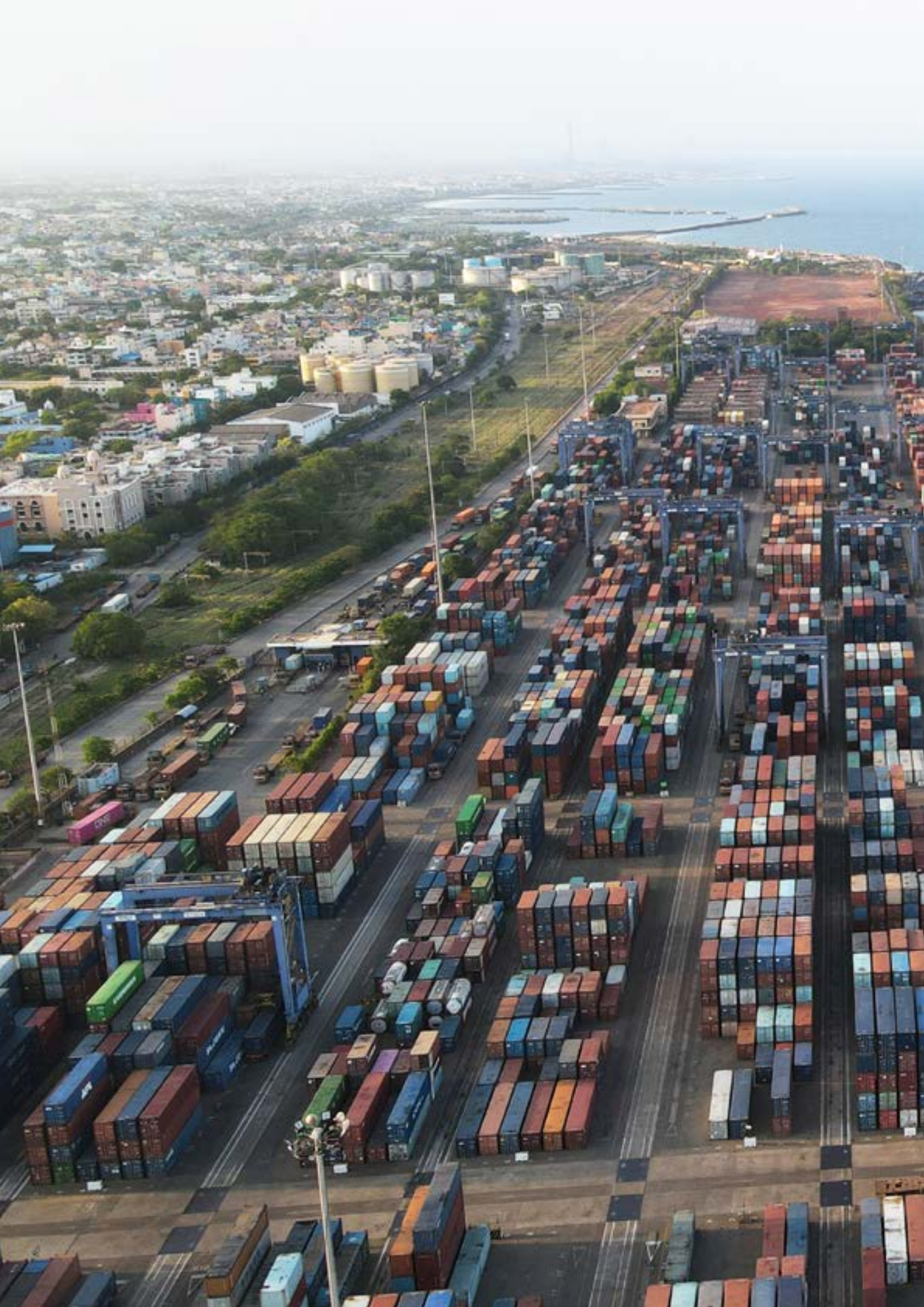
# National Time Release Study 2023

June 2023



# Table of Contents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# Foreword

As our economy grows so does the expectations from the Customs Administration. To improve requires that we measure where we are and to improve continually, we must keep measuring regularly. It is in this context that the National Time Release Study, intended as a robust quantitative assessment of the EXIM cargo release process, is carried out annually.

I am happy that the NTRS 2023 has presented an easily understandable analysis. A satisfying aspect of this study is the finding of further improvement in the overall release time of import and export cargos.

We are also nearer to the National Trade Facilitation Action Plan 2020-2023 targets. In exports the target time is achieved were the benchmark to be taken as average customs/regulatory release time.

In imports the study finding is noteworthy that Pre-payment Customs Compliance Verification by Customs Officers resulted in 27% of bills of entry receiving a deemed out of charge 32 hours before automated out of charge was triggered from duty payment by importer.

The NTRS 2023 has pinpointed various areas to be looked at further for smoothening the trade flow process, both within the Customs, and in the larger logistics and supply chain ecosystem.

On behalf of the Board, I congratulate the NTRS team jointly led by Sh. Gaurav Masaldan, Joint Secretary (Customs) and Sh. Vijay Singh Chauhan, Principal Commissioner (Customs) [since retired] for bringing out this study.

**Vivek Johri**
Chairman, CBIC

# 01 Executive Summary

National Time Release Study (NTRS) 2023 covering the import and export release time for 15 major ports, representing the four port categories, is the third in the series of NTRS adopting the standardised methodology. The study covers 4 Seaports, 6 Air Cargo Complexes, 3 Inland Container Depot and 2 Integrated Check Posts; these geographically well distributed ports cumulatively account for approximately 80 percent of the bills of entry and 70 percent of the shipping bills filed in the country.

The study presents inter-temporal performance assessment of trade facilitation measures, highlighting inter alia successful outcomes of various initiatives, including those taken in compliance of Trade Facilitation Agreement (TFA) commitments and wider "TFA Plus" initiatives identified under the National Trade Facilitation Action Plan (NTFAP). Regular conduct of NTRS also fulfils the commitment under Article 7.6 of the TFA. Further, since the completion of NTRS 2022, India has fulfilled all its category B commitments made under the TFA within the stipulated time.

Time Release Study (TRS) as a performance measurement tool aims to present quantitative measure of the cargo release time, defined as the time taken from arrival of the cargo at the Customs station to its out of charge for domestic clearance in case of imports and arrival of the cargo at the Customs station to the eventual departure of the carrier in case of exports. In this study, time is presented in hours and minutes i.e. (hours:minutes).

Recognising that the cargo release time is expected to be different for export and import and depends on a variety of factors, notably the mode of cargo movement, the NTFAP 2020-2023 has prescribed to bring down the average cargo release time:

- For imports (within 48 hours for Sea Cargo, Inland Container Depots and Land Customs Stations and 24 hours for Air Cargo).
- For exports (within 24 hours for Sea Cargo, Inland Container Depots and Land Customs Stations and 12 hours for Air Cargo).

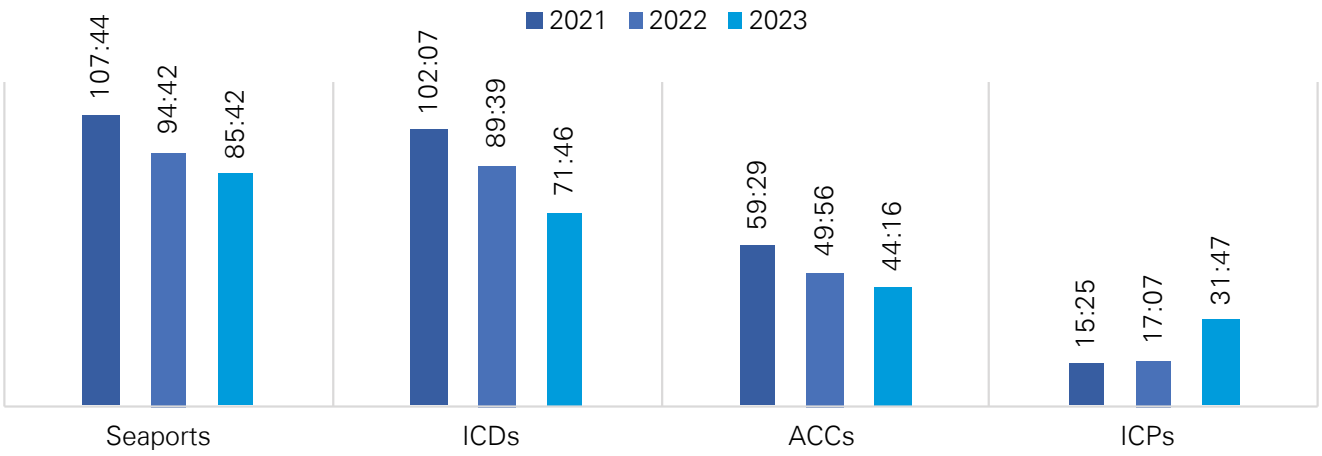
NTRS presents port-category wise average release time for the current year, based on the sample period of January 1-7, 2023 (both days included), comparing the same to the performance during the corresponding periods of 2021 and 2022 to, inter alia, (a) assess the progress made towards the NTFAP targets; (b) identify the impact of various trade facilitative initiatives, notably "Path to Promptness"; and (c) identify the challenges to more expeditious reduction in release time, adopting multi-dimensional in-depth analysis, coupled with stakeholder consultations both for import and export clearance process.

## Imports

The study of import release time is based on analysis of 60,403 bills of entry filed during the NTRS sample period of 1-7 January, 2023 with the share of excluded bills being 1 per cent.

The average import release time has continued to improve for three port categories, as shown in Chart 1 below: achieving 20 percent reduction in release time for ICDs; 11 percent reduction for ACCs; and 9 percent reduction for seaports in 2023 over 2022. In case of ICPs, the average release time has increased, though it continues to be well below the NTFAP target.

**Chart 1: Import Release Time, 2021-2023**




The distance travelled towards NTFAP target[1], a ready performance indicator for inter-temporal comparison, has improved by 14 percentage points in the case of ICDs, and 5 percentage points for ACCs as well as Seaports, as shown in Table 1 below. ICPs continue to be in achievement as per this performance indicator.

NTRS 2023 has also assessed the assurance of reduced release time by calculating standard deviation, along with a similar exercise for the corresponding period of the previous year (COPPY) to present a comparative assessment. As shown in the table 1 below, the improvement in the average release time is also accompanied by lower standard deviation, thereby providing greater assurance of expedited cargo clearance.

**Table 1: Average Import Release Time – Faster, Surer and Closer to the NTFAP targets**

| Port Category | Average Release Time (hour: minute) | | Distance travelled towards NTFAP target (in per cent) | | Standard Deviation (hour: minute) | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:22 | 79% | 74% | 95:31 | 107:26 |
| **ICDs** | 71:46 | 89:39 | 90% | 76% | 91:58 | 102:54 |
| **ACCs** | 44:16 | 49:56 | 80% | 75% | 64:55 | 74:19 |
| **ICPs** | 31:47 | 17:07 | 100% | 100% | 71:43 | 48:15 |

NTRS 2023 presents the current status in respect of the four pillars of "Path to Promptness" for import release time, viz. filing of advance bills of entry, allowing for pre-arrival processing, enhanced levels of facilitation, promotion of Authorised Economic Operator (AEO) scheme and increased utilization of Direct Port Delivery (DPD) scheme.

The percentage of **bills of entry filed in advance** has increased marginally, from 74 percent in 2022 to 76 percent in 2023; noting that the jump was more significant in 2022 from 37 percent in 2021, attributable mainly to the statutory push mandating timely filing of bills of entry, vide amendment made through the Finance Act, 2021. Recognising the

[1] In order to present quantitative assessment of inter-temporal change in the average release time, NTRS 2021 adopted an indicator titled Distance travelled towards NTFAP Target, which refers to the percentage share of fastest bills of entry/shipping bills for which average release time is within the NTFAP target for that port category.

possible challenges in advance filing of bills of entry, particularly at ICPs and ACCs, the study found that overall 93 percent bills of entry were filed within the stipulated time as against 90 percent in COPPY. This also demonstrates the use of NTRS as an effective tool for evidence-based policy making.

Second, **higher levels of facilitation** and more efficient interventions translate into lower cargo release time. This continues to be validated by NTRS 2023, which reports that the average release time for facilitated bills of entry was 55 percent lower than average release time for non-facilitated bills of entry, in respect of all the port categories.

Third, the advantages of enrolling for **AEO schemes** include higher facilitation; average release time being 38 percent lower than non-AEO bills of entry, greater certainty of more expeditious cargo release, besides lower trade costs. Notwithstanding the quantified advantages, uptake of AEO scheme continues to remain lukewarm at 35 percent in 2023. Referring to the perceived scope for increase in uptake, the study recommends a more effective AEO scheme, which is possible to be achieved through extensive direct outreach to the trade, not simply through the Customs broker. This could lead to significant improvement in the AEO uptake as well as the ART.

The study showed that each of the three components of "Path to Promptness" discussed above resulted in significant improvement in the Average Release Time (ART). As shown in the table 2 below, the improvement was substantially higher in cases where the three features were combined, achieving the NTFAP target release time for the concerned port categories.

**Table 2: Average Release Time by 'Path to Promptness' Parameters**

| | Overall (hour: minute) | | Advance BE (hour: minute) | | Facilitated BE (hour: minute) | | AEO BE (hour: minute) | | Advance Facilitated AEO BE (hour: minute) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 78:29 | 84:40 | 68:53 | 77:17 | 60:28 | 62:12 | 47:54 | 49:12 |
| **ICDs** | 71:46 | 89:39 | 60:37 | 81:16 | 61:30 | 75:59 | 63:18 | 56:22 | 44:13 | 53:07 |
| **ACCs** | 44:15 | 49:56 | 34:48 | 38:15 | 38:57 | 44:16 | 34:39 | 37:11 | 25:48 | 27:09 |
| **ICPs** | 31:44 | 17:07 | 19:45 | 19:41 | 32:10 | 16:55 | 62:28 | 27:15 | 7:54 | 27:25 |

Fourth, **Direct Port Delivery (DPD) facility** introduced at the CFS-based seaports allows the facilitated consignments to be given out of charge directly from the terminal premises. While the average release time for DPD bills of entry at 60:07 hours is lower than ART of 89:19 hours for Container Freight Station (CFS) bills of entry, further expansion of DPD scheme is constrained inter alia by levels of facilitation, share of FCL cargo, preference among the importers to continue availing the services of the CFS, benefiting from the buffer storage facility.

Considering the many reasons for assessing the average release time for **Full Container Load (FCL) and Less than Container Load (LCL) cargo** separately, including LCL bills of entry being proxy for small consignments preferred by MSME importers, NTRS 2023 found that the early JNCH TRS 2018 conclusion that ART for LCL bills of entry was higher than FCL bills of entry[2] and could be attributed to the additional stage of desegregation of cargo in the LCL clearance process was too simplistic and not supported by the 15 port NTRS.

The presentation of average release time categorized for assessing the impact of non-fiscal concerns handled by different **Participating Government Agencies (PGAs)** for the four port categories show a general trend of improvement in 2023 over COPPY, albeit they continue to take longer than the average release time for the concerned port category. Further, it was noted that bills of entry handled by Central Drugs Standard Control Organization reported the best average release time among the PGAs that have on boarded the SWIFT initiative of the CBIC.

[2] ART for LCL bills of entry at 151:36 hours was higher than FCL bills of entry at 140:24 hours; page 32.

Previous TRS/ NTRS have identified some **impact dissipating actions** that have dampened the beneficial impact of various trade facilitative measures. NTRS 2023 has delved deeper into these impact dissipating actions that are causing delays in cargo clearance.

It has been observed that despite statutory provisions, in 2023, 7 percent of the bills of entry continued to attract late fee for **delayed filing**, even though showing a decline from 10 percent during the NTRS 2022.

Further, stage-wise analysis has identified the **time taken in payment of duty after (self) assessment** as the stage accounting for maximum time taken, as also in 2022. Even as the time taken from assessment to payment of duty declined from 88.37 hours in 2022 to 72:19 hours in 2023, it is still significantly high, as evidenced from the finding that in 34 percent of bills of entry, interest was paid on account of delayed payment of duty.

It is observed that even as the share of bills of entry marked for assessment has been declining with increased facilitation levels, the time taken in assessment has generally been increasing: overall time taken in assessment of non-facilitated bills of entry for all the four port categories increased from 41:21 hours in 2021 to 50:47 hours in 2022 to 53:07 hours in 2023.

NTRS 2023 has identified three processes related to **Faceless Assessment**, namely (a) amendment, (b) query and (c) recall resulting in significant increase in the time taken during the assessment stage, or even resulting in change of risk treatment from fully facilitated to non-facilitated bill of entry.

(a) It is seen that the share of bills of entry involving amendment, subsequent to filing of bills of entry either as part of assessment process or by the importer for curative purposes, has increased from 11 percent in 2021 to 32 percent under NTRS 2022, and further to 37 percent in 2023.

(b) The analysis found that the share of queried bills of entry was 4.9 percent of the bills of entry analysed, excluding ICPs wherein no queries were raised. However, the share of queried bills of entry as percentage of non-facilitated bills of entry still continues to be 18 percent. It was found that the expression "query" is a misnomer since in many of the instances, it is resorted seeking documents that should otherwise have been uploaded at the self-assessment stage.

(c) In 2023, about 9 percent of the fully facilitated bills of entry were recalled, either at the request of the importer or the Customs officer, showing a significant decline from 13 percent in 2022. Of these recalled bills of entry, in 47 percent cases, up from 44 percent in 2022, final assessment was found to be different from the self-assessment.

Though the cargo clearance process is deemed to be completed with the grant of out of charge, and therefore, subsequent delay in evacuation of cargo after the OOC does not impact the measure of import release time, the quantification and changes therein overtime lead to better understanding trade behaviour and associated logistics and supply chain issues. The high time taken at this stage post OOC, and increase therein in the case of CFS cargo (except at Chennai port), is perhaps attributable, inter alia, to the timelines for procurement and delivery, plans for transportation and storage facility, besides perceived uncertainty about the cargo release time.

## Exports

Exports NTRS is based on the analysis of 63,547 shipping bills, representing an **increase of 25 percent** over shipping bills analysed during 2022, with a significant decline in the exclusions of shipping bills on account of data inconsistency or incompleteness.

NTRS recognises the distinction between regulatory clearance (also referred as customs release), which gets completed with the grant of Let Export Order (LEO) and the wider aspect of physical clearance which occurs on completion of logistics processes with departure of the carrier with the goods.

