



Study on Timeline of Export and Import of Containers through JNPT

April 2017



Table of Contents

Introduction	3
Objectives	4
Stakeholders	4
Methodology	5
IMPORT	6
1. Import Process	7
1.1. Terminal Dwell Time	7
1.2. Transit Time - CFS and ICD	8
1.3. Customs Release Time	9
1.3.1 Jawaharlal Nehru Customs House (JNCH)	9
1.3.2. Customs at ICD Tughlakabad	9
1.4. Custodian Dwell Time	10
1.4.1. CFS Dwell Time	10
1.4.2. CONCOR (ICD Tughlakabad)	10
1.5. Other Supporting Agencies	11
1.5.1. Shipping Line - Delivery Order	11
1.5.2. Partner Government Agencies (PGAs)	11
EXPORT	13
2. Export Process	14
2.1. Customs Release Time	14
2.1.1. Jawaharlal Nehru Customs House (JNCH)	
2.1.2. Customs ICD Tughlakabad	14
2.2. Custodian Dwell Time	14
2.2.1. CFS Dwell Time	14
Table 18: CFS Specific Dwell Time for April 2017	15
2.2.2. CONCOR (ICD Tughlakabad)	15
2.3. Transit Time - CFS and ICD	15
2.4. Terminal Dwell Time	16
3. Trend Analysis	18
ANNEXURE 1 - Imports	24
ANNEXURE 2 - Exports	25

Introduction

For a developing country of India's size and potential, undertaking trade facilitation reforms is an urgent need today to match pace with the growing global trade. This requires simplification and harmonization of procedures in order to reduce the time and cost taken for trading across borders.

With India's ratification of WTO's Trade Facilitation Agreement (April, 2016), there is an extended onus on the government for identifying action areas in order to simplify trade procedures and the associated time and cost. Various steps have been undertaken for this- there are fewer

Table 1: India's Ease of Doing Business Ranking							
Parameter/Year	2015	2016	2017				
Overall Ranking	134	131	130				
Trading Across Borders	126	144	143				

restrictions on foreign direct investment, tax holidays are given to developers, public-private partnerships (PPPs) are promoted for infrastructural projects and the Single Window for Trade Facilitation (SWIFT) has been launched by the Central Board of Excise and Customs (CBEC). It is also estimated that there is a requirement of around USD 1 trillion towards infrastructural investment in India during the 12th Five Year Plan period, 2012-2017, to maintain India's growth trajectory. With Indian economy on an exponential growth curve and Indian government's strong inclination to enhance trade and investment, foreign companies are turning to India for emerging market deals. At a point when the world is tending towards India, the country is likely to witness an increasing flow of rail, road and port traffic.

	Table 2: World Bank's Estimate of Trading Across Borders through Mumbai										
Parameter	Time to Export (Hours) Time to Import (Hours)										
Year	Documentary Compliance	Border Compliance	Documentary Compliance	Border Compliance							
2016	61	88	67		311						
2017	2017 58 85 65 307										
Source: www.	doingbusiness.org			•	•						

However, India's performance in World Bank's Ease of Doing Business Report has only shown a marginal improvement over the last few years (Table 1). Further, Table 2 shows the time to export and import through Mumbai, Maharashtra, as represented in the World Bank Doing Business Report (2017).

This report undertakes a comprehensive and analytical study of the various procedures and agencies involved in the supply chain for export and import through JNPT.It involves an analytical assessment of the time taken at various intervention points - dissecting the dwell time of containersfrom/to Container Freight Stations (CFS), Inland Container Depot (ICD) as well as Direct Port Entry/Delivery— entailing transportation of containers and other operational aspects, the process of assessment, registration and examination, among others. Further, the role of partner government agencies (PGAs) and shipping lines in the process have also been analysed.

Table 3: Target Timelines for Export (Hours)										
Year Port Customs Clearance Clearance at the Gate										
2015-16	103	3	2							
2016-17 (Target)	80	24	-							

Table 4: Target Timelines for Import (Hours)								
Year	Port	Railway	Customs Clearance	CFS				
2015-16	44	91.2	115	152				
2016-17 (Target)	30	36	30	120				

The report also acts as a benchmarking tool for the targets for 2016-17 – for export and import (as summarised in Table 3 and Table 4)—set in the meeting held on August 12, 2016 under the chairmanship of the CEO, NITI Aayog to build consensus regarding the role and responsibility of each ministry/agency

to finalise Port Ecosystem efficiency parameters.

Objectives

- 1. To track supply chain of import/export at JNPT through identification of all the procedures, agencies and stakeholders
 - ✓ Inclusive of all formats of port entry and delivery such as Direct Port Delivery, Direct Port Entry, CFS facilitated, Factory stuffed and ICD facilitated through rail, etc.
- 2. To calculate the time taken for import and export of Containers through JNPT on a monthly basis.
- 3. To specifically identify dwell time at various agencies in the process. These would include, but not be restricted to, the following:

Border Compliance

- ✓ Customs Clearance and Inspections: Time taken by the Customs for export and import clearances.
- ✓ Port Handling: Time taken by Terminal, CFS's and ICD's for export and import.
- ✓ Allied Agencies: Time taken by agencies such as FSSAI, PQ, etc. during the course of import and export.

