



LDB ANALYTICS: JNPT- November Report 2017



Executive Summary



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 approximately 6 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).

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.

DLDS Analytics reports have been able to bring in Visibility to the Stakeholders enabling them in improvising the key performance Indicators as below:

- There has been a significant improvement in the Dwell Time of Truck bound & Train Bound Import
 Containers. Based on the LDB Analytics, the Import Dwell time has improved by 40% in the month of
 November 2017 in comparison to October 2017.
- Post-GST, the removal of check-posts and Octroi stops has led to a significant reduction in the transit time for trucks; As per DLDS Analytics in comparison to June 2017, the lead time between the Toll Plazas has improved by **25-27** % in Nov 2017.
- There has been an improvement of **10% in overall ICD dwell time** in comparison to October 2017.
- 13% improvement in transit time of Container movement between JNPT Port terminals and nearby Container Freight Stations(CFSs)

Executive Summary



- Performance Benchmarking reports are helping inculcate competition among the stakeholders in providing better Logistics Services.
- Based on the DLDS Analytics, best performing stakeholders across the supply chain were recognized for their efficiencies in handling the Containers for the financial year 2016-2017:
 - JNPCT Port terminal was awarded with Best Performing Port Terminal Operator in Mumbai Region
 - MICT Port terminal was awarded with Best Performing Port Terminal Operator in Gujarat Region
 - All Cargo Logistics was awarded with Best Performing Container Freight Station in Mumbai Region
 - **Central Warehousing Corporation** was awarded with Best Performing Container Freight Station in Gujarat Region
 - CMA CGM Agencies ICD was awarded with Best Performing Inland Container Depot.

LDB Performance trend across JNPT





Performance Benchmarking

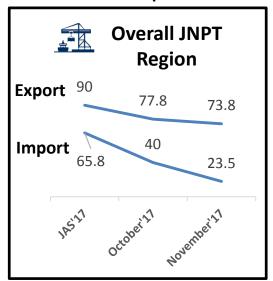


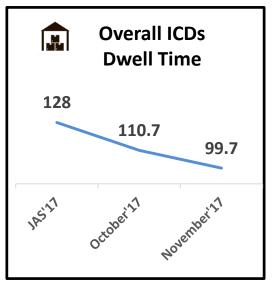
Performance Index

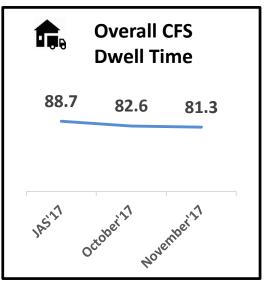


Container Clearance
Time analysis

With help of above activities below results have been achieved:







Dwell Time Reduction

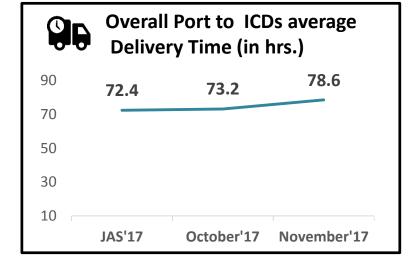
- 40% improvement in JNPT region Import cycle dwell time for November month as compared to the previous month
- 10% improvement in overall ICD dwell time as compared to the previous month

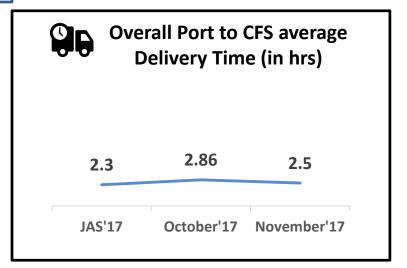


Congestion
Analysis



Bottleneck Identification





Transit Time Reduction
13% improvement in transit time of
container movement from JNPT Port
terminals and nearby Container
Freight Stations(CFSs)



DMICDC Logistics Data Services : LDB Coverage

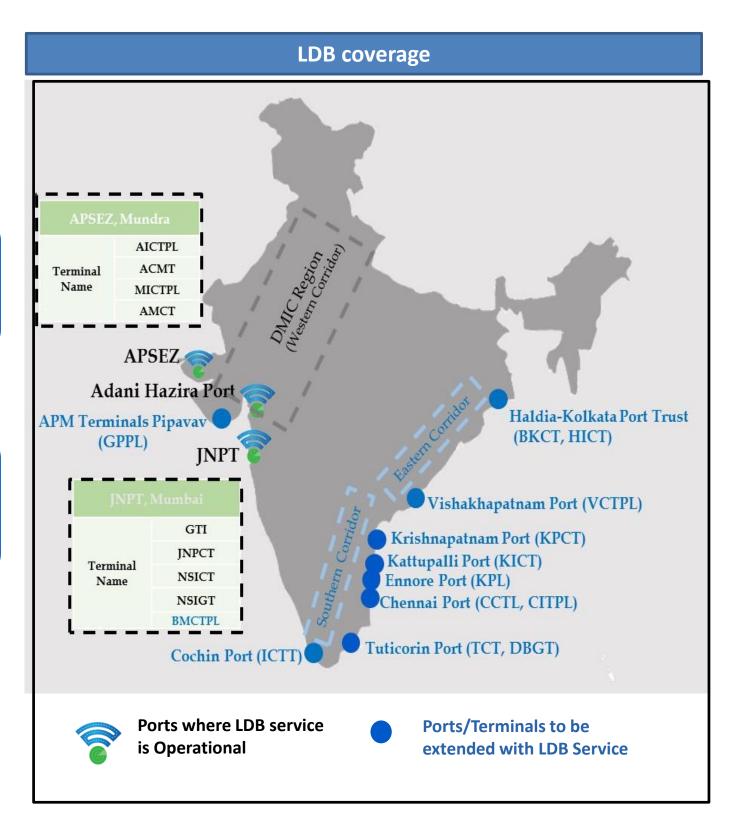


9 Port Terminals

In-land container Depots

44
Container
Freight Stations

13 Toll Plazas







Performance Benchmarking

Performance Benchmarking: Port Terminals





Performance benchmarking for JNPT Region for month November'17

		JNPT				
Top Performing Terminal						
Gateway Ter	minals India (GTI)	Dwell Time: 40.3 hrs.				
61	55.9	40.3				
JNPC	T GTI	GTI				
Septemb	oer October	November				





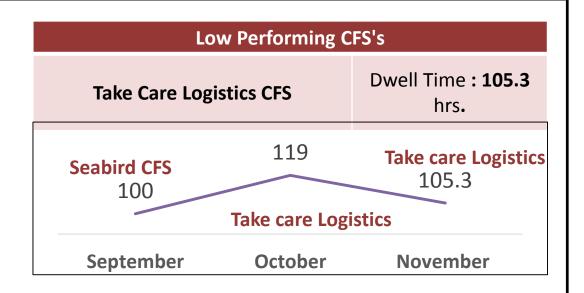
Performance Benchmarking: Container Freight Station





Performance benchmarking for 'JNPT Region CFS' for month November' 17

Top Performing CFS's						
Dronogiri Rail Te Mur	Dwell Time : 63 hrs.					
52	52	63				
All Cargo	CWC Dronagiri	Dronogiri Rail Terminal CFS,				
September	October	November				



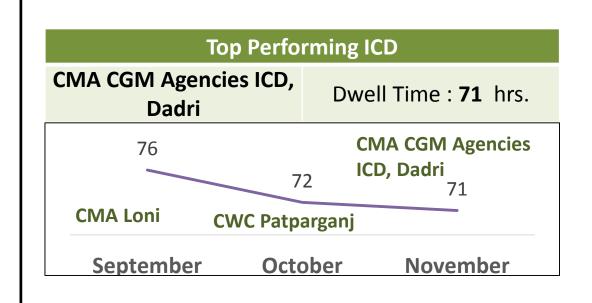


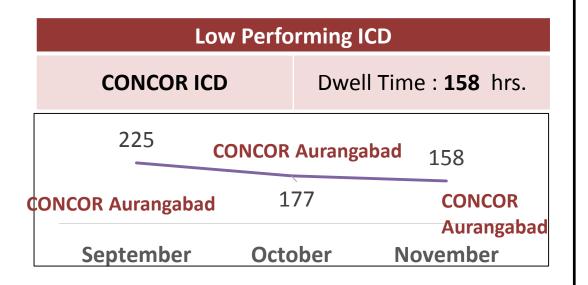
Performance Benchmarking: Inland Container Depot





Performance benchmarking for ICDs for month November'17







Performance Benchmarking: Western Corridor





Performance benchmarking of western corridor for month November'17

Port terminal performance across western corridor

Top Performing Termina			
	al	Low Performir	ng Terminal
Gateway Terminals India (GTI)	ell Time : 40.3 hrs.	i International ainer Terminal (AICT)	Dwell Time : 63 hrs

Container freight station (CFS) performance across western corridor

		CFS		
Top Performing CFS	S's		Low Performing	CFS's
Dronogiri Rail Terminal CFS, Navi Mumbai	Dwell Time : 63 hrs.		Hind Mundra Terminals CFS, Mundra	Dwell Time : 109 hrs.



