Terminal at Hazira
- 46 CFSs across Western Corridor
- 14 ICDs near NCR
- 19 Toll Plazas
- 280 Operators at Ports

INTEGRATION

- Integrated with 10 Port Systems
- Integrated with FOIS (Railways)

Providing Truck and Train based end to end Container Visibility Services.

SERVICES

- Basic Search through a single window for end to end tracking
- Basic Analytics (Dwell Time, Transit Time, Alerts, Google Map View etc.)
- Detailed Analytics (Container Heat Map, Congestion Analysis, Performance Benchmarking, etc.)

- Visibility services for 70% of India's Container Volume.
- Visibility provided for more than 7.5 million EXIM Containers



LDB Analytics



Performance Benchmarking



Performance benchmarking for JNPT Region for JFM'18 quarter

Port Terminals			
Top Performing Terminal		Low Performing Terminal	
Gateway Terminals India (GTI)	Dwell Time : 43.1 hrs.	Nhava Sheva International Container Terminal (NSICT)	Dwell Time : 54.7 hrs.

Performance benchmarking for APSEZ Region for JFM'18 quarter

Port Terminals			
Top Performing Terminal		Low Performing Terminal	
Adani Hazira Port Private Limited (AHPPL)	Dwell Time : 53.1 hrs.	Adani International Container Terminal (AICT)	Dwell Time : 77 hrs.



Performance benchmarking for JNPT Region CFS for quarter JFM'18

CFS	
Top Performing CFS's	Low Performing CFS's
JWR CFS Dwell Time : 55.1 hrs.	Take Care Logistics CFS Dwell Time : 122.2 hrs.

Performance benchmarking for APSEZ Region CFS for quarter JFM'18

CFS	
Top Performing CFS's	Low Performing CFS's
Adani CFS Eximyard, Mundra Dwell Time : 50.4 hrs.	Hind Mundra Terminals CFS, Mundra Dwell Time : 118.2 hrs.



Performance benchmarking for ICDs for quarter JFM'18

ICD	
Top Performing ICD	
CMA CGM Agencies ICD, Dadri	Dwell Time : 93.2 hrs.
Low Performing ICD	
APM Terminals ICD, Dadri	Dwell Time : 166 hrs.

Note: All the CONCOR ICD's/ CFS are excluded from this comparative analysis



Port Terminals

Top Performing Terminal

Gateway Terminals India (GTI)

Dwell Time : **43.1**
hrs.

Low Performing Terminal

**Adani International
Container Terminal (AICT)**

Dwell Time : **77** hrs.

Below depicts the best performing Container freight station (CFS) across western corridor for quarter JFM'18

CFS

Top Performing CFS's

Adani CFS Eximyard, Mundra

Dwell Time : **50.4**
hrs.

Low Performing CFS's

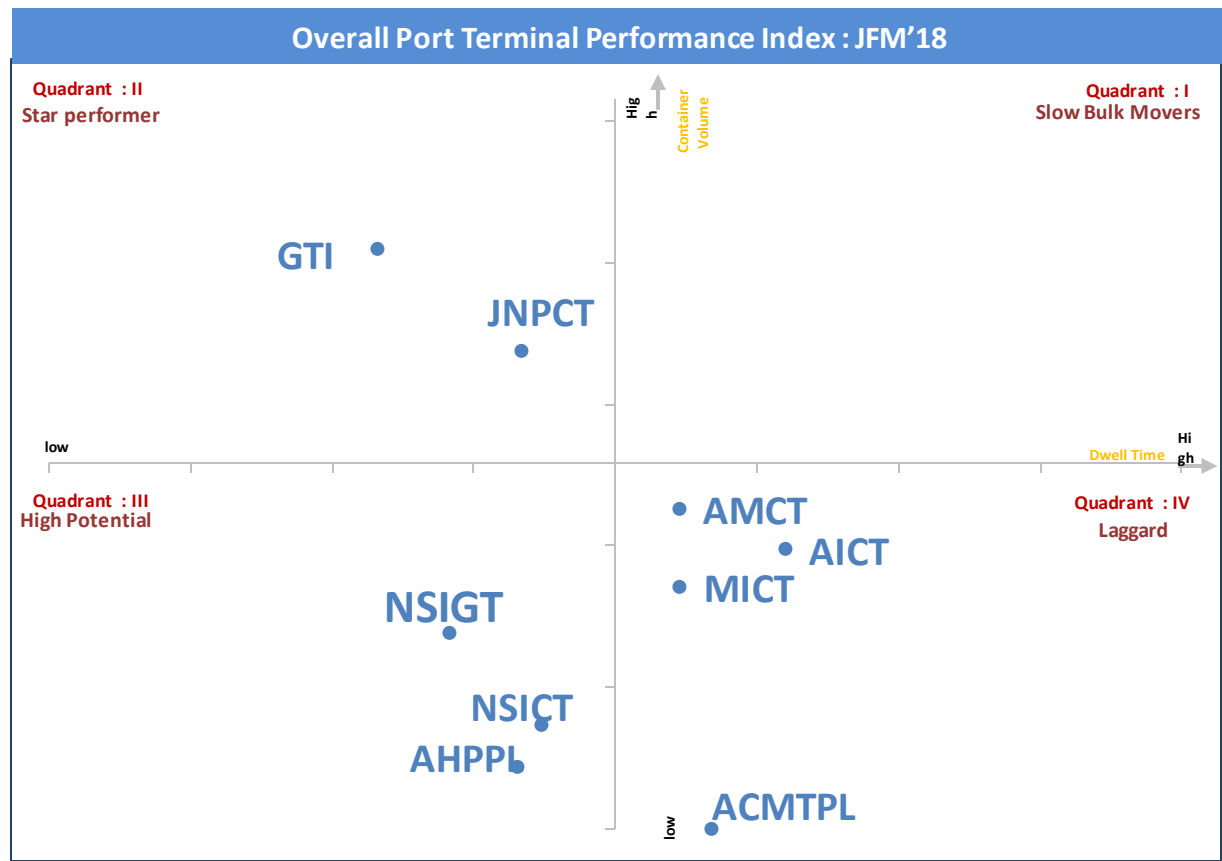
Take Care Logistics CFS

Dwell Time : **122.2**
hrs.



Star Performer: High container volume in lower dwell time

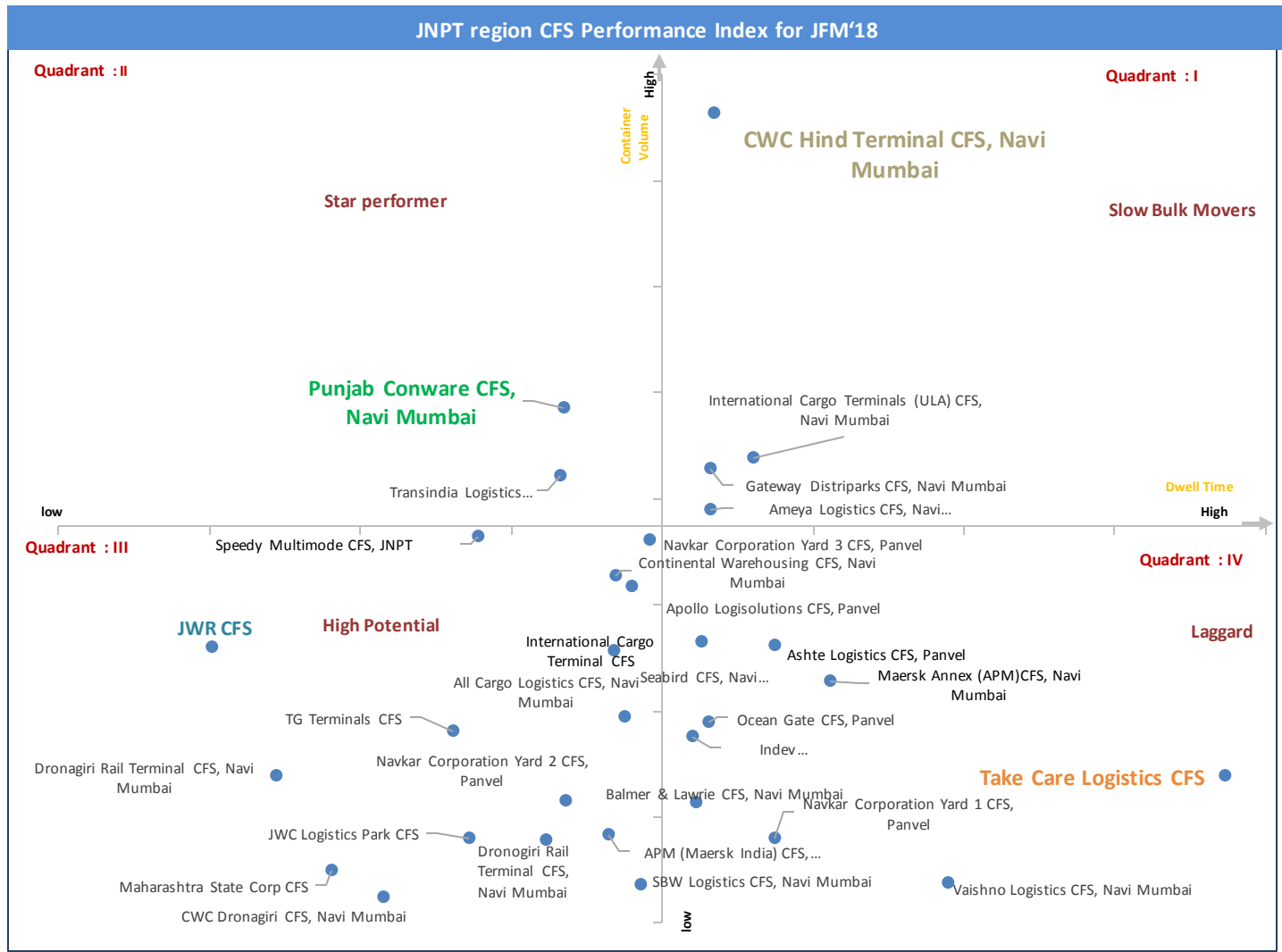
High Potential : Lower container volume in lower dwell time