Documentation Compliance

- Time taken to obtain, prepare and submit documents required during export and import but not to be restricted to Clearance, Inspection, Port Handling, etc.
- 4. Parking lots and Port gate: Time taken for entry and exit through these areas
- 5. Data from various agencies would be collected and analyzed to calculate the time taken for movement of export & import containers from JNPT.
- 6. Identification of action areas and measures for reducing dwell time during the course of export and import of containers from JNPT aiming to meet specified Government targets:
 - ✓ Procedure-wise area of intervention
 - ✓ Stakeholder-wise area of action
- 7. To critically analyze the various stages in the export and import cycles with a view to reduce the dwell time at each stage, with the principal aim of facilitating the reduction in export and import cycles from the current stage to the targets set by the government. Stage wise approach in terms of reaching the target will be suggested.
- 8. To analyze the transaction cost borne by the trade at each stage, with a view to mobilize reduction of the same
- 9. To provide incisive insights and recommendations on the improvement areas at various stages of the value chain, with focus on improving operations and reducing delays

Stakeholders

- 1. **Customs Broker**: Also known as Customs House Agent (CHA), a customs broker is a representative or an agent of the importer/exporter, and prepares and submits documents for clearing goods through Customs. He/she holds a customs licence for practise and is well versed with customs rules, regulations and tariffs.
- 2. **Customs**: It is the official department of the government with the authority to check goods and travellers. In international trade, the customs department collects duty on imported goods as levied by the government, and provides requisite clearances for both export and import goods.
- 3. Container Freight Station (CFS) and Inland Container Depot (ICD): A container freight stationis an extension of the port. It is the custodian of goods after they are cleared from the terminal. The process of customs clearance takes place inside the CFS.
- 4. **Port/Terminal:** A port is the point of entry of goods and travellers into the country. It provides facilities for berthing of vessels, and loading/unloading of cargo. A terminal is part of the port

- wherein different berths may be a part. It may be cargo-specific or designed to handle all types of cargo.
- 5. **Shipping Line:** A shipping line is a company that operates fleet of ships which transport cargo to different parts of the world. While most shipping lines are owners of the containers they carry, some lines lease the same from an external organisation.

Methodology

- 1. **Preliminary assessment** of parameters related to border compliance and documentary compliance at JNPT
- 2. **Data collection** from stakeholders such as terminal operators, customs Jawaharlal Nehru Customs House (JNCH) and ICD Tughlakabad, CFS operators and CONCOR
- 3. **Data analysis** entailing the process of data cleaning and analysis of the collected data through SAS, STATA and MS Excel. It would entail stakeholder-wise calculation of dwell time and finally, consolidation of the same in the process chain of EXIM trade
- 4. **Report** preparation describing average timelines for export and import value chains, and qualitatively indicating areas of improvement. The following parameters have been considered during analysis and report preparation:
 - a. Out of the total number of containers imported and exported at JNPT, the sample size considers the containers under the import and export category and not the containers meant for transhipment. Further, only Full Container Load (FCL) containershave been considered for this study.
 - b. The time in the tables is recorded in the hour format that is [h]:mm:ss. However, in the figures and charts, it is recorded in a decimal format. For example, a time of 04:30:00 recoded in a table is represented as 4.5 hours in the chart.
 - c. The total time taken in each agency is calculated as the average time taken from the first process at theagency to the final process (and not as a linear addition of time consumed in all processes recorded at an agency, as it may lead to inflated overall dwell time).

Limitations of the study

- a. Transit time calculation for port to CFS: Due to issues faced in determining unique container numbers, it was difficult to calculate transit time. Hence, based on observation and various previous researches conducted, we have used an average time of 12 hours as transit time for CFS.
- b. **Missing entries in data sets:**Many entries in the data sets were missing or not recorded by the agencies. For instance, out of 08CFS', none of the CFS recorded the time of shipping line delivery order.
- c. **Data error:**At a number of agencies, data errors were recorded. For instance, at certain CFS', the gate-out time was before the gate-in time. Further, duplication of data was observed in the data provided by the PGAs.

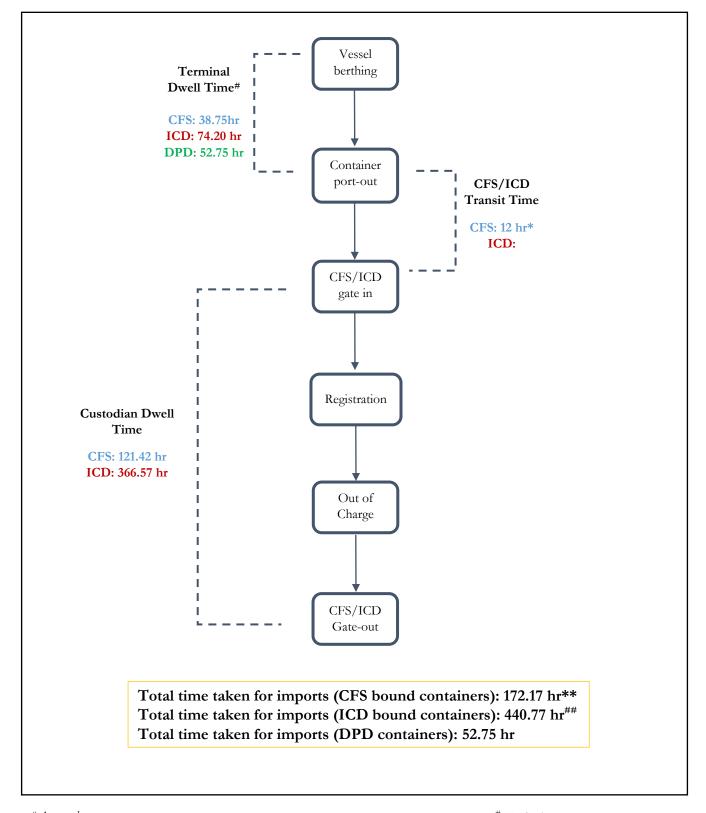


Figure 1: Import process at the Jawaharlal Nehru Port

^{*}Assumed

[#]Weighted averages

^{**} Inclusive of assumed transit time

^{##} Exclusive of transit time

1. Import Process

The import cycle starts with the shipping line filing an Import General Manifest (IGM) - electronically in the ICES, within 72 hours prior to arrival of the vessel at the port - to the time the goods are out for delivery from a CFS, ICD or through DPD. In between, various processes take place and a minimum of five agencies play a role, which can be assessed in terms of terminal dwell time, road/rail transit time, customs release time and custodian (CFS/ICD) dwell time (Figure 1 above). Further, in the overall process of imports, the time taken by the shipping line and the partner government agencies (PGAs) have also been calculated.