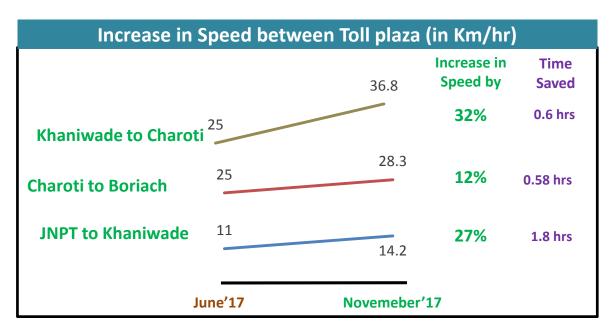


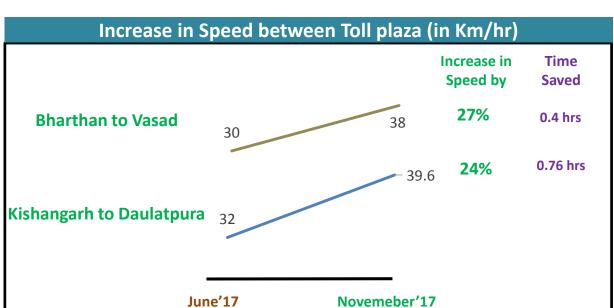
Key Findings

Toll Plaza Analysis: Impact of GST



Improved Transit Time between Toll plaza Routes in comparison to June'17(Pre GST)





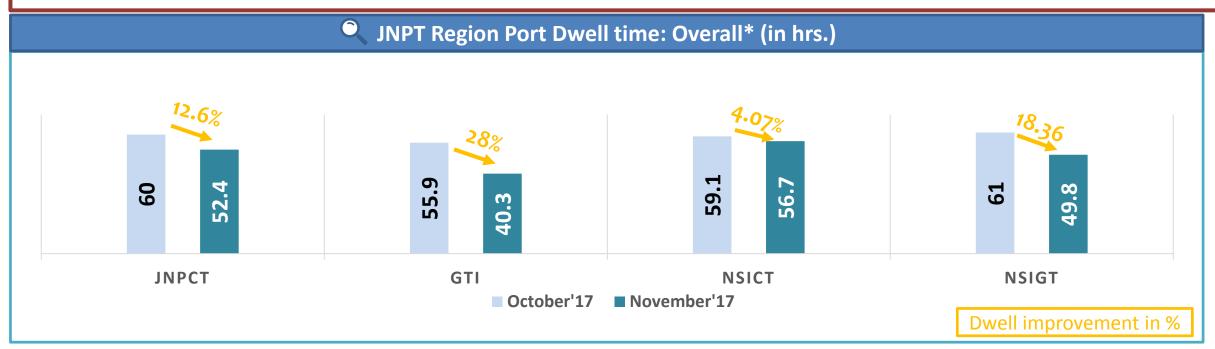
Toll Plazas routes: Avg. Travel Time & Speed						
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr.)	November'17 Avg. Speed (Km/hr.)	October'17 Avg. Speed (Km/Hr.)	June'17 Avg. Speed (Km/Hr.)
JNPT	Khaniwade	94	5	14.2	13.4	11
JNPT	Khalapur	60	2	18.2	15.2	22
Khaniwade	Charoti	50	1.25	36.8	35.2	25
Charoti	Boriach	126	4	28.3	27.7	25
Boriach	Bharthan	142	4	33.3	33.0	36
Bharthan	Kishangarh	686	29	20.5	21.7	24
Bharthan	Vasad	60	1.25	38	38.7	30
Kishangarh	Daulatpura	128	3	39.6	39.8	32
Dhule	Khalghat	186	7	20	19.3	27



Port Dwell Time Analysis



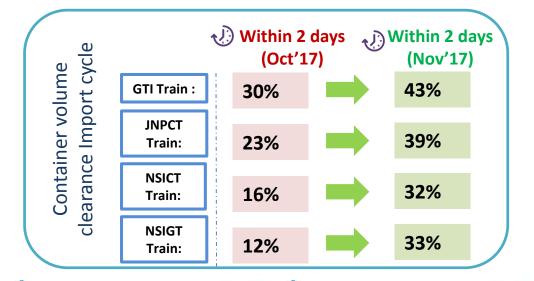
JNPT region port dwell time has been improved in month of November'17 due to effective container clearance

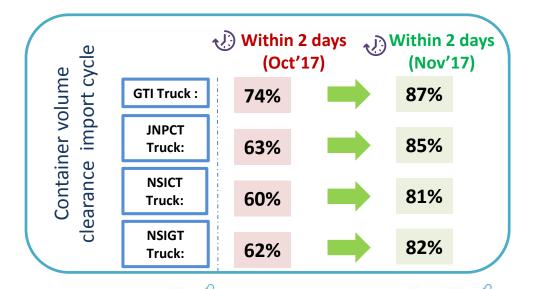


*Overall = import + export

Further Analysis

In import cycle, there is an increase in the number of the containers being cleared within 2 days in comparison to Oct'17. This effective clearance of container has reduce the overall port dwell time of all terminals of JNPT region.

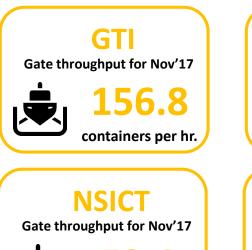




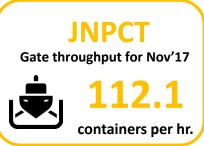
Gate Throughput

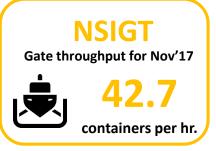


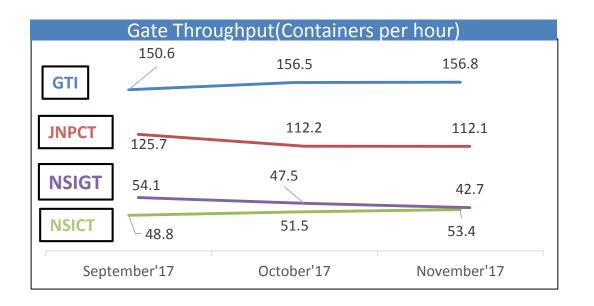
Gate throughput is defined as the number of containers passing through the port terminal gate per hour. The gate throughput has been calculated by taking the number of containers moving out of the port terminal in Import cycle plus the number of containers entering the port terminal during the export cycle



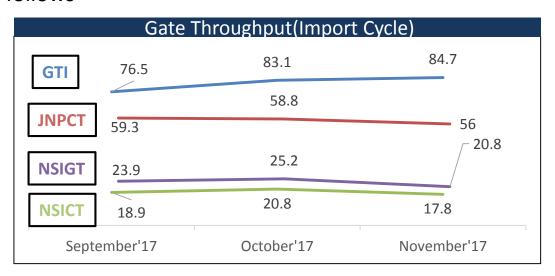
containers per hr.

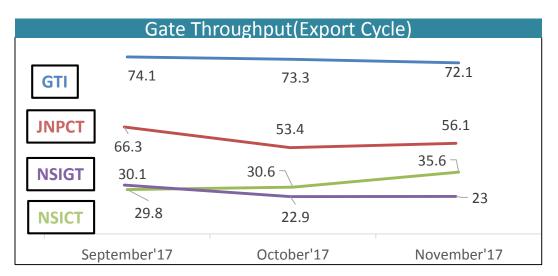






The overall gate throughput can be bifurcated on the basis of Import and Export cycle as shown below. The terminal wise segregation of gate throughput is represented for the months of September'17, October'17 and November'17 as follows