In Table 3 below, the port category-wise export release time, measured keeping the aforesaid distinction has been presented. It is observed that adopting the former benchmark of regulatory clearance, the NTFAP target release time has been achieved:

**Table 3: Export ART, Stages and Distance travelled towards target**

| | Physical release time (Arrival to Departure) (hour: minute) | | Distance travelled towards NTFAP target (arrival to departure) | | Customs release time (Arrival to LEO) (hour: minute) | | Distance travelled towards NTFAP target (Arrival to LEO) | | LEO to Departure and share thereof in total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 175:55 | 191:41 | 0.70% | 0.90% | 19:34 | 29:47 | 100% | 98.8% | 156:21 (89%) | 162:03 (85%) |
| **ICDs** | 129:33 | 177:44 | 12% | 6% | 32:53 | 47:41 | 97% | 75% | 96:39 (75%) | 135:39 (76%) |
| **ACCs** | 28:18 | 35:22 | 31% | 47% | 4:08 | 4:04 | 100% | 100% | 24:10 (85%) | 32:39 (92%) |
| **ICPs** | 11:07 | 21:39 | 100% | 100% | 4:33 | 11:07 | 100% | 100% | 6:34 (59%) | 13:04 (60%) |

The extent of certainty regarding the average release time using standard deviation as the indicator showed that along with the improvement in the export release time, there is also greater certainty regarding the same:

**Table 4: Greater certainty around average release time of export cargo**

| Port Category | Physical release time (arrival to departure) (hour: minute) | | Standard Deviation (hour: minute) | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 175:55 | 191:41 | 115:24 | 140:25 |
| **ICDs** | 129:33 | 177:44 | 102:09 | 138:43 |
| **ACCs** | 28:18 | 35:22 | 23:18 | 64:27 |
| **ICPs** | 11:07 | 21:39 | 15:55 | 33:22 |

The time taken from LEO to Departure, is significantly high in absolute term vis-à-vis NTFAP targets, as well as in share of the overall average release time for all the port categories, except ICPs. Study shows that certain processes have significantly impacted the time taken in this stage. These include, the stuffing of cargo and Less than Container load (LCL) cargo, in case of ICDs; stuffing of cargo, in case of Seaports {Container Freight Stations (CFSs) cater to nearly all Non-factory stuffed cargo}; and nature of commodity, for example, refrigerated cargo in case of ACCs.

Further, during the stakeholder interactions, it was suggested that the time taken from LEO to Departure is also dependent on the frequency and controllability of the movement of vessel/aircraft/rake/truck. This averment is intuitively sound. Since the exporters intend to minimise the risk of missing the delivery time, which is significantly different for the four modes of export, the proclivity to err on the side of caution is more pronounced, wherein the frequency of vessel/aircraft is lower.

It was found that many of the post-LEO processes do not per se entail significant amount of time, however queuing up for these logistic processes does. For example, loading on the rake at the ICDs, entry into the trucks at the terminal premises, security screening of packets at the ACCs or security clearance of trucks at ICPs entail significant queuing up.

The study has made certain recommendations, including: (a) need to release Exports Dwell Time Report (DTR), similar to the Imports DTR published by the CBIC, with coordinated data sourcing protocol between DG Systems and the custodians; (b) Chief Commissioners of Customs may utilise the Customs Clearance Facilitation Committee (CCFC) forum to formulate and lead local initiatives to address local challenges; and (c) since ICDs account for the largest number of ports, catering to exporters based in large hinterland wherein perhaps the scope for further improvement is maximum, a separate study covering larger set of active ICDs could be considered.

# 02 Introduction

National Time Release Study (NTRS) 2023 covering the import and export release time for 15 major ports representing the four port categories is the third in the series of NTRS adopting the standardised methodology[3], and presents comparable inter-temporal performance assessment of trade facilitation measures.

This study covers 4 Seaports, 6 Air Cargo Complexes (ACCs), 3 Inland Container Depots (ICDs) and 2 Integrated Check Posts (ICPs), which cumulatively account for approximately 80 percent of the bills of entry and 70 percent of the shipping bills filed in the country.

Regular conduct of NTRS flows from the following the commitment under article 7.6 of the Trade Facilitation Agreement (TFA) of the World Trade Organization (WTO) and it is also mandated by the NTFAP 2017-20, and 2020-23. These time-bound NTFAP have been prepared by the National Committee on Trade Facilitation (NCTF) chaired by the Cabinet Secretary, which was established in compliance with article 23.2 of the TFA. The said Article 7.6 also encourages Member countries to describe their experiences monitoring average release timeframes, including the methods they followed, any bottlenecks they discovered, and any potential implications on productivity.

India has shared its NTRS 2022 with the WTO, which incidentally is also the latest TRS among all Members. Further, since the completion of NTRS 2022, India has fulfilled all its category B commitments made under the TFA within the stipulated time, thereby completing the implementation of all TFA measures.


[3] First NTRS was conducted in 2019, albeit covering different time periods.

# 03 Scope, Methodology and Data Sources

NTRS 2023 is based on a detailed quantitative analysis of bills of entry and shipping bills filed at the 15 representative ports, during the sample period of first week of January, 2023, i.e. from January 1st to 7th.

**Geographical coverage**: The 15 Customs ports spread over 9 different States are:

| | |
|---|---|
| **Seaports** | (i) Jawaharlal Nehru Custom House (JNCH), also referred to as Nhava Sheva,<br>(ii) Mundra,<br>(iii) Kolkata,<br>(iv) Chennai; |
| **Air Cargo Complexes (ACCs)** | (v) Ahmedabad,<br>(vi) Bengaluru,<br>(vii) Chennai,<br>(viii) Delhi,<br>(ix) Hyderabad,<br>(x) Mumbai; |
| **Inland Container Depot (ICDs)** | (xi) Ludhiana,<br>(xii) Tughlakabad, Delhi,<br>(xiii) Whitefield, Bengaluru; |
| **Integrated Check Posts (ICPs)** | (xiv) Petrapole, West Bengal on India-Bangladesh border,<br>(xv) Raxaul, Bihar on India-Nepal border. |

**Unit of Study**: NTRS has adopted bill of entry (in the case of imports) and shipping bill (in the case of exports) as the unit for analysis, mainly in view of these being common units with ready availability of electronic data from the Customs automated system. It is also viewed that an analysis based thereon provides better insights and actionable conclusions for the regulatory and administrative authorities tasked with trade facilitation. It is nonetheless recognised that valuable insights from logistics and supply chain perspective can be obtained in respect of the sea cargo clearance process using 20-foot or 40-foot containers (TEU and FEU) as the unit.

**Data Sources**: One of the pillars of NTRS is that it is based primarily on the data sourced from the Customs automated system maintained by Directorate General of Systems and Data Management, CBIC. Given that entire cargo clearance is handled in an electronic environment, precise timestamps indicating stage-wise progress of documentary clearance are readily available. This data has been increasingly supplemented with additional information about logistics/physical movement of cargo, obtained from the IT systems of the concerned custodians. With learning the challenges of data inconsistency on export side have been reduced, which is reflected in lower exclusions.

**Performance Indicator**: For both import and export cargo, the NTRS uses the average cargo release time as the performance indicator. Basing on WCO's document the cargo release has been measured between the time of arrival until the release of cargo using a standardised system. For abundant clarity, it is stated that the lower the release time the better the performance, which is often expressed as an improvement. In this study, time is presented in hours and minutes i.e. (hours:minutes).

In the previous study, the **import release time** is determined as the arithmetic mean of the period between 'arrival of Goods' and the Customs' granting of 'Out of Charge' upon fulfilment of all regulatory conditions for all the bills of entry analysed. The granting of Entry Inwards at seaports, the arrival of cargo at ICDs and ICPs, and the arrival of the aircraft at ACCs signify the arrival of cargo through the respective modes. The event marking the completion of the cargo release process for all the four modes is the same, viz. grant of Out of charge (OOC) orders by the Customs. Thereafter, cargo can be cleared from the Customs station at the importer's convenience, which is recorded in the custodians' IT system as "Gate Out". It has been an accepted practice for NTRS to also capture the average time from grant of OOC to gate out, as an additional information, found useful from logistics perspective.

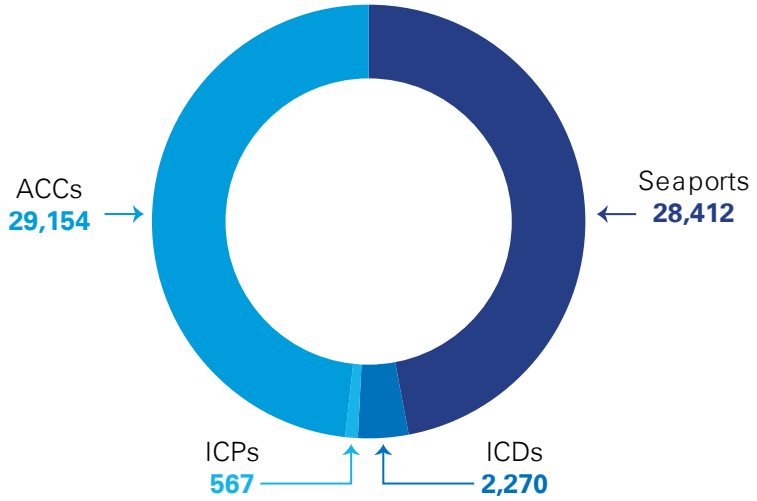
The **export release time** is determined as the arithmetic mean of the time between cargo's arrival at the port and its physical departure from the port/ Customs station represented by vessel sail off in the case of seaports, loading on the rake in the case of ICDs, dispatching the truck from the border gate in the case of ICPs, and take-off of the aircraft in the case of ACCs for all the shipping bills analysed. Nonetheless, it has been a developing practice of NTRS to also differentiate and measure the time till the customs release (referred as let export order) at which point all the regulatory clearances stand extended. This customs release is prior in time, to the physical release and the processes between the customs release and physical release are of use from the logistics perspective.

**Distance travelled towards NTFAP Target**: TRS has been recognised as an effective performance measurement tool for inter-temporal comparison of trade facilitation status, but not for inter-spatial comparison, since different ports, even when located in the same country, could be handling different commodities and traders with different risk profile or capacity. In order to present quantitative assessment of inter-temporal change in the average release time, NTRS 2021 adopted an indicator titled **Distance travelled towards NTFAP Target**, which refers to the percentage share of fastest bills of entry/shipping bills for which average release time is within the NTFAP target for that port category, which has been used since then.

**Sample period**: As mentioned earlier, the sample period for the NTRS 2023 is the first week of the calendar year, i.e. from 1st to the 7th of January 2023. Therefore, all the bills of entry and shipping bills filed between 1st and 7th January (both days included) were initially taken up and tracked until 7th February 2023. The decision to end tracking on 7th February is simply an administrative measure intended to facilitate the conclusion of the NTRS in a time-bound manner, allowing sufficient time for follow-up actions as part of the NTRS as a cyclical annual exercise.

**Sample Size**: In case of imports, the total number of bills of entry filed, during the sample period, was 60,721, of which particular bills of entry were excluded wherein OOC was not granted till 7th February or entry inwards had been granted before 1st December 2022. This standard exclusion criteria has resulted in about 1 percent of bills of entry being excluded this year. Therefore, the sample size for import release time analysis for NTRS 2023 is 60,403 bills of entry, with the following port-category break-up:

**Chart 2: Number of Bills of Entry analyzed**

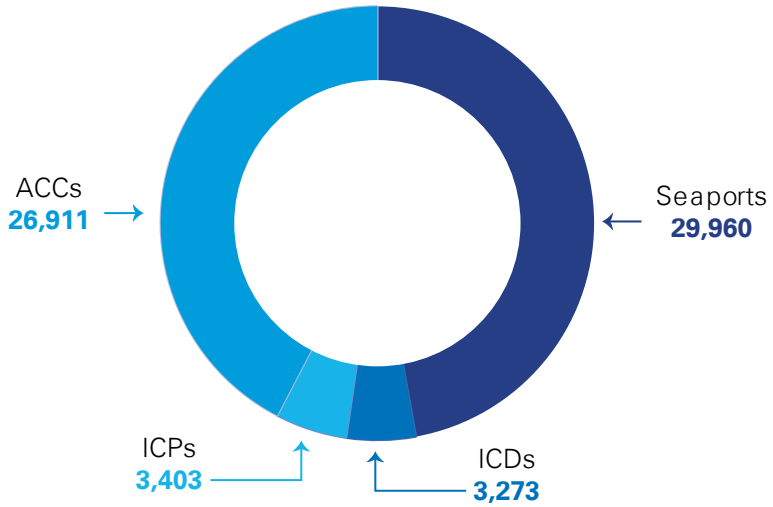



In case of exports, the initial number of shipping bills filed during the sample period in 2023 was 83,858. However, a much larger exclusion of about 24 percent, though significantly lower than 40 percent in 2022, was required to be made. The higher exclusion in the export study is due to data reconciliation challenges between the data obtained from the Customs automated system and those from the database of different custodians, even for the critical data relating to the time of arrival of goods at the port and that of physical departure from the port, which form points for analysis of export release time. After the necessary exclusions, Export NTRS 2023 is based on the analysis of 63,547 shipping bills.

After matching the two data sets, exclusions were made wherein shipping bills with inconsistent or blank data entries or in those cases where the LEOs were not granted till 7th February. It is noteworthy that the exclusions in Export NTRS have been significantly declining and reduction vis-à-vis last year is specifically reported. This reflects improved quality of logistics data sets received from field formations, assures greater robustness of findings of this study, even as it suggests that strict comparability between the findings of this year and the corresponding period of the previous year (COPPY) would require assumption regarding randomness of the excluded shipping bills.

The port-category breakup of the shipping bills analysed by NTRS 2023 after exclusions is shown in the chart below.

**Chart 3: Number of Shipping Bills analyzed**



NTRS 2023 presents its analysis based on port categorization, whereas the underlying data for the ports/Customs stations included therein are appended to this study. It does, however, make appropriate references to port-specific findings, enriching the quantitative analysis and reinforcing the arguments stated.

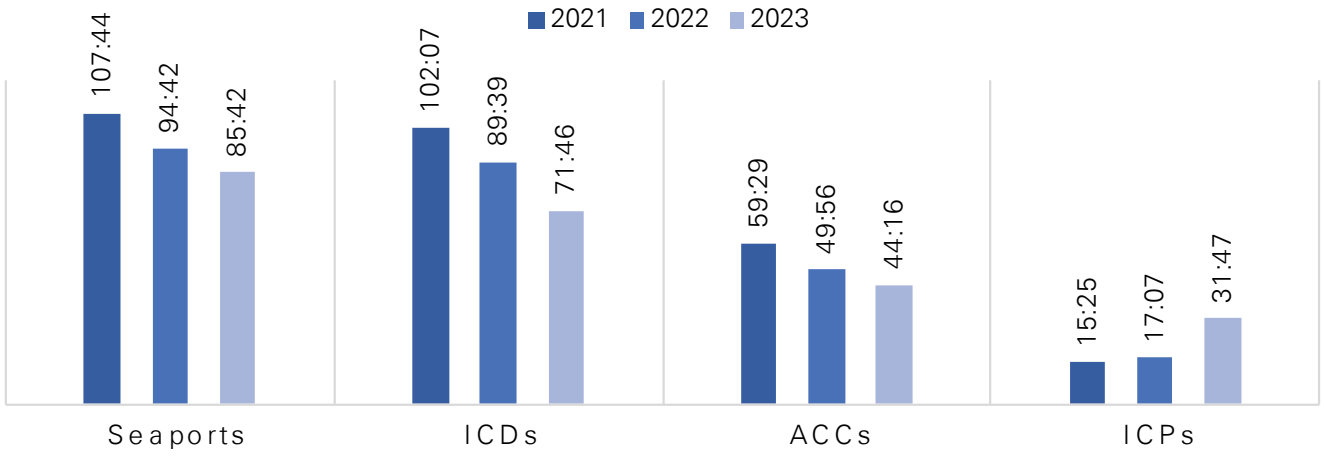
NTRS 2023 includes a two-way inter-temporal analysis - a comparison with performance indicators from the equivalent period of the prior year and a comparison with targets established under the NTFAP 2020-2023. Though the report notes the potential application of NTRS in assessing the efficiency of custodians and other TFA-Plus-covered facilities, as well as the performance of Customs administration and other regulatory authorities, inter-spatial comparisons are only possible with more advanced analysis, including the impact of the importer and the commodity-risk profile, which are largely outside the custodian's control.

A comparison of the average release time reported during the year with previous years reflects the impact of the trade facilitative steps introduced and adopted by various stakeholders during the intervening period as well as prior to the corresponding period of the previous year (COPPY). In this regard, the distance travelled toward the NTFAP goal is recognised as a ready indicator of the progress in the trade facilitation. In this NTRS, both these performance indicators have been relied upon to conclude that India's trade facilitation efforts are yielding substantial results, as elaborated in the subsequent sections.

# 04 Import Release Time: Better. For Sure

The average import release time for the three port categories, as presented in the chart below, has improved in 2023 over COPPY – by 20 percent for ICDs, 11 percent for ACCs, and 9 percent in case of seaports, which must be viewed in the context of similar improvement reported during the previous year. The ICPs, which had comfortably achieved the NTFAP target in 2021 itself, continue to report better than the targeted average release time, despite showing an increase of 86 percent in the average release time this year.

**Chart 4: Imports Release Time - Consistent Improvement**




Further, an assessment of the performance of the specific ports (excluding the two ICPs, which had achieved the NTFAP target in 2021 itself) shows that the maximum improvement in the average release time in 2023 over COPPY, was reported by Mundra (33 percent) among seaports; Hyderabad (44 percent) among ACCs; and Tughlakabad (23 percent) among ICDs.

The performance in terms of "distance travelled towards NTFAP target" indicator, as shown in the table below, has improved by 14 percentage points in the case of ICDs; and 5 percentage points for ACCs and seaports. The ICPs continue to report 100 percent achievement vis-à-vis this target. At the specific port level, it is observed that 10 of the 13 ports have travelled closer towards the NTFAP target in 2023 as compared to COPPY, indicating across the board improvement in the trade facilitation environment.

**Table 5: Import Release Time across port categories**

| | ART (hour: minute) | | Distance travelled towards target | | Standard Deviation (hour: minute) | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 79% | 74% | 95:31 | 107:26 |
| **ICDs** | 71:46 | 89:39 | 90% | 76% | 91:58 | 102:54 |
| **ACCs** | 44:15 | 49:56 | 80% | 75% | 64:55 | 74:19 |
| **ICPs** | 31:44 | 17:07 | 100% | 100% | 71:43 | 48:15 |

However, it is observed that despite the improvement in distance travelled towards NTFAP target, there continues to be scope for further improvement in respect of outlier bills of entry filed, particularly at the seaports and ACCs, which is discussed later in the report.

Stakeholder consultations, along with more nuanced data analysis of time taken after the completion of the import release process at the CFSs, which is discussed later in this report, suggested that despite widespread recognition of substantive improvement in the import release time, there continues a general concern regarding the certainty of expeditious release of imported cargo. Therefore, NTRS 2023 has attempted to measure certainty of import release time through the statistical tool of standard deviation. It is comforting to find that three of the port categories, excluding ICPs, have reported lower standard deviation in 2023 vis-à-vis 2022, as shown in Table 5 above. Therefore, it is concluded that during 2023, not only has import release time improved across port categories, but there is also greater certainty regarding such improved release time.

## 4.1 Progress on Path to Promptness

In this section, progress regarding the four components of "Path to Promptness" that have previously been identified to contribute to expeditious cargo release is discussed.

**Pre-arrival processing** | **Enhanced facilitation levels** | **Promotion of Authorised Economic Operator (AEO) scheme** | **Increased utilization of Direct Port Delivery (DPD) scheme**

In the Table 6 below, share of bills of entry reflecting adoption of three of the components over the years is presented port category-wise, excluding DPD which is applicable only to CFS-based seaports. It shows a general trend of progress towards promptness, which is discussed in detail thereafter.