1.1. Terminal Dwell Time

Terminal dwell time is the calculation of the time a container is at the terminal. It is calculated as the average time taken from berthing of vessel to the time of container evacuation from port gate. Terminal dwell time varies with respect to the destination of the container – Container Freight Station (CFS), Inland Container Depot (ICD) or Direct Port Delivery (DPD) to theimporter.

The total dwell time of container at Jawaharlal Nehru Port Container Terminal (JNPCT), Gateway Terminal International Container Terminal (GTICT), Nhava Sheva International Container Terminal (NSICT) and Nhava Sheva International Gateway Terminal (NSIGT) is close to 50.72 hours, 43.25 hours, 48.73 hours and 53.32 hours respectively. Further categorisation of containers and analysis of time taken – overall and stage-wise -have been provided in Table 5, Table 6, Table 7 and Table 8.It may be noted that in case of DPD, the dwell time of the container at the terminal is its total time taken for import.

Table 5: Distribution of Import Containers for April 2017									
Parameter	JNPCT (n)	GTICT (n)	NSICT (n)	NSIGT (n)					
Total number of import containers	41,703	55,537	12,112	11,544					
Number of CFS bound containers	29,445	38,224	7,461	8,123					
	(70.61%)	(68.83%)	(61.60%)	(70.37%)					
Number of ICD bound containers	8,529	11,340	3,080	2,239					
	(20.45%)	(20.42%)	(25.43%)	(19.40%)					
Number of Direct Port Delivery (DPD)	3,729	5,973	1,571	1,182					
containers	(8.94%)	(10.75%)	(12.97%)	(10.23%)					

Note: a) The 'n' values represent Full Container Load (FCL) containers only, They also take into account only import containers and not re-import and transhipment containers
b) Figures in brackets represent percentage share

	Table 6: Dwell Time of Import Containers for April 2017												
Parameter		JNPCT	ſ		GTICT			NSICT			NSIGT		
	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD	
Average dwell time (vessel berthing to container out of port) (hr)	43:0 4:57	82:3 8:29	43:07 :37	34:3 3:57	69:0 7:32	52:04 :42	36:4 9:55	65:4 9:14	71:47 :42	44:3 9:26	80:3 6:02	61:10: 19	
Average terminal dwell time (hr)	50:43:28 43:15:53 48:44:19 53:19:07												
Average port dwell time (hr)		47:21:02 ort dwell time is the weighted average for all four terminals in terms of import FCL containers handled											

Tabl	e 7: Ve	ssel Be	rthing t	o Cont	ainer D	ischarg	e - Imp	ort Co	ntainer	s for A ₁	oril2017	7
Parameter	JNPCT			GTICT			NSICT			NSIGT		
	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD
Average time taken from vessel berthing to container discharge (hr)	11:4 9:02	11:1 0:47	11:16 :02	8:34: 36	8:39: 59	8:49: 39	6:06: 00	6:10: 09	6:31: 04	13:3 9:25	13:4 2:23	11:14: 12
Terminal average (hr)	11:38:16 8:37:19 6:10:18 13:25:09									9		
Port Average (hr) Note: Average	time for to	9:52:29 ime for port is the weighted average for all four terminals in terms of import FCL containers handled										

Table 8	Conta	iner Di	ischarge	e to Co	ntainer	Out of	Port - 1	Import	Contair	ners for	r April2	017
Parameter	JNPCT		Γ	GTICT			NSICT			NSIGT		
	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD	CFS	ICD	DPD
Average time taken from container discharge to container out of port (hr)	31:1 5:52	71:2 4:51	31:51 :35	25:5 9:19	60:3 0:07	43:13 :09	30:4 3:55	59:3 9:05	65:16 :39	31:0 0:01	66:5 3:39	49:56: 07
Terminal average (hr)		39:04:14 34:38:53 42:34:00 39:53:58										
Port Average (hr)	37:28:31 time for port is the weighted average for all four terminals in terms of import FCL containers handled											

1.2. Transit Time - CFS and ICD

Transit time is the time taken for the container to reach the custodian- which can either be a CFS or an ICD. The rail transit time for ICD has been calculated as the difference between the time of loading on rail and time of arrival (gate-in) of the container at the ICD (Table 9). The CFS transit time is taken from the time of exit of a container from port to its arrival (gate-in) at the CFS. The samehas been arrived at on the basis of field observations.

Table 9: Transit Time of Import Containers from JNPT for April 2017								
Parameter	CFS	ICD Tughlakabad						
Average time taken (hr)	12*							
* assumed								

1.3. Customs Release Time

1.3.1 Jawaharlal Nehru Customs House (JNCH)

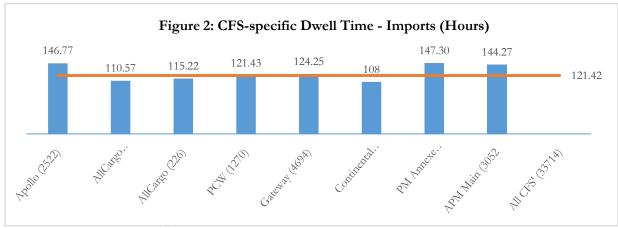
Customs release time is the time taken by the customs authorities, be it at the dock, at CFS or at ICD, to give Out-of-Charge (OOC) to a bill of entry for delivery of container(s) to the importer. It is calculated as the average time between submission of bill of entry to assessment and registration of goods to OOC [in case of RMS and Group B/E]; and registration of a container to assessment and duty payment to OOC [in case of Group (First Check) B/E]. It must be noted that the process of customs release is not linear; many agencies play a parallel role such as the PGAs, the importer/customs broker for duty payment, shipping line and the CFS. The total number of bills of entry received for all the categories have been summarised in Table 10.