Slow Bulk Movers : Higher container volume at higher dwell time

Laggard : Lower container volume at higher dwell time

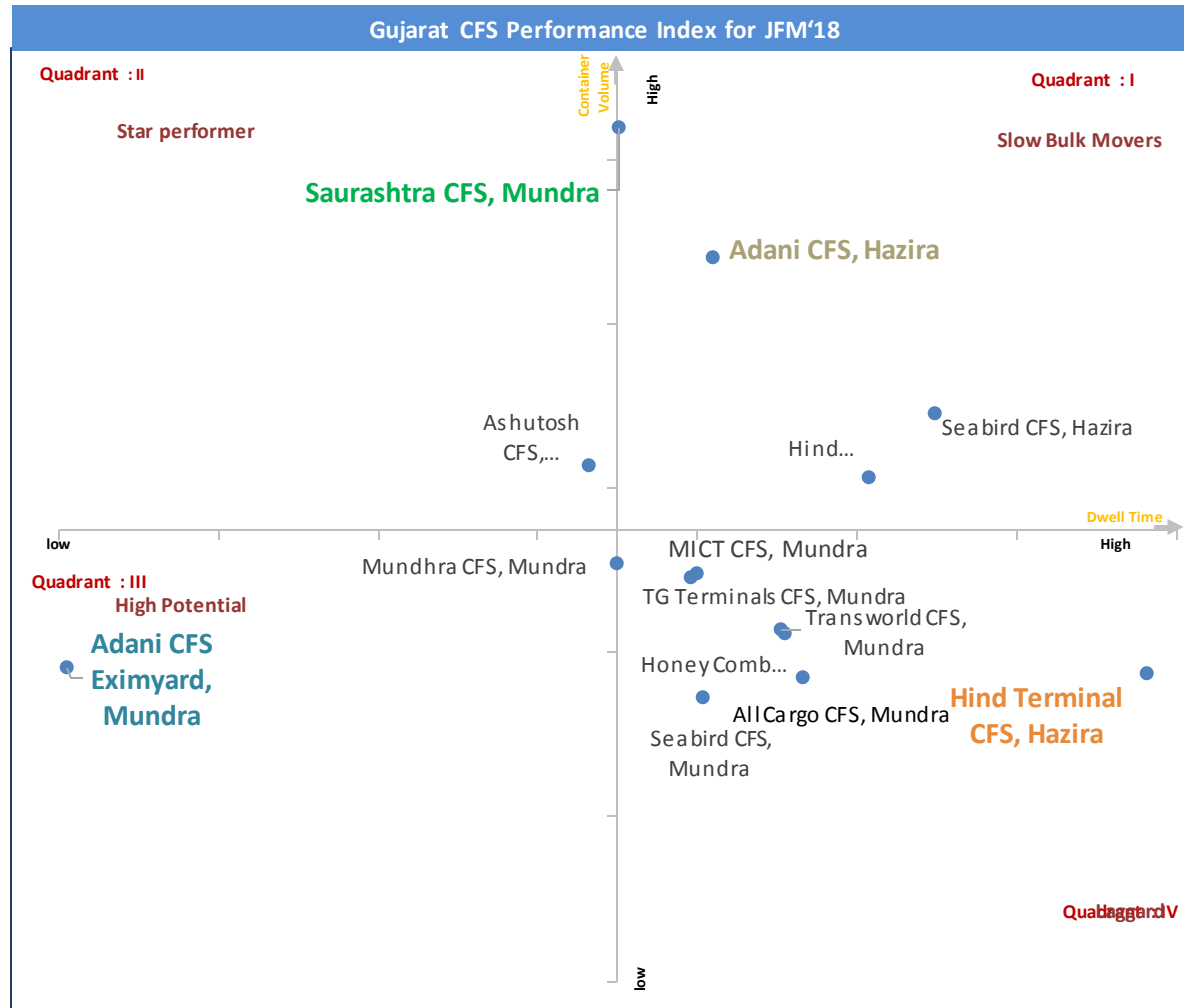




Legends

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



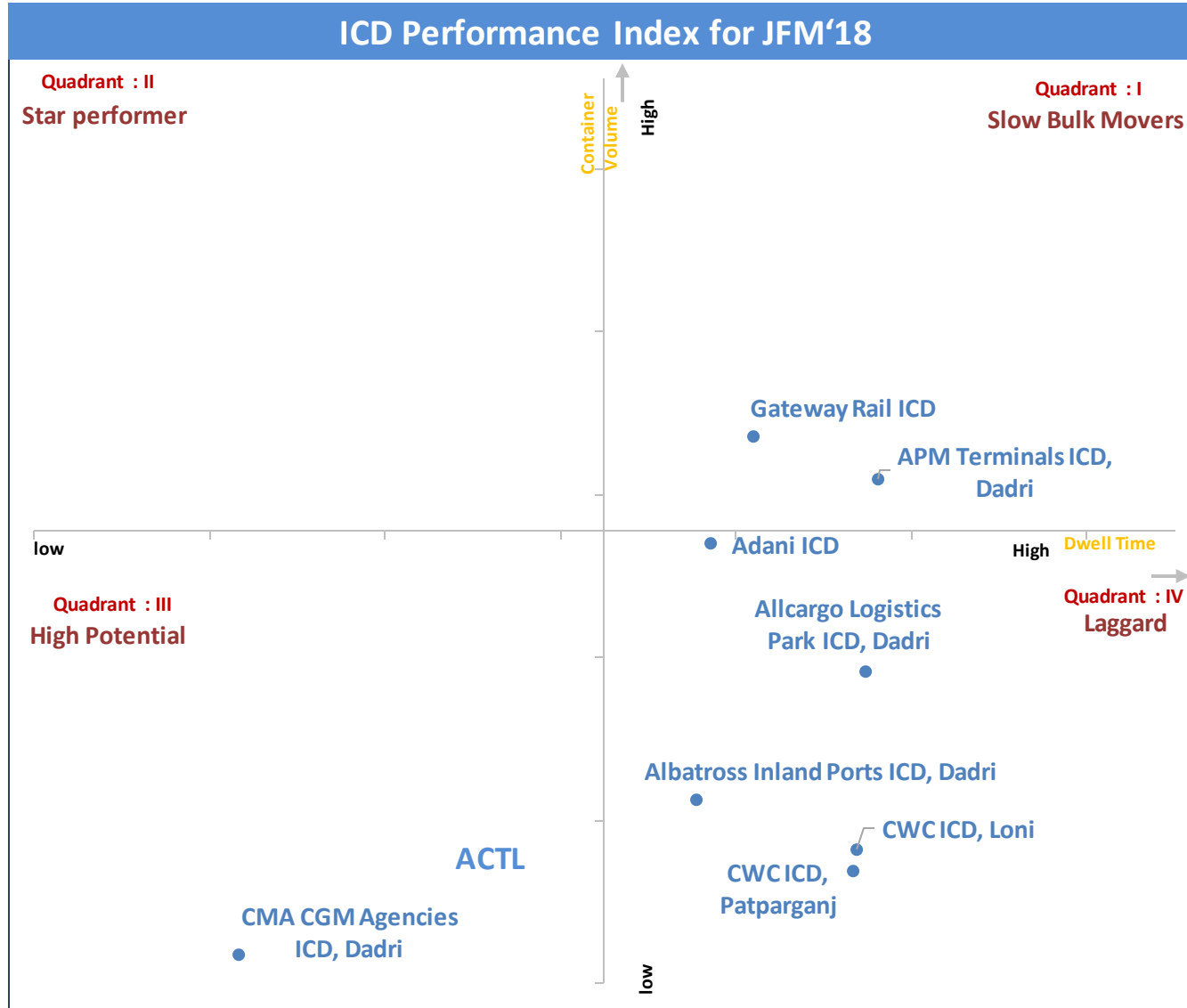


Legends

Top in category

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

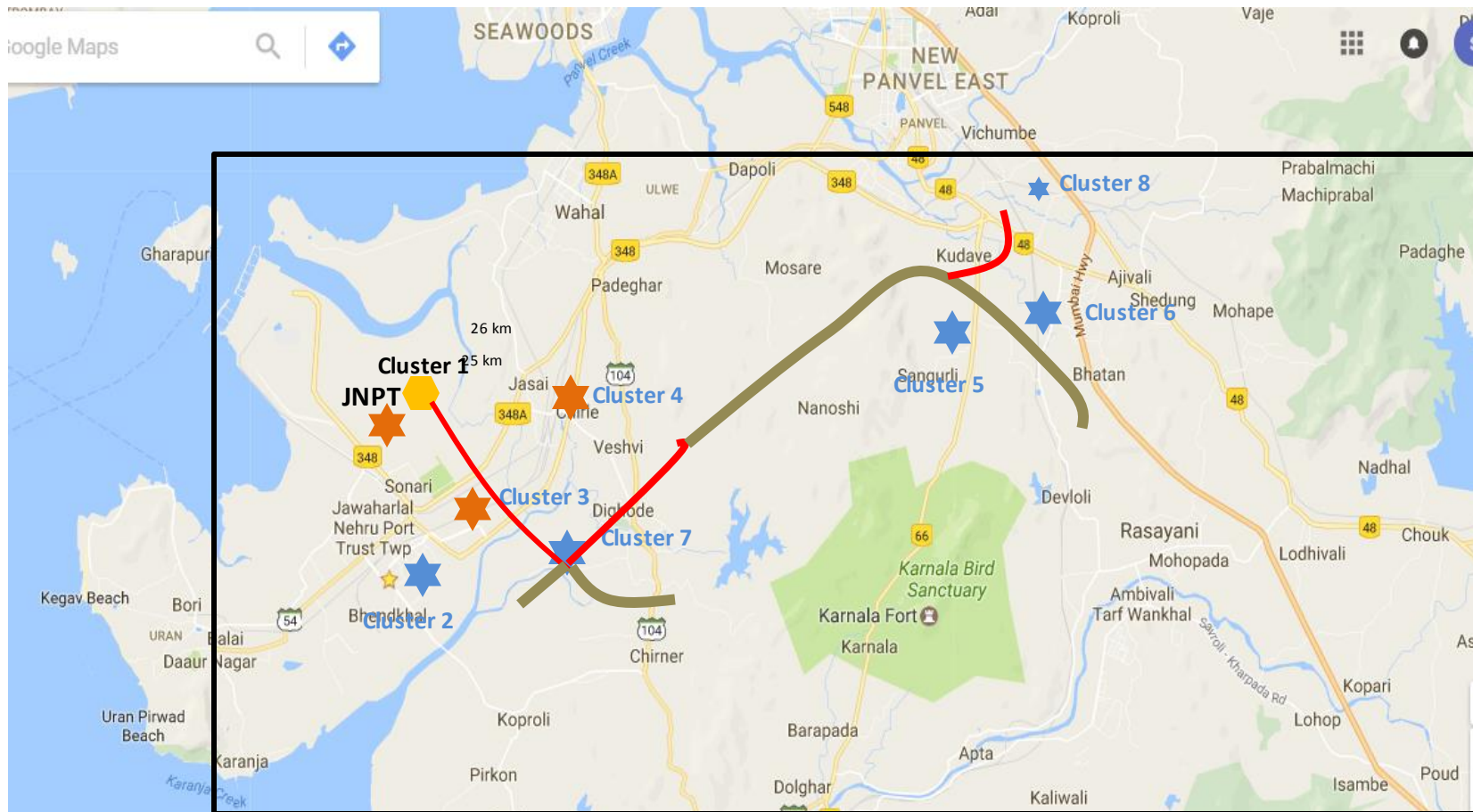




Legends

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





- | | |
|---|---|
| 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 |

Legends

- High Congestion (Red line)
- Medium Congestion (Green line)
- Low Congestion (Pink line)
- Cluster with bottleneck (Orange star)
- Cluster without bottleneck (Blue star)

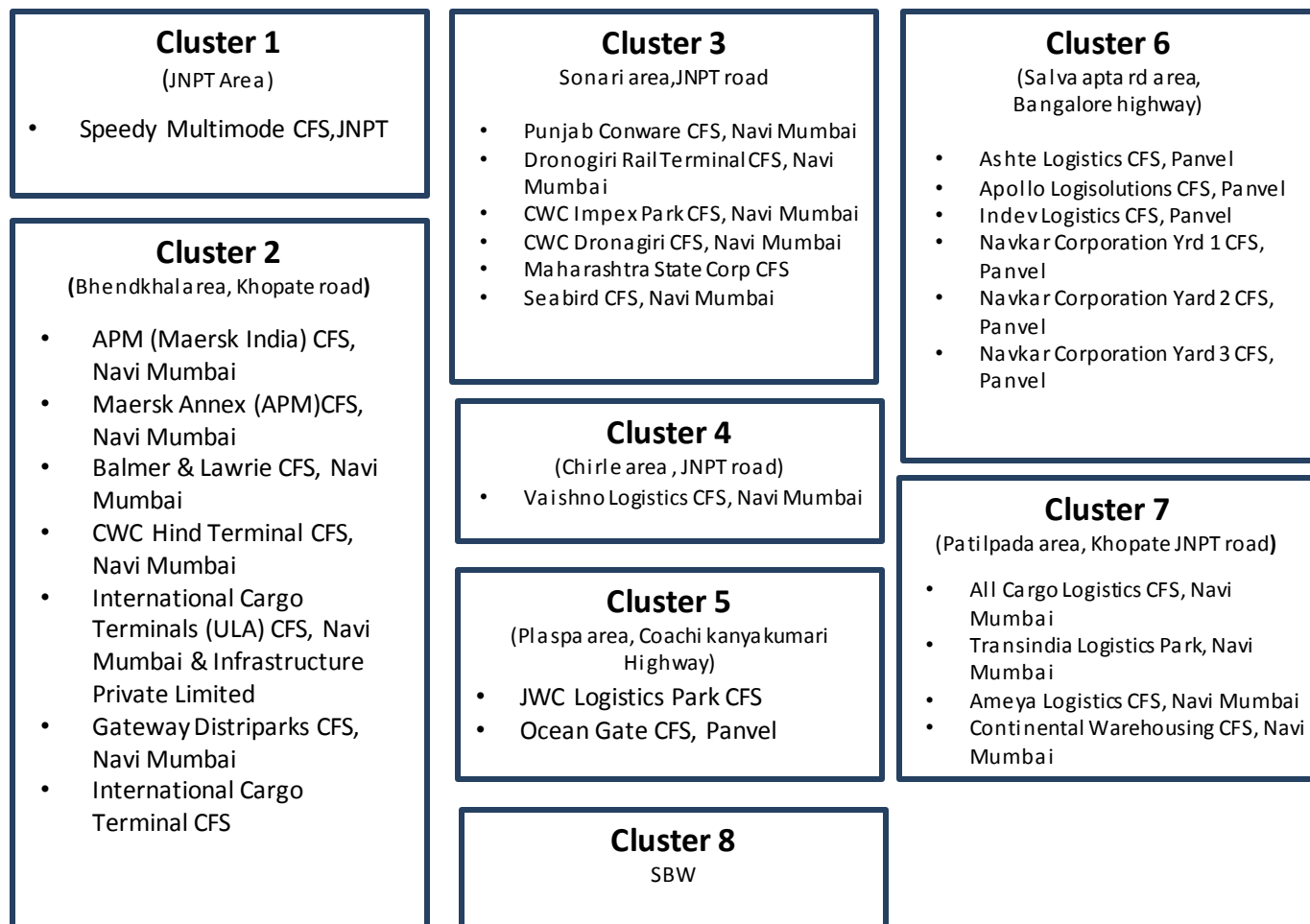
It is seen that Cluster 1 has congestion bottleneck throughout the JFM'18 quarter

GTI Terminal	JNPCT Terminal	NSICT Terminal	NSIGT Terminal
Congestion Level Export Cycle :-	Congestion Level Export Cycle :-	Congestion Level Export Cycle :-	Congestion Level Export Cycle :-
Import Cycle :-	Import Cycle :-	Import Cycle :-	Import Cycle :-

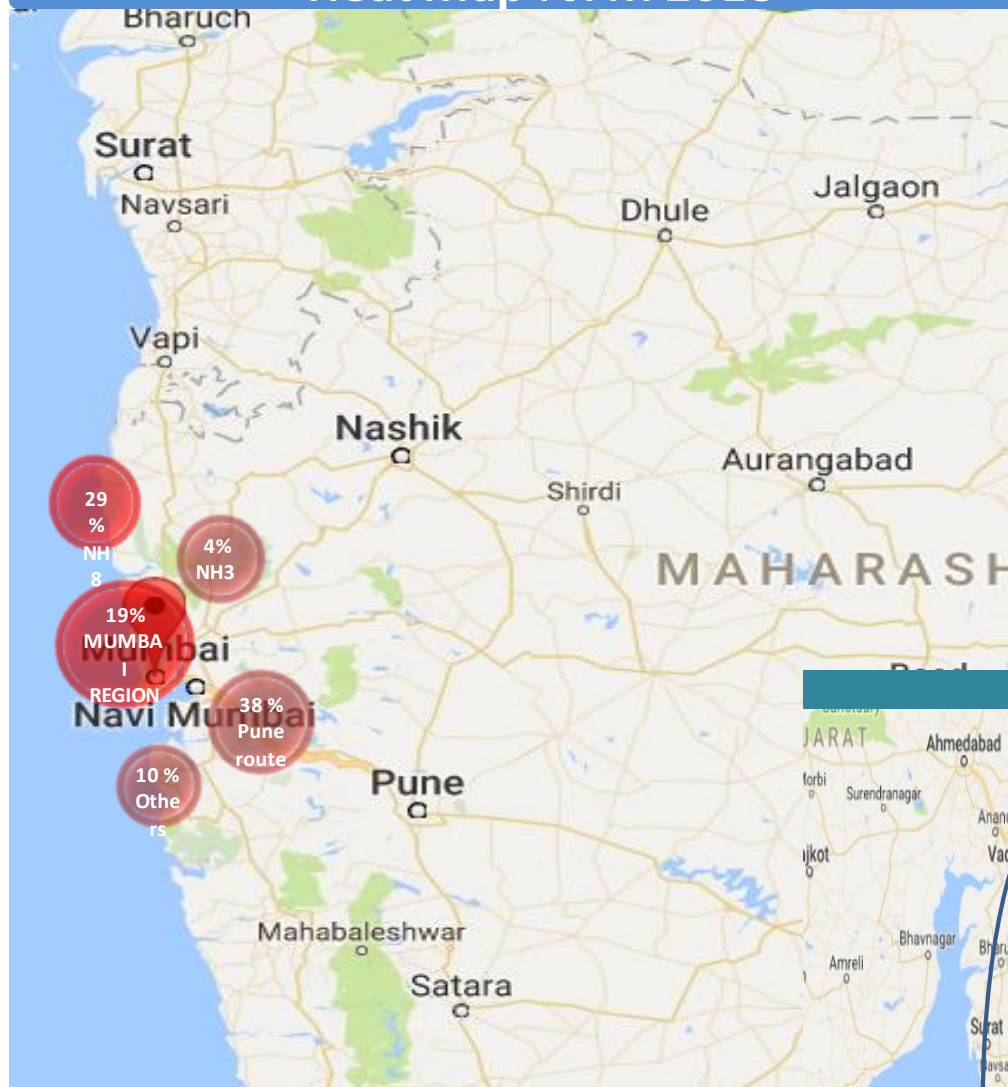
Note : Congestion is measured w.r.t actual time taken to cover the respective distance between clusters and terminals



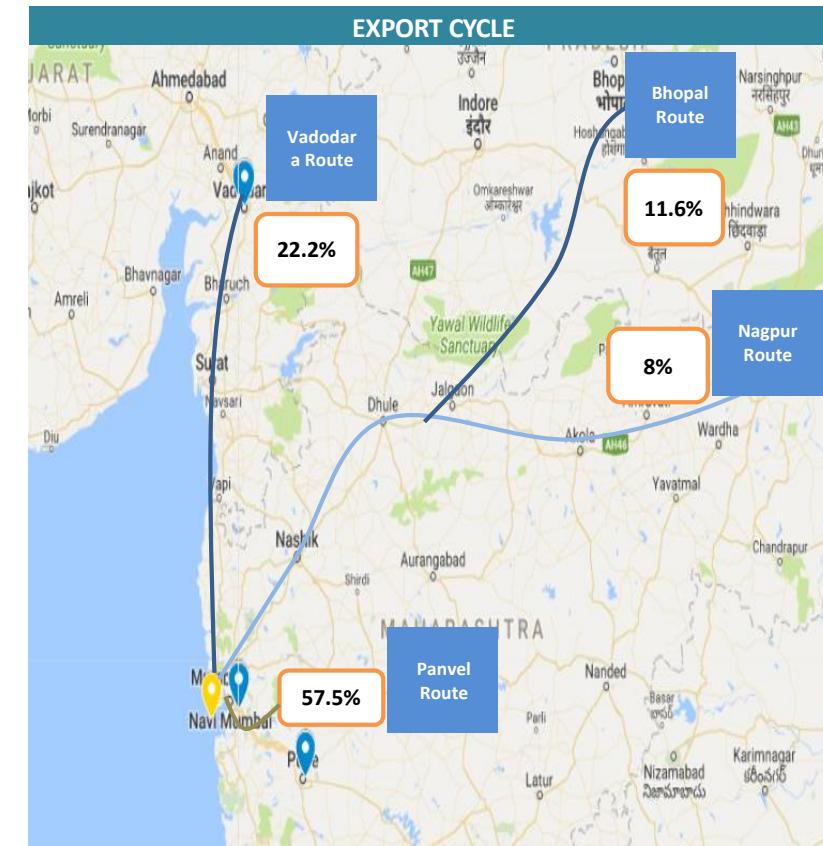
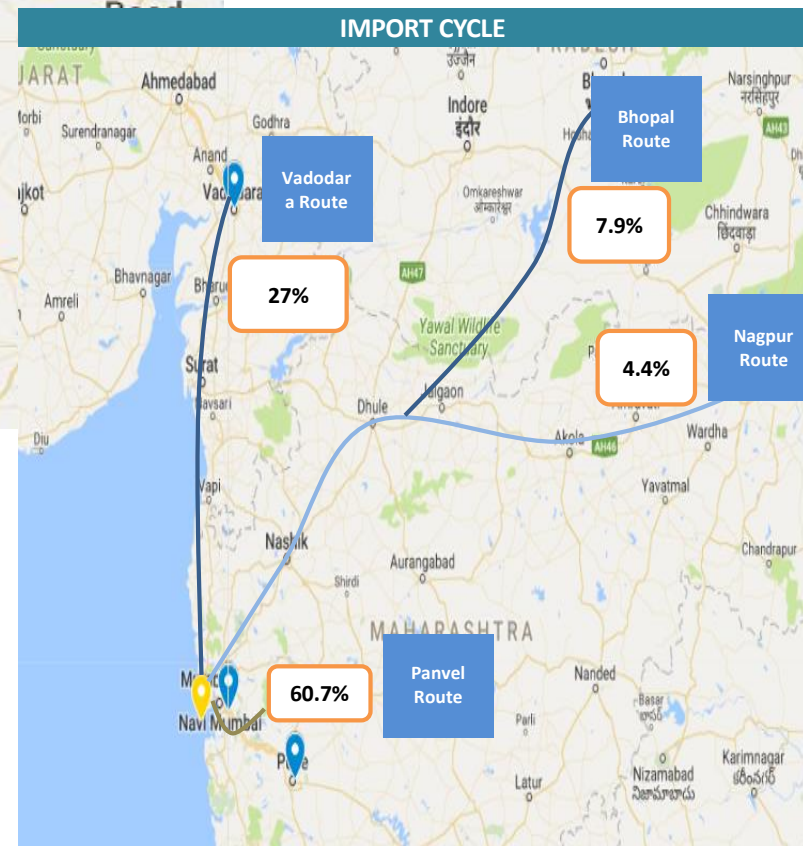
Below mentioned are all the CFS in the respective Clusters :



Heat Map : JFM 2018



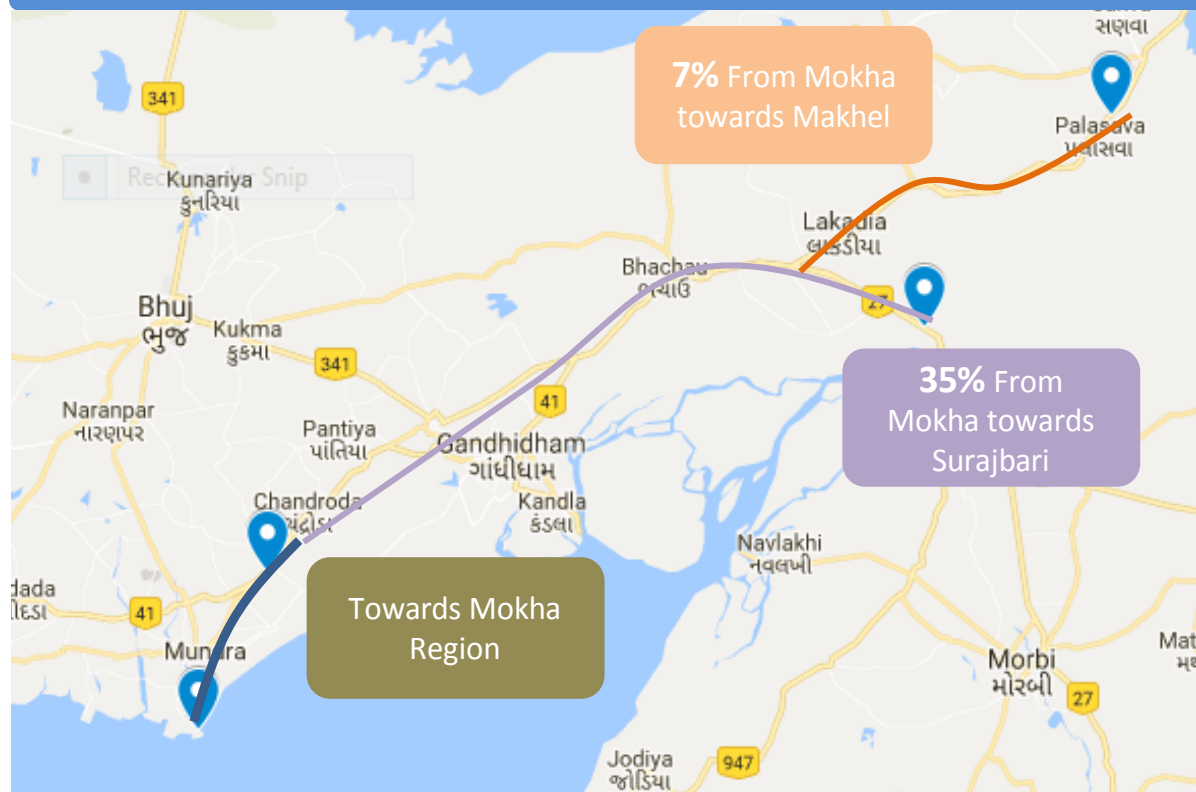
Region	OND'17	JFM'18
Mumbai Region	48%	19%
Pune	22%	38%
NH8	17%	29%
NH3	3%	4%
Others	10%	10%