**Table 6: Progress on the Path to Promptness:** **(Percentage share in total bills of entry)**

| | Advance Bills of Entry | | | Facilitated Bills of Entry | | | AEO Bills of Entry | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 |
| **Seaports** | 92% | 89% | 51% | 77% | 81% | 76% | 31% | 31% | 31% |
| **ICDs** | 74% | 85% | 0% | 83% | 75% | 72% | 21% | 20% | 12% |
| **ACCs** | 62% | 58% | 26% | 87% | 90% | 87% | 40% | 31% | 47% |
| **ICPs** | 27% | 17% | 26% | 81% | 84% | 60% | 13% | 7% | 0% |
| **Overall** | 76% | 74% | 37% | 82% | 85% | 81% | 35% | 35% | 38% |

### 4.1.1 Pre-arrival Processing and timely filing of bill of entry

It is intuitively obvious that initiation of the cargo clearance process through advance or timely filing of bills of entry would allow for completion of as much of regulatory checks as possible even before the arrival of the cargo and result in reduction in the time taken in cargo clearance upon the physical arrival at the Customs ports. Customs Act, 1962 contained enabling provisions for pre-arrival processing even before the same was included as a TFA commitment [refer article 7.6 (1)]. However, noting that voluntary recourse to pre-arrival processing was minimal at 14.9 percent at JNCH in July 2016[4], statutory and administrative measures have been taken and gradually strengthened to increase the share of advance bills of entry through an element of compulsion, sensitisation and capacity building among the importers/Customs brokers. The success of these measures is reflected in the very high percentage of bills of entry now being filed as advance bills of entry, particularly at seaports and ICDs.

Further, the lower share of advance bills of entry, particularly at the ICPs and ACCs vis-à-vis seaports and ICDs, as shown in Table 6 above, could be attributed to absence of timely availability of requisite information/ documents with the importer/ Customs brokers, with ACCs handling cargo arriving through many short duration flights and ICPs facing even shorter haulage time across the land border. In a few cases, Customs broker/ importer may prefer not to avail the benefits of pre-arrival processing due to specific logistics considerations or otherwise. Given the obvious benefits of pre-arrival processing on lower release time and fees payable in case of inordinate delay, this issue has been examined in greater detail later in this sub-section.

The above perspective is substantiated by relative plateauing of the overall share of advance bills of entry in the total bills of entry from 74 percent in 2022 to 76 percent in 2023, following a significant jump in 2022 from 37 percent in 2021.

The use of NTRS as an effective tool of evidence-based policy making is exhibited by the jump in the previous year which has been triggered mainly by the amendment carried out in section 46 of the Customs Act[5] (vide the Finance Act, 2021) and related CBIC Circular 08/2021[6] dated 29th March 2021, which essentially mandated advance/timely filing of bills of entry. The more substantive jump from 2021 to 2022 in the case of ICDs was also on account of change in the method of classification of advance bills of entry, with the new method treating a bill of entry filed before the arrival of the cargo at the ICD (rather than the gateway port) as advance bill of entry.

Therefore, under the extant statutory arrangement, it is more appropriate to adopt three-way categorisation of bills of entry on the basis of time of filing, viz. advance, normal, and a sub-category of the normal, wherein fees for delayed filing has been found to be specifically paid, commonly referred to as delayed bills of entry, which comprised 28 percent of the total normal bills of entry filed.

In Table 7 below, port category-wise ART is presented, which shows that the ART for advance bills of entry for seaports is 47 percent of the ART for normal bills of entry. Even for ACCs, wherein the advantage in terms of better release time is the lowest, ART for advance bills of entry is 59 percent of the ART for normal bills of entry. However, it is interesting to note that the impact of delay in filing a bill of entry, comparing the ART for normal and delayed bills of entry as a sub-category thereof, is minimal for seaports (1 percent), small for ICDs (8 percent), but huge for ACCs (130 percent) and ICPs (514 percent). This finding validates the earlier averment that the lower share of advance bills of entry at ACCs and ICPs is due to non-availability of documents/ information before the arrival of the cargo, also substantiated by high share of normal bills of entry filed within the stipulated period.

The share of delayed bills of entry, of the total normal bills of entry filed, is found to be 15 percent for ACCs and minimal 1 percent for ICPs, as against 42 percent for ICDs and excessively high 93 percent for seaports. The excessively high share of delayed bills of entry at the seaports suggests that almost all normal bills of entry filed at the seaports are in fact delayed. A few implications of this insight are discussed later in this study.

[4] Only 14.9 of the bills of entry filed at JNCH during July 2016 were filed as advance bills of entry; as mentioned in JNCH TRS 2018, page 27.

[5] The importer may submit the Bills of Entry 30 days prior to the anticipated arrival of the shipment in accordance with Section 46 of the Customs Act of 1962. According to Circular No. 08/2021, issued March 29, with a few exceptions noted by the CBIC, the importer must submit the Bill of Entry no later than the end of the day before the cargo actually arrives.

[6] https://www.cbic.gov.in/resources/htdocs-cbec/Customs/cs-circulars/cs-circulars-2021/Circular-No-08-2021.pdf

**Table 7: Average Release Time: Implications of Time of Filing of Bills of Entry**

| Port Category | Delayed Bills of Entry entailing late fee (hour: minute) | Normal Bills of Entry (hour: minute) | Advance Bills of Entry (hour: minute) |
|---|---|---|---|
| **Seaports** | 168:57 | 167:38 | 78:29 |
| **ICDs** | 112:22 | 104:06 | 60:37 |
| **ACCs** | 137:00 | 59:29 | 34:48 |
| **ICPs** | 222:17 | 36:12 | 19:45 |

Further, the study found that the share of delayed bills of entry in the total bills of entry filed at the fifteen ports under the purview of the study, has declined from 10 percent in 2022 to 7 percent in 2023, as shown in Table 18 and discussed further in the sub-section on Stage-wise analysis. However, interestingly it has found that though the quantum of fees paid for such delayed filing has declined from INR 10.80 crores to INR 6.47 crores, the average delay, measured from the arrival time to actual filing of the bill of entry, has gone up from 61:55 hours in 2022 to 68:06 hours in 2023.

The benefits of advance filing of bills of entry follow from completion of as many of the subsequent steps as possible, before the physical arrival of cargo. For example, if the advance filing is followed by completion of the assessment process in case of non-facilitated bills of entry and payment of duty in case of facilitated or even non-facilitated bills of entry, wherein assessment has been completed, it is expected that ART would improve further. This is discussed further in the sub-section on Stage-wise analysis.

### 4.1.2 Levels of Facilitation and Nature of Intervention

Increasing the levels of risk assessment-based facilitation, making the interventions more efficient and less time consuming and allowing for cargo release under deferred duty payment scheme for trusted authorised economic operators helps in achieving expeditious cargo release. They are found to vary depending on the risk profile of the importer and other associated parties, and the commodity concerned. Indian Customs has been actively engaged in assuring the highest levels of facilitation through continuous improvement in the Risk Management System (RMS), as mandated under Article 7.4 of the TFA and introduction of other associated and enabling provisions.

Based thereon, bills of entry are classified as: (a) fully facilitated bill of entry, wherein the self-assessment is accepted without any documentary verification or physical examination of the cargo; (b) facilitated bills of entry, wherein only documentary verification is undertaken; (c) non-facilitated bills of entry, which may involve physical examination; (d) first check, a sub-segment of non-facilitated bills, which is the most rigorous process, wherein assessment is contingent upon prior physical examination.

However, the varying treatment prescribed by the RMS, besides being based on the aforesaid associated risks, is also significantly influenced by the completeness and quality of the declarations made by the Customs broker at the self-assessment stage. Previous NTRS has found many instances of Customs brokers requesting for amendment in the self-declared details even in cases of fully facilitated bills of entry or "queries"[7] being raised by the assessing officers in case of facilitated/ non-facilitated bills of entry, often due to non-furnishing of requisite documents in e-Sanchit at the self-assessment stage. NTRS has attempted to assess the impact of such amendments and "queries" on the release time.

Before examining the impact of facilitation or intervention on the release time, it is recalled that share of facilitated bills of entry[8] has declined marginally to 82 percent in 2023 as against 85 percent in COPPY as detailed in Table 6 above. It may, however, be noted that this is solely on account of decline in the share of facilitated bills of entry filed at ICDs from 85 percent in 2022 to 74 percent this

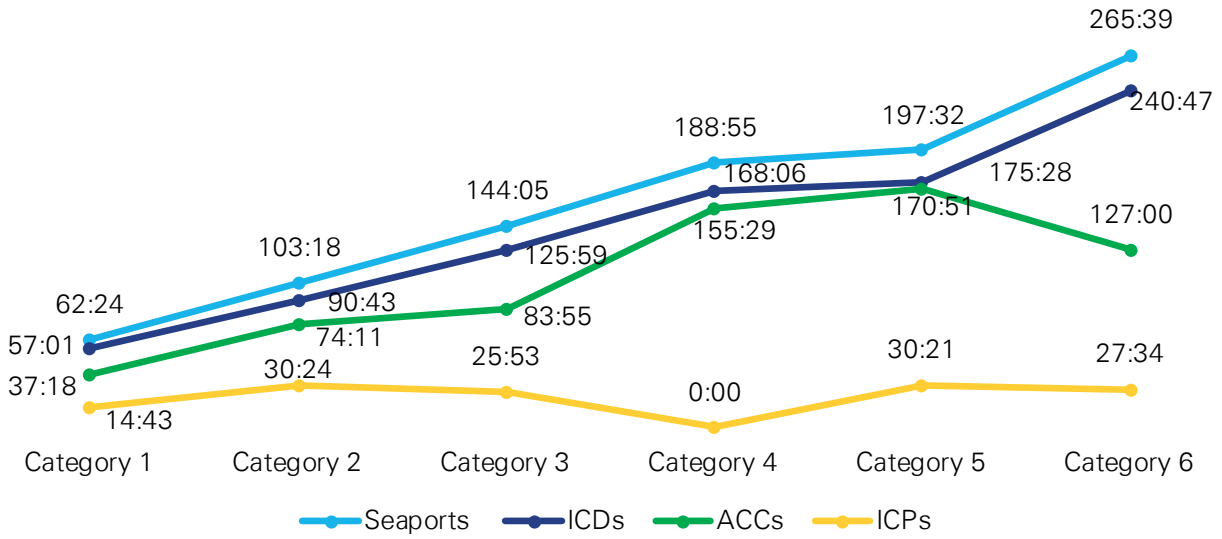
[7] 'Query' is an inappropriate/ incomplete expression since in many of the cases, the assessing officers request for documents that should have been filed at the self-assessment stage; and may not have been uploaded due to non-availability at the filing stage, especially in case of advance bills of entry.

[8] Includes both fully facilitated bills of entry (category 1) and facilitated bills of entry with only assessment (category 2) in Chart 5.

year, entirely eclipsing the small increases for the other three port categories. At the individual port level, it is seen that this share ranged from 69 percent at Mundra to 95 percent at Kolkata, which would be largely attributable to differences in the commodity mix and importer profile, noting that a decision regarding the level of facilitation is decided mainly by the Risk Management Division (RMD), with changes thereto being decided locally only with the approval of jurisdictional Principal Commissioner/ Commissioner of Customs.

Chart 5 below presents the average release time for various categories of bills of entry with different levels of facilitation, from fully facilitated to first check, as also those that involved amendments and queries. It is interesting to note that the benefits of facilitation or conversely the impact of intervention on ART is more pronounced for seaports and ICDs than ACCs and minimal in the case of ICPs. The study found that for the entire sample of bills of entry analysed, ART for fully facilitated bills of entry (category 1) is about 26 percent of the ART for first check bills of entry (category 6), recourse to which is albeit minimal at 2 percent. Similarly, ART for fully facilitated bills of entry is 25 percent of the ART for non-facilitated bills of entry that entailed assessment, examination, query as well as amendment (category 5), the share of which was 3 percent. These bills of entry have been further discussed in the section titled "The Story of the Fat Tail".

**Chart 5: Facilitation Matters, as does Nature of Intervention**




| Category 1 | Category 2 | Category 3 | Category 4 | Category 5 | Category 6 |
|---|---|---|---|---|---|
| Fully-Facilitated BEs | Facilitated BEs where only Assessment was conducted | Non-Facilitated BEs, with both Assessment and Examination | Non-Facilitated BEs, with both Assessment and Examination, as well as where first query was raised (There are no queries raised in case of ICPs) | Non-Facilitated BEs that entail Assessment, Examination, First Query as well as Amendment | First-Check BEs |

### 4.1.3 Trusted clients through Authorized Economic Operator (AEO) Program

Introduction of a trust-based Authorised Economic Operator (AEO) scheme is a logical conjoint of a risk-based facilitation scheme that takes into account the different risk profiles of various importers. India's AEO programme, which fulfils the commitment under Article 7.7 of the TFA, is being continuously strengthened to increase uptake and enhance benefits. The updated AEO programme, introduced by CBIC in July 2016, merged the erstwhile two schemes, namely Accredited Client Programme and Authorised Economic Operator scheme into a single three-tier AEO programme. The present scheme offers the importers, inter alia, higher degrees of facilitation, and other favourable treatments, including benefit of deferred duty payment to AEO tier 2 and 3 clients.

This study has assessed the benefits accruing to AEO clients in terms of: (i) higher levels of facilitation; (ii) more expeditious cargo release; (iii) greater certainty of expeditious clearance, besides lower costs on account of deferred duty payment. Table 8 below presents the comparative data in respect of AEO and non-AEO bills of entry for ART and associated standard deviation (SD). It is observed that for all the three port categories, except ICPs, the ART for AEO bills of entry is better than non-AEO bills of entry, with the advantage[9] being 62 percent for seaports.

**Table 8: Clearance for AEO Clients: Faster for Sure**

| | AEO - ART (hour: minute) | | Non AEO - ART (hour: minute) | | AEO – SD on ART (hour: minute) | | Non AEO – SD on ART (hour: minute) | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 60:28 | 62:12 | 96:51 | 109:32 | 77:56 | 83:32 | 100:19 | 113:41 |
| **ICDs** | 63:18 | 56:22 | 74:01 | 93:49 | 84:37 | 69:49 | 93:42 | 105:32 |
| **ACCs** | 34:39 | 37:11 | 50:42 | 57:43 | 48:45 | 60:41 | 73:05 | 81:35 |
| **ICPs** | 62:28 | 27:15 | 26:59 | 16:41 | 124:37 | 36:57 | 58:01 | 48:38 |

The table below presents comparative data for AEO vis-à-vis non–AEO bills of entry to highlight certain salient points. It is observed that higher share of AEO bills of entry are filed as advance bills of entry, except at the ICDs. Importantly, significantly higher levels of facilitation are accorded to AEO bills of entry vis-à-vis non-AEO bills of entry across all four port categories, with facilitation levels for AEO bills of entry ranging between 91 to 95 percent. As a result of proactive approach of AEOs and higher levels of facilitation, ART for AEO bills of entry is significantly better than non-AEO bills of entry for both categories across four port categories, except facilitated bills of entry at ICPs.

**Table 9: Clearance for AEO Clients: Faster for Sure**

| | AEO Advance | | Non AEO Advance | | AEO Normal | | Non AEO Normal | | AEO RMS | | Non AEO RMS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Seaports** | 55:58 | 95% | 88:58 | 90% | 151:30 | 5% | 171:08 | 10% | 52:23 | 91% | 78:12 | 71% |
| **ICDs** | 48:01 | 66% | 63:29 | 77% | 92:33 | 34% | 108:38 | 23% | 55:42 | 95% | 63:20 | 80% |
| **ACCs** | 28:11 | 64% | 39:32 | 60% | 46:08 | 36% | 67:33 | 40% | 31:59 | 94% | 44:20 | 82% |
| **ICPs** | 7:54 | 42% | 22:51 | 25% | 102:09 | 58% | 28:20 | 75% | 51:13 | 93% | 28:40 | 79% |

Note: The share is calculated as a percentage of AEO/ Non-AEO bills of entry

The study also found that in 2023, the ART for AEO advance facilitated bills of entry have met[10] the NTFAP target release time for all the four port categories, as shown in Table 10 below. However, notwithstanding the obvious and quantifiable benefits of enrolment for AEO, both in terms of trade time[11] and trade cost[12], along with greater certainty of expeditious release, the uptake of AEO scheme continues to remain lukewarm at 35 percent in 2023. At the individual port level, share of AEO bills of entry varied from Nil at ICP Raxaul to 54 percent at ACC Chennai, suggesting ample scope for its expansion even at the best performing port. This study has not attempted to ascertain the reasons for indifferent response to the AEO scheme, as reflected in low share of AEO bills of entry. However, a more effective AEO scheme, which is possible to be achieved through a mix of more benefits, process for enrolment, faster processing of compliance requirement and extensive direct outreach to the trade, not simply through the Customs broker, would lead to significant improvement in the AEO uptake as well as ART.

[9] Advantage refers to ART for AEO bills as a share of ART for non-AEO bills of entry.

[10] Significantly bettered in case of ICPs, bettered in case of ICDs, just met in case of seaports, and almost met in case of ACCs.

[11] Average release time for AEO clients being 38 percent lower than non-AEO clients in NTRS 2023.

[12] Directly on account of deferred duty payment and savings due to lower charges for examination and indirectly due to lower trade time.

India's TRS experience has helped identify four main components of "Path to Promptness" that results in lower import release time. As mentioned in the previous paragraph, three components[13], namely advance bills of entry, facilitated bills of entry, and AEO bills of entry, combine to deliver best release time results, as shown in Table 10 below.

**Table 10: Average Release Time by 'Path to Promptness' Parameters**

| | Overall (hour: minute) | | Advance BE (hour: minute) | | Facilitated BE (hour: minute) | | AEO BE (hour: minute) | | Advance Facilitated AEO BE (hour: minute) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 78:29 | 84:40 | 68:53 | 77:17 | 60:28 | 62:12 | 47:54 | 49:12 |
| **ICDs** | 71:46 | 89:39 | 60:37 | 81:16 | 61:30 | 75:59 | 63:18 | 56:22 | 44:13 | 53:07 |
| **ACCs** | 44:15 | 49:56 | 34:48 | 38:15 | 38:57 | 44:16 | 34:39 | 37:11 | 25:48 | 27:09 |
| **ICPs** | 31:44 | 17:07 | 19:45 | 19:41 | 32:10 | 16:55 | 62:28 | 27:15 | 7:54 | 27:25 |

### 4.1.4 Direct Port Delivery (DPD) Scheme

One of the trade facilitative initiatives taken after 2017 was to actively encourage Direct Port Delivery (DPD) facility at JNCH and other CFS-based seaports. The enabling provisions of the DPD scheme allowed facilitated containers to be given out of charge directly from the sea terminal premises, without requiring the containers to be mandatorily moved to CFSs, since no regulatory checks were warranted in case of containers covered by a facilitated bill of entry.