Table 10: Total C	Table 10: Total Customs Release Time for JNCH (Average Time)									
	RMS	Group	Group (First Check)							
Number of Containers	56,516(48.68%)	56,471(48.64%)	3,111(2.68%)							
Submission of B/E to Assessment	1:10:48	52:42:09								
(hr)	(n=56,516)	(n=55,652)								
Registration to Examination of		7:38:21	17:30:14							
Goods (hr)		(n=44,852)	(n=3,100)							
Examination to Out of Charge		01:55:40								
(hr)		(n=44,395)								
Registration of Goods to Out of	02:28:52	08:14:53								
Charge (hr)	(n=55,689)	(n=54,223)								
Examination to Assessment (hr)			62:21:57							
			(n=3,095)							
Duty Payment to Out of Charge			07:21:05							
(hr)			(n=2,897)							
Total time (hr)	3:39:40	60:57:02	87:13:15							
Total Custo	oms Release Time at	JNCH (hr)= 33:45:5	8							

1.3.2. Customs at ICD Tughlakabad

Once a container is received at ICD Tughlakabad, the customs release time starts from assessment till out of charge is given.

Table 11: Total	Customs	Release Time	for ICD	(Average T	lime)	
	RMS		Group		Group-II	
Number of Containers	7,115	(42.24%)	8,300	(49.27%)	1,430	(8.49%)
Submission of B/E to		1:07:03		59:37:57		
Assessment (hr)	(n=7,115	5)	(n=8,23)	60)		
Registration to Examination of				14:47:42		18:44:59
Goods (hr)			(n=7,54)	1)	(n=1,377)	
Examination to Out of Charge				03:08:12		
(hr)			(n=7,50)	06)		
Registration of Goods to Out of		05:05:46		15:59:55		
Charge (hr)	(n=7,059)	9)	(n=8,20)	02)		
Examination to Assessment (hr)						42:41:05
					(n=1,370)	
Duty Payment to Out of Charge						07:09:14
(hr)					(n=1,277)	
Total time (hr)		6:12:48	_	75:37:52		68:35:18
Total Cus	toms Rel	ease Time IC	D TKD ((hr) = 45.70		



1.4. Custodian Dwell Time

1.4.1. CFS Dwell Time

CFS dwell time is calculated from the time of gate-in of a container at the CFS to its gate-out from the CFS. In the analysis, data from 11 CFS has been represented (refer to Table 25 – Annexure 1.1). The total average time taken by all CFS (11 could be included) has also been provided in Table 12. CFS specific dwell time for 11 CFS at the JNP has been depicted in Figure 2. Please note that the total time taken by CFS is calculated in terms of gate-in to gate-out (and not as a linear addition of time taken in the various processes) due to the sample size being different for each process and many parallel processes involving customs, customs brokers and shipping line taking place.

Table 12: CFS Specific Dwell Time for April2017							
	A	В	С	D			
CFS (08 CFS' n=33,714)	Average time taken from gate-in to seal cutting	Average time taken from seal cutting to OOC	Average time taken from OOC to Gate- out#	Total (Gate-in to gate out)*			
Total	80:29:24	29:29:34	48:29:07	121:25:27			

^{*} D should be taken as the true representation of the overall CFS dwell time. However, column D should not be seen as summation of columns A, B and C because the number of entries for A.B and C is not same.

1.4.2. CONCOR (ICDTughlakabad)

The dwell time for CONCOR (ICD Tughlakabad) is calculated from the arrival of the containerat CONCOR to its gate out. Please note that this time taken by CONCOR is inclusive of the time taken by customs (Tughlakabad) to release the containers (Table 13).

Ta				
	A	D		
	GC-FAC	Non-GC-FAC	Warehouse	Direct
Number of Containers	1201	3043	97	
Arrival to OOC	140:46:30			
Arrival to EJO		200:25:31	138:28:26	183:21:26
EJO to DJO			143:17:19	

[#]in column C, as time is not recorded for OOC in CFS data, therefore, a difference of 24 hours is recorded as zero in the calculations. In order to overcome this statistical bias, we have added 12 hours to the calculated time taken in column C.

DJO to destuffing			02:41:46	
EJO to OOC		204:06:01		173:35:52
De-stuffing to OOC			110:39:41	
OOC to DJO				52:32:47
OOC to Gate pass	11:18:56	09:54:59	67:29:35	
DJO to Gate Pass				05:32:17
Gate pass to departure	24:40:45	17:50:21	02:40:57	04:27:12
Total time (hr)	176:33:54	438:54:04	392:36:22	412:42L51
Total C	CONCOR Dwell	Time for ICD TKI	O (hr) = 366:34:25	

1.5. Other Supporting Agencies

1.5.1.Shipping Line -Delivery Order

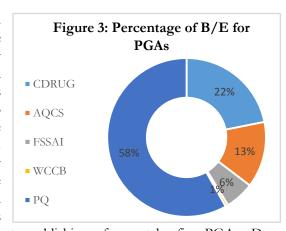
The shipping line provides delivery order (DO) as a final confirmation for delivery of cargo to the customs broker. Any delay by the shipping line in providing delivery order gets added to the total dwell time of the container at CFS/ICD. Some DOs are given after issue of OOC by customs, while others are generated at the same time or prior to OOC (Table 14).

Table 14: Average Time Taken for Generation of Delivery Orders	by Shipping Lines
Total no. of DO	
No. of DOs prior to OOC	
No. of DOs given post OOC	
No. of DOs received on same day as OOC	
Average time taken from CFS gate-in to receiving delivery order	
*This data is travilad by out 3 CES' (out of 00) therefore the number reflected horn is larger than the	a actual number of containous soins to

^{*}This data is provided by only 3 CFS' (out of 09), therefore the number reflected here is lower than the actual number of containers going to the CFS from both terminals in Table 5.