HEAT MAP : Overall Mundra Region

i.e. all 4 terminals at Mundra port region i.e. MICT, AICT, AMCT, AHPTL

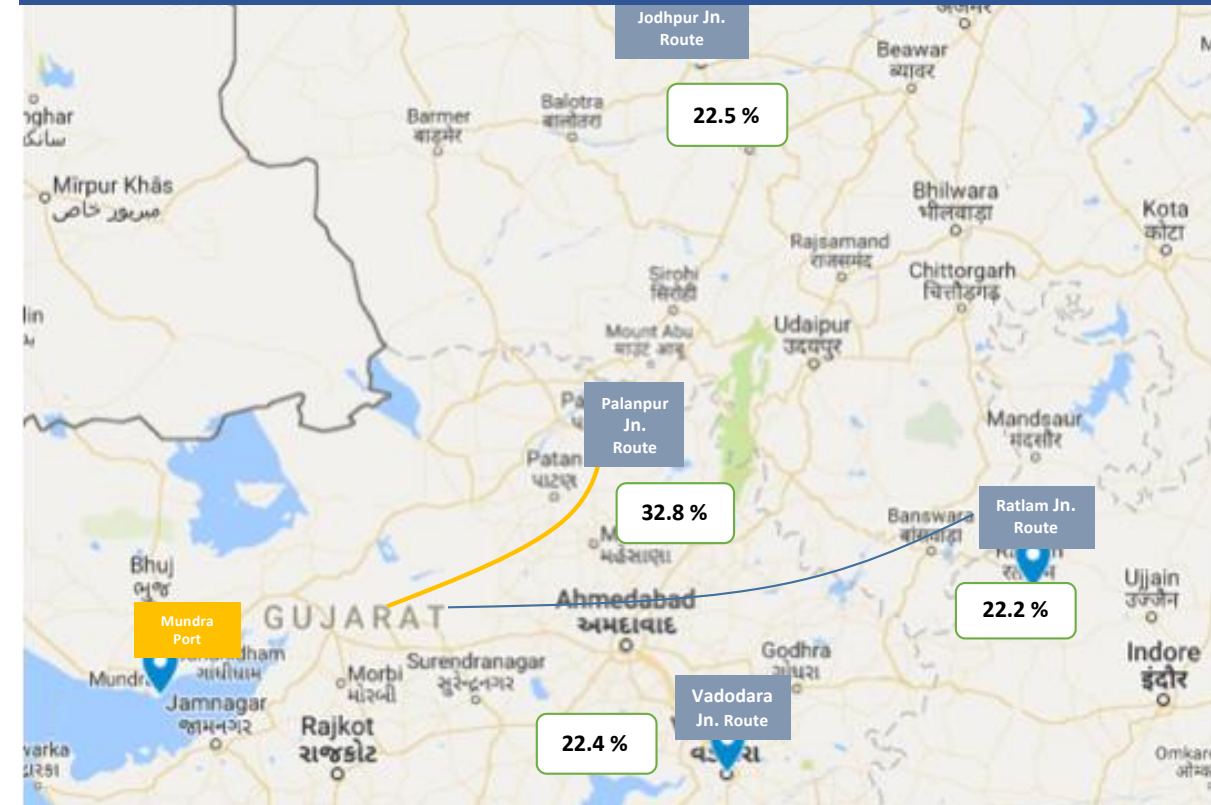
Heat Map : March'18



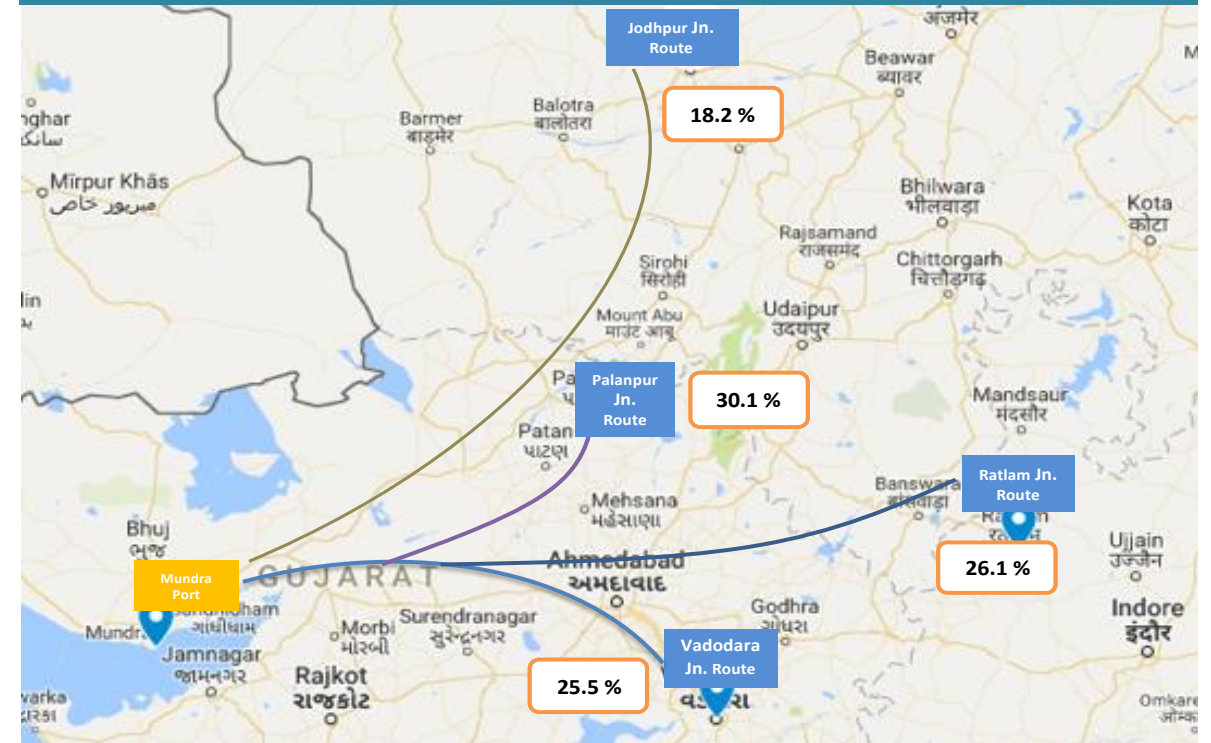
From Mokha towards

Region	March'18	February'18
Surajbari	35%	37%
Makhel	7%	7%

EXPORT CYCLE



IMPORT CYCLE



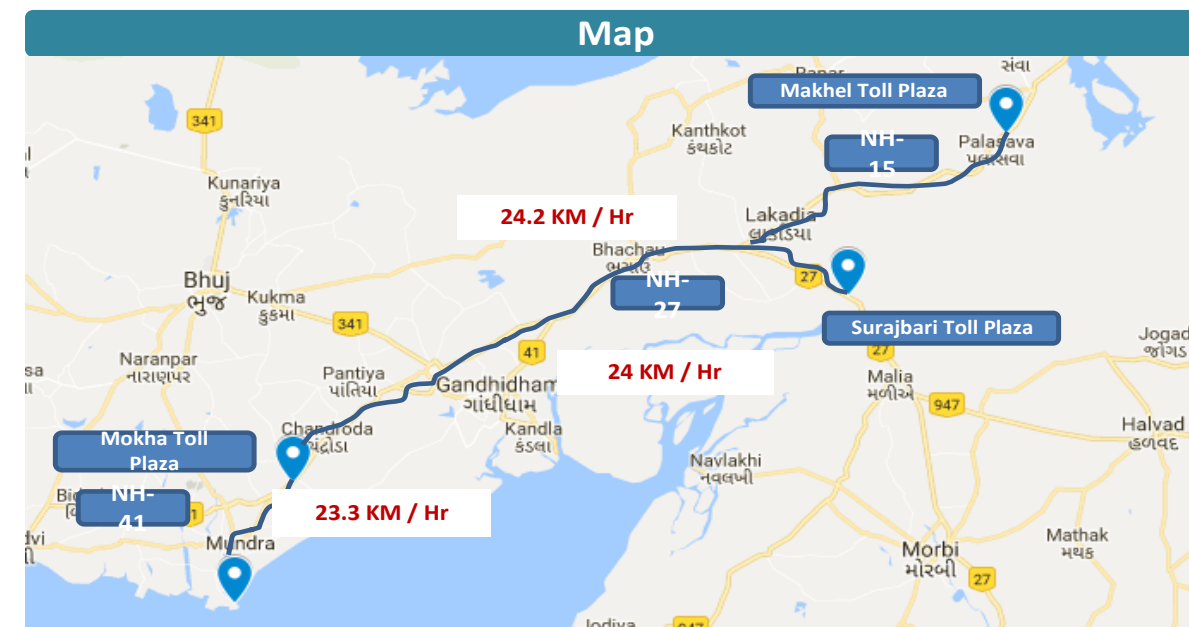
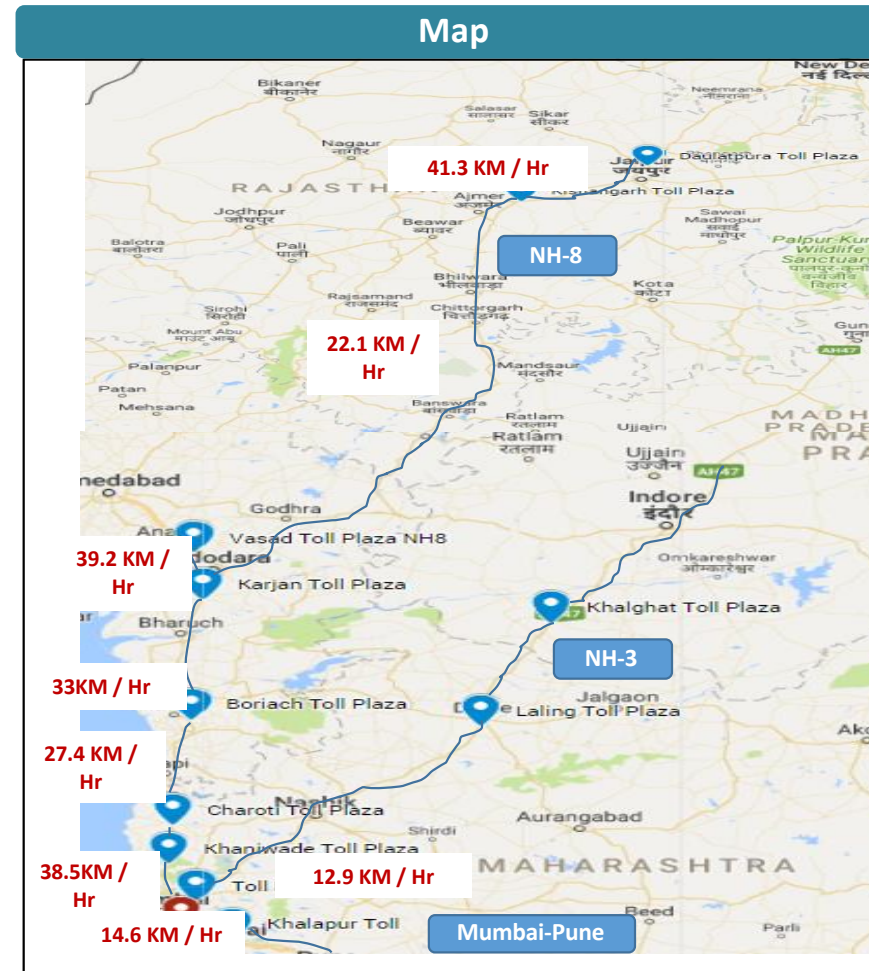
Toll Plaza Speed Analysis

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

Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	JFM'18 Avg. Speed (Km/Hr.)	OND'17 Avg. Speed (Km/Hr)
JNPT	Khaniwade	94	7.3	12.9	13.7
JNPT	Khalapur	60	4.1	14.6	15.6
Khaniwade	Charoti	50	1.30	38.5	35.7
Charoti	Boriach	126	4.60	27.4	28
Boriach	Bharthan	142	4.30	33.0	33
Bharthan	Kishangarh	686	31.00	22.1	21.1
Bharthan	Vasad	60	1.53	39.2	37.5
Kishangarh	Daulatpura	128	3.10	41.3	40

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

Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	Avg. Speed JFM'18 (Km/Hr.)	Avg. Speed OND'17 (Km/Hr.)
MICT	Mokha	28	1.2	23.3	23.3
Mokha	Makhel	150	6.2	24.2	23.8
Mokha	Surajbari	115	4.8	24	26.7

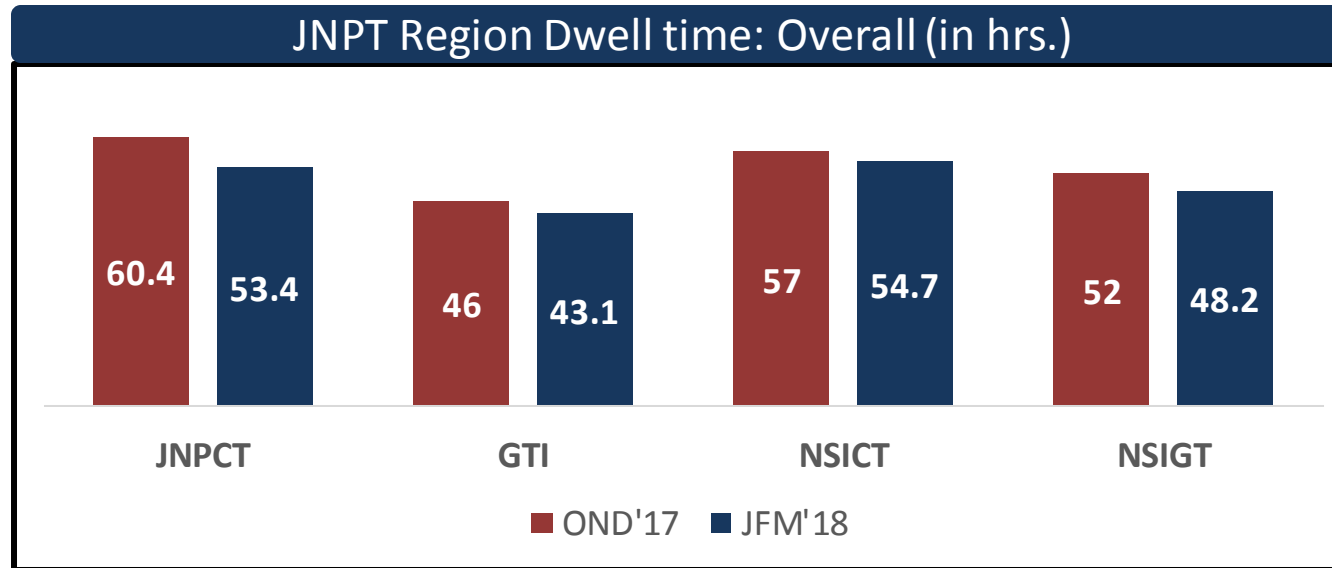


PERFORMANCE TREND METRICS



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 JFM'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



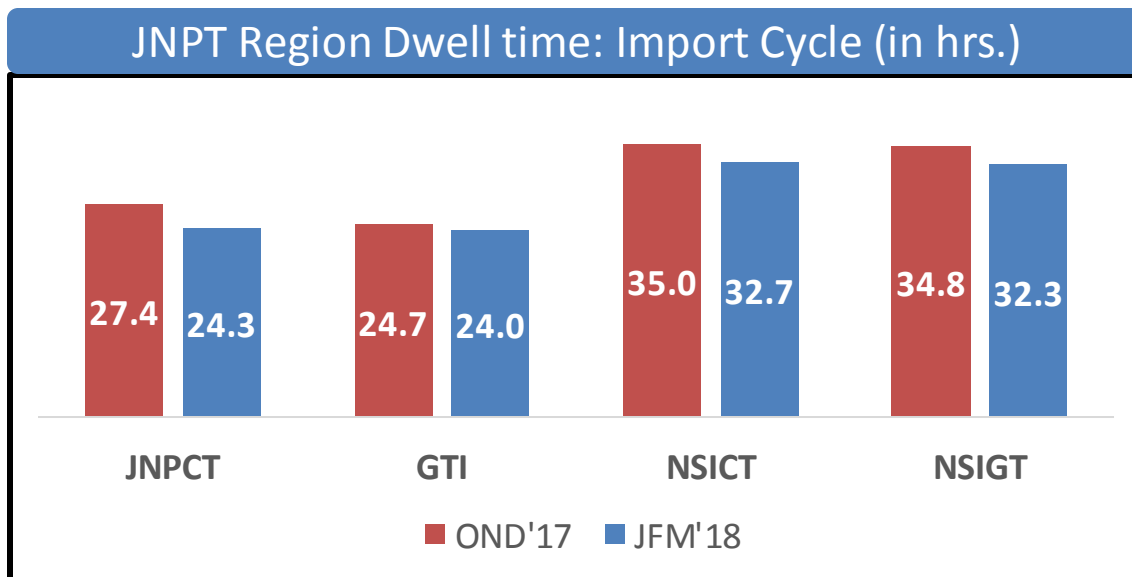
The overall JNPT region average dwell time for JFM'17 quarter is 48.3 hrs. which has improved from 52.3 hrs in OND'17 quarter

Below table showcases Import and Export cycle dwell time for both rail and truck bound containers for JFM'18



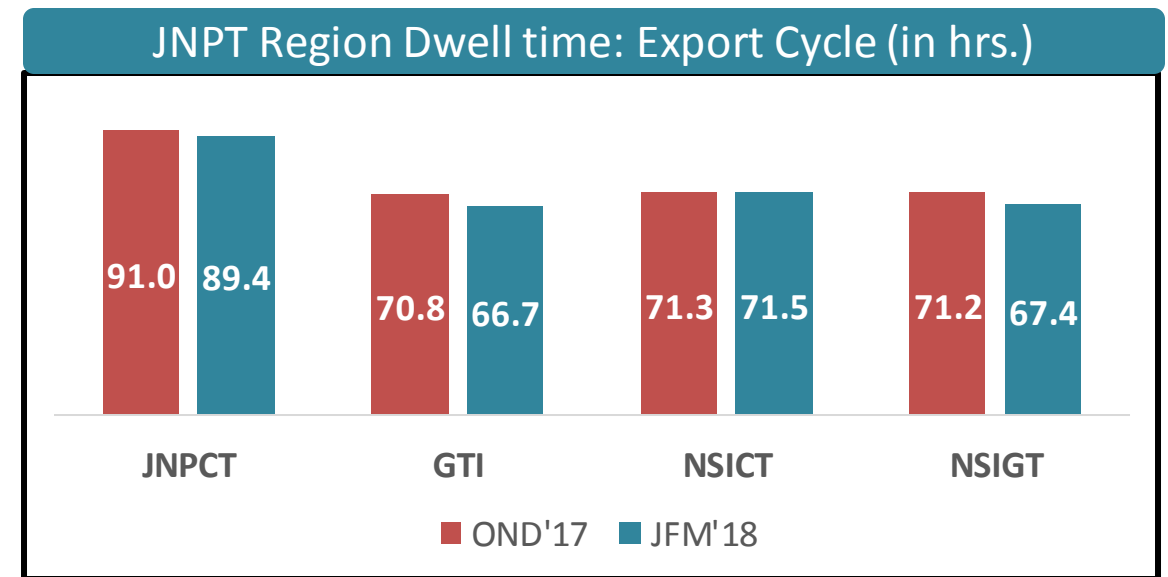
JNPT Import cycle Trend

The average import cycle dwell time of JNPT region port terminals for JFM'18 quarter is 26.4 hrs. which has improved from 28 hrs. in OND'17