However, DPD scheme did not have many takers despite significant benefit in terms of trade cost[14] and average release time. The uptake for the scheme picked up only after strong administrative "nudge" by the jurisdictional Customs authorities. Recent studies have indicated that the scope for further expansion of DPD schemes, which can be availed only for fully facilitated FCL cargo at CFS-based seaports, is rather limited. Stakeholder discussions also suggested that many importers may not to opt for the DPD facility, preferring instead to continue to use the tested facilities and free or low-cost buffer storage facility offered by the CFSs.

As regards the ART, NTRS 2023 found that the DPD bills of entry at 60:07 hours had significantly better ART than 89:19 hours for CFS bills of entry. The port-wise ART for DPD varies from a very impressive 19:37 hours at Mundra to more than 70 hours at JNCH and Kolkata, said to be attributed to DPD-CFS containers seeking to avail storage facility at the CFSs. For Mundra, ART for DPD containers in NTRS 2023 has improved substantially by 63 percent from 52:54 hours in 2022 (as against 123:54 hours in 2021). This is understood to be due to change in the earlier practice of releasing DPD containers only after the discharge of all other containers from the vessel, which has now been changed; and the DPD containers are being released without awaiting the discharge of all the containers of the vessel.

**Table 11: Direct Port Delivery - results in direct release time benefits**

| | All BE (hour: minute) | | ART for DPD (hour: minute) | | ART for CFS (hour: minute) | |
|---|---|---|---|---|---|---|
| **Seaports** | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Chennai** | 86:39 | 93:07 | 33:36 | 47:54 | 95:13 | 122:31 |
| **Kolkata** | 126:15 | 144:23 | 76:03 | 59:41 | 141:16 | 202:12 |
| **Mundra** | 71:14 | 106:56 | 19:37 | 52:54 | 77:10 | 103:50 |
| **Nhava Sheva** | 83:44 | 88:23 | 70:25 | 75:03 | 85:22 | 106:10 |

[13] The fourth component of Direct Port Delivery (DPD) scheme is applicable only to CFS based seaports.

[14] Direct cost being the payments that were required to be made to CFSs and indirect cost on account of lower trade time.

This study has found that the bills of entry availing DPD facility continue to remain low. However, an evaluation of DPD uptake based on the number of equivalent TEUs opting for DPD is expected to be higher. Such analysis has not been attempted by NTRS and it is recommended that such study may be taken up by the DPD cells of respective port/Customs authorities, if required.

## 4.2 Full Container Load (FCL) and Less than Container Load (LCL)

The cargo clearance process for containerised cargo handled at the seaports and ICDs entail a significant difference between FCL and LCL bills of entry. It must be noted that in the case of LCL cargo, goods covered by more than one bill of entry would be aggregated into a single container, which would require disaggregated clearance and delivery, whereas a single FCL bill of entry may cover one or more than one container booked by one entity/ importer. This categorisation, treating FCL as large consignment and LCL as small consignment, and small consignments as proxy for imports by MSMEs, is expected to shed insights on the impact of trade facilitation on MSMEs. Further, though the standardised methodology adopted by NTRS uses a bill of entry as a unit, it is possible to carry out a time release study, using container load as a unit. Such a study may present a different comparative release time for different ports than NTRS, given the significant difference in the share of FCL cargo at different seaport /ICDs.

In this regard, it was found that 99 percent of the bills of entry filed at Mundra were FCL bills of entry, which dropped to 69 percent for JNCH, 61 percent for Chennai, and significantly lower 23 percent for ICD Whitefield. However, in terms of containerized volume, the share of FCL cargo was 99.9 percent for Mundra, and dropped significantly less to 95 percent for JNCH, 94 percent for Chennai, and 49.6 percent for ICD Whitefield.

The early JNCH TRS 2018 had found that ART for LCL bills of entry has higher than FCL bills of entry[15] and attributed the same to the additional stage of desegregation of cargo in the clearance process. However, NTRS 2022 disputed the said simplistic conclusion, which continues to be challenged by the findings of NTRS 2023, as presented in Table 12 below.

**Table 12: Comparison of ART of FCL and LCL Cargo**

| Port | FCL | | LCL | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| Chennai | 98:34 (61%) | 107:10 (57%) | 68:26 (39%) | 76:03 (43%) |
| Kolkata | 121:43 (86%) | 145:06 (93%) | 141:13 (14%) | 165:12 (7%) |
| Mundra | 72:09 (99%) | 105:02 (99%) | 31:38 (1%) | 56:34 (1%) |
| Nhava Sheva | 83:22 (69%) | 93:09 (68%) | 84:29 (31%) | 78:22 (32%) |
| Ludhiana | 85:58 (85%) | 73:49 (91%) | 82:50 (15%) | 98:07 (9%) |
| Tughlakabad | 76:03 (75%) | 88:21 (75%) | 52:16 (25%) | 81:22 (25%) |
| Whitefield | 75:40 (23%) | 68:07 (93%) | 68:31 (77%) | 44:54 (7%) |

It is interesting to note that the average release time for LCL cargo is lower than FCL cargo for most of seaports and all ICDs, with the exception of Kolkata and Nhava Sheva, where FCL cargo is cleared faster. A stratified analysis reveals that the share of LCL bills of entry filed in advance is generally higher than that of FCL bills of entry filed in advance, with the exception of Kolkata and ICD Whitefield. For example, at Mundra, about 100 percent of LCL bills of entry are filed in advance as against 89 percent of FCL bills of entry. These shares are 94 percent and 90 percent at Chennai, 100 percent and 92 percent at ICD Ludhiana, and 87 percent and 79 percent at ICD Tughlakabad, for LCL and FCL bills respectively. Further, the level of facilitation in LCL cargo is higher than FCL cargo by 14 percentage points for Chennai and ICD Whitefield, 11 percentage points for ICD Tughlakabad, 7 percentage points for Mundra, and 2 percentage points for Kolkata and Nhava Sheva.

In contrast to FCL, where duty amount to be paid is likely be higher and consignment size is larger,

[15] ART for LCL bills of entry at 151:36 hours was higher than FCL bills of entry at 140:24 hours; page 32.

LCL containers have smaller cargo volumes and hence possibly lower duty, allowing perhaps for faster payment of duty, as a result of which, the cargo release is expedited. Owing to the changing logistics dynamics, some service providers, such as consolidators, pay duty on behalf of the importers, which also results in faster clearance of LCL cargo.

Considering that growth and expeditious clearance of LCL cargo is a priority with the growing demands of the fast-evolving e-commerce and ensuring trade facilitative environment for the MSME sector, it is recommended that a more detailed and rigorous analysis of clearance process for LCL cargo may be undertaken.

## 4.3 Impact of Participating Government Agencies (PGAs)

The cargo clearance process is often referred to as Customs clearance process, given that it is handled mainly by the Customs authorities in most of the countries. However, import of certain specified categories of goods require clearance or "no objection" from concerned regulatory authorities duly empowered by law, commonly referred to as Participating Government Agencies (PGAs) in India, before Customs authorities can grant out of charge. The extant cargo clearance process in electronic environment enables parallel processing of documents, as well as their pre-arrival processing through the Single Window Interface for Facilitating Trade (SWIFT) initiative of the CBIC, which seeks to promote Coordinated Border Management goal encouraged by the WCO, as well as fulfil the commitments under the TFA.

Some of the major regulatory agencies responsible for managing non-fiscal concerns include Food Safety and Standards Authority of India (FSSAI), Animal Quarantine and Certification Service (AQCS), Plant Quarantine Information System (PQIS), Drug Controller General (CDRUG), and Wildlife Crime Control Bureau (WCCB) – all of which have on-boarded the SWIFT initiative, and are focused on as a part of NTRS 2023.

It may be mentioned that certain other bills of entry not covered in this section may have required additional regulatory approval by agencies other than the five PGAs. However, other than bills of entry covering textile items, their numbers are likely to be very small and their impact on the average release time very insignificant.

For clearance from the concerned PGA, an importer can submit an electronic NOC request through SWIFT, which is connected to the Customs EDI system. The NOC is then received in the system. However, since the NOC from these agencies necessitates testing or examination of samples by these agencies, the collection of samples, transportation of the sample to the offices of these agencies, and receipt of the NOC from these agencies, all require time.

The average release times for the five PGAs for the various port categories are shown in the table below. It demonstrates that the average release times for bills of entry referred to PGAs are invariably longer than the average release times for the pertinent port category - 125:49 hours for PGA bills compared to overall ART of 85:42 hours in case of seaports, 90:14 hours for PGA bills compared to overall ART of 71:46 hours in ICDs, and 72:16 hours for PGA bills compared to overall ART of 44:16 hours for ACCs.

It was noted that bills of entry relating to Central Drugs Standard Control Organisation, reported the best average release time among the PGAs that have on boarded the SWIFT initiative of the CBIC.

**Table 13: Participating Government Agencies (PGAs) – additional checks require additional release time**

| Port Category | ART (hour:minute) | | AQCS (hour: minute) | | CDRUG (hour: minute) | | FSSAI (hour: minute) | | PQIS (hour: minute) | | WCCB (hour: minute) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 122:46 | 155:23 | 88:40 | 94:57 | 166:54 | 190:03 | 132:17 | 166:50 | 110:19 | 178:57 |
| **ICDs** | 71:46 | 89:39 | 153:15 | 108:33 | 46:27 | 117:52 | 136:55 | 222:55 | 115:13 | 193:05 | 113:25 | 205:23 |
| **ACCs** | 44:16 | 49:56 | 100:32 | 116:17 | 57:47 | 68:41 | 197:28 | 234:16 | 171:51 | 214:26 | 51:05 | 53:55 |
| **ICPs** | 31:47 | 17:07 | 22:02 | 29:22 | 8:00 | 12:48 | - | - | 6:10 | 24:58 | - | - |

NTRS 2023, re-iterates the observation made in NTRS 2022, that higher average release times for bills of entry referred to the PGAs are on account of factors such as distance between the port and PGA laboratories, low frequency of sample collection, often constrained by lack of adequate manpower, training and capacity building and requirement of certain documents to be submitted in hard copy. While the results of this as well as previous NTRS do not highlight the constraining impact of these deficiencies, they are nonetheless important.

## 4.4 Stage-wise analysis: Identifying Critical Stages and Processes

The extant cargo clearance process has evolved from an earlier standardised strictly sequential process that began after the arrival of the cargo and subsequent filing of the bill of entry. Introduction of electronic filing, pre-arrival processing, risk-based facilitation, single window, deferred duty payment and pre-payment Customs compliance verification (PCCV) over the years, have added various hues to the cargo clearance process, including parallel processing, each resulting in lower release time.

The early JNCH TRS had broadly identified delays in filing bills of entry, time consuming assessment process and delays in payment of duty, as three major factors contributing to the high import release time. Even as slew of subsequent statutory and administrative initiatives have resulted in significantly improved ART, certain challenges have been observed. For example, NTRS 2022 identified increase in amendments sought by the trade subsequent to filing of a bill of entry, more common in the case of advance filing and also noted an increase in the number of non-facilitated bills of entry wherein queries were raised. In this section, salient features of stage-wise analysis has been presented.

Pre-arrival processing and timely filing of bills of entry is now a norm. However, as discussed earlier, even in NTRS 2023, 7 percent of bills of entry were delayed that attracted the statutory late payment fees.

### 4.4.1 Time taken in assessment of non-facilitated bills of entry

The study has found that even as the share of bills of entry subjected to assessment has declined, the average time taken in assessment of these non-facilitated bills of entry for all the four port categories increased from 41:21 hours in 2021 to 50:47 hours in 2022 further to 53:07 hours in 2023.

Further, while the assessment time has declined for ICDs from 76:17 hours in 2021 to 69:54 hours in 2022 to 61:30 hours in 2023, during the same period, it has increased for the other three port categories – from 47:11 hours in 2021 to 57:41 hours in 2022 to 62:56 hours in 2023 for seaports, from 9:13 hours to 22:03 hours to 24:18 hours for ICPs, and from 25:05 hours to 34:42 hours to 36:20 hours for ACCs.

**Table 14: Time taken in Assessment of Non-Facilitated Bills of Entry**

| Port Category | ART for all BEs (hour: minute) | | Time taken from Filing of BE to Assessment (hour: minute) | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 62:56 | 57:41 |
| **ICDs** | 71:46 | 89:39 | 61:30 | 69:54 |
| **ACCs** | 44:15 | 49:56 | 36:20 | 34:42 |
| **ICPs** | 31:44 | 17:07 | 24:18 | 22:03 |

Interestingly, it is also seen that the time taken for assessment is significantly lower for the ICPs and the ACCs bills of entry. However, since under the extant **Faceless Assessment** scheme, these bills of entry may not have been assessed at ICPs and ACCs, it would be erroneous to draw any conclusion regarding the time taken in assessment at different port categories. Nonetheless, increase in the average time taken in assessment under the faceless assessment regime suggests that it merits a more detailed analysis. Therefore, this study has attempted to assess the impact of increased incidence of amendments and "queries" on ART of such non-facilitated bills of entry.

### 4.4.2 Bills of entry involving amendment

NTRS has found that the share of bills of entry involving amendment, subsequent to filing of bills of entry either as part of assessment process or suo moto by the importer for curative purposes, has increased from 11 percent in 2021 to 32 percent under NTRS 2022, and further to 37 percent in 2023, with substantially higher share of 50 percent for seaports and 26 percent for ACCs, as presented in Table 15 below.

**Table 15: ART for BEs involving Amendment**

| Port Category | Overall ART (hour: minute) | | ART for BEs involving amendment (hour: minute) | | BE inv. Amendment % | | Time taken in Amendment (hour: minute) | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 94:31 | 105:14 | 50% | 44% | 15:14 | 16:44 |
| **ICDs** | 71:46 | 89:39 | 120:13 | 139:19 | 14% | 39% | 18:57 | 25:50 |
| **ACCs** | 44:16 | 49:56 | 60:06 | 74:31 | 26% | 21% | 7:40 | 7:56 |
| **ICPs** | 31:47 | 17:07 | 26:38 | 14:39 | 8% | 3% | 6:13 | 5:15 |

During the stakeholder consultations, it was suggested that higher incidence of amendment was due to the pressure to file bills of entry in advance. Therefore, this study delved deeper and found that there was a significant correlation between share of advance bills of entry and incidence of amendments. An analysis covering seaports and ACCs, where share of amendment is the highest, showed that in eight of the ten ports, the share in amendment was much higher in advance bills of entry as compared to normal bills of entry; the difference being as high as 36 percentage points for Chennai, 19 percentage points for Nhava Sheva, and 17 and 16 percentage points for ACC Delhi and Mumbai respectively.

However, when the share of bills of entry for ACCs with amendments was categorised between advance, normal and delayed, it was found that 12 percent of delayed bills of entry and 16 percent of normal bills of entry required amendments. This finding indicates that it is not just the pressure of filing advance bill of entry that is resulting in amendments.

Noting that 33 percent of advance bills of entry at ACCs required amendments, it is plausible that with the cost of amendment being lower than that the cost for late filing of bills of entry, coupled with amendment process being made easier and becoming generally faster (referred to in Table 15 above), the importers/Customs brokers opt to file advance bill of entry and resort to subsequently amending those bills of entry for curative purposes.

### 4.4.3 Queries: Incidence, Typology, Response and Impact

The analysis found that in respect of around 4.9 percent of sample bills of entry covering four port categories (excluding ICPs wherein no queries were raised), at least one query was raised, even as it is noted that in many cases more than one query is raised. Recognising that such queries are essentially raised in case of non-facilitated bills of entry, the share of queried bills of entry as percentage of non-facilitated bills of entry increases to 18 percent.

As mentioned earlier, many of the queries are essentially requisition for required or additional documents that should have been submitted under e-Sanchit at the self-assessment stage. Further, in cases relating to import of second-hand goods, often query is raised requiring Chartered Engineer (CE) report that is essential for determining transaction value. This study has noted that CBIC has been undertaking detailed analysis of the nature of query through the ADVAIT (Advanced Analytics in Indirect Taxation) portal covering the entire country; and therefore, not attempted any further analysis for this representative sample of 15 ports.

Table 16 below shows that the average time taken in raising the first query after filing of a bill of entry varied between 50 hours to 57 hours for the three port categories; and equally long time, varying between 43 hours to 52 hours was taken in responding to the first query. In those cases, where the response was found sufficient, the subsequent assessment was completed between 8 hours to 16 hours. However, in those cases wherein another query was required, it is found to take further 40 hours to 53 hours to be raised; and another 42 hours to 54 hours to be responded to by the Customs broker. The subsequent assessment, thereafter, on an average took about 25 hours to 29 hours.

The consequence of such queries is seen in substantial increase in ART, which broadly doubles in case of a single query, and triples in case more than one query was necessary.

**Table 16: ART for BEs involving Queries**

| Port Category | Overall ART (hour: minute) | ART where First Query is raised (hour: minute) | ART where Last Query is raised (hour: minute) | Time taken between filing of BE to First Query Raised (hour: minute) | Time taken from First Query Raised to First Query Responded (hour: minute) | First Query Responded to Assessment (hour: minute) | First Query Responded to Last Query Raised (hour: minute) | Last Query Raised to Last Query Responded (hour: minute) | Last Query Responded to Assessment (hour: minute) |
|---|---|---|---|---|---|---|---|---|---|
| **Seaports** | 85:42 | 171:48 | 240:03 | 56:02 | 52:18 | 12:59 | 52:29 | 42:02 | 25:15 |
| **ICDs** | 71:46 | 139:57 | 212:02 | 57:36 | 43:30 | 8:17 | 40:39 | 44:57 | 27:13 |
| **ACCs** | 44:16 | 151:40 | 236:15 | 49:55 | 43:31 | 16:25 | 53:15 | 54:24 | 29:05 |

Being guided by the spirit of Behavioral Economics, the study attempted to ascertain whether the time of filing of a bill of entry is associated with queries being raised, particularly first query. It was found that maximum share (49 percent) of bills of entry, where first query was raised, were filed between noon and 6 PM, and for these bills of entry, time taken between filing of bill of entry and first query raised was also the maximum (60:21 hours). In comparison, in a minimal 1 percent bills of entry filed between midnight and 6 AM, first query was raised; and further the time taken in raising of first query was also lower at 47:08 hours. However, since the time taken is more than one day, and there are limited data points, no firm conclusions regarding correlation between intra-day break-up of filing of bills of entry (and consequently marked for assessment) and raising of first query could be drawn.

This study, therefore, concludes that an effective solution to minimise the incidence of such queries is required to be found. While a concrete action plan would require substantially more detailed discussion and perhaps data analysis, which is beyond the scope of this study, it is expected to include issuing of Public Notices on the lines of JNCH Public Notice No. 21/2023 dated 08.03.2023 and ICD, Tughlakabad Public Notice No. 04/2023 dated 07.02.2023; creating more widespread awareness about the same among Customs broker community and regular handholding to enhance the capacity of the cutting edge Customs brokers. In addition, CBIC needs to continue its endeavour through National Assessment Centre (NAC) to make this process more efficient and effective.