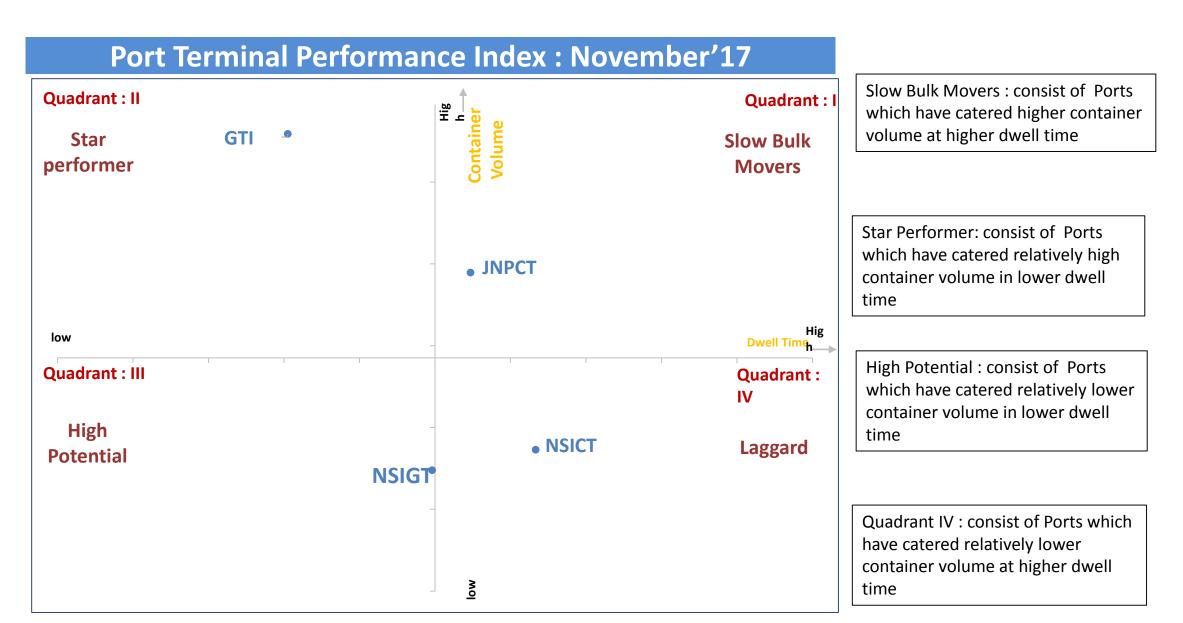
Performance Index



JNPT region PORT Terminals : Performance Index



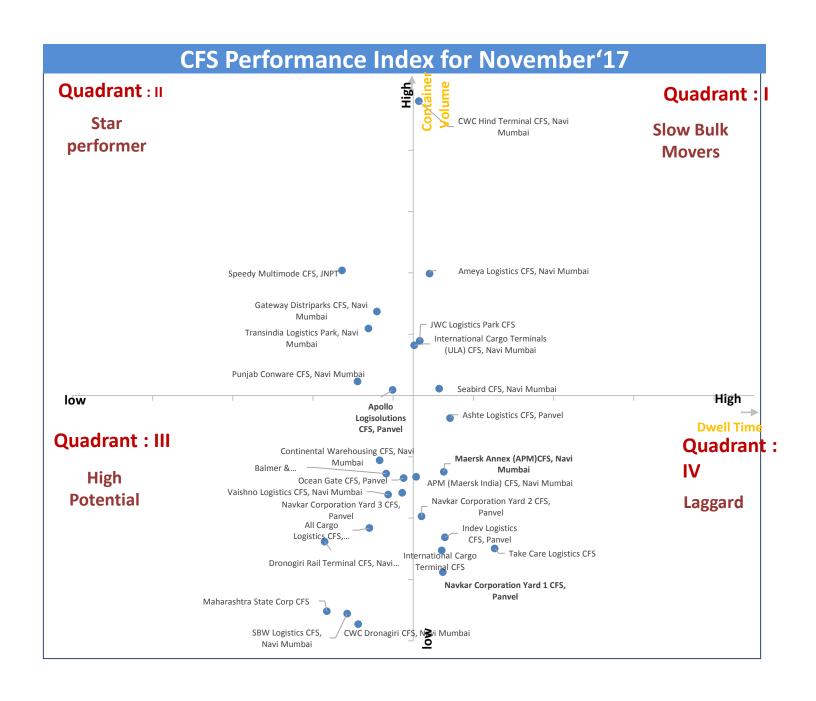
To assess the relative performance the relative dwell time as well as the volume of containers handled are depicted graphically in the form of an index to portray the performance of a particular organisation on the basis of these two combined factors.



JNPT region CFS : Performance Index



The below graph depicts the Performance Index for all CFS for month of November'17. The Quadrant II represent the best CFS with high frequency Index i.e. high container volume at lower dwell time

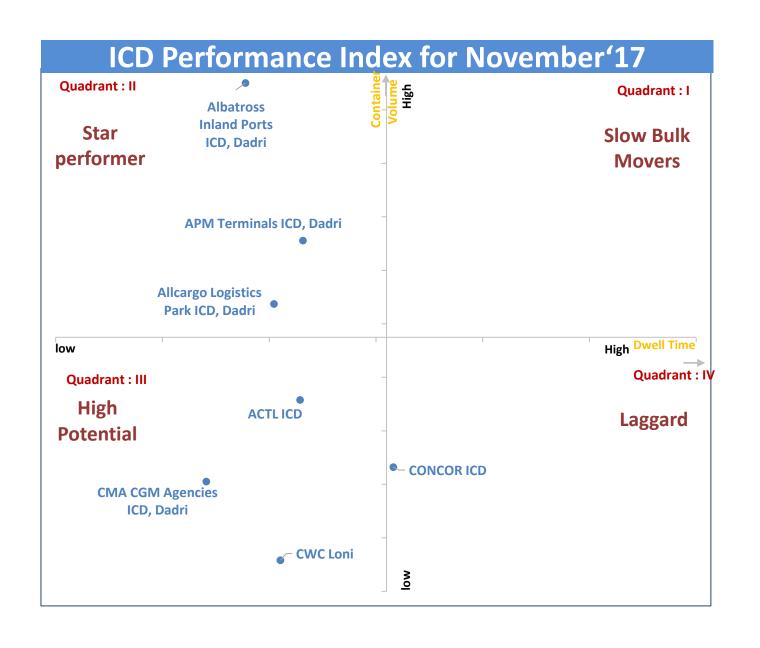




ICDs: Performance Index



The below graph depicts the Performance Index for all ICDs for month of November'17. The Quadrant II represent the best ICD with high frequency Index i.e. high container volume at lower dwell time

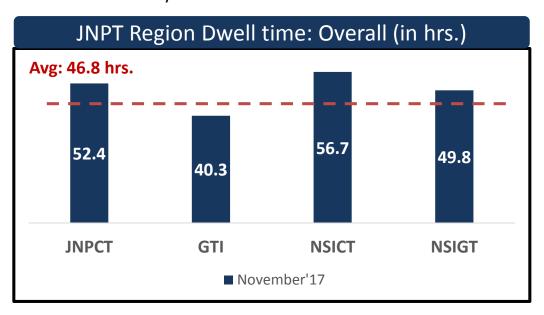


JNPT PORT DWELL TIME TREND



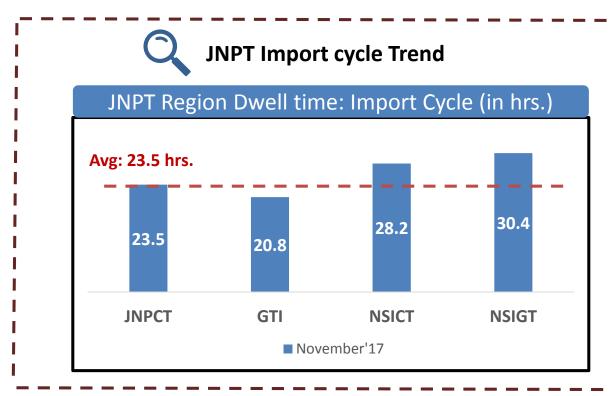
JNPT port dwell time trend:

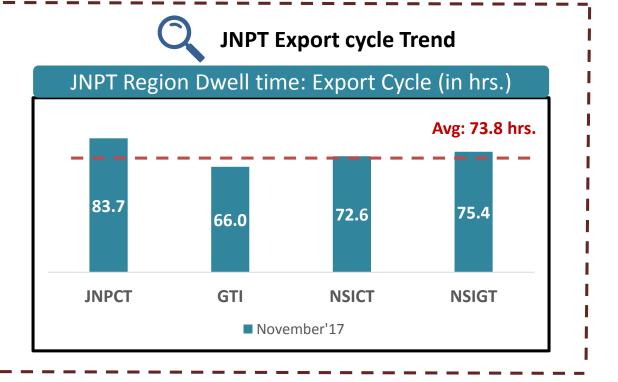
The below table shows the overall port dwell time (i.e. import and export cycle combine) trend of all the JNPT Port terminals for month of November'17. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal



The Average line represent the JNPT region average dwell time with respect to the individual component (i.e. Overall Dwell time, Import and Export cycle) for the present month