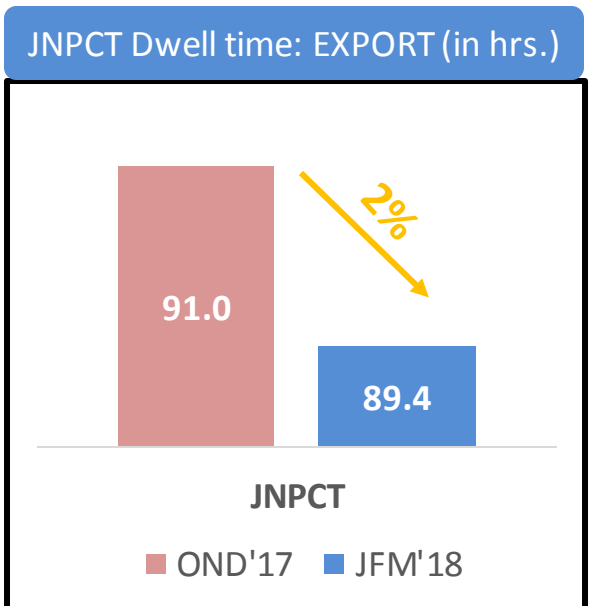
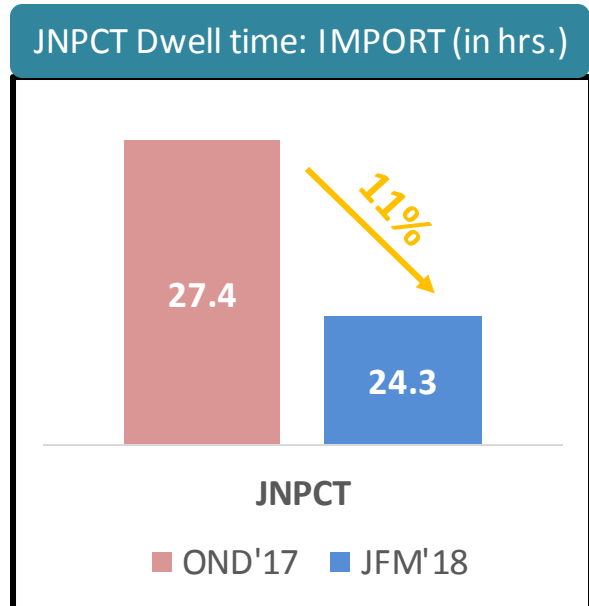
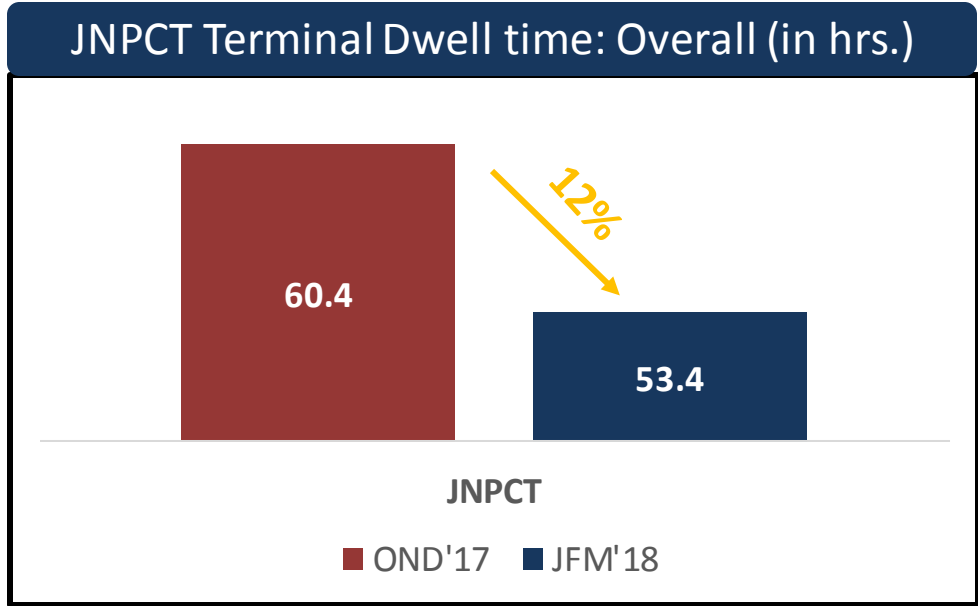
JNPT Export cycle Trend

The average export cycle dwell time of JNPT region port terminals for JFM'18 quarter is 74.2 hrs. which has improved from 77.4 hrs. in OND'17



1 JNPCT terminal has improved its port dwell time performance by 11% in JFM'18

JNPCT has reduced its overall port dwell time in JFM'18 quarter by 11% as compared to last OND'17 quarter. This improvement can be majorly contributed to Import cycle dwell time, which has shown 11% reduction in dwell time in JFM'18 as compared to OND'17



JNPCT container clearance day distribution has been depicted in the figure. Truck bound container has been managed effectively in Import cycle during JFM'18 as around 99% of the containers have been cleared with 5 days

Terminal	JFM'18		
	Within 2 days	Within 2-5 days	More than 5 days
JNPCT : Import Train	40%	36%	24%
JNPCT : Import Truck	84%	15%	1%
JNPCT : Export Train	7%	35%	58%
JNPCT : Export Truck	14%	63%	23%



Truck v/s Train traffic handled



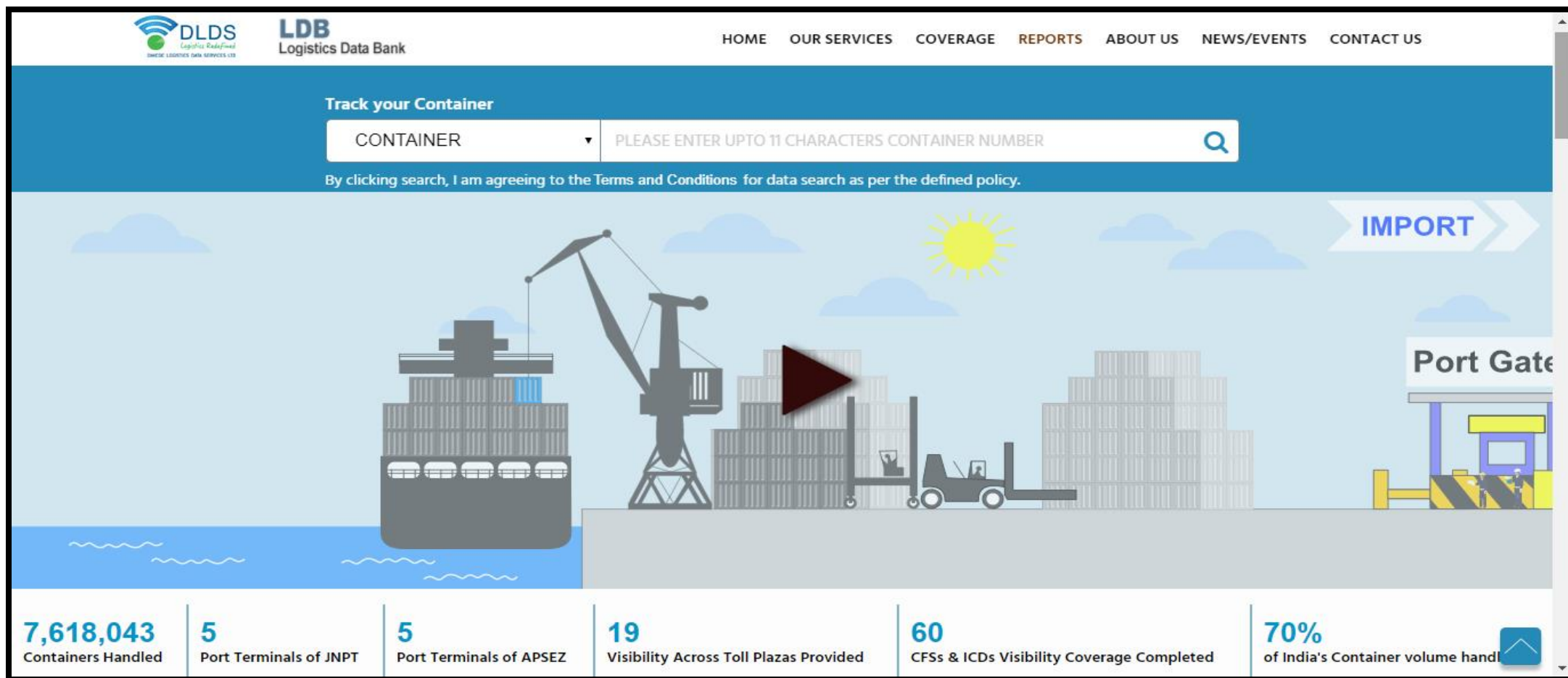
The following table displays the container volume distribution trend on the basis of mode of transit for Import cycle (JNPT and APSEZ region)

Month	JNPT (Volume in %)		APSEZ MUNDRA (Volume in %)	
	Truck	Train	Truck	Train
Sept'17	83	17	78	22
Oct'17	81	19	77	23
Nov'17	82	18	82	18
Dec'17	81	19	77	23
Jan'18	86	14	80	20
Feb'18	87	13	80	20
Mar'18	84	16	82	18
Overall	83%	17%	79%	21%

The following table displays the container volume distribution trend on the basis of mode of transit for Export cycle (JNPT and APSEZ region)

Month	JNPT (Volume in %)		APSEZ MUNDRA (Volume in %)	
	Truck	Train	Truck	Train
Sept'17	85	15	50	50
Oct'17	85	15	48	52
Nov'17	87	13	66	34
Dec'17	85	15	66	34
Jan'18	87	13	68	32
Feb'18	88	12	67	33
Mar'18	88	12	70	30
Overall	86%	14%	62%	38%





The screenshot displays the LDB (Logistics Data Bank) portal interface. At the top left, the DLDS logo and 'LDB Logistics Data Bank' are visible. The navigation menu includes HOME, OUR SERVICES, COVERAGE, REPORTS, ABOUT US, NEWS/EVENTS, and CONTACT US. A prominent 'Track your Container' section features a search bar with a dropdown menu set to 'CONTAINER' and a placeholder text 'PLEASE ENTER UPTO 11 CHARACTERS CONTAINER NUMBER'. Below the search bar, a disclaimer states: 'By clicking search, I am agreeing to the Terms and Conditions for data search as per the defined policy.' The main visual is an illustration of a port terminal with a ship, a crane, a forklift, and stacks of containers, with a large red play button in the center. A banner on the right says 'IMPORT' and 'Port Gate'. At the bottom, a statistics dashboard shows: 7,618,043 Containers Handled, 5 Port Terminals of JNPT, 5 Port Terminals of APSEZ, 19 Visibility Across Toll Plazas Provided, 60 CFSs & ICDs Visibility Coverage Completed, and 70% of India's Container volume handled.

Metric	Value
Containers Handled	7,618,043
Port Terminals of JNPT	5
Port Terminals of APSEZ	5
Visibility Across Toll Plazas Provided	19
CFSs & ICDs Visibility Coverage Completed	60
of India's Container volume handled	70%

- Monthly Analytics reports have been incorporated in the LDB portal.
- Vessel Tracking feature has been implemented for JNPT container terminal.
- More than 7.5 million containers have been handled till date.



DLDS partnered with FIEO to organize an Interactive Session on "Container Visibility Services & Roadmap Ahead"

- To educate and spread awareness about LDB services to exporters and importers



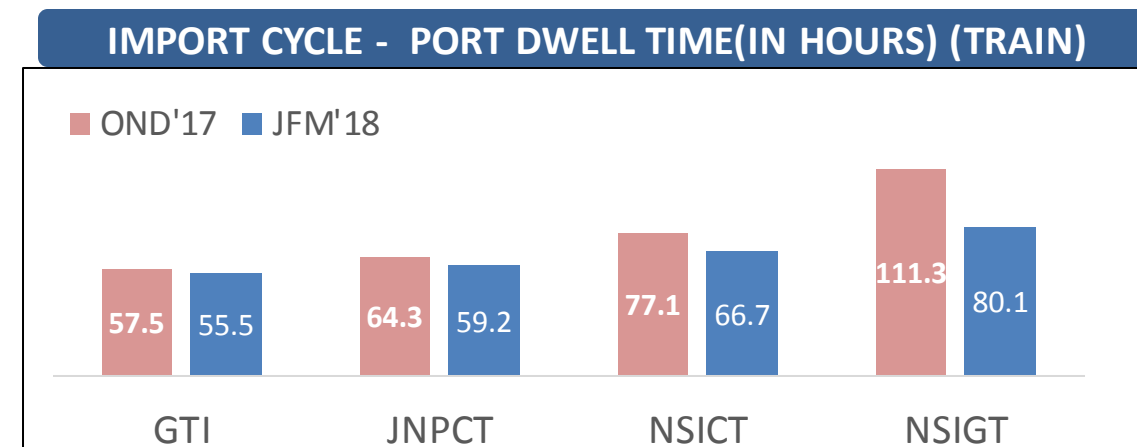
JNPT REGION : TRADE PERFORMANCE



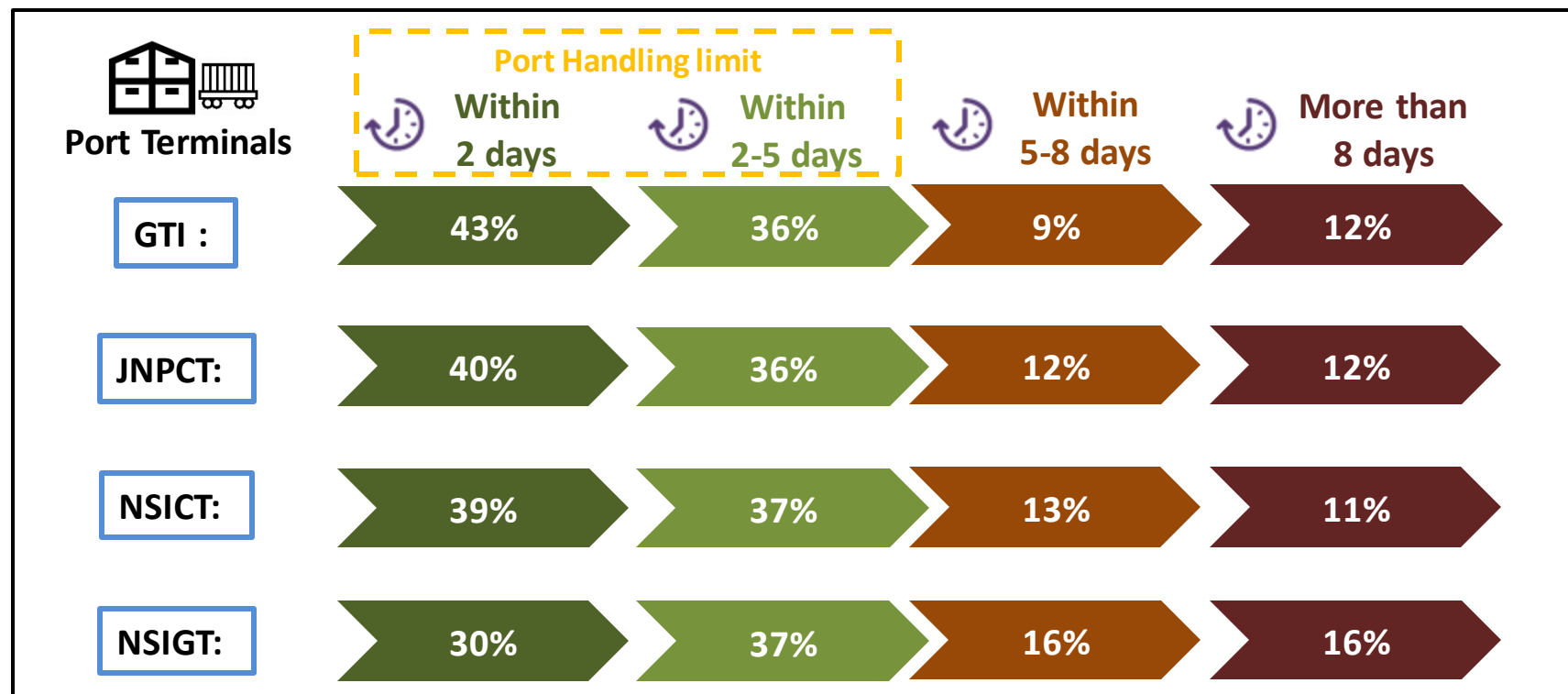
PORT IMPORT via TRAIN

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	OND'17 (in Hrs)	JFM'18 (in Hrs)
GTI	57.5	55.5
JNPCT	64.3	59.2
NSICT	77.1	66.7
NSIGT	111.3	80.1



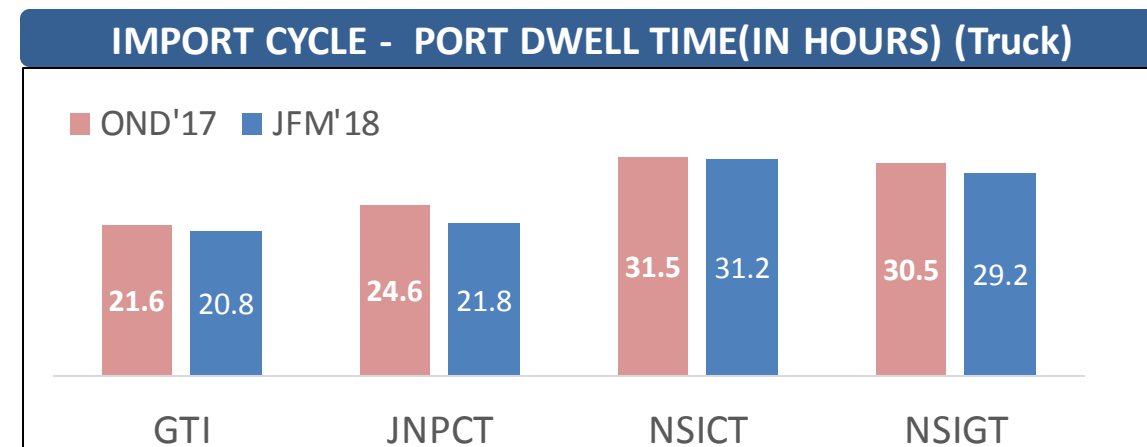
Container Volume Handled : Day wise (via train)