### 4.4.4 Recall of fully-facilitated bills of entry

The study found that in certain cases, wherein the Risk Management Division (RMD) under the Customs automated system had categorised a bill of entry as fully facilitated with direction for "no assessment and no examination", the bills of entry were recalled, at the request of either the importer or the Customs based on local alert or inputs, as provided in the relevant CBIC Circular. It was observed that the share of such recalled bills of entry has declined from 13 percent in 2022 to 9 percent in 2023. Of these recalled bills of entry in 2023, in 47 percent cases the final assessment was made with amendments to the self-declared bill of entry, as compared to 44 percent in 2022.

NTRS has found that the ART for these recalled bills of entry at all ports covered by the study was significantly higher at 94:29 hours, as compared to the overall ART of 64:40 hours. Further, relying on a small sample of ICD Tughlakabad, the study found that while the ART for this ICD was 70 hours, it was much higher at 201 hours for fully facilitated bills of entry that were recalled bills and 232 hours for those non-facilitated bills of entry which were recalled from FAG.

The study identifies amendment, query and recall under the Faceless Assessment system as main reasons for increase in time being taken at the assessment stage. Based on the above analysis and stakeholder discussions, it can be concluded that there is room to improve the quality of self-assessment, which impacts the level of facilitation, need for amendment, query or recall. Simultaneously, there is need to improve the capacity and sensitise the assessing officers.

### 4.4.5 Timely payment of duty

NTRS 2022 had identified "delay in payment of duty that dampens the advantages of advance filing of bills of entry and prompt full facilitation or expeditious completion of assessment"[16], noting that statutory provisions requiring payment of interest on delayed payment of duty after (self) assessment have not resulted in ensuring prompt payment of duty,

NTRS 2023 found that the argument made in NTRS 2022 that time taken in payment of duty accounts for a significant share of the overall ART continues to remain valid. The table below shows that the time taken from assessment to payment of duty in 2023 continues to remain almost as high as in 2022. The role played by time taken in payment of duty in the import release process is further validated by the finding that ART for bills of entry wherein the benefit of deferred duty payment was availed is significantly lower than the average ART for each of the four port categories.

**Table 17: Time taken in Payment of Duty**

| Port Category | ART for all BEs (hour: minute) | | Time taken from Assessment to Payment (when Payment is made after Assessment) (hour: minute) | | Share of BEs involving deferred payment | | ART for BEs involving deferred payment (hour: minute) | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | 98:01 | 100:43 | 7% | 7% | 45:48 | 42:44 |
| **ICDs** | 71:46 | 89:39 | 69:11 | 68:32 | 4% | 4% | 51:19 | 42:40 |
| **ACCs** | 44:15 | 49:56 | 47:11 | 52:39 | 10% | 10% | 29:58 | 31:40 |
| **ICPs** | 31:44 | 17:07 | 15:27 | NA | 3% | NA | 8:10 | NA |

The above conclusion regarding delays in payment of duty is also substantiated by the finding that in about 34 percent of bills of entry, interest for delayed payment of duty was paid. It is also interesting to note that this share is much higher than the 7 percent share of bills of entry, which attracted requisite fine for delay at the filing stage. However, as shown in Table 18 below, the total amount of fees paid for delayed bills of entry filings in 2023 is about three times the interest paid on the late duty payment, thereby indicating that the financial impact of late filing of bills of entry is significantly higher than for late duty payments. It is understood that operationalization of the Electronic Cash Ledger combined with deferred duty payment scheme and greater sensitisation of the trade will result in reduction in the time taken in payment of duty after assessment.

[16] Para 10.4 (1) page 35, NTRS 2022

**Table 18: Interest on Late Duty Payment and Fine on Delayed Filing of Bills of Entry**

| Port | Share paying interest on duty | | Total interest amount (INR) | | Share paying fine for delayed filing | | Total fine amount (INR) | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Overall | 34% | 40% | 2,18,92,592 | 6,06,60,031 | 7% | 10% | 6,47,21,845 | 10,80,25,427 |
| Seaports | 30% | 37% | 1,63,82,881 | 4,40,90,652 | 8% | 11% | 3,79,68,597 | 6,64,73,962 |
| ICDs | 49% | 79% | 17,04,296 | 90,75,150 | 11% | 11% | 34,15,752 | 38,09,000 |
| ACCs | 36% | 39% | 37,91,664 | 74,84,729 | 6% | 9% | 2,33,07,496 | 3,76,53,465 |
| ICPs | 15% | 21% | 13,751 | 9,500 | 1% | 2% | 30,000 | 89,000 |

Lastly, the study also looked at the relatively newer initiative, called the Pre-payment Customs Compliance Verification (PCCV), introduced under the rubric of Turant Customs Program that enables the provision of CCV to a bill of entry even pending payment of duties. During NTRS 2023, it was found that in 27 percent of total bills of entry analysed, PCCV was given, on an average of 32:11 hours before the grant of OOC.

### 4.4.6 Time taken in cargo evacuation after grant of 'out of charge'

JNCH TRS had included a small sample study to assess the time taken after grant of OOC till actual gate out from CFS, even as it noted that grant of OOC marked the completion of the import release process. This aspect was studied in response to the general perception that CFSs are often used as buffer storage space, which was also considered to be useful data input from supply chain and logistics perspective. For this analysis, the timestamp for grant of out of charge was obtained from the Customs automated system and the gate out from the IT system of the concerned custodian.

Subsequent NTRS have attempted to measure this time as well for all the four port categories. As can be seen from Table 19 below, the average time taken after OOC to Gate Out has declined from 64:06 hours in 2022 to 36:32 hours in 2023. This improvement is attributed to various digitization measures adopted at various ports, such as the Digital Docket Delivery at ACC Mumbai.

Nonetheless, it is viewed that the average time of 36:32 hours taken for goods to move out of the Customs premises after the grant of OOC may merit deeper analysis by supply chain and logistics professionals, since it appears intuitively obvious that the full benefits of improved cargo release time will be reaped by the importer if there are no subsequent delays as well. In this regard, this study has found that in the case of CFS cargo, with the exception of Chennai seaport, the time taken from OOC to gate out has increased at all other seaports, as detailed in Annexure C.

**Table 19: Time taken in cargo evacuation after grant of out of charge**

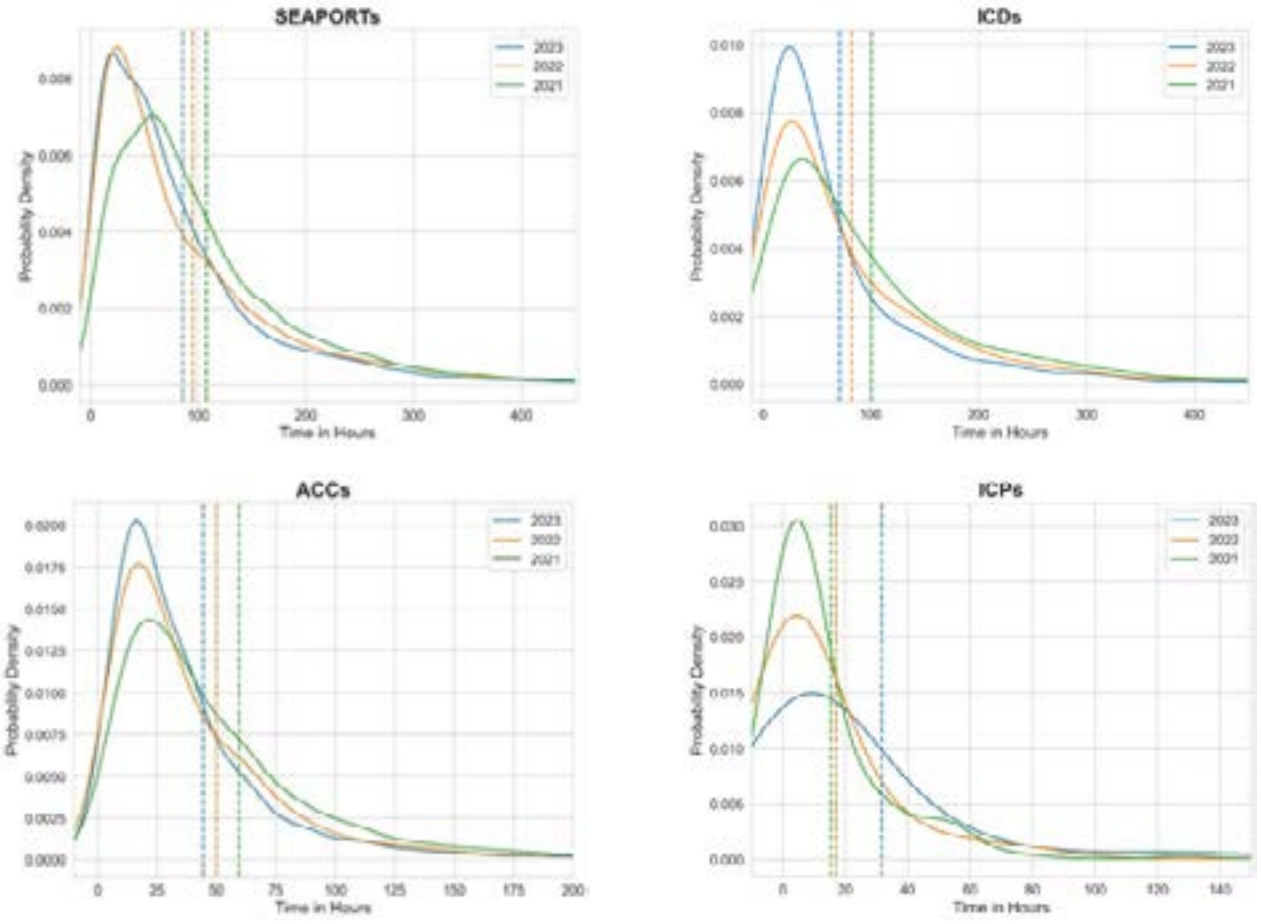
| Port Category | Arrival to OOC (hour: minute) | | OOC to Port Gate Out (hour: minute) | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 85:42 | 94:42 | DPD: 29:28; CFS: 69:02 | 56:49 (CFS: 59:04, DPD: 51:42) |
| **ICDs** | 71:46 | 89:39 | 96:18 | 66:04 |
| **ACCs** | 44:15 | 49:56 | 11:58 | 18:58 |
| **ICPs** | 31:44 | 17:07 | 03:03 | 05:00 |

Stakeholder consultations suggested that factors including importer behaviour and awareness, timelines for procurement and delivery, plans for transportation and storage facility, besides perceived uncertainty about the cargo release time may influence the actual evacuation of cargo following the completion of the cargo clearance process.

## 4.5 The Story of the Fat Tail[17]

The early TRS appeared to confirm the general assumption that the probability density curve of the bill of entry-wise release time, drawn from the large sample of bills of entry would be a normal distribution. However, subsequent NTRS seemed to create a doubt in this regard. Therefore, NTRS 2023 undertook the required analysis, using the archived sample data from the NTRS 2021 and 2022 as well. It was found that the fat tail exists, across all the four port categories, as presented in the charts below.

**Chart 6: Probability Density Curves for all port categories**




The study, having confirmed the persistence of fat tail, aggregated the more time-consuming bills of entry that fell outside the range determined by the indicator viz. "distance travelled towards the NTFAP targets", at the port-category[18] level to identify possible factors that could be delaying the release of such cargo.

This additional analysis found that among these outlier bills of entry, as presented in table below, the share of delayed bills of entry, those requiring assessment, amendment and queries therein, examination, delayed duty payment, additional regulatory clearance from PGAs, and sea cargo routed through CFSs, was all much higher compared to the respective port category averages for the overall sample set. The fat tail analysis, therefore, confirms the general findings regarding the factors that dampen expeditious import cargo release referred to earlier in this study.

[17] Fat tails are a statistical phenomenon, entailing greater likelihood of extreme events occurring than under a normal distribution, in which all values in the sample are distributed equally above and below the mean.

[18] 79 percent at seaports, 90 percent at ICDs, 80 percent at ACCs, and 100 percent at ICPs.

**Table 20: Characteristics of Outliers constituting 'fat-tail'**

| | Share of Delayed Filing of BEs, paying late fee | Share of Assessment | Share of Examination | Share of duty paid after arrival of cargo | Share of bills paying Interest on Late Duty Payment | Share of Amendment in BEs | Share of First Query | Share of Last Query | Share of bills marked to PGAs | Share of CFS |
|---|---|---|---|---|---|---|---|---|---|---|
| **Seaports** | 18% | 52% | 51% | 77% | 51% | 56% | 19% | 4% | 17% | 76% |
| **ICDs** | 20% | 54% | 54% | 88% | 65% | 32% | 25% | 8% | 4% | - |
| **ACCs** | 21% | 31% | 28% | 96% | 60% | 38% | 8% | 2% | 9% | - |

Further, it was observed that specific commodity groups had higher share of queries. For cumulative analysis of all ports under the purview of the study, HS Code 3901 (Polymers of ethylene), 8517 (Telephone sets) and 2710 (Petroleum oils) were the top commodities in which maximum first queries were raised. A deeper analysis of specific ports showed that while most of the ports had maximum queries at one of the abovementioned commodities, some ports showed variation.

Based on these observations of impact of commodity on queries raised, it was intuitively viewed that commodity composition per se would also have a role to play in delaying the release of cargo that constitutes the fat tail mentioned above. This was tested on a smaller sample of Nhava Sheva and ACC Mumbai, and it was concluded that while commodity composition impacts the number of queries raised, which in turn impacts the ART, commodity composition per se has limited role to play in constituting the fat tail.

The study has preferred not to include detailed statistical analysis undertaken in this regard in the interest of brevity.

## 4.6 Import TRS: Conclusions, Recommendations and scope for further study

(a) It is concluded that as a result of various trade facilitative initiatives, including implementation of all the TFA provisions, import release time has continued to improve across port categories. Equally, significantly, there is also greater certainty regarding such improved release time.

(b) The general trend of progress towards Path to Promptness continues; and as a result, the ART for advance facilitated bills of entry filed by AEOs have met the NTFAP target release time for all the four port categories.

(c) Despite greater certainty of more expeditious release, the uptake of AEO scheme continues to remain lukewarm. A more effective AEO scheme, which is possible to be achieved through a mix of more benefits, perhaps by encouraging PGAs to do so as well, simpler process for enrolment, lower compliance requirement and extensive direct outreach to the trade, not simply through the Customs broker, would lead to significant improvement in the AEO uptake as well as ART. It is recommended that CBIC may coordinate with all stakeholders for launching a major initiative and outreach for improving AEO enrolment.

(d) Considering that growth and expeditious clearance of LCL cargo is a priority with the growing demands of the fast-evolving e-commerce, which is also a priority initiative under the recently unveiled Foreign Trade Policy, 2023, and ensuring trade facilitative environment for the MSME sector, it is recommended that a more detailed and rigorous analysis of clearance process for LCL cargo may be undertaken.

(e) The study identifies amendment, query and recall under the Faceless Assessment system as main reasons for increase in time being taken at the assessment stage. Based on this, it concludes that there is a need to improve the quality of self-assessment, which impacts the level of facilitation, need for amendment, query or recall. Simultaneously, there is a need to improve the capacity and sensitise the assessing officers.

(f) Given the impact of queries on release time, the study concludes that an effective solution to minimise the incidence of such queries is required to be found. While a concrete action plan would require substantially more detailed discussion and perhaps data analysis, which is beyond the scope of this study, it is expected to include issuing of Public Notices on the lines of JNCH Public Notice No. 21/2023 dated 08.03.2023 and ICD, Tughlakabad Public Notice No. 04/2023 dated 07.02.2023; creating more widespread awareness about the same among Customs broker community and regular handholding to enhance the capacity of the cutting edge Customs brokers. In addition, CBIC needs to continue its endeavour through National Assessment Centre (NAC) to make this process more efficient and effective.

(g) NTRS found that the total amount of fees paid for delayed bills of entry filings in 2023 is about three times the interest paid on the late duty payment, thereby indicating that the financial impact of late filing of bills of entry is significantly higher than for late duty payments. It is understood that operationalization of the Electronic Cash Ledger combined with deferred duty payment scheme and greater sensitisation of the trade will result in reduction in the time taken in payment of duty after assessment.

(h) Time taken in evacuation of cargo post grant of out of charge merits deeper analysis by supply chain and logistics professionals, since it appears intuitively obvious that the full benefits of improved cargo release time will be fully reaped by the importer if there are no subsequent delays in delivery.

(i) Stakeholder consultations suggest that there is significant lack of awareness regarding various trade facilitation initiatives of the government and trade cost and trade time benefits thereof, which is borne out by the detailed quantitative analysis attempted by NTRS. Recognising that full benefits of these initiatives require voluntary on boarding by the trade, a concerted outreach to the EXIM community, along with the Customs Brokers association is strongly recommended.

# 05 Export Release Time

## 5.1 Context

The conduct of Time Release Study in India, **particularly Export Release Time**, received a fillip after coming into force of the Trade Facilitation Agreement (TFA) of the World Trade Organization (WTO). With NTRS 2023, following the standardised methodology adopted in NTRS 2022, the challenge of data inconsistency has been minimised further, which has resulted in greater robustness of its findings.

The focus on assessment of **export facilitation**, which is aimed at **simplification, modernization, and harmonization of export processes**, through measurement of export release time is consistent with the high priority placed by Government of India on export promotion.

In exports, there are significant differences in the cargo clearance process, and non-availability of detailed timestamps as neither the physical arrival of the cargo at the Customs station nor the post LEO processes are captured by the Customs automated system. Many steps are required to be undertaken after the grant of the LEO until the actual export of the cargo. Therefore, the "**average release time**" could not have been computed solely from the timestamps obtained from the Customs automated system.

Accordingly, Export NTRS 2022 presented port-category-wise average export release time by sourcing the data from the Customs automated system and from the IT systems of the concerned custodians. This study, inter alia, highlighted the high average physical release time in exports, vis-à-vis the NTFAP 2020-2023 target of: within 24 hours for Sea Cargo, Inland Container Depots and Land Customs Stations/ Integrated Check Posts; and within 12 hours for Air Cargo. It pointed out that the time taken till customs/regulatory release (let export order) was a small percentage of the **time being taken after grant of LEO** uptil the physical release of the goods denoted by the departure of goods on carrier. The time taken between LEO and departure of goods was high and constituted 60 per cent. of total time from arrival till departure of goods for ICPs, and 92 per cent. for ACCs.

The NTRS 2023 has also benefited from a study undertaken in relation to time taken post Let Export Order which covered 4 ports that are part of the NTRS 2023. In order to appreciate the nuances of the supply chain, a typical export process is viewed as comprising **three stages: (a)** pre- arrival stage – beginning with the filing of shipping bill and generally concurrent movement of cargo from the factory to the Customs port; **(b)** regulatory clearance stage at the Customs port, after arrival of the cargo till grant of LEO by Customs; and **(c)** post regulatory clearance stage that involves movement of cargo within the port premises until the point of final departure. The final departure refers to the vessel-sail off in case of seaports; loading on the rake in case of ICDs; dispatch of the truck across the border gate in case of ICPs; and take-off of the aircraft in case of ACCs.

## 5.2 Methodology

The methodology adopted for NTRS 2023 is the same as that adopted for previous study. The study excludes the pre-arrival stage mentioned above.