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







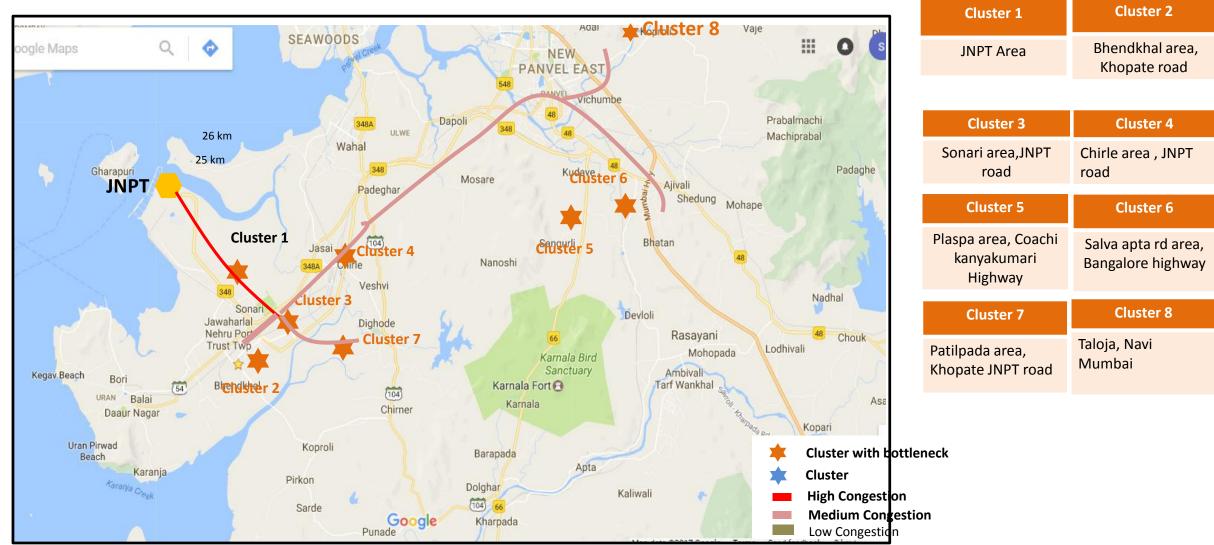
JNPT REGION: CONGESTION ANALYSIS AND HEAT MAP



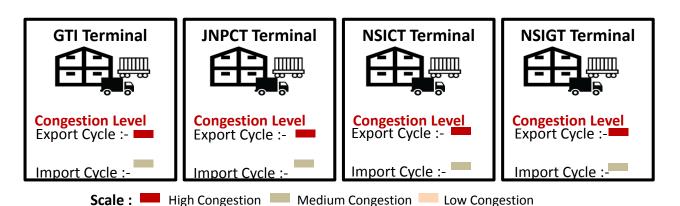
JNPT REGION: CONGESTION ANALYSIS



Congestion Analysis around Mumbai Region



Congestions around Cluster 1 & Cluster 8 was on higher side in the month of November 2017



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

Container movement around JNPT region via Truck



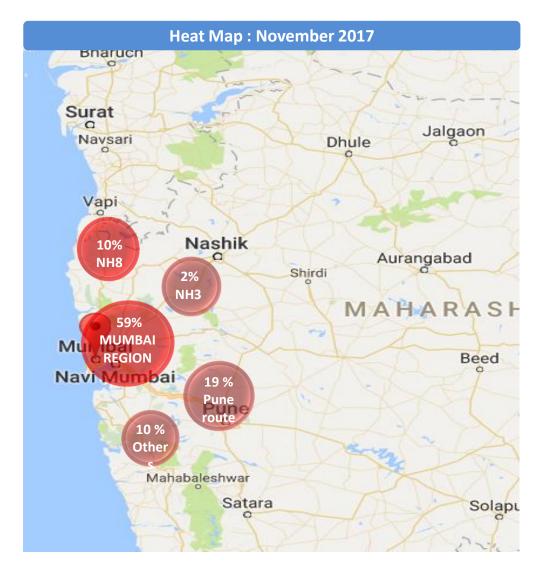
HEAT MAP: Overall Mumbai region



Region	October'1 7	November '17
Mumbai Region	47%	48%
Pune	19%	22%
NH8	22%	17%
NH3	2%	3%
Others	10%	10%

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

HEAT MAP: GTI Port Terminal



Region	October' 17	Novemb er'17
Mumbai Region	58%	59%
Pune	14%	19%
NH8	16%	10%
NH3	2%	2%
Others	10%	10%

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

Container movement around JNPT region via Truck



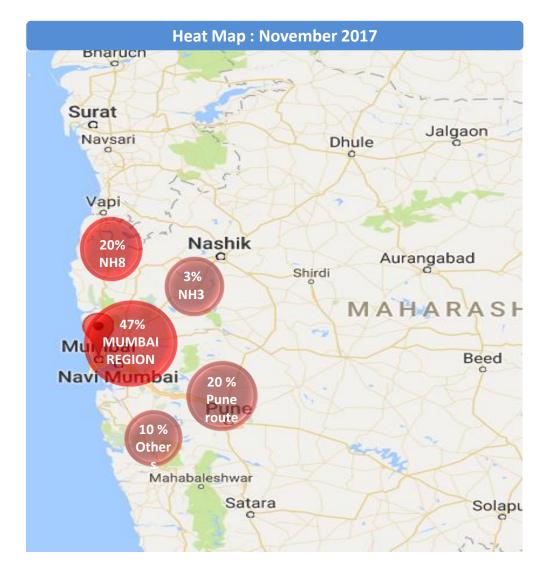
HEAT MAP: JNPCT Port Terminal



Region	October'1 7	Novembe r'17
Mumbai Region	51%	50%
Pune	15%	18%
NH8	22%	19%
NH3	2%	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	October' 17	Novemb er'17
Mumbai Region	53%	47%
Pune	15%	20%
NH8	15%	20%
NH3	3%	3%
Others	10%	10%

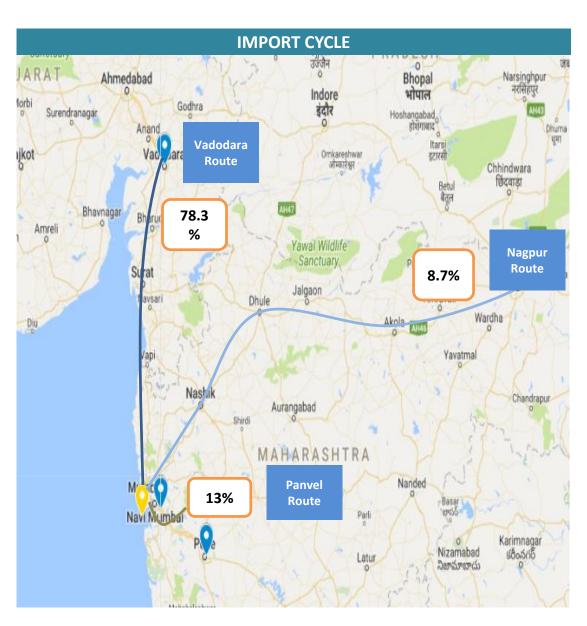
The heat map above depicts the movement of containers in and around the Mumbai region.

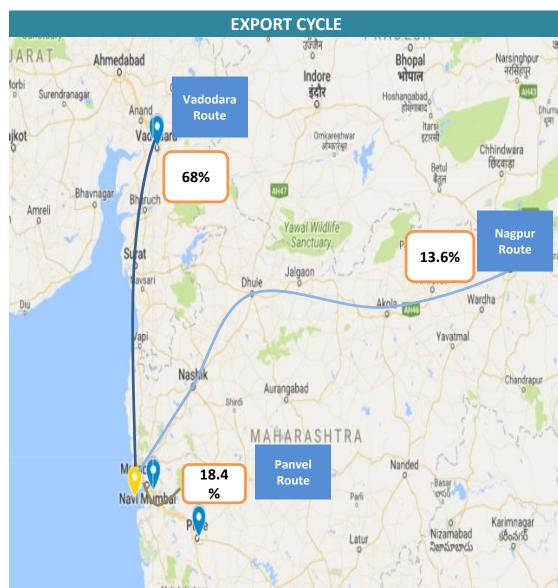
Heat Map: JNPT Region



Container Movement around JNPT region via Train

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





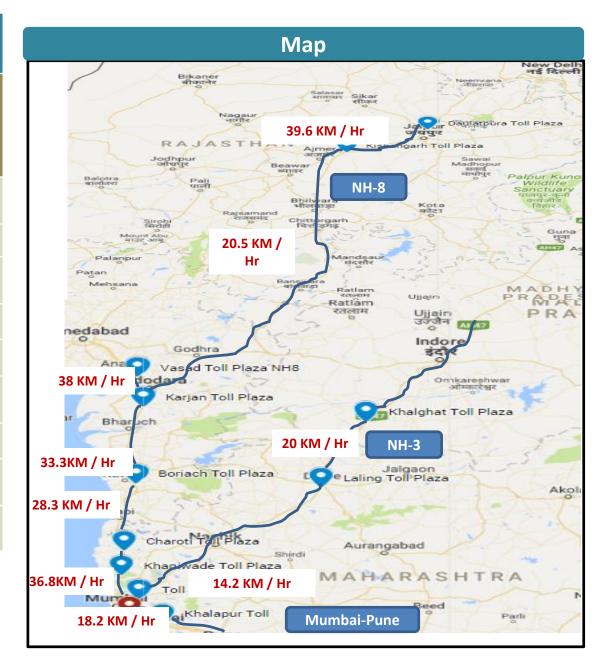


Transit Time Analysis: TOLL PLAZA (1/2)



The below table shows all the toll plazas covered under DLDS connected with JNPT, the average speed has marginally decreased between **Bharthan and Kishangarh** and **Bharthan and Vasaad** toll plaza.