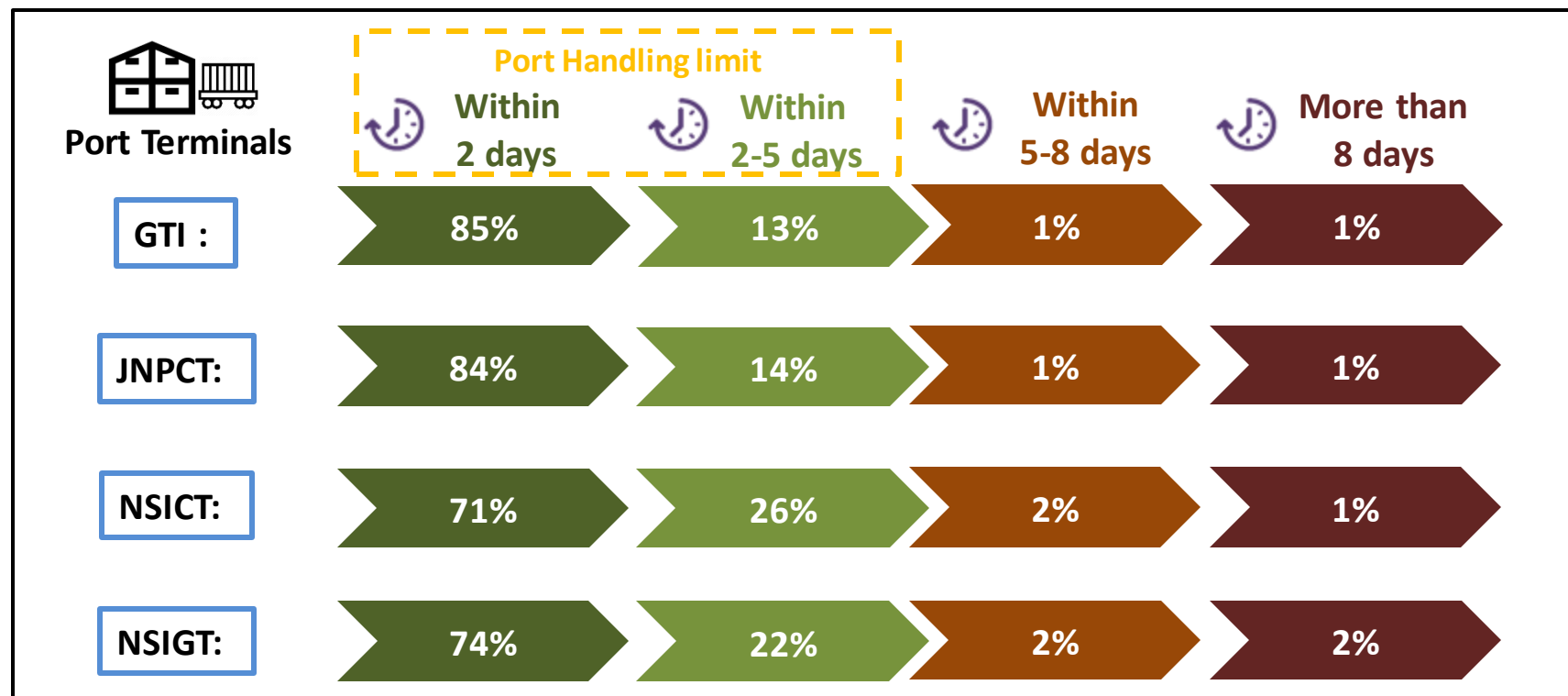
PORT IMPORT via TRUCK

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	OND'17 (in Hrs)	JFM'18 (in Hrs)
GTI	21.6	20.8
JNPCT	24.6	21.8
NSICT	31.5	31.2
NSIGT	30.5	29.2



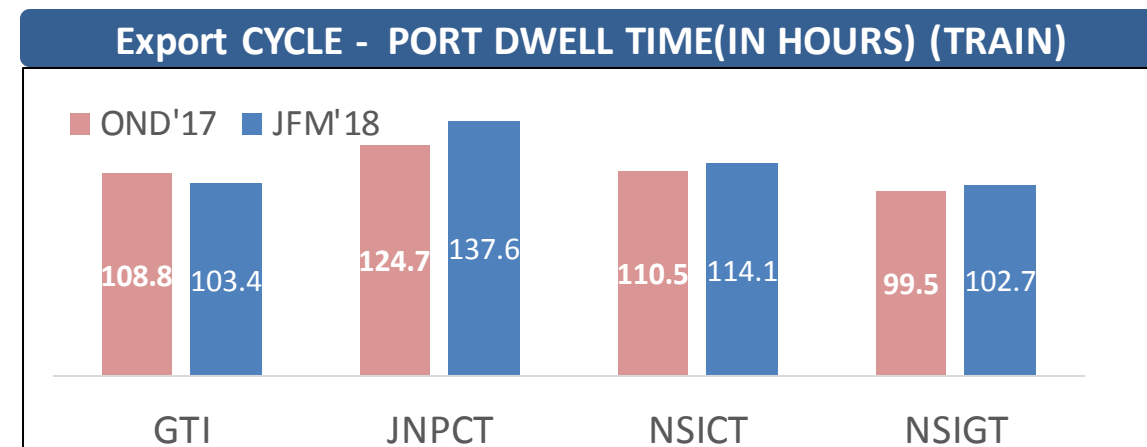
Container Volume Handled : Day wise (via truck)



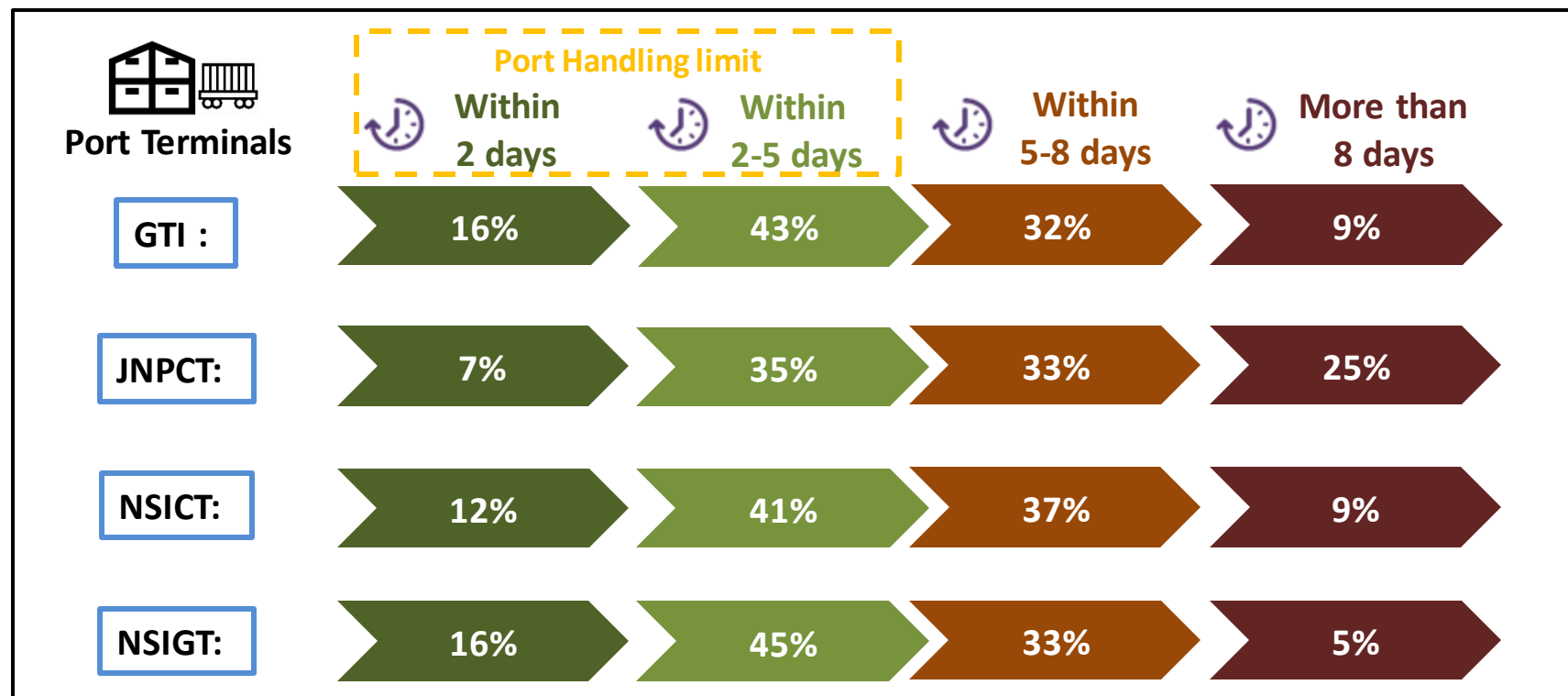
PORT EXPORT via TRAIN

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	OND'17 (in Hrs)	JFM'18 (in Hrs)
GTI	108.8	103.4
JNPCT	124.7	137.6
NSICT	110.5	114.1
NSIGT	99.5	102.7



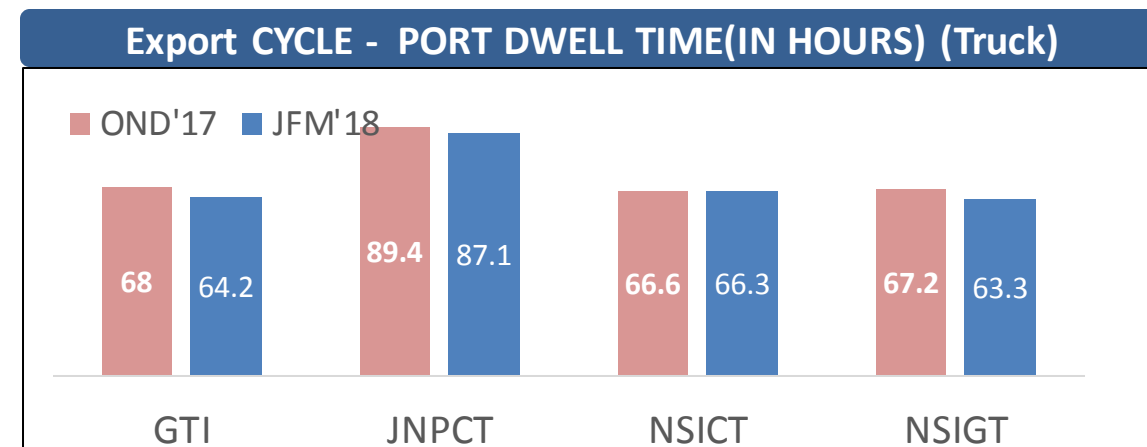
Container Volume Handled : Day wise (via train)



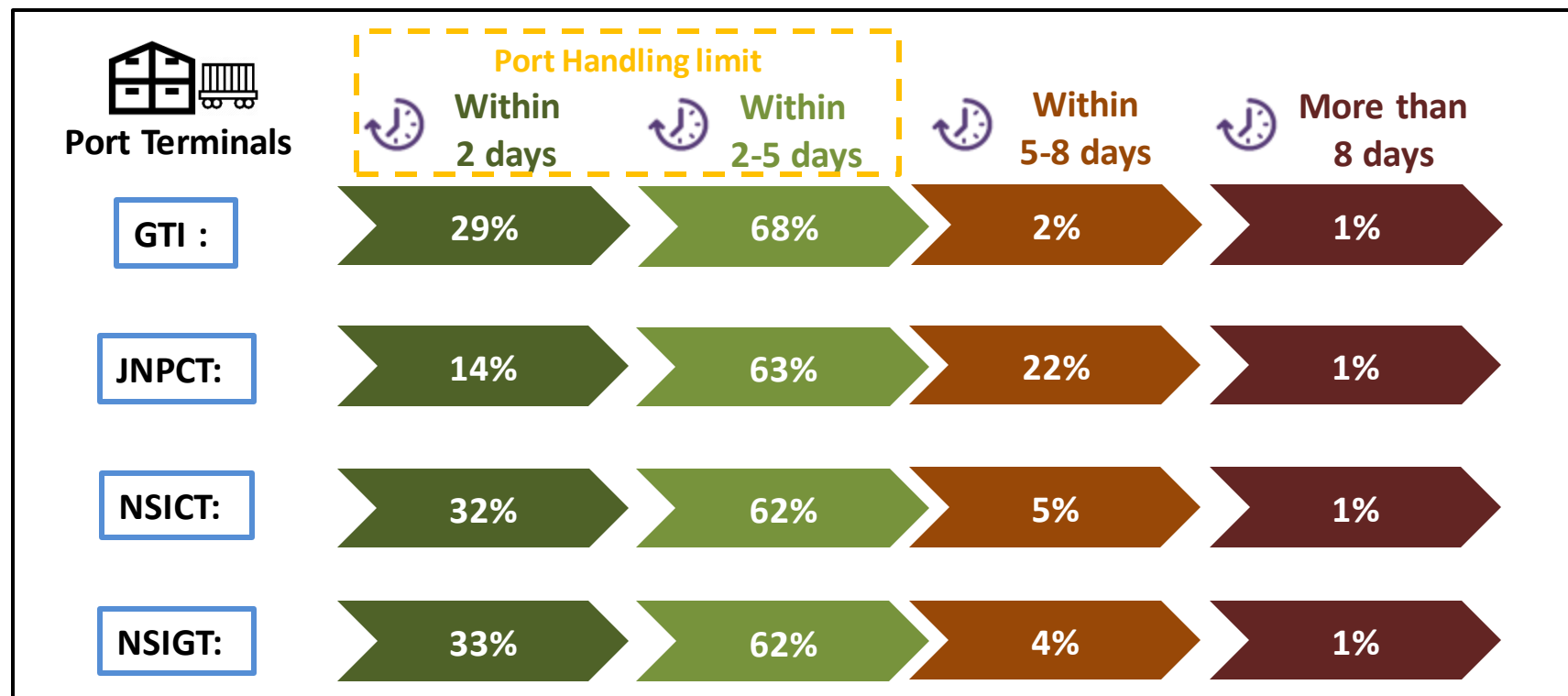
PORT EXPORT via TRUCK

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	OND'17 (in Hrs)	JFM'18 (in Hrs)
GTI	68	64.2
JNPCT	89.4	87.1
NSICT	66.6	66.3
NSIGT	67.2	63.3

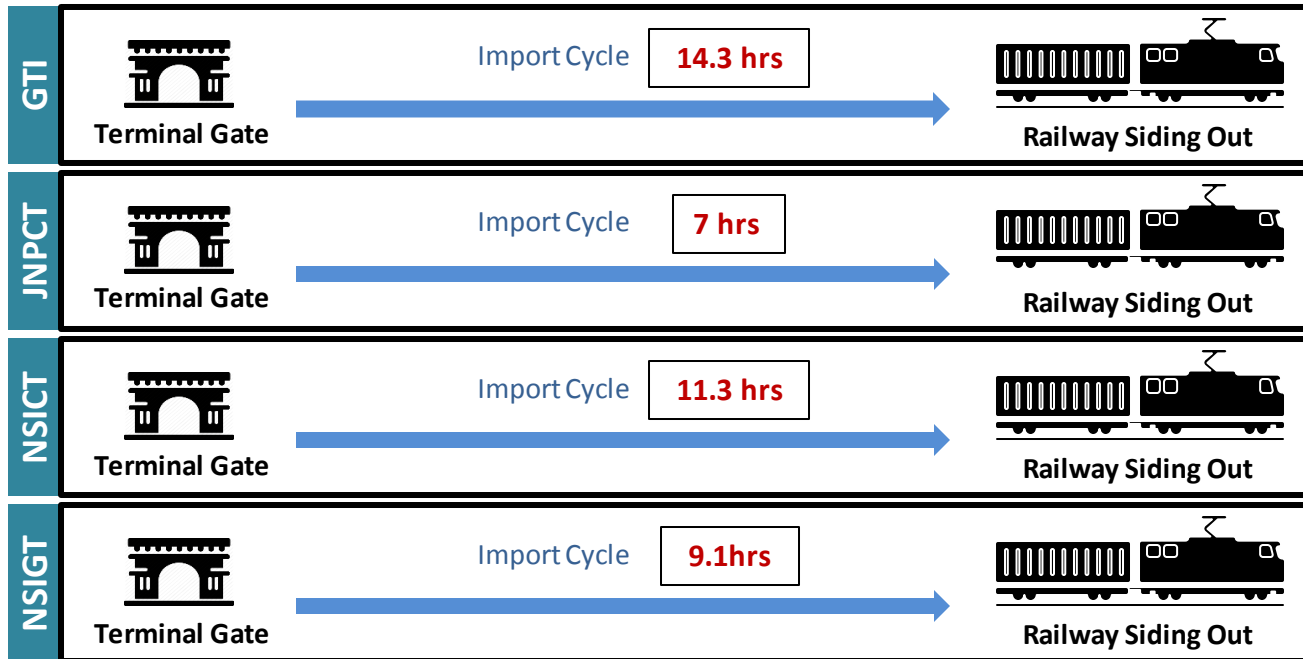


Container Volume Handled : Day wise (via truck)



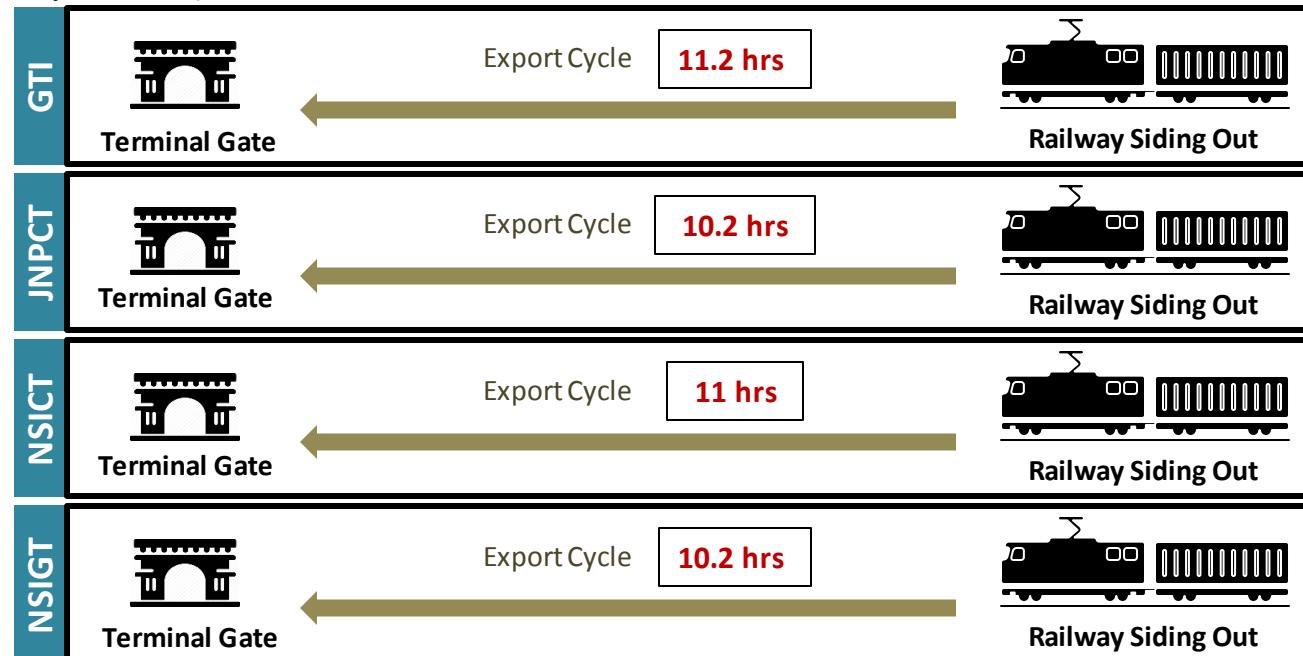
Container Handling time : Import Cycle

Container handling time in import cycle refers to the time taken by container to reach 1st 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 Mar'18