Export release time is calculated as the time taken between arrival of the cargo at the port/Customs station to LEO (which is the customs or regulatory clearance) and then after LEO to departure of the goods in carrier from the port (which is the stage of post–regulatory clearance involving logistics activity or movements in the extended port premises). The departure of goods is also referred as the physical release in exports.

The **sample period** for this study is same as that of NTRS 2022, i.e. first week of the calendar year (from 1st to 7th January 2023). During this period, 117,179 shipping bills were filed at all the fifteen ports, which were tracked till 7th February 2023. Of these, 33,321

shipping bills were purged due to non-presentation of goods at the Customs station within the stipulated period. Out of the remaining 83,858 shipping bills, 63,547 shipping bills were taken up for detailed analysis, after excluding the rest due to incomplete/ inconsistent data entries.

Regulatory processing data was collected from DG Systems (CBIC) for all shipping bills filed between 1st and 7th January 2023 (both days included) and corresponding cargo identification numbers were shared with the respective field formations to collect data related to logistics of the entire export clearance process. After matching the two data sets, exclusions were made in cases of inconsistent or incomplete data entries or in those cases wherein LEOs was granted till 7th February 2023. It is noteworthy that the exclusions[19] in export NTRS have been significantly declining, which reflects an improved quality of logistics data sets received from field formations, thereby assuring greater robustness of findings of this study, even as it suggests that strict comparability between the findings of this year and the corresponding period of the previous year (COPPY) would require assumption regarding randomness of the excluded shipping bills.

## 5.3 Export Release: Comparative Findings

### Export Sample Size

The total number of shipping bills filed, excluding purged shipping bills during NTRS 2023 sample period was 83,858, representing a slight dip of 1 percent as compared to 84,445 shipping bills filed during 2022 sample period.

This NTRS is based on the analysis of 63,547 shipping bills, representing an **increase of 25 percent** over 50,656 shipping bills analysed during NTRS 2022. This jump in the sample size is on account of significant decline in the exclusions[20] vis-à-vis last year, as mentioned earlier and reflects stabilization of the data-collection and collation protocol arrived at between the Customs and the concerned custodians. The port category-wise break-up of the sample size of shipping bill is tabulated below:

**Table 21: Export Sample Size, 2023 vis-à-vis 2022**

| | SBs Filed (2023) | Excluded SBs (2023) | Share of Excluded SB (2023) | SBs Filed (2022) | Excluded SBs (2022) | Share of Excluded SB (2022) |
|---|---|---|---|---|---|---|
| **Seaports** | 43281 | 13321 | 31% | 42751 | 26386 | 62% |
| **ICDs** | 3512 | 239 | 7% | 3658 | 990 | 27% |
| **ACCs** | 33109 | 6198 | 19% | 32871 | 6249 | 19% |
| **ICPs** | 3956 | 553 | 14% | 5165 | 164 | 3% |

[19] Exclusions listed in Table 1

[20] Exclusions: LEO after 7th February and inconsistencies - data mismatch between regulatory and logistics datasets, blank entries, LEO before Arrival, LEO after Departure, and Departure time in 2022.

**Purged Shipping Bills**

The share of purged shipping bills in the total shipping bills filed, was found to range at 18 percent at ICPs, 22% at sea ports, 26% at ICDs and 37% at ACCs. These represent shipping bills that were filed but did not result in any physical export since goods were not presented for export within the stipulated period for various reasons including commercial or logistics considerations.

**Comparative Export Release Time and Distance travelled towards NTFAP targets**

The export release time in 2023 has improved vis-à-vis 2022 for all port categories, as presented in the table below.

**Table 22: Export release time**

| Target | Regulatory clearance (Arrival to LEO) (hour: minute) | | Post regulatory logistics activity (LEO to Departure) (hour: minute) | | Arrival to Departure (hour: minute) | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports (24 hrs)** | 19:34 | 29:47 | 156:21 | 162:03 | 175:55 | 191:41 |
| **ICDs (24 hrs)** | 32:53 | 47:41 | 96:39 | 135:39 | 129:33 | 177:44 |
| **ACCs (12 hrs)** | 4:08 | 4:04 | 24:10 | 32:39 | 28:18 | 35:22 |
| **ICPs (24 hrs)** | 4:33 | 11:07 | 6:34 | 13:04 | 11:07 | 21:39 |

The improved release time is found to be associated with higher certainty around the time taken for departure of cargo from its arrival at the port. This is reflected in lower standard deviation, as compared with COPPY, as follows:

**Table 23: Standard Deviation of export cargo arrival to departure time**

| | Standard Deviation (hour: minute) | |
|---|---|---|
| | 2023 | 2022 |
| **Seaports** | 115:24 | 140:25 |
| **ICDs** | 102:09 | 138:43 |
| **ACCs** | 23:18 | 64:27 |
| **ICPs** | 15:55 | 33:22 |

The distance travelled to NTFAP target is represented by the percentage share of fastest shipping bills for which average release time is within that target.

If the time taken till completion of regulatory clearances is benchmarked with respect to the NTFAP target of release time, the target is met except in the case of ICDs:

**Table 24: Regulatory export release time benchmarked with NTFAP target**

| Target | Regulatory clearance (Arrival to LEO) (hour: minute) | | Distance travelled towards target (Arrival to LEO) | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| **Seaports (24 hrs)** | 19:34 | 29:47 | 100% | 98.8% |
| **ICDs (24 hrs)** | 32:53 | 47:41 | 97% | 75% |
| **ACCs (12 hrs)** | 4:08 | 4:04 | 100% | 100% |
| **ICPs (24 hrs)** | 4:33 | 11:07 | 100% | 100% |

However, if the larger supply chain perspective is also taken into account by bench marking the broader time taken till departure, with respect to the NTFAP target of release time, then it is observed that the distance travelled towards the target continues to be low for seaports, ICDs and air cargo complexes as shown below. Only with respect to ICPs is the target met:

**Table 25: Regulatory and non-regulatory export release times benchmarked with NTFAP target**

| Target | Arrival to Departure (hour: minute) | | Distance travelled towards target (Arrival to Departure) | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| **Seaports (24 hrs)** | 175:55 | 191:41 | 0.70% | 0.90% |
| **ICDs (24 hrs)** | 129:33 | 177:44 | 12% | 6% |
| **ACCs (12 hrs)** | 28:18 | 35:22 | 31% | 47% |
| **ICPs (24 hrs)** | 11:07 | 21:39 | 100% | 100% |

The above distance travelled towards target remains low for seaports, ICDs and air cargo complexes in view of continued high percentage share, in overall time till departure, of time involved in post-regulatory clearance logistics activities as shown below:

**Table 26: High share of post-regulatory time**

| | Arrival to Departure (hour: minute) | | Share of regulatory clearance time till LEO | | Share of post-regulatory time from LEO to departure | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 175:55 | 191:41 | 11% | 15% | 89% | 85% |
| **ICDs** | 129:33 | 177:44 | 25% | 24% | 75% | 76% |
| **ACCs** | 28:18 | 35:22 | 15% | 8% | 85% | 92% |
| **ICPs** | 11:07 | 21:39 | 41% | 40% | 59% | 60% |

Delving deeper, it is seen that in each of the six ACCs the average release time has been bettered, with improvement being reported at both the stages.

### 5.3.1 Stage-wise analysis of Export Clearance Process

As mentioned earlier, the NTRS covers the stages of arrival of the cargo at Customs station till grant of LEO; and post LEO stage until the final departure.

It may be highlighted that many of the TFA commitments are aimed at reducing the time taken at arrival to LEO stage wherein the process of regulatory clearance begins once the exporter has presented and registered the goods for which he had already filed the shipping bill.

The time taken from the physical arrival of the goods (as reported in the custodian's system) to registration of goods on the Customs automated system is high and contributes significantly to the higher time taken from arrival of goods to LEO stage:

**Table 27: Time taken till goods registration substantial in time till customs release**

| | Arrival to goods registration (hour: minute) | Customs release time (arrival to LEO) (hour: minute) |
|---|---|---|
| **Seaports** | 17:00 | 19:34 |
| **ICDs** | 27:12 | 32:53 |
| **ACCs** | 2:58 | 4:08 |
| **ICPs** | 3:46 | 4:33 |

**Factors explaining Export Release Time:**

Under the export process the shipping bills are mandatorily filed in advance of cargo arrival at Customs station, which ensures pre-arrival processing by the Customs Risk Management System (RMS) as well as, where required, most other regulatory screening. Most of the export goods requiring clearance from PGAs receive NOC prior to filing of the shipping bill. The RMS may facilitate the shipping bill or subject it to verification of self-assessment and/or examination of the goods.

The NTRS 2023 comparison of the broader export time release measure till departure, for facilitated and non-facilitated shipping bills reveals the effect of non-facilitation. This effect has lessened in absolute terms since the NTRS 2022 resulting in lower release time for non-facilitated bills:

**Table 28: Impact of Facilitation (No Assessment No Examination), 2023 vis-à-vis 2022**

| | Share of Facilitation | | Facilitated SBs (hour: minute) | | | | Non-facilitated SBs (hour: minute) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Arrival to LEO | | Arrival to departure | | Arrival to LEO | | Arrival to departure | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | 86% | 89% | 17:33 | 28:44 | 174:08 | 190:21 | 32:01 | 38:08 | 186:54 | 202:22 |
| **ICDs** | 88% | 83% | 32:24 | 45:47 | 128:11 | 178:01 | 36:21 | 58:27 | 139:10 | 176:08 |
| **ACCs** | 90% | 89% | 3:52 | 3:42 | 28:05 | 35:07 | 6:22 | 7:00 | 30:16 | 37:20 |
| **ICPs** | 76% | 84% | 4:19 | 9:55 | 10:43 | 20:25 | 5:16 | 16:11 | 12:23 | 26:59 |

As it can be deduced from Table 28 above, the share of time taken from registration of goods to regulatory clearance by way of customs LEO is minimal. The improvement in release time for export cargo has likely resulted from heightened emphasis in customs on arranging better coordinated and more expeditious examination of cargo and related activities, where required.

From the above table, the relative advantage of facilitation can be calculated as the ratio of the broader export time release measure till departure of facilitated bills vis-à-vis non-facilitated bills. A ratio of 1 indicates no advantage and lower the ratio, higher the advantage. At seaports, ICDs and air cargo complexes in the study, this ratio of relative advantage of facilitation in exports approximates 0.9, whereas similar ratio calculated for imports approximates 0.5. As standard facilitation levels at 86 per cent in exports are high[21] and the share of regulatory clearance time till LEO is low, it is concluded that raising the facilitation level even further (even while balancing the compliance concerns related inter-alia with exportability or tax or remission of tax) is not likely to have substantive relevance in reducing the overall export cargo release time till departure of goods.

While the port category-specific issues are discussed in detail in the subsequent sub-sections of this study, the following processes have significant[22] impact on the time taken at the LEO to departure stage:

(a) Stuffing of cargo and Less than Container load (LCL) cargo, in case of ICDs

(b) Stuffing of cargo, in case of Seaports [Container Freight Stations (CFSs) cater to nearly all non-factory stuffed cargo]

(c) Nature of commodity, for example, refrigerated cargo in case of ACCs.

During the stakeholder interactions, it was suggested that the time taken from LEO to Departure is also dependent on the frequency and controllability of the movement of vessel/aircraft/rake/truck. This appears to be intuitively sound. Since the exporters intend to minimise the risk of missing the delivery time, the proclivity to err on the side of caution is more pronounced, wherein the frequency of vessel/aircraft is lower.

[21] In imports RMS facilitation was at 77% in seaports, 83% at ICD, 87% at ACCs and 80% at ICPs

[22] As shown though regression using Ordinary Least Squares (OLS) method for data of Nhava Sheva, ICD Tughlakabad, ACC Bengaluru and ICP Petrapole where P value of less than 5 per cent.

Moreover, it is observed that many of the post-LEO processes do not per se entail significant amount of time, however queuing up for the same do. For example, loading on the rake at the ICDs, entry into the trucks at the terminal premises, security screening of packets at the ACCs or security clearance of trucks at ICPs entail significant queuing up.

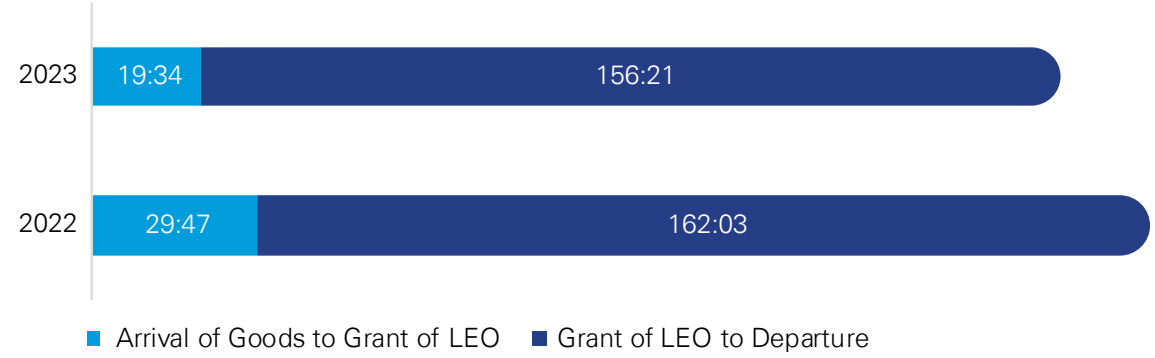
The following section elaborates the different stages of export release, by port category.

## 5.4 Port Category-wise Assessment

### 5.4.1 Seaports

The export release time at seaports has improved by 8 percent from 191:41 hours in 2022 to 175:55 hours in 2023, albeit with only marginal improvement in time taken post grant of LEO.

**Chart 7: Export Release Time at Seaports**




Stakeholder interactions indicated that the long-time taken after the grant of LEO is mainly due to non-availability of daily vessel services or a result of business decisions of Shipping Lines about the schedule of vessels and lifting of a particular consignment rather than to any time-consuming terminal process or infrastructural inefficiency.

The export clearance through seaports is handled either directly through the parking plaza/ terminal premises, also called Direct Port Export (DPE) or routed through CFSs.

While at Kolkata and Mundra, higher share of shipping bills are found to opt for DPE option, the share of CFS cargo was higher at Chennai and Nhava Sheva. It is noted that for LCL export, it is necessary to route the cargo through CFS for aggregating the cargo into full container load. On the other hand, the share of DPE shipping bills would depend on the share of FCL cargo.

The table below presents the share of shipping bills handled through DPE vis-à-vis CFSs, consolidated for the four seaports, along with broader measure of export release time:

**Table 29: DPE vs. CFS**

| | DPE | | CFS | |
|---|---|---|---|---|
| | Share | Average arrival to departure time (hour: minute) | Share | Average arrival to departure time (hour: minute) |
| Share of SBs | 45% | 116:13 | 55% | 225:24 |

It is observed that the overall export release time till departure for DPE cargo is almost half of that for cargo routed through CFSs. CFS cargo took an average 109 hours more till departure as compared to DPE cargo.

However, any comparison must note that DPE is for factory-stuffed full container loads while CFSs largely handle non-factory stuffed cargo that is stuffed and Less than Container Load (LCL) cargo consolidated at the dry docks into containers at the CFS which is coordinated with the schedule of the vessel. Thus, there is also the use of CFS for temporary storage for export goods that have received all documentary clearance and are awaiting the scheduled arrival of the vessel.

The above conclusions find support from the detailed break-up of the stage-wise time taken for CFS vis-à-vis DPE cargo, which is presented in the tables below. The following aspects merit highlighting:

(i) The higher time taken at CFS during Arrival to LEO is due to lag between arrival and registration which is more pronounced at CFS[23]; attributed in some cases to the wait time until all part-consignments against a single shipping bill arrive at the Customs port for the goods to be registered.

(ii) Higher time taken in CFS from LEO to Gate Out is mainly attributable to CFS being used as buffer storage, besides consolidation and stuffing of LCL cargo.

(iii) Above aspects are supported by the lower time taken by CFS cargo from CFS Gate Out to Terminal In stage, even though the CFSs are located farther from the terminal compared to the parking plaza (applicable in case of JNPA).

**Table 30: Stage-wise Export Release Time at Nhava Sheva - JNPA**

| Arrival to LEO (hour: minute) | | LEO to PP/ CFS Gate Out (hour: minute) | | PP/CFS Out to Terminal In (hour: minute) | | Terminal In to Yard In (hour: minute) | | Yard In to Yard Out (hour: minute) | | Yard out to loading (hour: minute) | | Loading to vessel sail-off (hour: minute) | | Arrival to Departure (hour: minute) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PP | CFS | PP | CFS | PP | CFS | PP | CFS | PP | CFS | PP | CFS | PP | CFS | PP | CFS |
| 4:38 | 29:40 | 4:29 | 102:55 | 11:25 | 4:37 | 1:11 | 1:18 | 69:52 | 62:40 | 0:22 | 0:20 | 9:18 | 9:24 | 102:45 | 211:26 |
| 19:09 | | 61:50 | | 7:44 | | 1:15 | | 65:38 | | 0:21 | | 9:22 | | 165:46 | |

**Table 31: Stage-wise Export Release Time for CFS at Chennai, Kolkata and Mundra**

| Port | Arrival to departure (hour: minute) | Arrival to LEO (hour: minute) | LEO to CFS Out (hour: minute) | CFS In to Export Carting Order (hour: minute) | Export Carting Order to Stuffing (hour: minute) | Stuffing to Movement (hour: minute) | Movement to CFS Gate Out (hour: minute) | CFS Gate Out to Terminal In (hour: minute) | Terminal In to Container Loading (hour: minute) | Container Loading To VSO (hour: minute) |
|---|---|---|---|---|---|---|---|---|---|---|
| Chennai | 193:31 | 23:55 | 75:38 | NA | NA | NA | NA | 10:45 | 90:10 | 17:20 |
| Kolkata | 224:00 | 41:11 | 53:31 | 70:52 | 68:06 | 05:07 | 01:26 | 01:56 | 117:37 | 52:50 |
| Mundra | 324:52 | 31:53 | 84:08 | 09:07 | 127:05 | 58:47 | 09:18 | 02:33 | 97:48 | 09:07 |

**Table 32: Stage-wise Export Release Time for DPE at Chennai, Kolkata and Mundra**

| Port | Arrival to departure (hour: minute) | Arrival to LEO (hour: minute) | LEO to Container Loading (hour: minute) | Container Loading to VSO (hour: minute) |
|---|---|---|---|---|
| Chennai | 88:06 | 12:50 | 59:18 | 15:56 |
| Kolkata | 158:14 | 18:55 | 121:15 | 21:56 |
| Mundra | 130:39 | 11:20 | 110:02 | 09:16 |

In order to segregate the impact of consolidation of LCL cargo on the release time, a comparison of FCL and LCL release time for only CFS shipping bills[24] was made. As shown in the table below, it is seen that the higher release time for LCL cargo (by 32:33 hours) vis-à-vis FCL cargo is entirely at LEO to CFS Gate Out stage:

[23] The time taken from Arrival of Goods to Registration and from Registration to LEO is 26:53 and 6:55 hours for CFS cargo, and 6:32 and 1:43 hours for DPE cargo respectively.