1.5.2.Partner Government Agencies (PGAs)

Partner government agencies (PGAs) are the allied agencies that are required to examine and provide clearance to certain types/categories of cargo. They play a key role in the overall process of cargo clearance. In an earlier practise, the time required by these agencies was added in the customs release time, however, some cargo (particularly perishable) is now released before the arrival of report by PGAs on the basis of a bond guarantee. While the time taken by these agencies may not add to the overall dwell time, it is important to note that some agencies take as much as 10 days to publish reports despite initiation of SWIFT in April, 2016. This



report analyses the time taken from sample collection to publishing of report by five PGAs- Drug controller (CDrug), Animal Quarantine(AQ), Wildlife Crime Control Bureau (WCCB),Food Safety and

Standards Authority of India (FSSAI) and Plant Quarantine (PQ) (Table 15). Please note that the reports for some agencies like PQ and FSSAI may also be received after out-of-charge due to nature of the cargo.

Table 15: Average Time Taken by PGAs in April 2017										
CDRUG AQCS WCCB FSSAI PQIS										
Total number of containers (n)	13724	1531	1196	8891	60242					
Time taken from sample collection	416:22:32	183:20:52	156:07:49	144:43:25	196:01:23					
to report publishing (hr)										

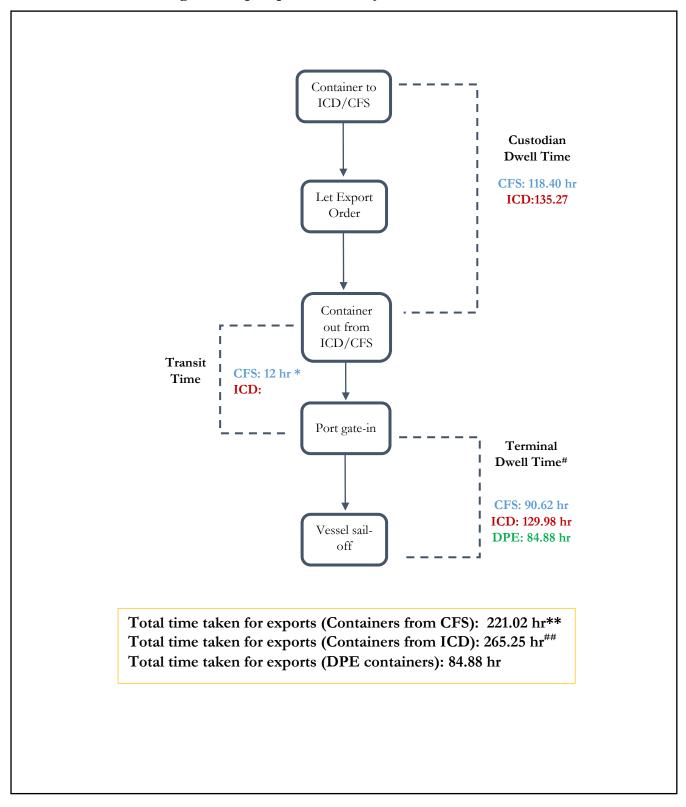


Figure4: Export process at the Jawaharlal Nehru Port

*Assumed

[#]Weighted averages

^{**} Inclusive of assumed transit time

^{##} Exclusive of transit time

2. Export Process

The export cycle starts from filing of the shipping bill to vessel sail off from the port. In between, various processes take place and a minimum of five agencies play a role, which can be assessed in terms of terminal dwell time, road/rail transit time, customs release time and custodian (CFS/ICD) dwell time (Figure 4).

2.1. Customs Release Time

2.1.1. Jawaharlal Nehru Customs House (JNCH)

Customs release time is calculated from the time of registration of goods in the customs system to the generation of Let Export Order (LEO) at JNCH.

Table 16: JNCH Dwell Time for Exports for April 2017						
Total no. of shipping bills (n)	91,631					
Average time taken from registration of goods to issuance of LEO (hr)	3:48:32					

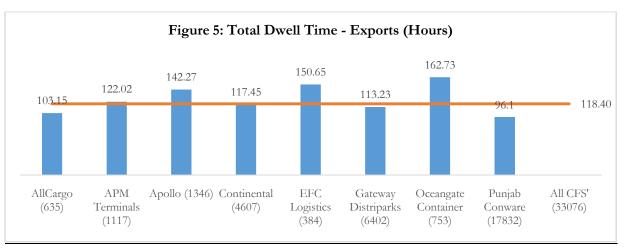
2.1.2. Customs ICD Tughlakabad

Customs ICD Tughlakabaddwell time is calculated from registration of goods in the customs system to issuance of LEO at the ICD.

Table 17: Customs ICDTughlakabad Dwell Time for Exports forApril 2017					
Total no. of shipping bills	12895				
Average time taken from registration to issuance of LEO (hr)	15:43:35				

2.2. Custodian Dwell Time

CFS dwell time is calculated from the issue of export carting order to the gate-out of container from CFS. The generation of shipping bill (S/B) is not taken as the starting point for this activity because some S/Bs are filed prior to export carting order, while others are filed post the same. Figure 5 shows the total dwell time individually for all the CFS' assessed. Further, Table 18 provides the overallaverage time taken for major processes with respect to the 09 CFS' analysed.



2.2.1.CFS Dwell Time

Table 18: CFS Specific Dwell Time for April 2017								
	A	В	С	D				
CFS (08 CFS' n= 33,076)	Average time taken from Export Carting Order (ECO) to container stuffing	Average time taken from container stuffing to movement order	Average time taken from movement order to gate out	Total (ECO to gate out)*				
Total	92:37:57	21:53:33	9:10:27	118:24:26				

^{*}D should be taken as the true representation of the overall CFS dwell time. However, column D should not be seen as summation of columns A, B and C because the number of entries for A.B and C are not the same

2.2.2.CONCOR (ICD Tughlakabad)

CONCOR (ICD Tughlakabad) dwell time is calculated fromgate-in of a container at CONCOR to its loading on wagon for rail transit to the port.