Container Handling time : Export Cycle

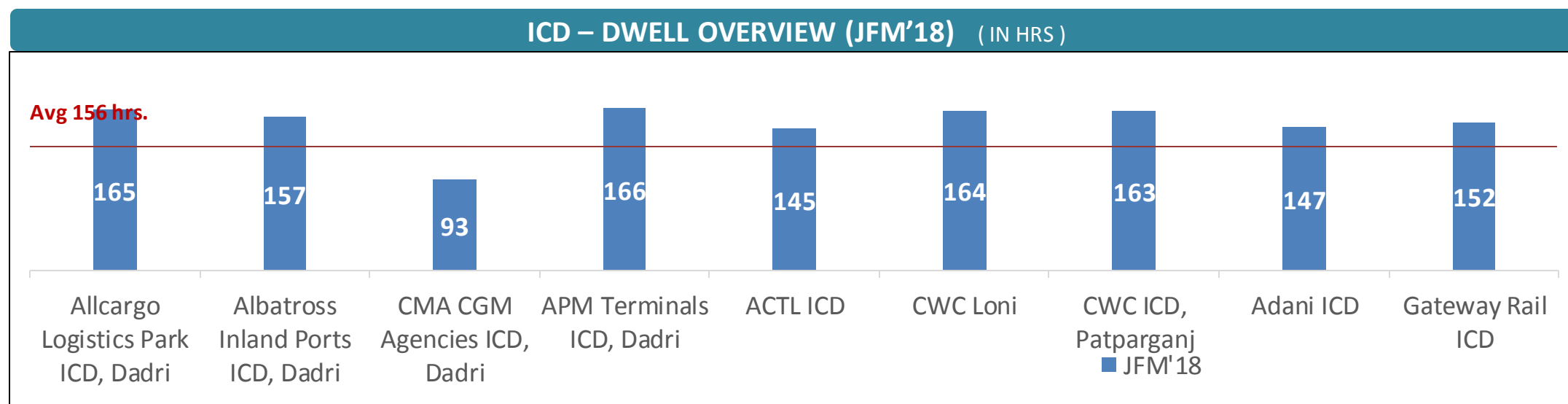
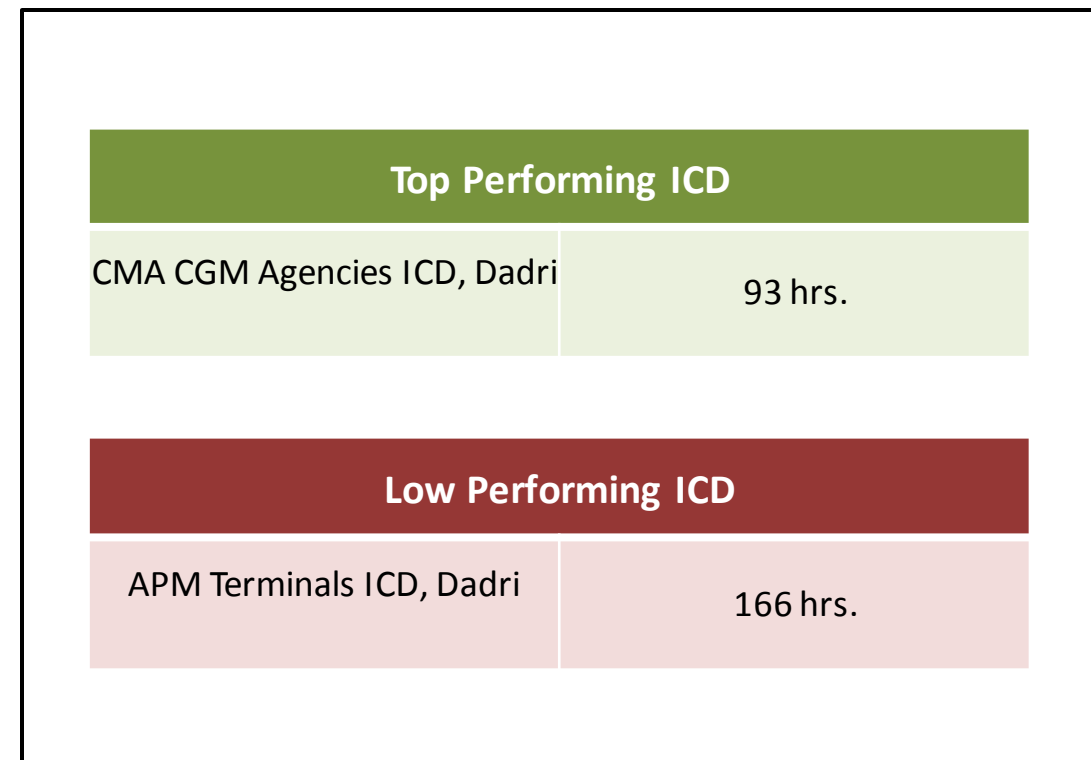
Container handling time in export cycle refers to the time taken by container to reach Port terminal (i.e. Port In) from last railway station (i.e. JNPT railway station). The below data is for month of Mar'18



ICD DWELL TIME ANALYSIS

The table below depicts the dwell of all ICDs for quarter OND'17 and JFM'18.

Dwell Time (in Hrs)		
ICD	OND'17	JFM'18
Allcargo Logistics Park ICD, Dadri	126	165
Albatross Inland Ports ICD, Dadri	117	157
CMA CGM Agencies ICD, Dadri	80	93
APM Terminals ICD, Dadri	127	166
ACTL ICD	129	145
CWC Loni	150	164
CWC ICD, Patparganj	*	163
Adani ICD	-	147
Gateway Rail ICD	-	152



*Note : Insufficient data entries were received in LDB system for CWC Patparganj ICD in OND'17



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	JFM'18
NCR region	3.79 days
Aurangabad	2.43 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	JFM'18
NCR region	3.19 days
Aurangabad	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	JFM'18
NCR region	13.4 days
Aurangabad	12.9 days

Calculation :

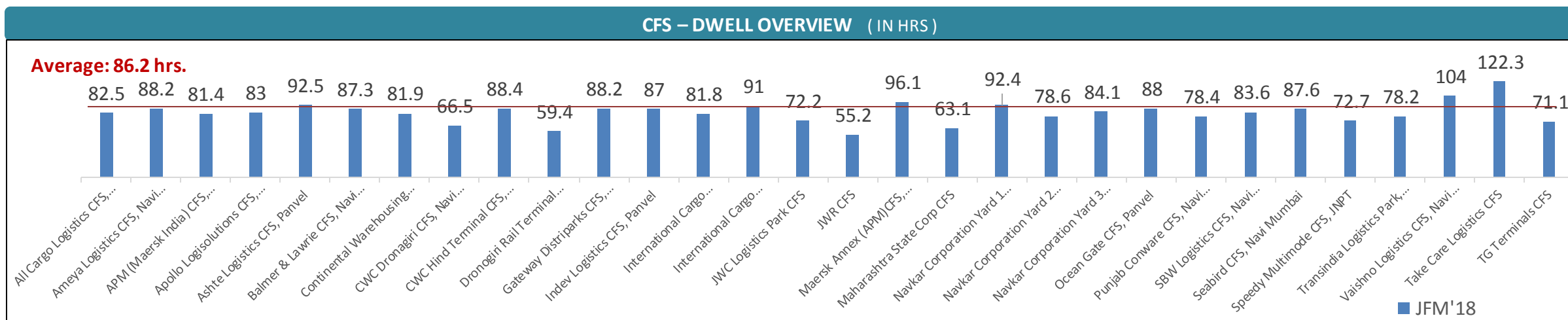
Port Dwell Time + Port to ICD Delivery Time + ICD Dwell Time = Avg. Lead Time from Port to ICD



CFS DWELL TIME ANALYSIS

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

CFS Dwell Time (in hrs)					
CFS	OND'17	JFM'18	CFS	OND'17	JFM'18
All Cargo Logistics CFS, Navi Mumbai	71.3	82.5	JWC Logistics Park CFS	86.0	72.2
Ameya Logistics CFS, Navi Mumbai	84.0	88.2	JWR CFS	--	55.2
APM (Maersk India) CFS, Navi Mumbai	87.7	81.4	Maersk Annex (APM)CFS, Navi Mumbai	95.4	96.1
Apollo Logisolutions CFS, Panvel	79.6	83.0	Maharashtra State Corp CFS	72.3	63.1
Ashte Logistics CFS, Panvel	92.4	92.5	Navkar Corporation Yard 1 CFS, Panvel	90.0	92.4
Balmer & Lawrie CFS, Navi Mumbai	80.0	87.3	Navkar Corporation Yard 2 CFS, Panvel	90.6	78.6
Continental Warehousing CFS, Navi Mumbai	78.7	81.9	Navkar Corporation Yard 3 CFS, Panvel	85.1	84.1
CWC Dronagiri CFS, Navi Mumbai	73.7	66.5	Ocean Gate CFS, Panvel	87.0	88.0
CWC Hind Terminal CFS, Navi Mumbai	85.9	88.4	Punjab Conware CFS, Navi Mumbai	74.2	78.4
Dronogiri Rail Terminal CFS, Navi Mumbai	78.5	77.3	SBW Logistics CFS, Navi Mumbai	82.6	83.6
Gateway Distriparks CFS, Navi Mumbai	77.6	88.2	Seabird CFS, Navi Mumbai	86.3	87.6
Indev Logistics CFS, Panvel	81.2	87.0	Speedy Multimode CFS, JNPT	72.0	72.7
International Cargo Terminal CFS	87.2	81.8	Transindia Logistics Park, Navi Mumbai	76.6	78.2
International Cargo Terminals (ULA) CFS, Navi Mumbai	87.2	91	Vaishno Logistics CFS, Navi Mumbai	90.6	104.0
			Take Care Logistics CFS	108.6	122.3
			TG Terminals CFS	--	71.1



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	Mar'18
Speedy Multimode Ltd CFS	2.3
Balmer & Lawrie & Co. Ltd.,CFS	2.8
Gateway Distriparks Ltd	3.5
APM (Maersk India Pvt. Ltd)CFS	1.8
Continental Warehousing (Nhava Sheva) Ltd.	1.9
Seabird Marine Services Pvt Ltd.	3.4
JWC Logistics Park Ltd CFS	3.2
Ameya Logistics Pvt. Ltd.	2.7
Ashte Logistics Pvt. Ltd.	4.0
NAVAKAR CORPORATION LTD.,YARD-1 CFS	2.9
Apollo Logisolutions Ltd.	4.8
Ocean Gate Container Terminals Pvt. Ltd.CFS	3.0
Indev Logistics Pvt. Ltd.CFS	4.0
Transindia Logistics Park Pvt, Ltd CFS	2.9
All Cargo Logistics Ltd., CFS	2.3
Vaishno Logistics Yard CFS	5.4
NAVAKAR CORPORATION LTD.,YARD-II CFS	7.4
PUNJAB CONWARE (PW)	2.2
DRONAGIRI RAIL TERMINAL	2.1
MAHARASHTRA STATE WARE. CORP. CFS	
CWC LOGISTIC PARK - Opr.Hind Trmnl.	2.3
NAVAKAR CORPORATION LTD.YARD-III CFS	3.7
International Cargo Terminal CFS	3.7
Maersk Annex (APM)CFS	3.0
International Cargo Terminal CFS	2.4
SBW Logistics CFS , Navi Mumbai	4.6
JWR CFS	3.3

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	Mar'18
Speedy Multimode Ltd CFS)	1.6
Balmer & Lawrie & Co. Ltd.,CFS	2.2
Gateway Distriparks Ltd	2.7
APM (Maersk India Pvt. Ltd)CFS	4.0
Continental Warehousing (Nhava Sheva) Ltd.	2.0
Seabird Marine Services Pvt Ltd.	3.2
JWC Logistics Park Ltd CFS	2.7
Ameya Logistics Pvt. Ltd.	2.3
Ashte Logistics Pvt. Ltd.	2.8
NAVAKAR CORPORATION LTD.,YARD-1 CFS	2.6
Apollo Logisolutions Ltd.	5.8
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.8
Indev Logistics Pvt. Ltd.CFS	3.5
Transindia Logistics Park Pvt, Ltd CFS	2.5
All Cargo Logistics Ltd., CFS	1.7
Vaishno Logistics Yard CFS	3.4
NAVAKAR CORPORATION LTD.,YARD-II CFS	3.2
PUNJAB CONWARE (PW)	2.0
DRONAGIRI RAIL TERMINAL	1.4
MAHARASHTRA STATE WARE. CORP. CFS	1.2
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.9
NAVAKAR CORPORATION LTD.YARD-III CFS	2.9
International Cargo Terminal CFS	2.6
Maersk Annex (APM)CFS	3.5
International Cargo Terminal CFS	2.4
SBW Logistics CFS , Navi Mumbai	5.3
JWR CFS	2.2



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	Mar'18
Speedy Multimode Ltd CFS	1.4
Balmer & Lawrie & Co. Ltd.,CFS	2.3
Gateway Distriparks Ltd	3.3
Continental Warehousing (Nhava Sheva) Ltd.	2.1
Seabird Marine Services Pvt Ltd.	2.9
JWC Logistics Park Ltd CFS	2.9
Ameya Logistics Pvt. Ltd.	3.3
Ashte Logistics Pvt. Ltd.	4.1
NAVAKAR CORPORATION LTD.,YARD-1 CFS	3.7
Apollo Logisolutions Ltd.	3.3
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.3
Indev Logistics Pvt. Ltd.CFS	2.9
Transindia Logistics Park Pvt, Ltd CFS	2.5
All Cargo Logistics Ltd., CFS	2.8
Vaishno Logistics Yard CFS	2.7
NAVKAAR CORPORATION LTD.,YARD-II CFS	18.4
PUNJAB CONWARE (PW)	2.3
DRONAGIRI RAIL TERMINAL	2.9
CWC LOGISTIC PARK - Opr.Hind Trmnl.	2.0
NAVKAAR CORPORATION LTD.YARD-III CFS	3.9
International Cargo Terminals CFS	2.6
Maersk Annex (APM)CFS	2.4
International Cargo Terminal CFS	2.6
SBW Logistics CFS , Navi Mumbai	3.6

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	Mar'18
Speedy Multimode Ltd CFS	1.7
Balmer & Lawrie & Co. Ltd.,CFS	2.0
Gateway Distriparks Ltd	3.1
APM (Maersk India Pvt. Ltd)CFS	2.1
Continental Warehousing (Nhava Sheva) Ltd.	1.8
Seabird Marine Services Pvt Ltd.	3.3
JWC Logistics Park Ltd CFS	2.7
Ameya Logistics Pvt. Ltd.	2.9
Ashte Logistics Pvt. Ltd.	4.2
NAVAKAR CORPORATION LTD.,YARD-1 CFS	3.5
Apollo Logisolutions Ltd.	4.6
Ocean Gate Container Terminals Pvt. Ltd.CFS	4.3
Indev Logistics Pvt. Ltd.CFS	4.7
Transindia Logistics Park Pvt, Ltd CFS	2.6
All Cargo Logistics Ltd., CFS	2.4
Vaishno Logistics Yard CFS	2.0
NAVKAAR CORPORATION LTD.,YARD-II CFS	8.7
PUNJAB CONWARE (PW)	2.2
DRONAGIRI RAIL TERMINAL	1.9
CWC LOGISTIC PARK - Opr.Hind Trmnl.	2.1
NAVKAAR CORPORATION LTD.YARD-III CFS	3.9
International Cargo Terminals & Infrastructure Private Limited-CFS	3.0
Maersk Annex (APM)CFS	2.8
International Cargo Terminal CFS	2.3
SBW Logistics CFS , Navi Mumbai	4.5



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

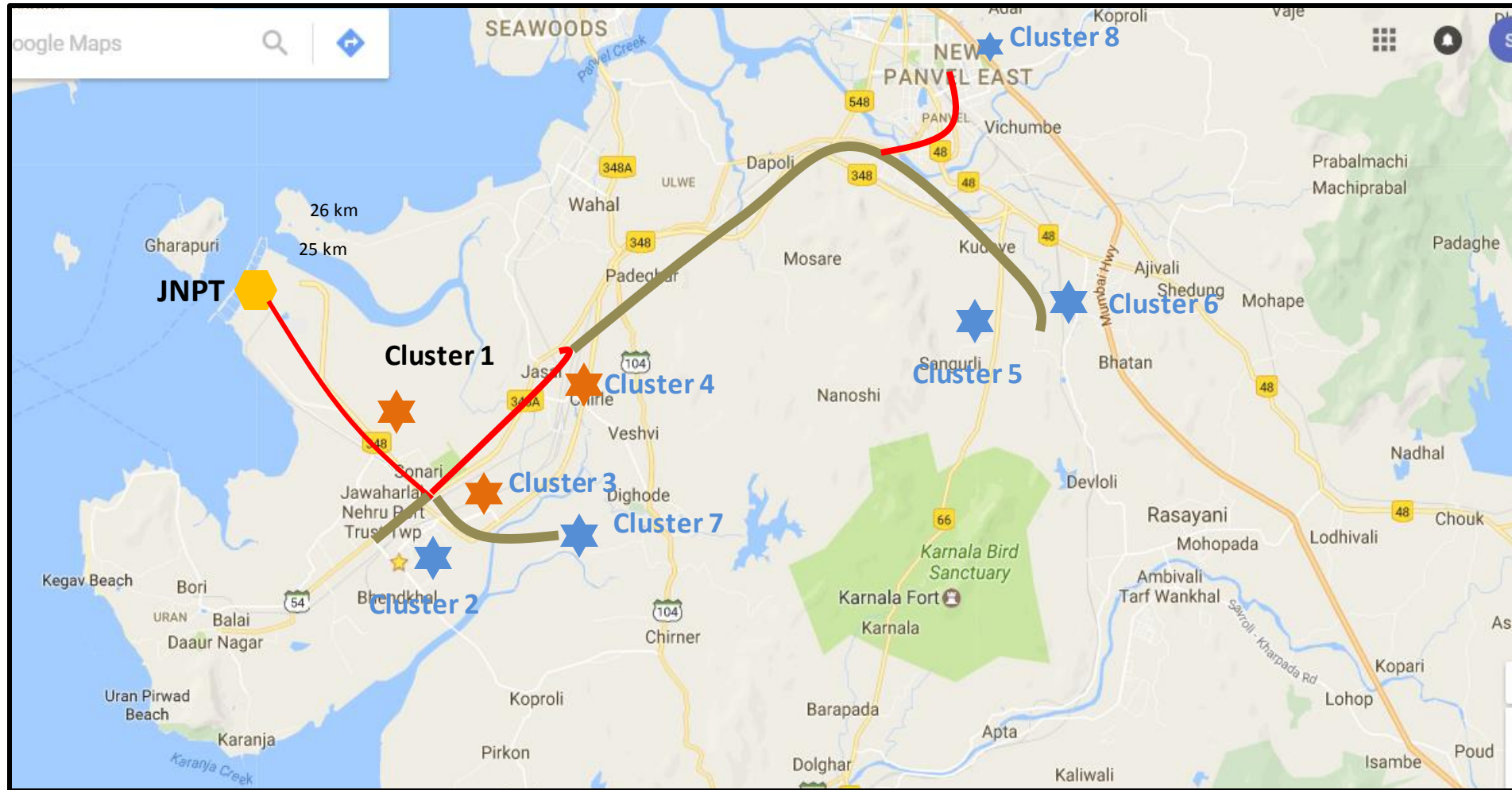
For Mar'18

CFS Out Port in (Export Cycle in Hrs)