[24] For CFS shipping bills filed at seaports, share of LCL cargo has increased from 42 percent in 2022 to 55 percent in 2023.

**Table 33: FCL vs. LCL at CFSs**

| Arrival of export in CFS to Departure (hour: minute) | |
|---|---|
| **FCL** | **LCL** |
| 207:24 | 239:57 |
| **LEO to CFS Gate Out (hour: minute)** | |
| 86:16 | 127:56 |

Further, as seen herein above in table 29, CFS cargo, on an average, took 109 hours more than DPE cargo, suggesting that about 70 percent of the additional time taken in the CFS may be attributed to buffer storage. During the stakeholder consultation, representatives of Container Freight Station Association of India (CFSAI) also submitted that some exporters may prefer to utilise the spaces provided by the CFSs.

During the interactions it was gathered from stakeholders that there is the commercial practice of overbooking of cargo by carriers which is an operational tool used in the airline and container shipping industry, in an effort to hedge against no-show cargo. Though commonly known, and widely researched, extent of such overbooking was not readily available in the public domain. The extent of impact on export cargo release time could not be attempted as part of this study.

Few suggestions were received with respect to the exclusion of time taken in the CFS for storage from the export release time, or compulsorily not allowing registration of goods till allocation of empty container and preparation of container load plan was not complete. Analysis shows that having identified the reasons for export cargo to dwell inside the CFS, no worthwhile purpose is likely to be served by tweaking the release time indicators at this juncture. Nor would it be advisable to delay the registration of goods, since commercial prudence would prefer obtaining all regulatory approvals well in time to eliminate any uncertainty on this account. These suggestions are in the nature of changes that forcibly lower the release time.

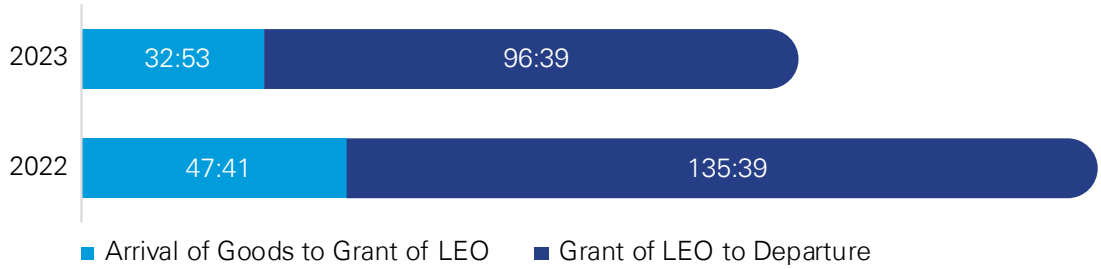
Some stakeholders suggested that the scheduled opening of port terminal gates to allow entry of export cargo meant for loading of specific vessel, should be closer to the cut-off time, which would lower the time taken post grant of LEO until the vessel departure. While examining this aspect, it was informed by the JNPA officials that the average parcel size of JNPA terminals is about 3,000 to 4,000 TEUs, out of which 2,000 TEUs is for exports. Each terminal has 4 lanes for exports; and often at any given time, export containers of 3-4 vessels are being gated in. Presuming movement of 40 TEUs per hour (approximately 1.5 minutes taken for inspection and clearance of a container at Gate by CISF), it takes about 40-50 hours to move in 2,000 TEUs. Considering that all the containers have to be inside the export yard 8 hours prior to berthing of vessel for proper planning of the loading operation, it is imperative that the dwell time of 50-60 hours is required due to the nature of the process. It also deserves mention that port terminals and shipping lines have commercial relationship in which the dwell time at port prior to berthing of vessel acts as an enabler for terminals to prepare for 'optimising' vessel turnaround times.

Therefore, reducing the interval between the opening of terminal gates and cut-off time in the manner suggested would not be apt.

### 5.4.2 ICDs

The overall export release time for ICDs has improved by 27 percent from 177:44 hours in 2022 to 129:33 hours in 2023, with time taken being reduced at both the stages.

**Chart 8: Export Release Time at ICDs**



The stage-wise analysis undertaken showed significant variations between different ICDs at different stages. Therefore, in order to highlight and bring the same to the notice of the concerned authorities, the stage-wise time taken at the three ICDs is presented separately in the table below.

It was found that the average release time was most significantly impacted by whether the cargo was **factory-stuffed or ICD-stuffed**, for each of the three ICDs, with the difference being most pronounced for Tughlakabad exceeding 100 hours. The higher time taken at Tughlakabad for ICD-stuffed cargo is primarily at the stage of unloading (50 hours as compared to 20 minutes at Ludhiana) and LEO to stuffing job order (88 hours as compared to 28 hours for Ludhiana).

It is observed that LCL cargo accounts for about 74 percent of the ICD-stuffed cargo, which takes more time mainly on account of **destination-wise consolidation**. This conclusion finds tentative validation in the high time taken from LEO to generation of Stuffing Job Order in case of LCL cargo vis-à-vis FCL cargo.

The identification was attempted of the **destination countries where LCL consolidation takes the longest** and the other set of countries where the differential between FCL and LCL release is the lowest. Insofar as ICD Tughlakabad, is concerned, it was found that the former set includes countries like Sri Lanka, Spain, Philippines, Hungary and Japan, and the latter includes Tanzania, Qatar, China, Korea and Poland. However, in view of the limited data points sets available for undertaking detailed analysis of impact of destination on the export release time of LCL cargo, no specific conclusions could be drawn.

**Table 34: Stage-wise Export Process for Factory-Stuffed Cargo**

| Port | Physical release time (ICD Gate In to Loading on Rake) (hour: minute) | Arrival to LEO (hour: minute) | LEO to Wagon Booking (hour: minute) | Wagon Booking to Loading on the Rake (hour: minute) | Loading on the Rake to Rake Dispatch (hour: minute) |
|---|---|---|---|---|---|
| Ludhiana | 62:09 | 12:35 | 46:43 | 2:50 | 1:13 |
| Tughlakabad | 70:18 | 33:46 | 20:54 | 15:43 | 1:19 |
| Whitefield | 87:07 | 28:47 | 32:22 | 26:16 | 0:00 |

Note: It was also found that the e-sealing is happening mid-way between filing of shipping bill to arrival of cargo at the ICD. In case of Tughlakabad, time taken from filing of SB to e-sealing is 12:30 hours and e-sealing to ICD Gate In is 13:21 hours.

**Table 35: Stage-wise Export Process for ICD-Stuffed Cargo**

| Port | Physical release time (ICD Gate In to Loading on Rake) (hour: minute) | ICD Gate In to Unloading (hour: minute) | Unloading to LEO (hour: minute) | LEO to Stuffing Job Order (hour: minute) | Stuffing Job Order to Stuffing (hour: minute) | Stuffing to Wagon Booking (hour: minute) | Wagon Booking to Loading on the Rake (hour: minute) | Loading on the Rake to Rake Dispatch (hour: minute) |
|---|---|---|---|---|---|---|---|---|
| Ludhiana | 85:13 | 00:20 | 17:55 | 28:49 | 26:47 | 16:38 | 02:47 | 01:07 |
| Tughlakabad | 174:17 | 50:00 | 31:25 | 88:57 | 8:03 | 21:23 | 23:45 | 0:00 |
| Whitefield | 116:30 | 02:01 | 61:36 | 60:11 | 00:16 | 15:47 | 04:06 | 03:35 |

The significant role of consolidation is also validated by a comparison of the release time for all **FCL and LCL cargo** handled at the ICDs. It was found that LCL cargo takes almost 78 additional hours for release, of which 67 hours are taken post LEO, intuitively attributable to destination-wise consolidation. It may also be noted that the difference in the time taken from ICD gate in to grant of LEO between LCL and FCL cargo is much lower, consistent with the expectation since the regulatory clearance process does not make significant distinction between LCL or FCL cargo, except perhaps in the case of multiple goods being covered by a shipping bill.

[23] The time taken from Arrival of Goods to Registration and from Registration to LEO is 26:53 and 6:55 hours for CFS cargo, and 6:32 and 1:43 hours for DPE cargo respectively.

[24] For CFS shipping bills filed at seaports, share of LCL cargo has increased from 42 percent in 2022 to 55 percent in 2023.

**Table 36: Comparison of stage-wise time taken for FCL vs. LCL Cargo**

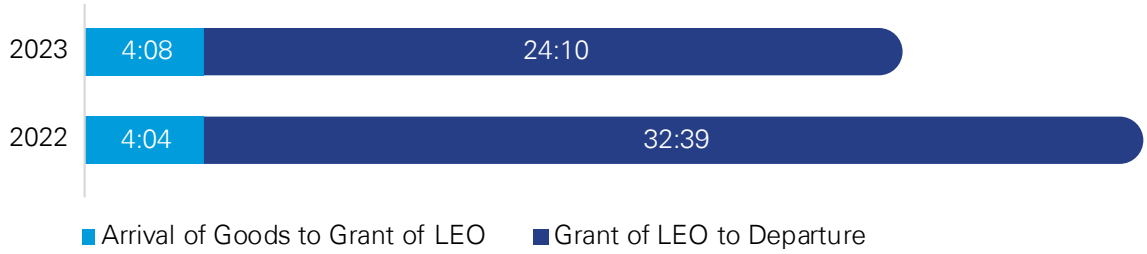
| | FCL | LCL |
|---|---|---|
| Physical release time (ICD Gate In to Loading on rake) (hour: minute) | 85:37 | 163:15 |
| Customs release time (ICD Gate In to LEO) (hour: minute) | 27:00 | 37:25 |
| LEO to Loading on the Rake (hour: minute) | 58:37 | 125:49 |
| Share | 43% | 57% |

NTRS recognises that various ICDs spread across the country provide easy gateway for exporters, including MSMEs. In addition, in terms of numbers they constitute the biggest category of Customs port in the country, even as the size and nature of trade and commodity handled may vary significantly. In view of the same, it would perhaps be useful to conduct a wider time release study for the active ICDs in the country, distinct from the NTRS.

### 5.4.3 ACCs

The export release time at ACCs has improved by 20 percent from 35:22 hours in 2022 to 28:18 hours in 2023, with entire improvement being reported at the post-LEO stage, as shown in the chart below.

**Chart 9: Export Release Time at ACCs**




The share of time taken from LEO to Departure at 85 percent in the overall average release time is the highest (of the four modes of transport) for ACCs. This time refers to the time taken after grant of LEO till loading of cargo in the aircraft and thereafter for the departure of the flight.

The study undertook analysis of the intra-day break-up of arrival of goods, registration of goods, grant of LEO and aircraft departure and the associated average release time. The findings indicate, as shown in the table below, that for all ACCs combined, there is very limited assessment during the morning hours[25]. But a deeper look indicates that relatively fewer goods are presented for registration in the morning hours[26]. On consideration of various related issues, it is viewed that a more even distribution of cargo handling activities through the day, consistent with the prescribed working hours of various agencies at Air Cargo Complexes, may further reduce export release time.

**Table 37: Intra-day Pattern of Cargo Clearance**

| Schedule | Arrival of Goods (Count of SBs) | Registration of Goods (Count of SBs) | Grant of LEO (Count of SBs) | Aircraft Departure (Count of SBs) | Time from LEO to Departure (based on aircraft departure) (hour: minute) |
|---|---|---|---|---|---|
| Midnight to 6 AM | 1844 | 310 | 422 | 7194 | 24:51 |
| 6 AM to Noon | 3950 | 803 | 166 | 9991 | 23:12 |
| Noon – 6 PM | 16494 | 17457 | 14206 | 4532 | 26:53 |
| 6 PM to Midnight | 4623 | 8341 | 12117 | 5194 | 22:43 |

[25] Share of grant of LEOs between Midnight to Noon, of the total LEOs granted, is 0.1 percent at ACC Ahmedabad, 1.3 percent at ACC Bengaluru, 0.9 percent at ACC Chennai, 4.2 percent at ACC Delhi, 0.5 percent at ACC Hyderabad and 0.4 percent at ACC Mumbai

[26] Share of registration of goods between Midnight to Noon, of the total registrations, is 3.0 percent at ACC Ahmedabad, 5.3 percent at ACC Bengaluru, 0.9 percent at ACC Chennai, 5.2 percent at ACC Delhi, 0.7 percent at ACC Hyderabad and 3.2 percent at ACC Mumbai

A more detailed analysis of the factors explaining the time taken at the post-LEO stage identified the following two aspects: (i) Security clearance of consignments, though necessary is a time-consuming activity at the ACCs; and (ii) Commercial practice of overbooking of consignments by airlines[27].

Finally, a brief analysis was undertaken regarding the nature of commodity on the average release time in case of air cargo. As presented in the table below, it was seen that refrigerated cargo (including perishable food items and pharmaceutical products) is released in impressively lower time compared to non-refrigerated cargo.

**Table 38: Export average physical release time of Refrigerated and Non-Refrigerated Cargo**

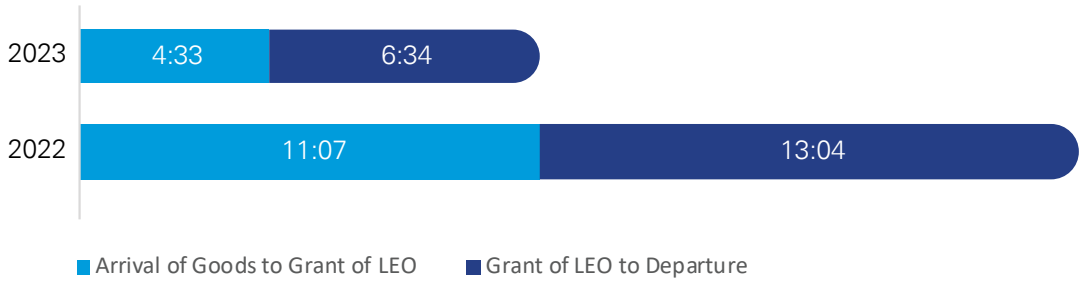
| Refrigerated Cargo | Physical release time (hour: minute) |
|---|---|
| Yes | 19:54 |
| No | 31:38 |

This suggests that the commodity composition has a role to play in the overall ART reported by any Customs station, with ACCs handling more perishable cargo reporting much lower ART. It is viewed that with construction of new air cargo terminals and cold-storage facilities at airports, as envisaged in the National Logistics Policy, the release of perishable cargo would be further streamlined.

### 5.4.4 ICPs

The export release time at ICPs shows most significant improvement of 49 percent from 21:39 hours in 2022 to 11:07 hours in 2023, with very impressive improvements at both the stages, as shown in the chart below. With this performance, both the ICPs have bettered the NTFAP target release time of 24 hours.

**Chart 10: Export Release Time at ICPs**




In the table below, stage-wise time taken after arrival of goods at the ICP Petrapole is presented, noting that similar data for ICP Raxaul was not readily available. It shows that ICP Petrapole has achieved the best release time performance among all Customs ports covered by NTRS, showing tremendous improvement over COPPY.

**Table 39: Stage-wise Export Release at ICP Petrapole**

| | Arrival to LEO (hour: minute) | | LEO to Departure (hour: minute) | | LEO to Export Parking (hour: minute) | | Export Parking to Departure (hour: minute) | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Petrapole | 6:51 | 26:36 | 7:14 | 24:56 | 2:13 | NA | 5:56 | NA |

Notwithstanding the excellent release time performance achieved by ICP, it is recognised that truck dispatch from the border is also greatly dependent on the capacity of clearance and parking on the Bangladesh/ Nepal side, as well as on the schedule of arrival and clearance of cargo. Analysis of the intra-day break-up of the arrival of cargo, registration of goods, grant of LEO and truck departure for both ICPs, as shown in the table below, revealed that the bulk of the activities at these ICPs takes place during the six-hour period starting noon. It is viewed that with massive up-gradation of infrastructure facilities at these ICPs on both sides of the border, the average release time would improve further.

[27] Commercial practice of overbooking is an operational tool used in the airline and container shipping industry, in an effort to hedge against no-show cargo. Though commonly known, and widely researched, extent of such overbooking in India is not readily available in the public domain.

**Table 40: Intra-day Pattern of Cargo Clearance**

| Schedule | Arrival of Goods (Count of SBs) | Registration of Goods (Count of SBs) | Grant of LEO (Count of SBs) | Dispatch from Border (Count of SBs) | Time from LEO to Departure (based on schedule of dispatch from border) (hour: minute) |
|---|---|---|---|---|---|
| Midnight to 6 AM | 472 | 0 | 0 | 0 | - |
| 6 AM to Noon | 1295 | 887 | 553 | 347 | 14:16 |
| Noon – 6 PM | 1511 | 2063 | 2151 | 1612 | 4:50 |
| 6 PM to Midnight | 125 | 453 | 699 | 1444 | 6:38 |

Finally, a detailed commodity-wise analysis was done to assess the impact of the nature of cargo on the average release time in case of ICPs. It was found that the commodity-wise average ART at ICP Petrapole ranged from 01:37 hours in HS Code 2807 (Sulphuric acid) to 159:58 hours for HS Code 4016 (Articles of vulcanised rubber), and at ICP Raxaul ranged from 00:58 hours in HS Code 7018 (Glass beads and imitation pearls) to 32:31 hours in HS Code 1207 (Other oil seeds). It is seen that faster release of perishable and hazardous cargo at Petrapole has been achieved through separate parking space for perishables and hazardous goods and preference in truck movement across the border gates.

It is therefore, concluded that ICPs have achieved the NTFAP target release time, with even more impressive ART for perishable or hazardous cargo.

## 5.5 Export TRS: Conclusion

(a) The Study has concluded that further progress has been made towards improvement in the export ART and the policies to have provided greater certainty regarding faster export clearance. It has highlighted the factors that influence the time taken in various processes, focusing on the impact of frequency and schedule of vessel / aircraft / rake / truck, preference for use of port facility for buffer storage to not miss the carrier schedule, and minimal time being taken in the clearance process, as distinct from queuing for the same, etc.

(b) It is recognized that for more comprehensive assessment of the benefits of trade facilitation initiatives in India, there is a need to start Exports Dwell Time Report (DTR), similar to the Imports DTR published by the CBIC. It requires coordinated data sourcing protocol between DG Systems and the custodians.

(c) Further, recognising that many of the challenges to streamline the cargo clearance process are local in nature, it is viewed that the initiatives to overcome them must also be local. The Study recommends that the Principal Chief Commissioners/ Chief Commissioners of Customs may utilise the Customs Clearance Facilitation Committee (CCFC) forum to formulate and lead such local initiatives.

(d) The study noted the massive infrastructure up-gradation programmes being undertaken as part of various government schemes including PM Gati Shakti. It recognises that implementation of these national and local projects would result in further reduction in the cargo release time.

(e) In conclusion, it is recommended that since ICDs account for the largest number of ports, catering to exporters based in large hinterland, and their role in promoting exports is likely to increase, as also wherein perhaps the scope for further improvement is maximum, a separate standalone study covering larger set of active ICDs could be considered.

# 06 Nepal: Transit Release Time Study

NTRS 2023 has attempted to expand the scope of time release study to cover the time taken in transit of containerised cargo handled by Kolkata seaport destined for and from Nepal, through Raxaul ICP, both the ports being covered by NTRS 2023.