	Table 13: CONCOR Dwell Time									
	A	В	С							
	GC-FAC	Warehouse	Direct							
Number of Containers	323	238	9							
Arrival to CRN	33:54:21									
Arrival to LEO		65:08:44	03:42:08							
CRN to LEO	30:28:38									
LEO to Loading	40:31:01									
LEO to stuffing		29:44:04	00:53:20							
Stuffing to Sealing		13:38:22	00:58:23							
Sealing to loading		70:10:28	43:44:15							
Loading to Dispatch	01:49:58	01:45:40	02:19:51							
CRN to Dispatch	72:28:34									
Arrival to Dispatch (hr)	106:22:54	177:37:48	51:37:57							
Total CONC	OR Dwell Time for I	CD TKD (hr) = 135:15:	59							

2.3. Transit Time - CFS and ICD

Export transit time is the time taken for the container to reach the port. The rail transit time for ICD has been calculated based on the difference between the time of loading on rail and arrival (gate-in) of the container at the port (Table 20). The CFS transit time has been taken from the time of exit of a container from CFS to its arrival (gate-in) at the port. This figure has been assumed on the basis of field observations.

Table 20: Transit time of Export Containers to JNPT for April2017								
Parameter	CFS	ICD Tughlakabad						
Average time taken (hr)	12*							
* assumed								

2.4. Terminal Dwell Time

Terminal dwell time is calculated as the time taken from arrival of a container at the port to the time of vessel sail off. The categorisation of containers as well as the overall average dwell time and average time taken stage-wise have been represented in Table 21, Table 22, Table 23 and Table 24.

Table 21: Categorisation of Export Containers for April2017									
Parameter	JNPCT (n)	GTICT (n)	NSICT (n)	NSIGT (n)					
Total number of export containers	25,160	36,199	18,349	15,052					
Number of containers from CFS	8,358	10,774	-	-					
	(33.22%)	(29.76%)							
Number of containers from ICD	3,271	5,332	3,806	3,650					
	(13%)	(14.74%)	(20.74%)	(24.25%)					
Number of Direct Port Entry (DPE)	13,531	20,093	14,543	11,402					
	(53.78%)	(55.50%)	(79.26%)	(75.75%)					

Note: a) The containers from NSICT and NSIGT has been classified on the basis of mode (outbound carrier) -Rail and Truck. The containers with the mode "Truck" have been taken as DPE for analysis

	Table 22: Dwell Time of Export Containers for April 2017											
Parameter	JNPCT			GTIC	[NSIC'	Γ		NSIG'	Γ	
	CFS	ICD	DPE	CFS	ICD	DPE	CFS	ICD	DPE	CFS	ICD	DPE
Average dwell time (container arrival at port to vessel sail off) (hr)	104: 23:1 1	149: 58:2 1	104:2 7:50	79:5 6:45	121: 37:2 2	73:46 :01	-	121: 23:4 5	76:06 :06	-	133: 17:2 3	92:29 :39
Average terminal dwell time (hr)	110:21:11 82:39:18 85:29:48 102:23:13						3					
Average port dwell time (hr)	93:41:37 ort dwell time is the weighted average for all four terminals in terms of export FCL containers handled											

b) For GTICT, DPE includes both Factory Stuffed and ICD by Road as has been reported

c) The 'n' values represent Full Container Load (FCL) containers only, They also take into account only export containers and not re-export and transhipment containers

d) Figures in brackets represent percentage share

CFS	JNPCT ICD			CTICT	_						Table 23: Container Arrival to Container Loading - Export Containers for April 2017								
CFS	ICD)	GTICT			NSICT			NSIGT										
		DPE	CFS	ICD	DPE	CFS	ICD	DPE	CFS	ICD	DPE								
88:0 2:29	135: 02:0 9	89:18 :37	71:3 4:22	112: 35:2 7	65:56 :12	1	111: 40:1 9	67:13 :35	-	117: 19:5 1	78:36 :12								
94:50:00 74:29:10 76:26:43 87:44:21																			
82:19:14																			
•	2:29	94:50:0	94:50:00	94:50:00	94:50:00 74:29:10	94:50:00 74:29:10 88:0 2:29 92:0 9 89:18 71:3 4:22 7 65:56 :12 82:1	94:50:00 74:29:10 88:0 2:29 92:0 9 89:18 71:3 4:22 7 7 82:19:14	94:50:00 74:29:10 76:26:4	94:50:00 74:29:10 76:26:43	94:50:00 74:29:10 76:26:43 89:14	88:0 02:0 89:18 71:3 35:2 65:56 - 40:1 67:13 :35 - 19:5 94:50:00 74:29:10 76:26:43 87:44:2								

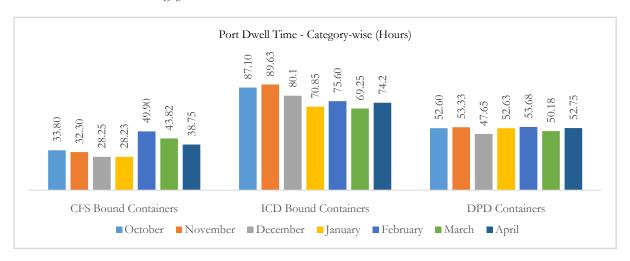
Table 24: Container Loading to Vessel Sail Off - Export Containers for April 2017												
Parameter		JNPCT		GTICT			NSICT			NSIGT		
	CFS	ICD	DPE	CFS	ICD	DPE	CFS	ICD	DPE	CFS	ICD	DPE
Average time from container loading to vessel sail off (hr)	17:0 2:17	15:3 5:02	15:55 :39	8:22: 23	9:01: 55	7:49: 51	-	9:43: 26	8:52: 32	-	14:2 2:16	12:12 :31
Terminal Average (hr)	16:15:13 8:10:09 9:03:05 12:43:07											
Port Average (hr) Note: Average	11:08:43 etime for port is the weighted average for all four terminals in terms of export FCL containers handled											