CFS	JNPCT	GTI	NSICT	NSIGT
CWC LOGISTIC PARK - Opr.Hind Trmnl.	3.0	4.2	7.3	10.1
CWC Dronagiri CFS	3.7	4.2	14.4	6.9
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	2.6	2.8	4.4	3.2
Indev Logistics Pvt. Ltd.CFS	4.9	5.0	2.8	10.2
PUNJAB CONWARE (PW)	2.5	2.9	7.3	8.9
Transindia Logistics Park Pvt, Ltd CFS	5.0	2.4	13.2	14.1
Apollo Logisolutions Ltd.	6.0	5.4	11.5	15.6
JWR CFS	4.5	4.1	6.2	7.8
NAV KAR CORPORATION LTD.YARD-III CFS	4.7	5.7	13.5	12.2
Ameya Logistics Pvt. Ltd.	5.2	3.8	8.0	14.6
Ashte Logistics Pvt. Ltd.	4.0	4.5	9.9	8.5
DRONAGIRI RAIL TERMINAL	3.1	3.7	5.2	10.7
TG Terminals CFS	3.0	2.5	8.1	6.1
Vaishno Logistics Yard CFS	3.5	3.6	-	7.7
NAV KAR CORPORATION LTD.,YARD-II CFS	7.3	6.7	11.7	12.4
Gateway Distriparks Ltd	3.1	2.9	10.7	12.0
All Cargo Logistics Ltd., CFS	6.0	28.2	8.6	6.5
International Cargo Terminal CFS	4.6	3.4	9.6	-
Balmer & Lawrie & Co. Ltd.,CFS	3.0	3.0	11.0	28.7
Continental Warehousing (Nhava Sheva) Ltd.	2.6	2.7	6.2	3.6
Seabird Marine Services Pvt Ltd.	4.9	3.7	12.8	6.3
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.7	4.5	7.6	7.5
MAHARASHTRA STATE WARE. CORP. CFS	3.4	3.2	7.7	5.7
International Cargo Terminals & Infrastructure Private Limited-CFS	3.2	3.5	3.5	8.0
APM (Maersk India Pvt. Ltd)CFS	2.1	1.9	7.5	17.8



Congestion Analysis around Mumbai Region







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

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

Legends

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

It is seen that Cluster 1 has congestion bottleneck throughout the Mar'18 quarter

GTI Terminal  Congestion Level Export Cycle :- ■ Import Cycle :- ■	JNPCT Terminal  Congestion Level Export Cycle :- ■ Import Cycle :- ■	NSICT Terminal  Congestion Level Export Cycle :- ■ Import Cycle :- ■	NSIGT Terminal  Congestion Level Export Cycle :- ■ Import Cycle :- ■
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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, 31 CFS's have been grouped into 8 Clusters on the basis of their vicinity. Below table shows all the clusters and the relevant data for GTI terminal

CFS Cluster : GTI Terminal

- In export cycle the GTI terminal is having congestion for traffic from cluster 8
- In import cycle the movement of traffic towards cluster 4 is facing congestion

GTI terminal for month of Mar'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	2.8
Cluster 2	6	13	2.8	3.0
Cluster 3	6	11	2.1	3.7
Cluster 4	1	13	5.4	3.6
Cluster 5	2	25	3.1	2.2
Cluster 6	6	25	4.0	-
Cluster 7	4	12	2.5	3.3
Cluster 8	1	34	4.6	11.8
Cluster 9	1	20	3.3	4.1

CFS Cluster : JNPCT Terminal

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

JNPCT terminal for month of Mar'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	2.6
Cluster 2	6	13	2.6	3.0
Cluster 3	6	11	1.4	3.4
Cluster 4	1	13	3.4	3.5
Cluster 5	2	25	2.7	1.4
Cluster 6	6	25	3.0	4.9
Cluster 7	4	12	2.2	5.1
Cluster 8	1	34	5.3	8.7
Cluster 9	1	20	2.2	4.5

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, 31 CFS's have been grouped into 8 Clusters on the basis of their vicinity. Below table shows all the clusters and the relevant data for GTI terminal

CFS Cluster : NSICT Terminal

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

NSICT terminal for month of Mar'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	1.4	4.4
Cluster 2	6	13	0.0	8.6
Cluster 3	6	11	1.1	7.7
Cluster 4	1	13	-	-
Cluster 5	2	25	2.6	3.8
Cluster 6	6	25	3.8	11.5
Cluster 7	4	12	2.6	8.3
Cluster 8	1	34	3.6	0.0
Cluster 9	1	20	26.6	6.2

CFS Cluster : NSIGT Terminal

- In export cycle the NSIGT terminal is having traffic congestion from cluster 7, cluster 2

NSIGT terminal for month of Mar'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	3.2
Cluster 2	6	13	2.3	11.0
Cluster 3	6	11	2.2	6.9
Cluster 4	1	13	2.0	7.7
Cluster 5	2	25	3.5	-
Cluster 6	6	25	4.4	11.2
Cluster 7	4	12	2.5	10.3
Cluster 8	1	34	4.5	16.0
Cluster 9	1	20	18.9	7.8

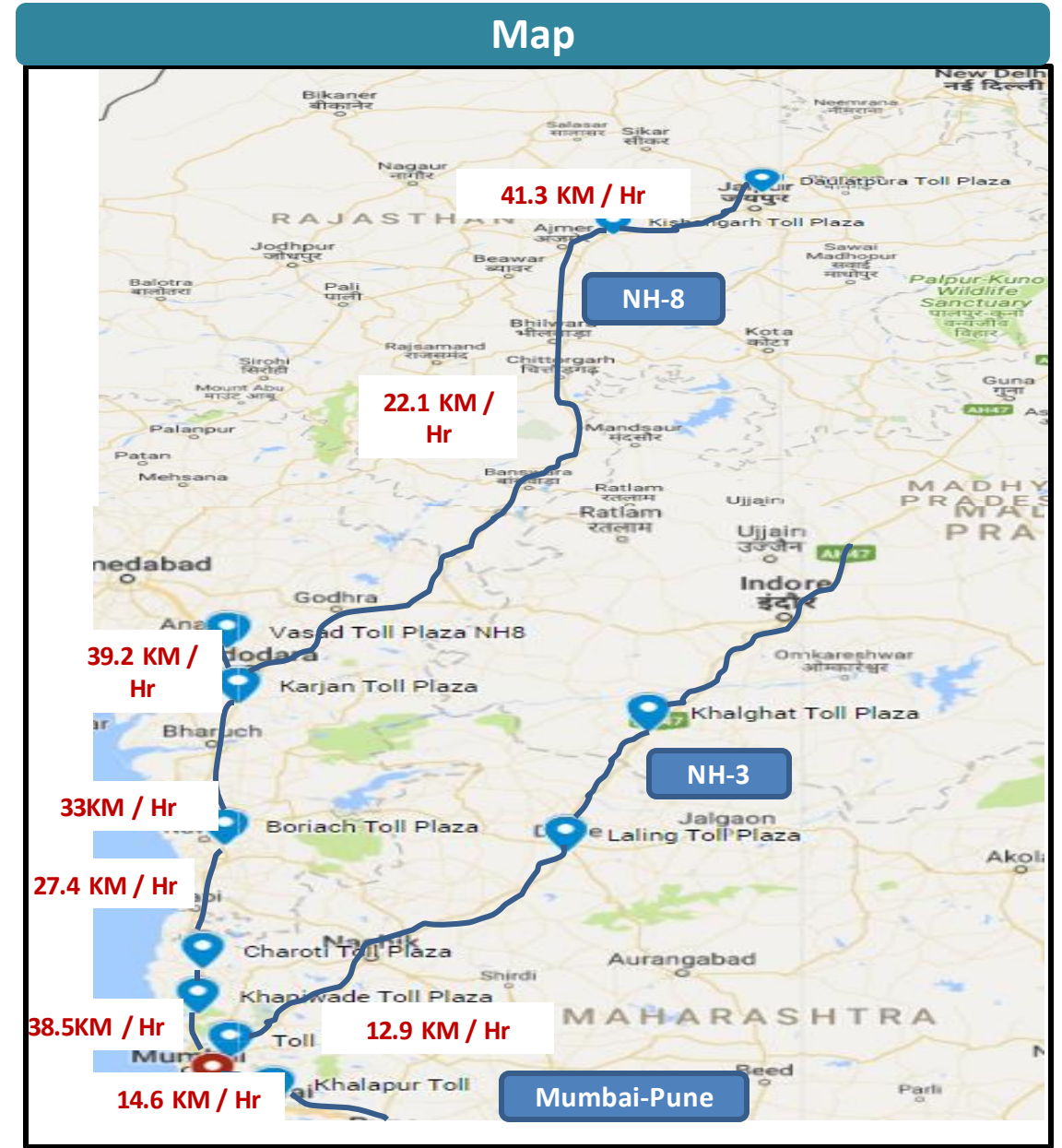
Export container usually aren't allowed in the port before the arrival of their respective vessel so this unplanned transportation of the export containers from the CFS's to Port can cause **bottlenecks**



Congestion Analysis : TOLL PLAZA

The below table shows all the toll plazas covered under DLDS connected with JNPT

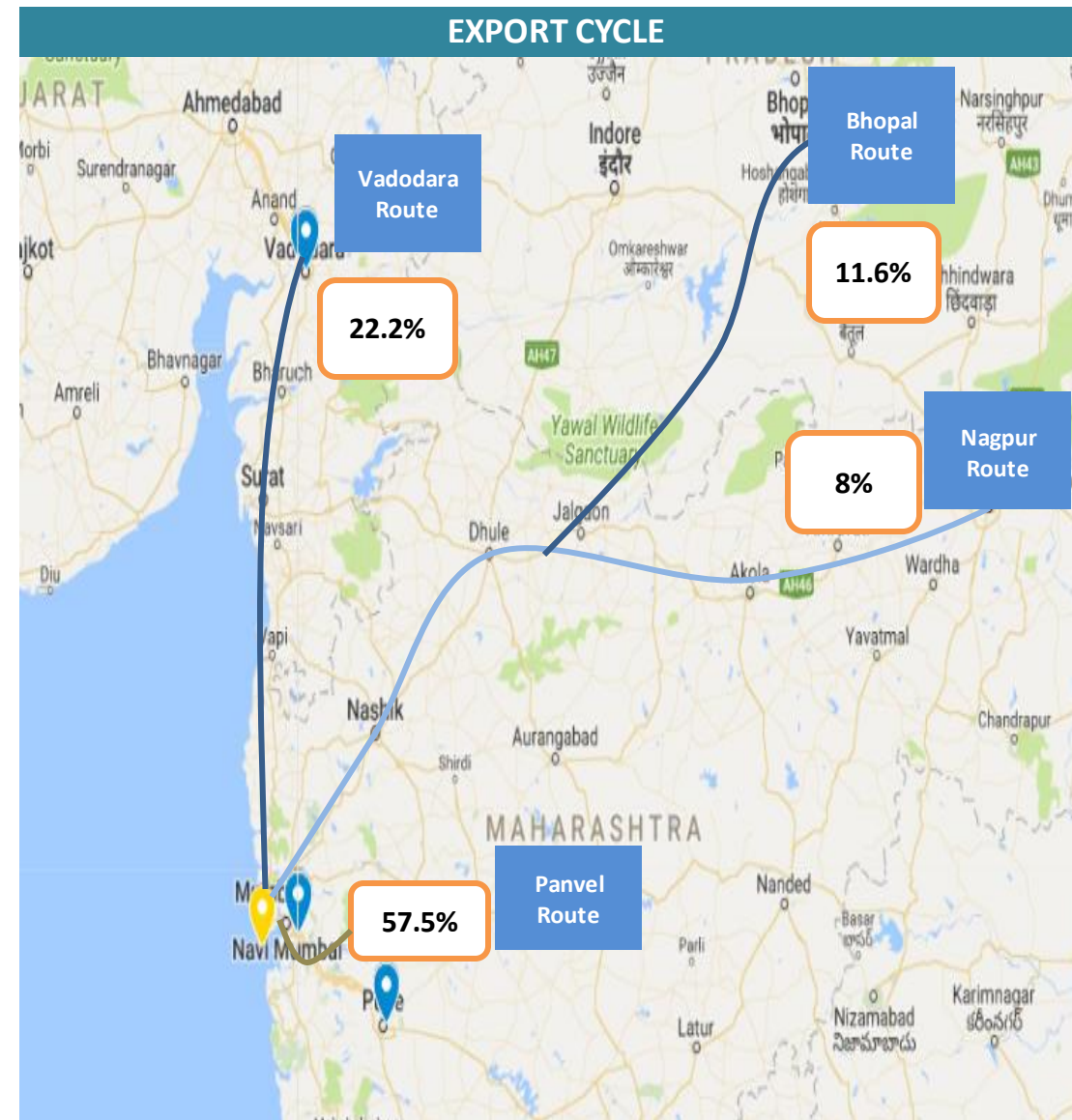
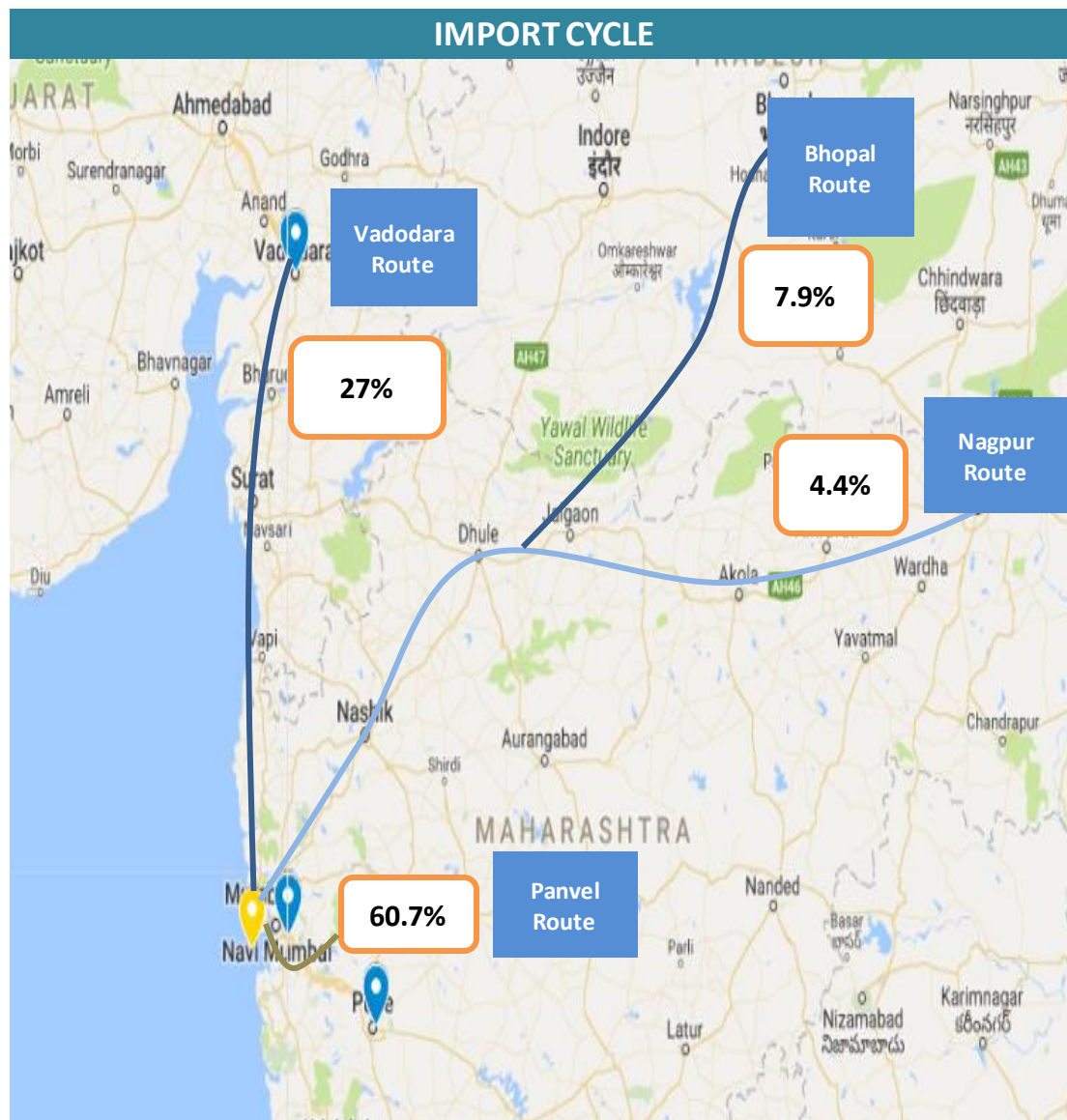
Avg. Travel Time & Speed between Toll Plazas (JFM'18)					
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	JFM'18 Avg. Speed (Km/Hr.)	OND'17 Avg. Speed (Km/Hr)
JNPT	Khaniwade	94	7.3	12.9	13.7
JNPT	Khalapur	60	4.1	14.6	15.6
Khaniwade	Charoti	50	1.30	38.5	35.7
Charoti	Boriach	126	4.60	27.4	28
Boriach	Bharthan	142	4.30	33.0	33
Bharthan	Kishangarh	686	31.00	22.1	21.1
Bharthan	Vasad	60	1.53	39.2	37.5
Kishangarh	Daulatpura	128	3.10	41.3	40