It is noted that the transit EXIM cargo of Nepal is governed by India – Nepal Transit Agreement. Under the said Agreement, India provides maritime transit and supporting services and facilities to Nepal at Kolkata and Haldia ports. A Protocol to the Treaty of Transit between Nepal and India specifies detailed operational modalities including entry and exit points to and from India for the transit trade of Nepal. Besides, both the countries signed a Memorandum to the Protocol to the Treaty of Transit which specifies the detailed procedures to be applied to imports to, and exports from, Nepal.

With the transit cargo moving by both road and rail, transit by rail is governed by the India – Nepal Rail Services Agreement, which specifies transit trade between Kolkata / Haldia ports in India and Birgunj in Nepal via Raxaul in India and between stations on Indian Railways and Birgunj via Raxaul for bilateral trade.

The study recognises that this being the very first attempt, the objective of this Transit Release Time study is to present benchmark cumulative and stage-wise time taken in transit of export cargo from ICP Raxaul to Kolkata seaport by road covering a distance of 740 kms and by rail covering a distance of 690 kms and import cargo from Kolkata seaport to ICP Raxaul.

The following salient aspects are observed from the table below:

(i) Transit export release time, measured by the time taken from arrival of the cargo at ICP Raxaul till vessel sail off from Kolkata, is lower for transit by rail than road;

(ii) Transit import release time, measured by the time taken from entry inwards granted to the vessel at Kolkata seaport till cargo departure from ICP Raxaul, is also lower for transit by rail than road, albeit the difference being significantly less than for export transit;

(iii) Transit export release time is higher than the transit import release time, for both transit by rail and road;

(iv) The stages that consume the maximum time are movement of the cargo between the port and the ICP; and waiting for the cargo having arrived at Kolkata seaport for loading on the vessel in the case of export; and in loading on to the rake or truck at Kolkata seaport in the case of import.

**Table 41: Transit Time for Nepal's Exports**

| Nepal Export: Raxaul ICP to Kolkata Seaport (Transit by Road) | (hour: minute) |
|---|---|
| Total time: Truck Arrival at Raxaul Border Gate -> Vessel Sail Off from Kolkata | 357:12 |
| a. Truck Arrival at Raxaul Border Gate -> Truck departure from ICP Raxaul | 01:22 |
| b. Truck departure from ICP Raxaul -> Truck arrival at Kolkata port | 127:21 |
| c. Truck arrival at Kolkata port -> Container loading onto vessel | 186:58 |
| d. Container loading onto vessel -> Vessel Sail off from Kolkata | 18:06 |

| Nepal Export: Raxaul ICP to Kolkata Seaport (Transit by Rail) | (hour: minute) |
|---|---|
| Total time: Rake Arrival at Raxaul -> Vessel Sail Off from Kolkata | 234:43 |
| a. Rake Arrival at Raxaul -> Rake Departure from Raxaul | 00:06 |
| b. Rake Departure from Raxaul -> Rake Arrival at Kolkata Port | 51:38 |
| c. Rake Arrival at Kolkata Port -> Unloading of Container from Rake | 06:13 |
| d. Unloading of Container from Rake -> Vessel Sail Off from Kolkata | 176:45 |

**Table 42: Transit Time for Nepal's Imports**

| Nepal Import: Kolkata Seaport to Raxaul ICP (Transit by Road) | (hour: minute) |
|---|---|
| Total time: Entry Inward at Kolkata -> Truck Departure from Raxaul | 251:54 |
| a. Entry Inward at Kolkata -> Vessel Berthing at Working Berth | 02:22 |
| b. Vessel Berthing at Working Berth -> Container Discharge | 12:51 |
| c. Container Discharge -> Container Loaded onto Truck at Kolkata Port | 128:01 |
| d. Container Loaded onto Truck at Kolkata Port -> Truck Departure from Kolkata Port | 10:05 |
| e. Truck Departure from Kolkata Port -> Truck Arrival at Raxaul | 94:05 |
| f. Truck Arrival at Raxaul -> ECTS unseal at Raxaul | 05:58 |
| g. ECTS unseal at Raxaul -> Truck Departure from Raxaul | 00:12 |

| Nepal Import: Kolkata Seaport to Raxaul ICP (Transit by Rail) | (hour: minute) |
|---|---|
| Total time: Entry Inward at Kolkata -> Rake Departure from Raxaul | 219:56 |
| a. Entry Inward at Kolkata -> Vessel Berthing at Working Berth | 15:52 |
| b. Vessel Berthing at Working Berth -> Container Discharge | 13:14 |
| c. Container Discharge -> Placement of Rake | 107:15 |
| d. Placement of Rake -> Container Loaded onto Rake at Kolkata Port | 03:47 |
| e. Container Loaded onto Rake at Kolkata Port -> Rake Departure from Kolkata Port | 04:10 |
| f. Rake Departure from Kolkata Port -> Rake Arrival at Raxaul | 106:51 |
| g. Rake Arrival at Raxaul -> ECTS unseal at Raxaul | 01:26 |
| h. ECTS unseal at Raxaul -> Rake Departure from Raxaul Port | 01:07 |

The quantification of time taken at this stage has been included in this Study with the intention to provide the benchmark data for comparison in future.

# Annexure A: Sample Size and Release Time

### Table A.1: Import Sample Size

| | BEs Filed | | | Exclusions | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 |
| **Seaports** | 28474 | 30240 | 26225 | 62 | 122 | 731 |
| **Chennai** | 7181 | 10709 | 6197 | 5 | 24 | 231 |
| **Kolkata** | 1662 | 1631 | 1881 | 9 | 7 | 23 |
| **Mundra** | 2835 | 2633 | 2556 | 7 | 15 | 38 |
| **Nhava Sheva** | 16796 | 15267 | 15591 | 41 | 76 | 439 |
| **ICDs** | 2490 | 3400 | 3580 | 220 | 863 | 1081 |
| **Ludhiana** | 245 | 187 | 254 | 0 | 0 | 3 |
| **Tughlakabad** | 1225 | 2015 | 2408 | 103 | 6 | 379 |
| **Whitefield** | 1020 | 1198 | 918 | 117 | 857 | 699 |
| **ACCs** | 29189 | 28916 | 25779 | 35 | 56 | 348 |
| **Ahmedabad** | 369 | 369 | 353 | 0 | 2 | 0 |
| **Bengaluru** | 6573 | 6100 | 5243 | 6 | 25 | 104 |
| **Chennai** | 4613 | 4554 | 4494 | 6 | 5 | 33 |
| **Delhi** | 8309 | 8012 | 7095 | 12 | 4 | 60 |
| **Hyderabad** | 1227 | 1219 | 1028 | 0 | 5 | 24 |
| **Mumbai** | 8098 | 8662 | 7566 | 11 | 15 | 127 |
| **ICPs** | 568 | 567 | 511 | 1 | 103 | 0 |
| **Petrapole** | 367 | 279 | 261 | 1 | 103 | 0 |
| **Raxaul** | 201 | 288 | 250 | 0 | 0 | 0 |

### Table A.2: Import Release Time and Distance travelled towards NTFAP Targets

| | Import ART | | | Distance travelled towards NTFAP targets | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 |
| **Seaports** | | | | | | |
| **Chennai** | 86:39 | 93:07 | 102:46 | 80% | 78% | 54% |
| **Kolkata** | 126:15 | 144:23 | 144:45 | 38% | 23% | 20% |
| **Mundra** | 71:14 | 106:56 | 137:58 | 91% | 69% | 35% |
| **Nhava Sheva** | 83:44 | 88:23 | 100:08 | 79% | 80% | 65% |
| **ICDs** | | | | | | |

| Import ART | | | | Distance travelled towards NTFAP targets | | |
|---|---|---|---|---|---|---|
| **Ludhiana** | 85:30 | 76:02 | 141:43 | 80% | 88% | 48% |
| **Tughlakabad** | 70:01 | 91:04 | 98:38 | 92% | 77% | 69% |
| **Whitefield** | 70:12 | 88:08 | 89:03 | 91% | 64% | 79% |
| **ACCs** | | | | | | |
| **Ahmedabad** | 47:34 | 51:12 | 68:29 | 71% | 69% | 54% |
| **Bengaluru** | 45:50 | 54:55 | 57:15 | 82% | 74% | 65% |
| **Chennai** | 43:28 | 43:26 | 52:25 | 84% | 84% | 63% |
| **Delhi** | 43:17 | 42:32 | 54:56 | 75% | 80% | 61% |
| **Hyderabad** | 35:49 | 64:11 | 77:21 | 94% | 70% | 47% |
| **Mumbai** | 45:34 | 54:37 | 66:46 | 79% | 68% | 55% |
| **ICPs** | | | | | | |
| **Petrapole** | 40:15 | 31:18 | 24:24 | 100% | 100% | 100% |
| **Raxaul** | 16:26 | 8:21 | 5:59 | 100% | 100% | 100% |

## Table A.3: Export Sample Size

| SBs Filed | | | | Exclusions | | |
|---|---|---|---|---|---|---|
| | **2023** | **2022** | **2021** | **2023** | **2022** | **2021** |
| **Seaports** | 43281 | 42751 | 41101 | 13321 | 26386 | 30647 |
| **Chennai** | 6656 | 6698 | 6153 | 3783 | 5685 | 5898 |
| **Kolkata** | 1658 | 1531 | 1654 | 558 | 880 | 1539 |
| **Mundra** | 9444 | 8447 | 9797 | 2021 | 3001 | 2152 |
| **Nhava Sheva** | 25523 | 26075 | 23497 | 6959 | 16820 | 21058 |
| **ICDs** | 3512 | 3658 | 3681 | 239 | 990 | 2494 |
| **Ludhiana** | 478 | 476 | 501 | 0 | 5 | 117 |
| **Tughlakabad** | 1662 | 1681 | 1783 | 19 | 29 | 1500 |
| **Whitefield** | 1372 | 1501 | 1397 | 220 | 956 | 877 |
| **ACCs** | 33109 | 32871 | 29411 | 6198 | 6249 | 8454 |
| **Ahmedabad** | 2318 | 2314 | 1945 | 1 | 117 | 1006 |
| **Bengaluru** | 5825 | 5627 | 5172 | 0 | 2976 | 2627 |
| **Chennai** | 4038 | 3886 | 3510 | 1076 | 675 | 470 |
| **Delhi** | 11086 | 11569 | 10212 | 139 | 2240 | 3475 |
| **Hyderabad** | 1322 | 1453 | 1280 | 511 | 7 | 29 |
| **Mumbai** | 8520 | 8022 | 7292 | 4471 | 234 | 847 |
| **ICPs** | 3956 | 5165 | 2915 | 553 | 164 | 783 |
| **Petrapole** | 1276 | 1554 | 1462 | 28 | 158 | 783 |
| **Raxaul** | 2680 | 3611 | 1453 | 525 | 6 | 0 |

## Table A.4: Export ART

| Port | Export ART | | Filing of SB to Arrival | | Arrival to LEO | | LEO to Departure | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | | | | | | | | |
| **Chennai** | 193:22 | 181:38 | 27:25 | 59:00 | 23:54 | 20:38 | 169:28 | 162:06 |
| **Kolkata** | 176:53 | 187:02 | 49:13 | 52:10 | 25:14 | 24:13 | 151:39 | 162:49 |
| **Mundra** | 194:24 | 202:49 | 37:02 | 47:48 | 18:05 | 26:39 | 176:18 | 176:25 |
| **Nhava Sheva** | 165:46 | 186:34 | 35:22 | 34:41 | 19:09 | 33:02 | 146:37 | 153:32 |
| **ICDs** | | | | | | | | |
| **Ludhiana** | 74:25 | 97:54 | 13:55 | 25:18 | 15:36 | 24:24 | 58:48 | 73:33 |
| **Tughlakabad** | 160:52 | 196:21 | 40:19 | 48:45 | 32:20 | 42:58 | 128:32 | 153:41 |
| **Whitefield** | 107:45 | 190:17 | 14:47 | 65:23 | 40:52 | 87:12 | 66:52 | 134:42 |
| **ACCs** | | | | | | | | |
| **Ahmedabad** | 22:45 | 73:26 | 19:08 | 19:46 | 5:30 | 6:30 | 17:15 | 73:08 |
| **Bengaluru** | 29:14 | 30:05 | 11:26 | 12:09 | 2:51 | 2:05 | 26:23 | 28:06 |
| **Chennai** | 17:27 | 23:25 | 25:28 | 27:17 | 2:06 | 1:27 | 15:20 | 22:10 |
| **Delhi** | 30:32 | 37:33 | 17:15 | 18:24 | 5:38 | 5:57 | 24:53 | 31:47 |
| **Hyderabad** | 20:42 | 25:30 | 13:13 | 43:56 | 2:14 | 11:17 | 18:27 | 25:17 |
| **Mumbai** | 33:34 | 30:38 | 21:06 | 33:13 | 2:57 | 2:25 | 30:37 | 29:36 |
| **ICPs** | | | | | | | | |
| **Petrapole** | 14:06 | 50:59 | NA | NA | 6:51 | 26:36 | 7:14 | 24:56 |
| **Raxaul** | 9:24 | 10:15 | NA | NA | 3:13 | 3:55 | 6:10 | 8:11 |

# Annexure B: Path to Promptness Analysis for all ports

### Table B.1: Share of Advance BEs, RMS Facilitated and AEO clients

| | Advance BEs | | | RMS | | | AEO | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 | 2023 | 2022 | 2021 |
| **Seaports** | | | | | | | | | |
| **Chennai** | 92% | 92% | 24% | 81% | 84% | 82% | 40% | 40% | 41% |
| **Kolkata** | 89% | 82% | 57% | 95% | 89% | 78% | 22% | 20% | 14% |
| **Mundra** | 89% | 85% | 52% | 69% | 67% | 57% | 25% | 18% | 21% |
| **Nhava Sheva** | 93% | 88% | 61% | 75% | 80% | 77% | 29% | 29% | 31% |
| **ICDs** | | | | | | | | | |
| **Ludhiana** | 93% | 92% | _ | 91% | 85% | 67% | 25% | 18% | 10% |
| **Tughlakabad** | 81% | 84% | 0.4% | 79% | 77% | 73% | 7% | 8% | 12% |
| **Whitefield** | 61% | 86% | 0.5% | 86% | 70% | 75% | 38% | 26% | 17% |
| **ACCs** | | | | | | | | | |
| **Ahmedabad** | 52% | 61% | 30% | 87% | 83% | 84% | 15% | 17% | 18% |
| **Bengaluru** | 73% | 66% | 22% | 89% | 92% | 88% | 50% | 48% | 50% |
| **Chennai** | 50% | 50% | 17% | 91% | 92% | 91% | 54% | 51% | 56% |
| **Delhi** | 55% | 48% | 28% | 84% | 88% | 84% | 29% | 34% | 41% |
| **Hyderabad** | 33% | 50% | 15% | 91% | 89% | 87% | 22% | 28% | 44% |
| **Mumbai** | 71% | 65% | 33% | 85% | 89% | 86% | 39% | 40% | 47% |
| **ICPs** | | | | | | | | | |
| **Petrapole** | 42% | 44% | 41% | 73% | 69% | 39% | 21% | 18% | _ |
| **Raxaul** | NA | NA | _ | 94% | 94% | 93% | NA | NA | _ |

## Table B.2: ART of Advance BEs, RMS Facilitated and AEO clients

| | Advance BEs | | RMS | | AEO | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| **Seaports** | | | | | | |
| **Chennai** | 78:45 | 87:05 | 69:11 | 73:48 | 61:12 | 63:55 |
| **Kolkata** | 117:56 | 128:11 | 123:04 | 140:34 | 90:56 | 114:21 |
| **Mundra** | 60:43 | 95:23 | 53:21 | 85:59 | 41:23 | 74:33 |
| **Nhava Sheva** | 77:31 | 76:43 | 64:22 | 71:04 | 60:33 | 55:27 |
| **ICDs** | | | | | | |
| **Ludhiana** | 85:43 | 71:42 | 83:27 | 71:09 | 49:28 | 37:10 |
| **Tughlakabad** | 60:47 | 81:28 | 55:46 | 75:36 | 64:44 | 60:05 |
| **Whitefield** | 49:51 | 86:39 | 61:43 | 81:36 | 65:26 | 57:16 |
| **ACCs** | | | | | | |
| **Ahmedabad** | 30:12 | 38:04 | 43:27 | 44:54 | 33:38 | 42:27 |
| **Bengaluru** | 35:55 | 42:46 | 39:14 | 48:30 | 36:44 | 43:27 |
| **Chennai** | 30:30 | 32:06 | 38:42 | 38:19 | 33:27 | 35:17 |
| **Delhi** | 34:45 | 31:35 | 38:37 | 38:55 | 35:11 | 33:59 |
| **Hyderabad** | 25:31 | 45:14 | 32:11 | 55:58 | 20:26 | 39:44 |
| **Mumbai** | 36:27 | 41:19 | 40:05 | 47:35 | 34:16 | 40:36 |
| **ICPs** | | | | | | |
| **Petrapole** | 19:45 | 19:41 | 43:19 | 35:52 | 63:18 | 27:15 |
| **Raxaul** | NA | NA | 16:22 | 8:25 | NA | NA |

# Annexure C: Post Regulatory Clearance

### Table C.1: Time taken from OOC to Port Gate Out

| | 2023 | 2022 | 2021 |
|---|---|---|---|
| **Seaports** | | | |
| **Chennai** | 27:08 (DPD); 105:11 (CFS) | 106:44 (DPD); 240:58 (CFS) | 69:11 (DPD); 52:37 (CFS) |
| **Kolkata** | 42:49 (DPD); 47:26 (CFS) | 53:45 (DPD); 39:48 (CFS) | 42:12 (DPD) |
| **Mundra** | 31:00 (DPD); 83:03 (CFS) | 37:43 (DPD); 31:36 (CFS) | 38:58 (DPD); 111:35 (CFS) |
| **Nhava Sheva** | 26:13 (DPD); 63:00 (CFS) | 20:05 (DPD); 52:00 (CFS) | 32:54 (DPD); 31:01 (CFS) |
| **ICDs** | | | |
| **Ludhiana** | 57:49 | 64:49 | 49:38 |
| **Tughlakabad** | 120:53 | 60:04 | 69:53 |
| **Whitefield** | 76:12 | 102:09 | 100:23 |
| **ACCs** | | | |
| **Ahmedabad** | 21:32 | 19:20 | 20:48 |
| **Bengaluru** | 9:58 | 16:31 | 11:50 |
| **Chennai** | 11:03 | 31:11 | 14:03 |
| **Delhi** | 8:25 | 11:08 | 11:55 |
| **Hyderabad** | 14:11 | 18:31 | 25:55 |
| **Mumbai** | 13:53 | 19:26 | 15:57 |
| **ICPs** | | | |
| **Petrapole** | 2:36 | 3:08 | 2:25 |
| **Raxaul** | 3:52 | 6:14 | 2:24 |

# NOTES

# NOTES

**Team – National Time Release Study -2023**

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**Assisted by**: M/s KPMG Advisory Services Pvt Ltd as part of consulting services to NCTF Secretariat