Avg. Travel Time & Speed between Toll Plazas (November'17)					
Source	Destination Toll Plaza	Inter Distanc e (Km)	Avg. Travel Time (Hr)	Avg. Speed (Km/Hr)	Previous month Avg. speed (km/hr)
JNPT	Khaniwade	94	7.0	14.2	13.4
JNPT	Khalapur	60	4.0	18.2	15.2
Khaniwade	Charoti	50	1.4	36.8	35.2
Charoti	Boriach	126	4.6	28.3	27.7
Boriach	Bharthan	142	4.3	33.3	33.0
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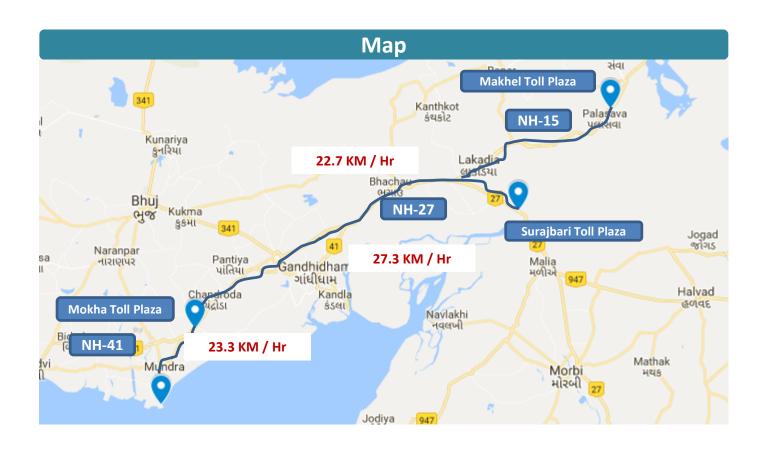


Transit Time Analysis: TOLL PLAZA (2/2)



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

Avg. Travel Time & Speed between Toll Plazas (November'17)					
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	Avg. Speed November' 17 (Km/Hr.)	Avg. Speed October'17 (Km/Hr.)
MICT	Mokha	28	1.2	23.3	22
Mokha	Makhel	150	6.6	22.7	24.5
Mokha	Surajbari	115	4.2	27.3	25.5







ANNEXURE





JNPT REGION: TRADE PERFORMANCE

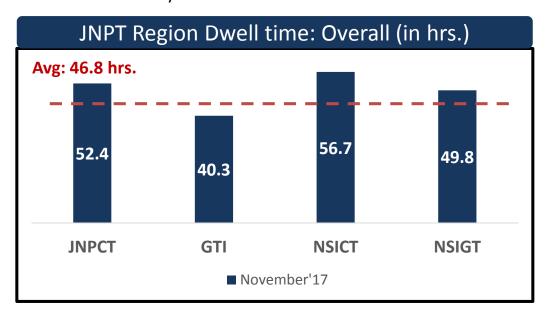


JNPT PORT DWELL TIME TREND



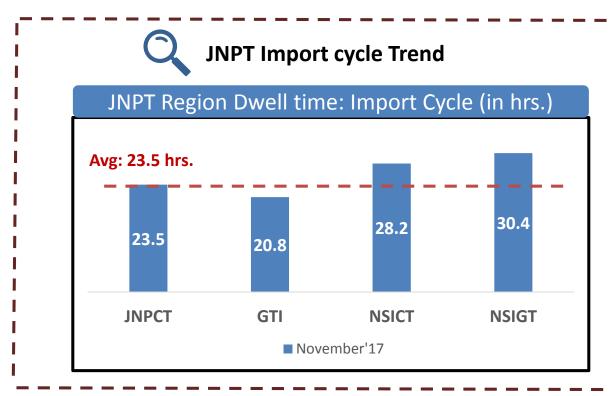
JNPT port dwell time trend:

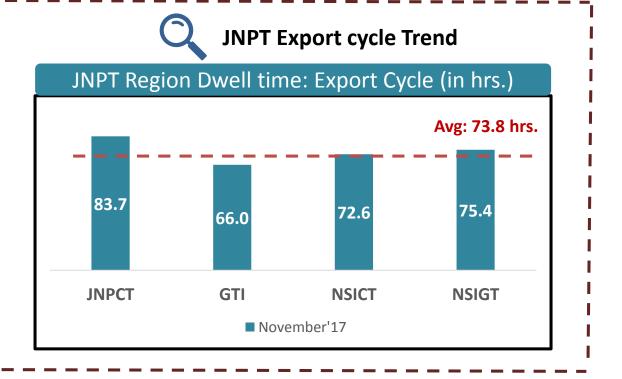
The below table shows the overall port dwell time (i.e. import and export cycle combine) trend of all the JNPT* Port terminals for month of November'17. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal



The Average line represent the JNPT region average dwell time with respect to the individual component (i.e. Overall Dwell time, Import and Export cycle) for the present month

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





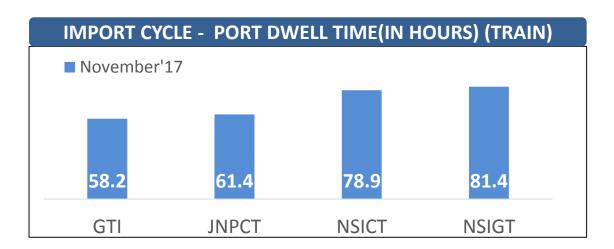
JNPT PORT DWELL TIME ANALYSIS: IMPORT CYCLE



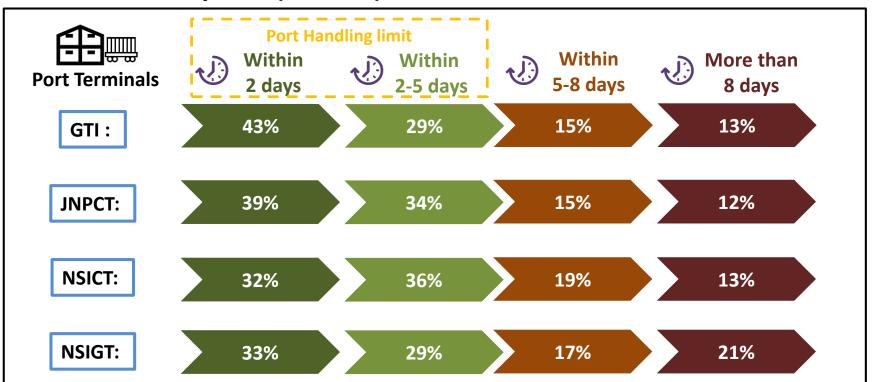
PORT IMPORT via TRAIN

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	October'17 (in Hrs)	November'17 (in Hrs)
GTI	84	58.2
JNPCT	90	61.4
NSICT	123	78.9
NSIGT	185	81.4



Container Volume Handled: Day wise (via train)



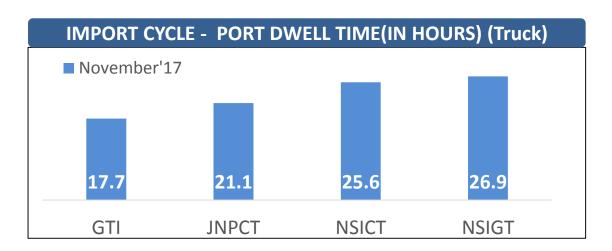
JNPT PORT DWELL TIME ANALYSIS: IMPORT CYCLE



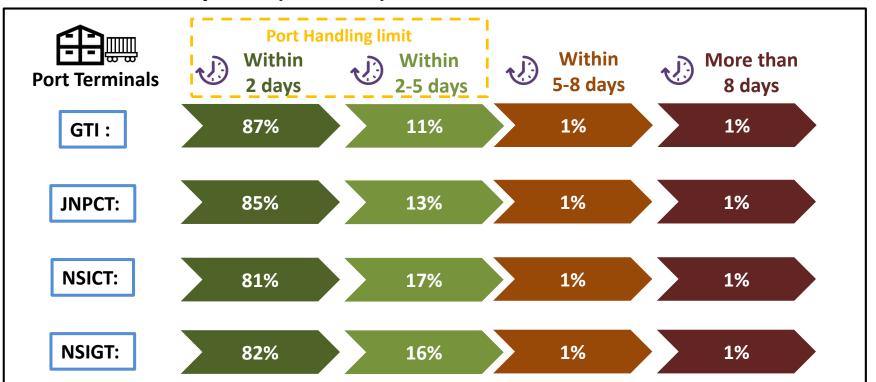
PORT IMPORT via TRUCK

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	October'17 (in Hrs)	November'17 (in Hrs)
GTI	27	17.7
JNPCT	35	21.1
NSICT	40	25.6
NSIGT	37	26.9



Container Volume Handled: Day wise (via truck)