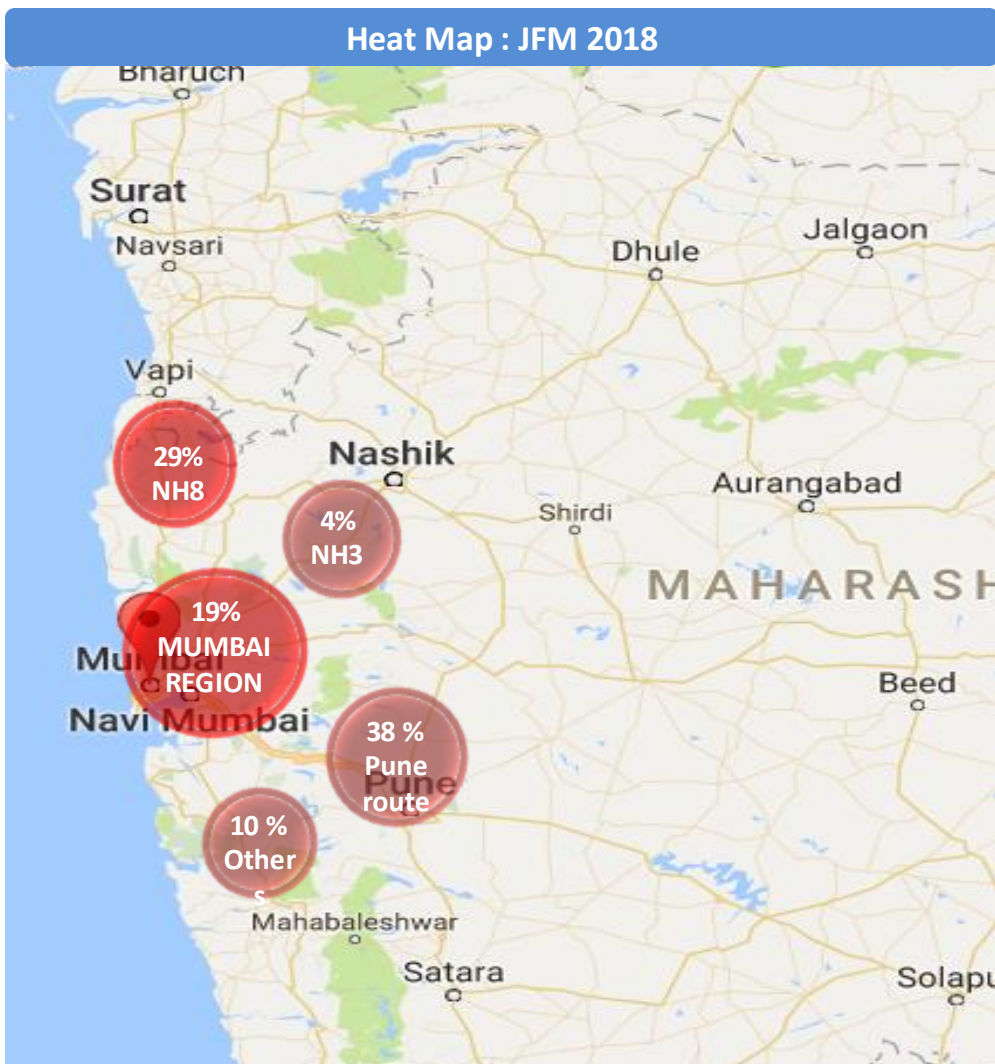
Container movement around JNPT Port terminal region via Train

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 March '18



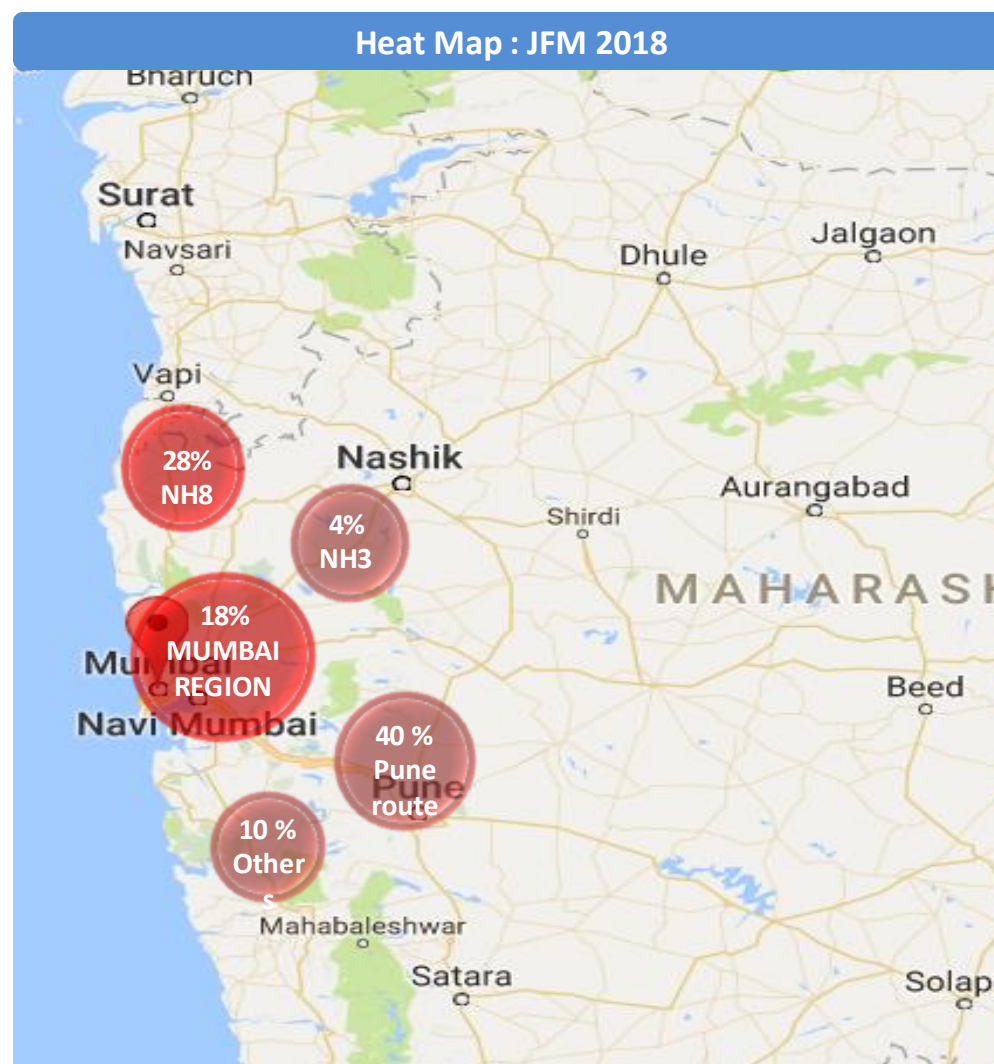
HEAT MAP : Overall Mumbai region



Region	OND'17	JFM'18
Mumbai Region	48%	19%
Pune	22%	38%
NH8	17%	29%
NH3	3%	4%
Others	10%	10%

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

HEAT MAP : GTI Port Terminal



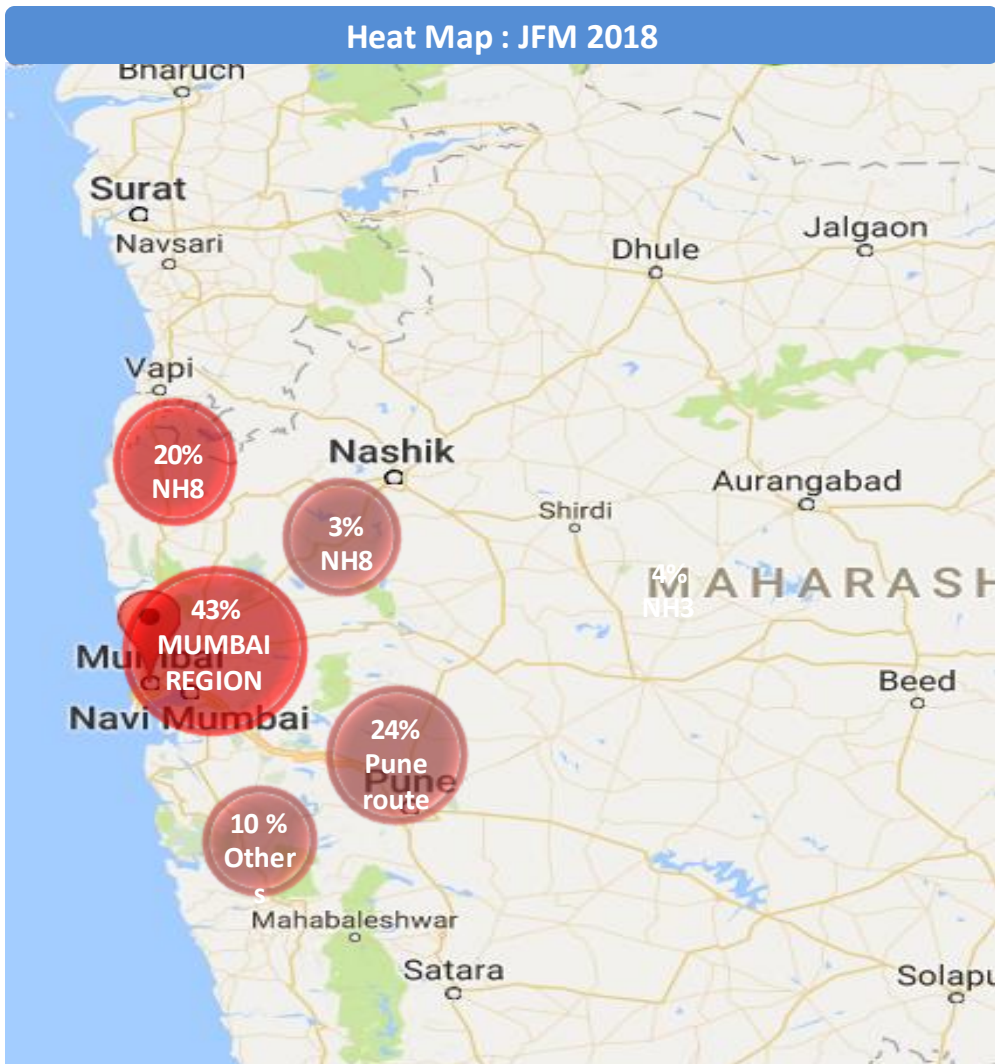
Region	OND'17	JFM'18
Mumbai Region	59%	18%
Pune	19%	40%
NH8	10%	28%
NH3	2%	4%
Others	10%	10%

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



Container movement around JNPT Port terminal region via Truck

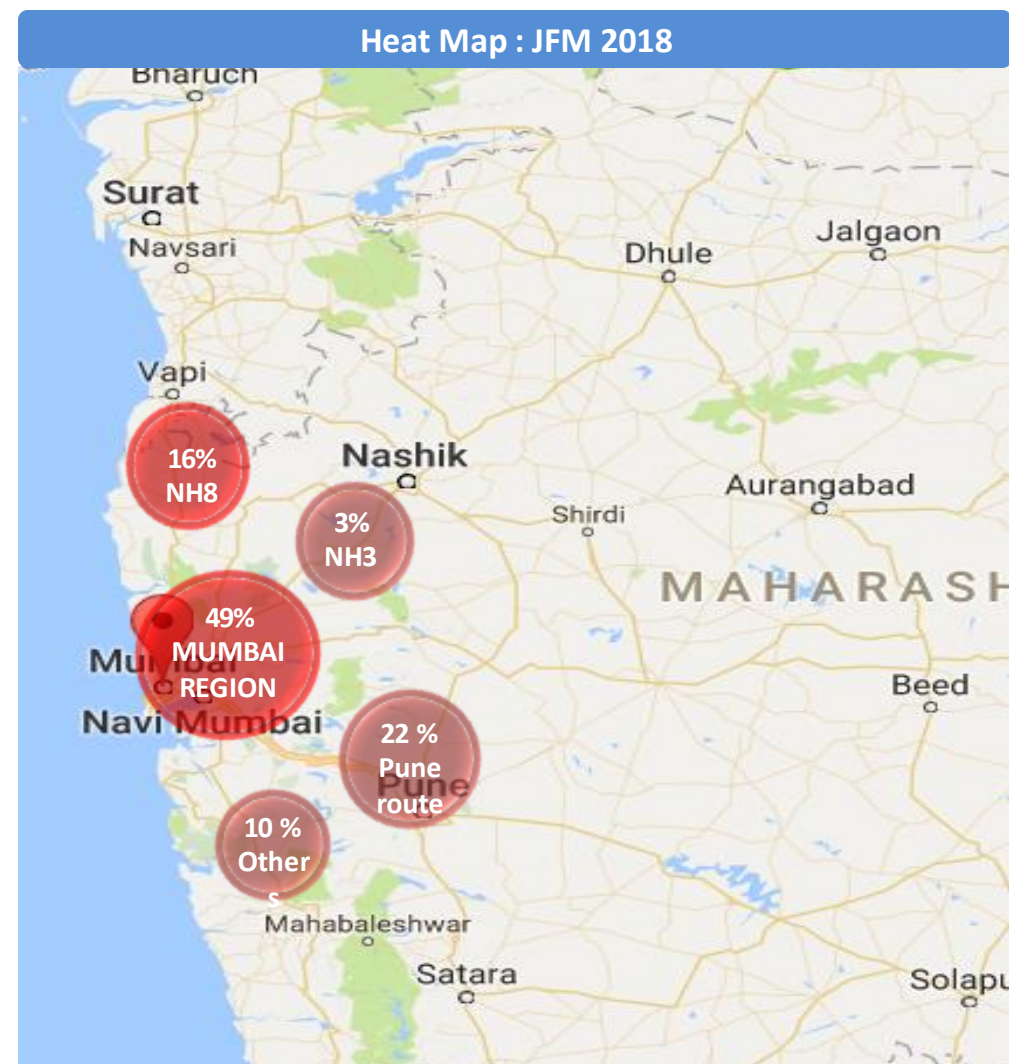
HEAT MAP : JNPCT Port Terminal



Region	OND'17	JFM'18
Mumbai Region	50%	43%
Pune	18%	24%
NH8	19%	20%
NH3	3%	3%
Others	10%	10%

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

HEAT MAP : NSICT Port Terminal

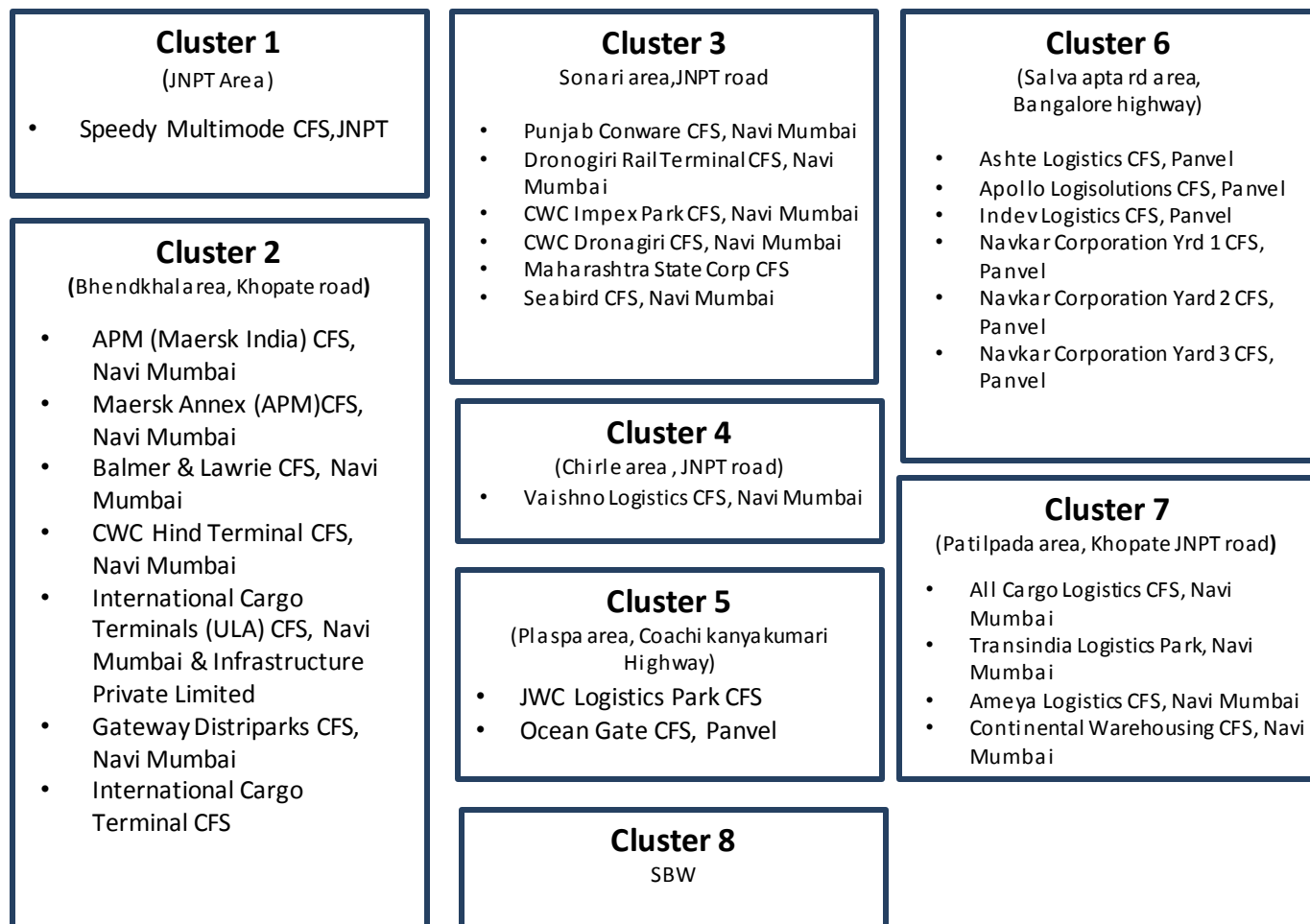


Region	OND'17	JFM'18
Mumbai Region	47%	49%
Pune	20%	22%
NH8	20%	16%
NH3	3%	3%
Others	10%	10%

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



Below mentioned are all the CFS in the respective Clusters :





Thank You !!