3. Trend Analysis

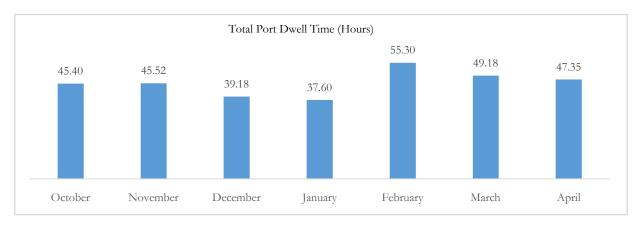
This section aims at analysing the trends in key metrics pertaining to the import and export value chains encompassing the JNP. The monthly comparison of the metrics have been depicted below:

3.1. Imports

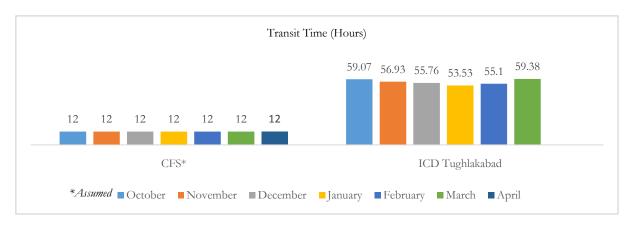
3.1.1. Port Dwell Time— Category-wise



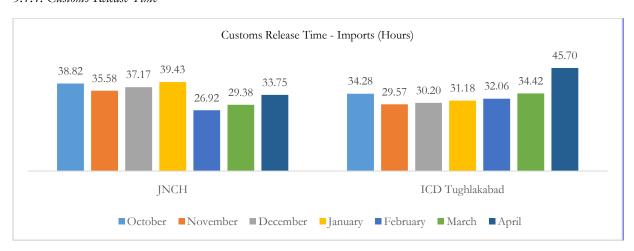
3.1.2. Total Port Dwell Time - All Terminals