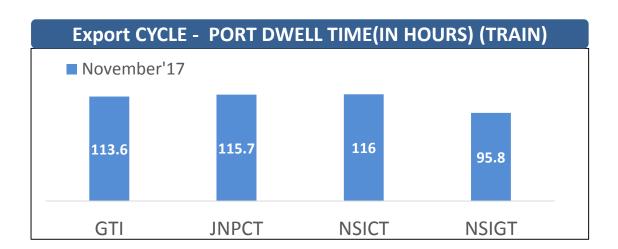
JNPT PORT DWELL TIME ANALYSIS: EXPORT CYCLE



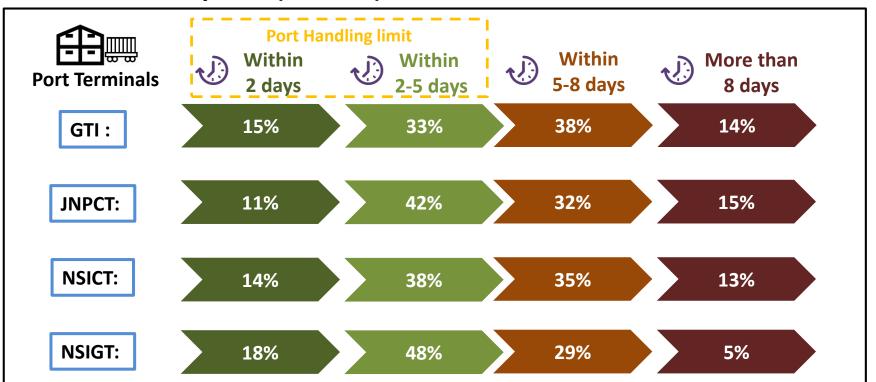
PORT EXPORT via TRAIN

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	October'17 (in Hrs)	November'17 (in Hrs)
GTI	121	113.6
JNPCT	110	115.7
NSICT	108	116
NSIGT	103	95.8



Container Volume Handled: Day wise (via train)



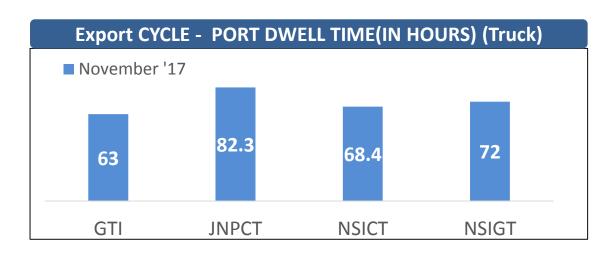
JNPT PORT DWELL TIME ANALYSIS: EXPORT CYCLE



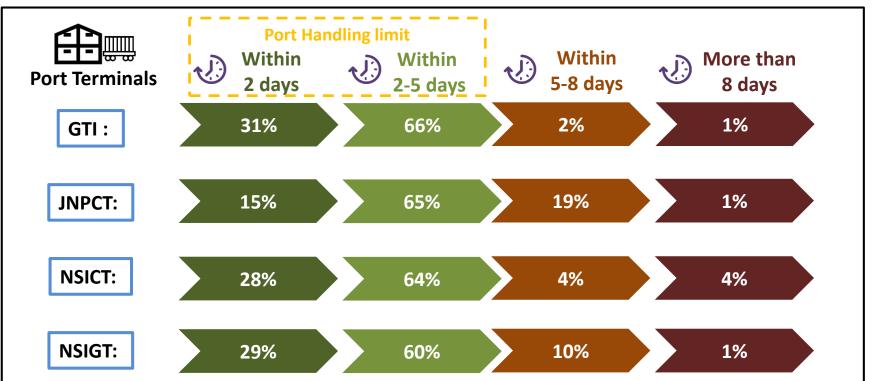
PORT EXPORT via TRUCK

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	October'17 (in Hrs)	November'17 (in Hrs)
GTI	80	63
JNPCT	75	82.3
NSICT	62	68.4
NSIGT	58	72



Container Volume Handled: Day wise (via truck)

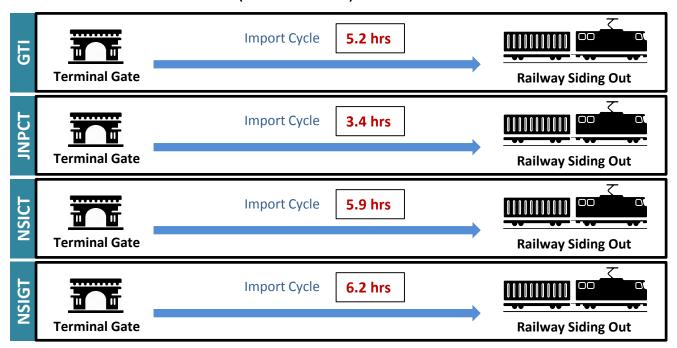


Container movement : JNPT region via Train



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 November'17



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 November'17



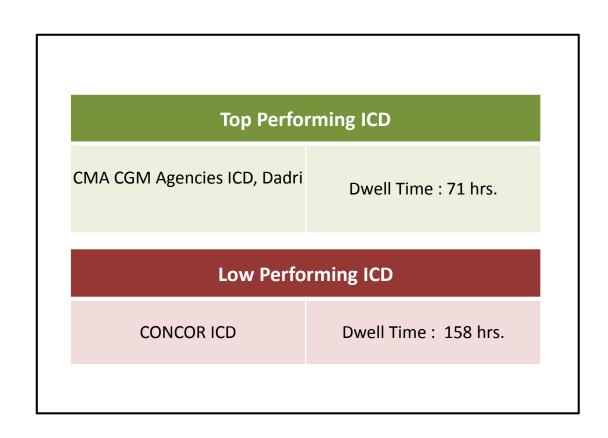
ICD ANALYSIS: DWELL TIME

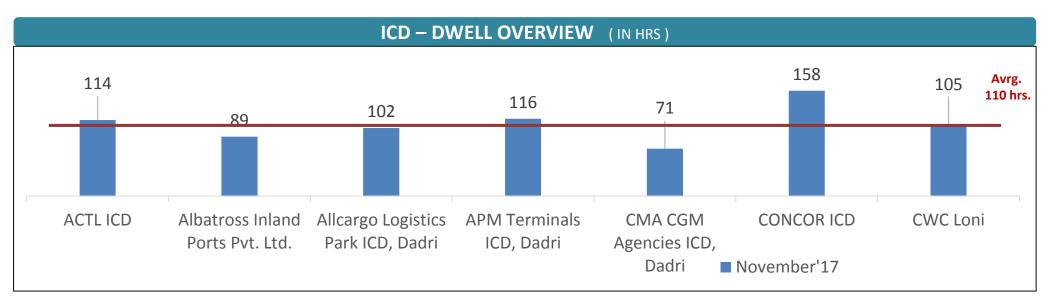


ICD DWELL TIME ANALYSIS

The table below depicts the dwell of all ICDs for month of October '17 and November 17.

Dwell Time (in Hrs)				
ICD	October'17	November'1 7		
ACTL ICD	87	114		
Albatross Inland Ports Pvt. Ltd.	127	89		
Allcargo Logistics Park ICD, Dadri	119	102		
APM Terminals ICD, Dadri	118	116		
CMA CGM Agencies ICD, Dadri	75	71		
CONCOR ICD	177	158		
CWC Loni	72	105		
CWC Patparganj ICD	72	*		





^{*}Note: Insufficient data entries were received in LDB system for CWC Patparganj ICD in November'17

ICD ANALYSIS: Transit Time Analysis



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	November'17
NCR region	3.3 days
Aurangabad	2.05 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	November'17
NCR region	2.8 days
Aurangabad	2.3 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	November'17
NCR region	10 days
Aurangabad	10.58 days

Calculation:

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



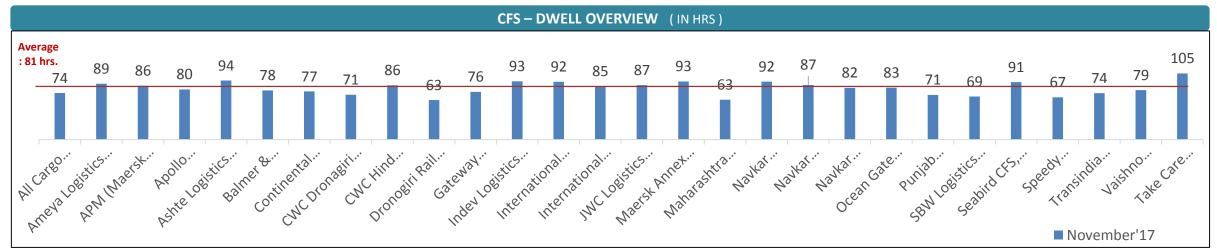
CFS ANALYSIS: DWELL TIME



CFS DWELL TIME ANALYSIS

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

CFS Dwell Time (in hrs)					
CFS	October'17	November' 17	CFS	October'1 7	November' 17
All Cargo Logistics CFS, Navi Mumbai	74	74	International Cargo Terminals (ULA) CFS, Navi	95	
Ameya Logistics CFS, Navi Mumbai	84	89	Mumbai	93	85
	04	05	JWC Logistics Park CFS	89	87
APM (Maersk India) CFS, Navi Mumbai	81	86	Maersk Annex (APM)CFS, Navi Mumbai	102	93
Apollo Logisolutions CFS, Panvel	75	80	Maharashtra State Corp CFS	72	63
Ashte Logistics CFS, Panvel	101	94	Navkar Corporation Yard 1 CFS, Panvel	107	92
Balmer & Lawrie CFS, Navi Mumbai	77	78	Navkar Corporation Yard 2 CFS, Panvel	89	87
Continental Warehousing CFS, Navi Mumbai	84	77	Navkar Corporation Yard 3 CFS, Panvel	85	82
CWC Dronagiri CFS, Navi Mumbai	52	71	Ocean Gate CFS, Panvel	89	83
CWC Hind Terminal CFS, Navi Mumbai	81	86	Punjab Conware CFS, Navi Mumbai	69	71
CWC Impex Park CFS, Navi Mumbai	55	*	SBW Logistics CFS, Navi Mumbai	81	69
Dronogiri Rail Terminal CFS, Navi Mumbai	74	63	Seabird CFS, Navi Mumbai	88	91
Gateway Distriparks CFS, Navi Mumbai	72	76	Speedy Multimode CFS, JNPT	73	67
Indev Logistics CFS, Panvel			Transindia Logistics Park, Navi Mumbai	80	74
	83	93	Vaishno Logistics CFS, Navi Mumbai	94	79
International Cargo Terminal CFS	90	92	Take Care Logistics CFS	119	105



*Note: Insufficient data entries were received in LDB system for CWC Impex Park CFS, Navi Mumbai in November'17

Top and Low Performing CFS's w.r.t Dwell Time for November 2017



Below table shows the top performing CFS's

Top Performing CFS's w.r.t Dwell time (November 2017)		
Dronagiri Rail Terminal CFS, Navi Mumbai	Dwell Time: 63 Hrs	
Maharashtra State Corp CFS	Dwell Time: 63 Hrs	

Below table shows the low performing CFS's

Low Performing CFS's w.r.t Dwell time (November 2017)		
Take Care Logistics CFS	Dwell Time: 105 Hrs	
Ashte Logistics CFS, Panvel	Dwell Time: 94 Hrs	

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	November'1	
Connective Multipered a Ltd CCC	7	
Speedy Multimode Ltd CFS	1.6	
Balmer & Lawrie & Co. Ltd.,CFS	1.8	
Gateway Distriparks Ltd	2.5 1.8	
APM (Maersk India Pvt. Ltd)CFS Continental Warehousing (Nhava Sheva) Ltd.	1.8	
<u> </u>		
Seabird Marine Services Pvt Ltd.	2.1	
JWC Logistics Park Ltd CFS	3.1	
Ameya Logistics Pvt. Ltd.	2.6	
Ashte Logistics Pvt. Ltd.	3.0	
NAVAKAR CORPORATION LTD., YARD-1 CFS	3.1	
Apollo Logisolutions Ltd.	4.5	
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.8	
Indev Logistics Pvt. Ltd.CFS	3.4	
Transindia Logistics Park Pvt, Ltd CFS	2.1	
All Cargo Logistics Ltd., CFS	1.7	
Vaishno Logistics Yard CFS	2.2	
NAVKAR CORPORATION LTD.,YARD-II CFS	3.0	
PUNJAB CONWARE (PW)	1.8	
DRONAGIRI RAIL TERMINAL	3.1	
MAHARASHTRA STATE WARE. CORP. CFS	1.9	
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.7	
NAVKAR CORPORATION LTD.YARD-III CFS	2.9	
International Cargo Terminal CFS	2.2	
Maersk Annex (APM)CFS	2.3	
International Cargo Terminal CFS	2.1	
SBW Logistics CFS , Navi Mumbai	2.9	

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	November'1	
Speedy Multimode Ltd CFS)	1.6	
Balmer & Lawrie & Co. Ltd.,CFS	2.5	
Gateway Distriparks Ltd	2.8	
APM (Maersk India Pvt. Ltd)CFS	2.2	
Continental Warehousing (Nhava Sheva) Ltd.	1.8	
Seabird Marine Services Pvt Ltd.	2.8	
JWC Logistics Park Ltd CFS	3.2	
Ameya Logistics Pvt. Ltd.	3.1	
Ashte Logistics Pvt. Ltd.	3.2	
NAVAKAR CORPORATION LTD.,YARD-1 CFS	3.2	
Apollo Logisolutions Ltd.	5.8	
Ocean Gate Container Terminals Pvt. Ltd.CFS	3.1	
Indev Logistics Pvt. Ltd.CFS	3.8	
Transindia Logistics Park Pvt, Ltd CFS	2.5	
All Cargo Logistics Ltd., CFS	1.9	
Vaishno Logistics Yard CFS	1.8	
NAVKAR CORPORATION LTD.,YARD-II CFS	3.1	
PUNJAB CONWARE (PW)	1.8	
DRONAGIRI RAIL TERMINAL	1.6	
MAHARASHTRA STATE WARE. CORP. CFS	1.9	
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.8	
NAVKAR CORPORATION LTD.YARD-III CFS	3.3	
International Cargo Terminal CFS	2.2	
Maersk Annex (APM)CFS	2.5	
International Cargo Terminal CFS	2.3	
SBW Logistics CFS , Navi Mumbai	3.7	



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

CFS	November'1 7
Speedy Multimode Ltd CFS	1.4
Balmer & Lawrie & Co. Ltd.,CFS	1.8
Gateway Distriparks Ltd	3.0
APM (Maersk India Pvt. Ltd)CFS	1.8
Continental Warehousing (Nhava Sheva) Ltd.	1.4
Seabird Marine Services Pvt Ltd.	2.4
JWC Logistics Park Ltd CFS	2.7
Ameya Logistics Pvt. Ltd.	2.8
Ashte Logistics Pvt. Ltd.	3.2
NAVAKAR CORPORATION LTD.,YARD-1 CFS	3.0
Apollo Logisolutions Ltd.	4.2
Ocean Gate Container Terminals Pvt. Ltd.CFS	2.6
Indev Logistics Pvt. Ltd.CFS	4.7
Transindia Logistics Park Pvt, Ltd CFS	2.2
All Cargo Logistics Ltd., CFS	1.4
Vaishno Logistics Yard CFS	1.6
NAVKAR CORPORATION LTD.,YARD-II CFS	3.1
PUNJAB CONWARE (PW)	1.8
DRONAGIRI RAIL TERMINAL	1.4
MAHARASHTRA STATE WARE. CORP. CFS	2.6
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.7
NAVKAR CORPORATION LTD.YARD-III CFS	3.8
International Cargo Terminals CFS	2.1
Maersk Annex (APM)CFS	2.2
International Cargo Terminal CFS	2.6
SBW Logistics CFS , Navi Mumbai	3.3

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	November'1		
Speedy Multimode Ltd CFS	1.8		
Balmer & Lawrie & Co. Ltd.,CFS	1.7		
Gateway Distriparks Ltd	2.7		
APM (Maersk India Pvt. Ltd)CFS	2.2		
Continental Warehousing (Nhava Sheva) Ltd.	1.8		
Seabird Marine Services Pvt Ltd.	2.4		
JWC Logistics Park Ltd CFS	3.5		
Ameya Logistics Pvt. Ltd.	2.6		
Ashte Logistics Pvt. Ltd.	3.4		
NAVAKAR CORPORATION LTD.,YARD-1 CFS	4.2		
Apollo Logisolutions Ltd.	3.5		
Ocean Gate Container Terminals Pvt. Ltd.CFS	8.4		
Indev Logistics Pvt. Ltd.CFS	3.5		
Transindia Logistics Park Pvt, Ltd CFS	2.9		
All Cargo Logistics Ltd., CFS	2.3		
Vaishno Logistics Yard CFS	2.0		
NAVKAR CORPORATION LTD.,YARD-II CFS	3.2		
PUNJAB CONWARE (PW)	1.6		
DRONAGIRI RAIL TERMINAL	1.1		
MAHARASHTRA STATE WARE. CORP. CFS	1.4		
CWC LOGISTIC PARK - Opr.Hind Trmnl.	1.9		
International Cargo Terminals CFS	2.0		
Maersk Annex (APM)CFS	2.9		
International Cargo Terminal CFS	2.3		
SBW Logistics CFS , Navi Mumbai	3.2		