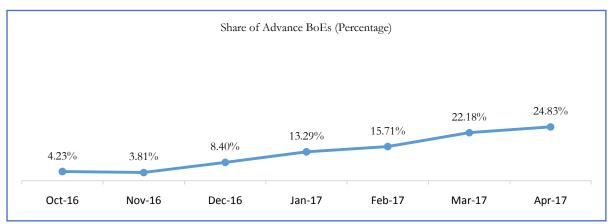


3.1.3. Transit Time



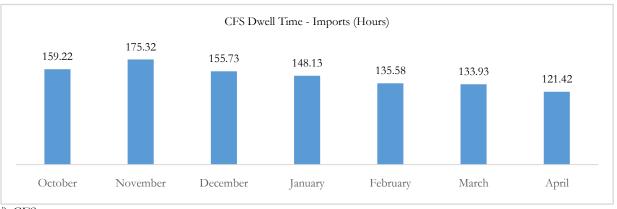
3.1.4. Customs Release Time





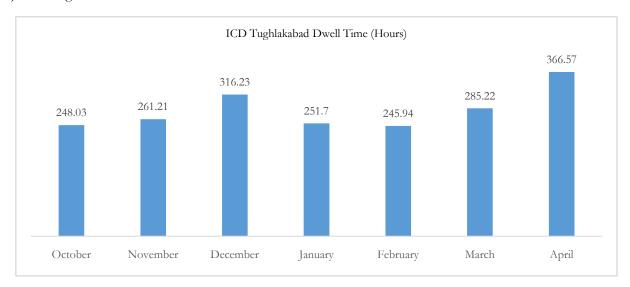
3.1.5. Advance Bill of Entry

3.1.6. Custodian Dwell Time

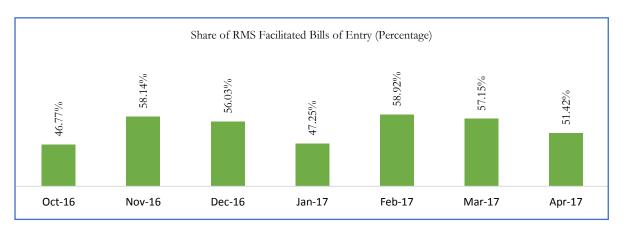


i) CFS

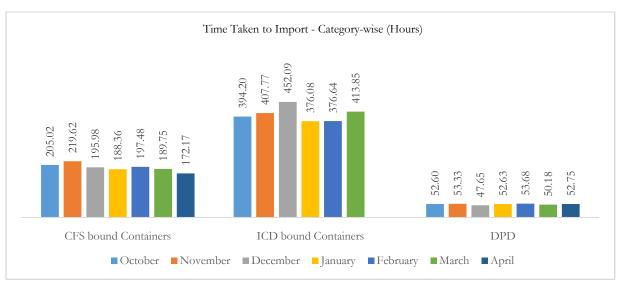
ii) ICD Tughlakabad



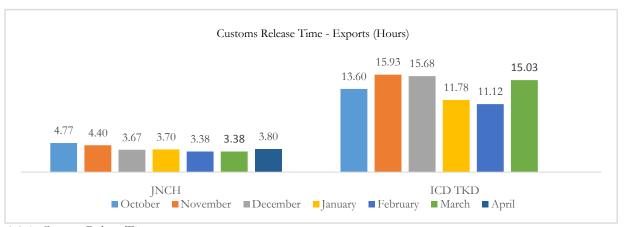
3.1.7. RMS Bills of Entry- JNCH



3.1.8. TotalImport Time -Category-wise

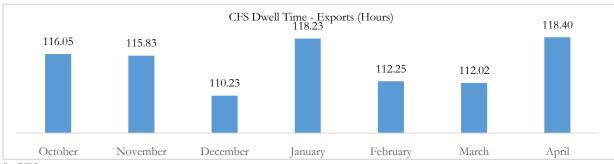


3.2. Exports



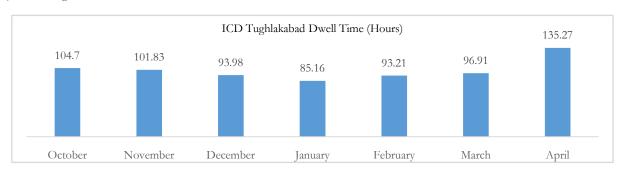
3.2.1. Customs Release Time

3.2.2. Custodian Dwell Time

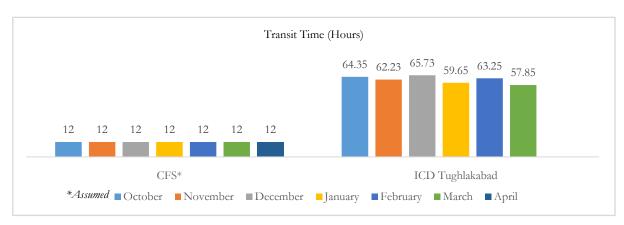


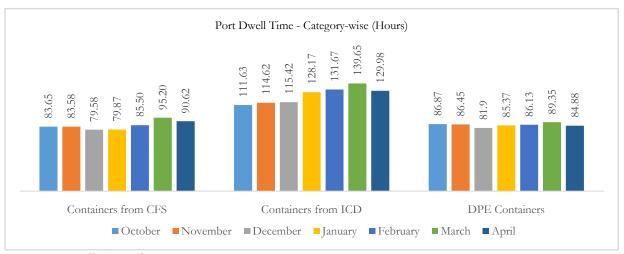
i) CFS

ii) ICD Tughlakabad



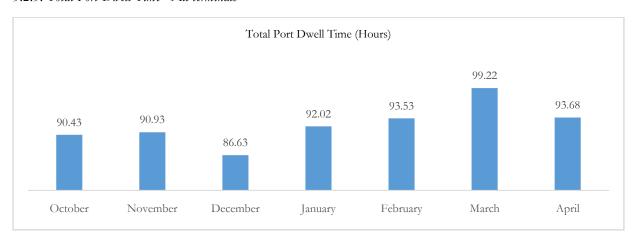
3.2.3. Transit Time



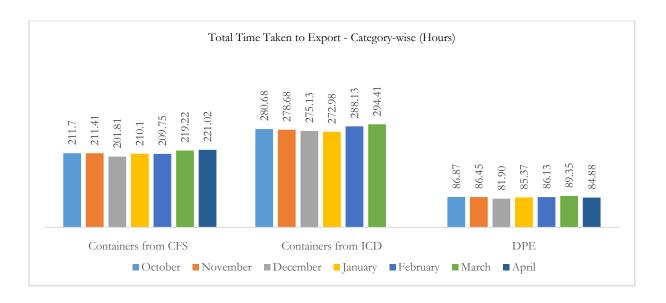


3.2.4. Port Dwell Time— Category-wise

3.2.5. Total Port Dwell Time - All terminals



3.2.6. Total Export Time – Category-wise



ANNEXURE 1 - Imports

1.1. CFS Dwell Time

Table 27: CFS Specific Dwell Time for April 2017									
	A	В	С	D					
CFS	Average time taken from gate-in to seal cutting	Average time taken from seal cutting to OOC	Average time taken from OOC to Gate- out	Total (Gate-in to gate out)					
Total	80:29:24	29:29:34	48:29:07	121:25:27					
Apollo	100:40:32	NA	NA	146:46:57					
AllCargo Annexe	77:52:20	12:15:10	53:51:37	110:34:46					
AllCargo	73:07:07	18:56:15	59:14:41	115:13:47					
PCW	97:30:22	NA	33:09:47	121:26:53					
Gateway	101:16:12	NA	43:10:54	124:15:37					
Continental	59:19:14	NA	NA	108:00:23					
PM Annexe	101:24:46	62:39:27	57:59:04	147:18:43					
APM Main	95:26:44	66:53:40	39:55:00	144:16:36					

1.2. Dwell Time by PGAs

Table 28: Average Time Taken by PGAs in April2017								
	CDRUG	AQCS	WCCB	FSSAI	PQ			
Total number of Containers (n)	5931	1932	1310	8891	60242			
Time taken from B/E filing to sample	16:41:35	15:05:42	16:10:59	144:43:25	196:01:23			
collection (hr)								
Time taken from sample collection	336:23:48	176:23:22	104:47:04	N/A	N/A			
to report publishing (hr)								

ANNEXURE 2 - Exports

2.1. CFS Dwell Time

Table 29: CFS Specific Dwell Time for April 2017									
CFS	Average time taken from Export Order to container stuffing	Container stuffing to movement order	Movement order to gate out	Total (ECO to gate out)					
Total	92:37:57	21:53:33	9:10:27	118:24:26					
AllCargo	79:42:29	11:46:25	24:54:56	103:09:04					
AllCargo Annexe	87:45:54	NA	51:13:17	122:01:08					
APM Terminals	85:35:28	40:22:01	26:57:40	142:16:33					
Continental	92:56:04	NA	NA	117:27:22					
EFC Logistics	128:58:26	25:00:31	6:16:52	150:39:18					
Gateway	92:16:51	14:59:42	8:39:04	113:14:11					
Oceangate	126:44:41	45:51:16	25:47:49	162:44:30					
Punjab Conware	80:11:59	22:42:57	4:36:40	96:06:32					