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



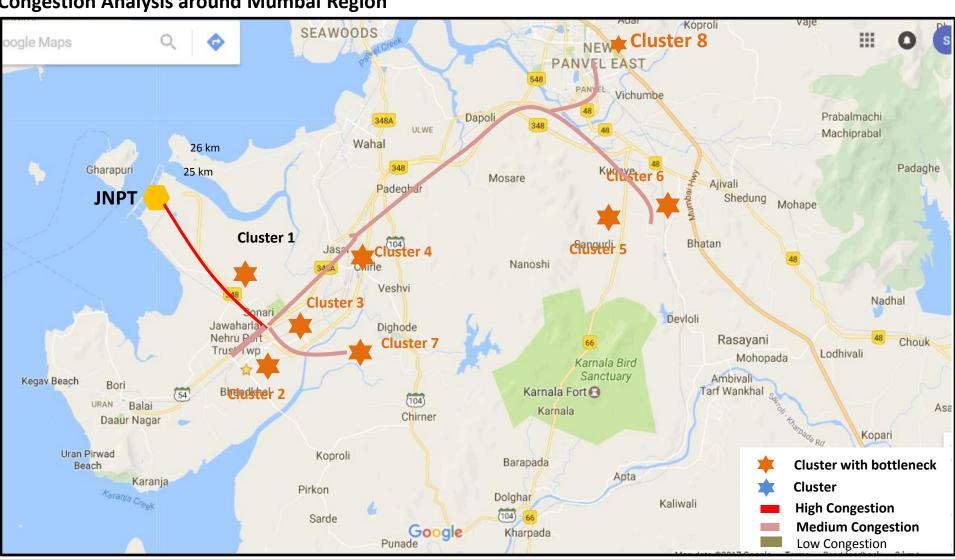
Below table shows the delivery time in export cycle from the CFS's to PORT terminals

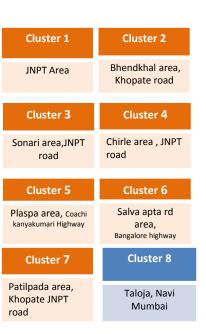
Month of November'17					
CFS Out Port in (Export Cycle in Hrs)					
CFS	JNPCT	GTI	NSICT	NSIGT	
International Cargo Terminal CFS	4.0	3.1	3.0	3.1	
DRONAGIRI RAIL TERMINAL	3.2	3.8	3.8	5.9	
Jawaharlal Nehru Port CFS (Speedy Multimode Ltd CFS)	2.0	2.9	2.3	4.4	
Vaishno Logistics Yard CFS	2.9	3.5	2.8	5.0	
Ashte Logistics Pvt. Ltd.	5.0	3.7	2.5	5.9	
CWC LOGISTIC PARK - Opr.Hind Trmnl.	3.1	3.9	3.4	4.1	
JWC Logistics Park Ltd CFS	3.7	5.0	4.8	5.0	
Ameya Logistics Pvt. Ltd.	4.4	3.8	4.7	8.2	
PUNJAB CONWARE (PW)	2.8	2.8	3.1	4.8	
Apollo Logisolutions Ltd.	4.8	7.4	6.8	6.0	
Transindia Logistics Park Pvt, Ltd CFS	3.3	3.2	4.6	6.7	
Seabird Marine Services Pvt Ltd.	5.3	5.5	6.5	8.5	
All Cargo Logistics Ltd., CFS	3.7	3.0	5.7	6.0	
Gateway Distriparks Ltd	3.6	3.5	4.3	5.0	
Continental Warehousing (Nhava Sheva) Ltd.	2.3	2.4	3.1	5.3	
NAVKAR CORPORATION LTD., YARD-II CFS	4.4	7.5	5.3	7.6	
NAVKAR CORPORATION LTD.YARD-III CFS	4.8	6.2	4.4	6.9	
Indev Logistics Pvt. Ltd.CFS	6.1	2.0	3.2	4.2	
Balmer & Lawrie & Co. Ltd.,CFS	3.1	7.3	3.3	5.1	
CWC Dronagiri CFS	4.2	3.7	4.4	6.3	
MAHARASHTRA STATE WARE. CORP. CFS	2.5	2.5	3.0	6.6	
Ocean Gate Container Terminals Pvt. Ltd.CFS	3.4	3.7	3.3	5.5	
APM (Maersk India Pvt. Ltd)CFS	1.8	1.7	2.0	4.5	
International Cargo Terminals & Infrastructure Private Limited-CFS	5.6	5.2	6.6	6.9	
NAVAKAR CORPORATION LTD., YARD-1 CFS	7.4	8.7	NA	9.2	
Maersk Annex (APM)CFS	2.0	34.1	NA	NA	
SBW Logistics CFS , Navi Mumbai	8.5	8.4	8.6	9.6	

JNPT REGION: CONGESTION ANALYSIS

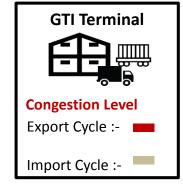


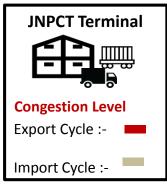
Congestion Analysis around Mumbai Region

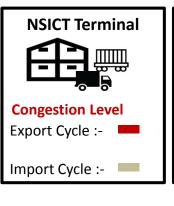




Note: Please find the respective CFS in each cluster in annexure section









Scale: High Congestion Medium Congestion Low Congestion

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



JNPT Region : Cluster Analysis



Base on container movement from port to CFS in Mumbai region, 28 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, cluster6
- In import cycle the movement of traffic towards cluster 6 is facing congestion

GTI terminal for month of November'17					
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	2.9	
Cluster 2	6	13	2.1	3.9	
Cluster 3	6	11	1.9	3.3	
Cluster 4	1	13	2.2	3.5	
Cluster 5	2	25	2.9	4.4	
Cluster 6	6	25	3.1	6.8	
Cluster 7	4	12	1.9	3.1	
Cluster 8	1	34	2.9	8.4	

CFS Cluster: JNPCT Terminal

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

JNPCT terminal for month of November'17				
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	2.0
Cluster 2	6	13	2.3	3.1
Cluster 3	6	11	1.8	3.7
Cluster 4	1	13	1.8	2.9
Cluster 5	2	25	3.1	3.6
Cluster 6	6	25	3.2	4.8
Cluster 7	4	12	2.2	3.5
Cluster 8	1	34	3.7	8.5

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**



JNPT Region : Cluster Analysis



Base on container movement from port to CFS in Mumbai region, 28 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 8 and cluster 6
- In import cycle the movement of traffic towards cluster 8, cluster 6 is facing congestion

NSICT terminal for month of November'17				
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	2.3
Cluster 2	6	13	2.1	3.3
Cluster 3	6	11	2.1	3.5
Cluster 4	1	13	1.6	2.8
Cluster 5	2	25	2.7	4.0
Cluster 6	6	25	3.5	4.4
Cluster 7	4	12	1.8	4.7
Cluster 8	1	34	3.3	8.6

CFS Cluster: NSIGT Terminal

 In export cycle the NSIGT terminal is having traffic congestion from cluster 7, cluster 8

NSIGT terminal for month of November'17				
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	1.8	4.4
Cluster 2	6	13	2.2	4.7
Cluster 3	6	11	1.4	6.1
Cluster 4	1	13	2.0	5.0
Cluster 5	2	25	5.9	5.2
Cluster 6	6	25	3.5	6.5
Cluster 7	4	12	2.5	6.4
Cluster 8	1	34	3.2	18.6

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 :

Cluster 1

(JNPT Area)

Speedy Multimode CFS,JNPT

Cluster 2

(Bhendkhal area, Khopate road)

- APM (Maersk India) CFS, Navi Mumbai
- Maersk Annex (APM)CFS, Navi Mumbai
- Balmer & Lawrie CFS, Navi Mumbai
- CWC Hind Terminal CFS, Navi Mumbai
- International Cargo
 Terminals (ULA) CFS, Navi
 Mumbai & Infrastructure
 Private Limited
- Gateway Distriparks CFS, Navi Mumbai
- International Cargo Terminal CFS

Cluster 3

Sonari area, JNPT road

- Punjab Conware CFS, Navi Mumbai
- Dronogiri Rail Terminal CFS, Navi Mumbai
- CWC Impex Park CFS, Navi Mumbai
- CWC Dronagiri CFS, Navi Mumbai
- Maharashtra State Corp CFS
- Seabird CFS, Navi Mumbai

Cluster 4

(Chirle area, JNPT road)

• Vaishno Logistics CFS, Navi Mumbai

Cluster 5

(Plaspa area, Coachi kanyakumari Highway)

- JWC Logistics Park CFS
- Ocean Gate CFS, Panvel

Cluster 8

SBW

Cluster 6

(Salva apta rd area, Bangalore highway)

- Ashte Logistics CFS, Panvel
- Apollo Logisolutions CFS, Panvel
- Indev Logistics CFS, Panvel
- Navkar Corporation Yrd 1 CFS, Panvel
- Navkar Corporation Yard 2 CFS,
 Panyel
- Navkar Corporation Yard 3 CFS, Panvel

Cluster 7

(Patilpada area, Khopate JNPT road)

- All Cargo Logistics CFS, Navi
- Transindia Logistics Park, Navi Mumbai
- Ameya Logistics CFS, Navi Mumbai
- Continental Warehousing CFS, Navi Mumbai



