NATIONAL TIME RELEASE STUDY 2025


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Abbreviations

Abbv.	Full Form
ACCs	Air Cargo Complexes
AEO	Authorized Economic Operator
AQCS	Animal Quarantine and Certification Service
ART	Average Release Time
BE/BoE	Bill of Entry
CBIC	Central Board of Indirect Taxes & Customs
CDRUG	Drug Controller General
CFS	Container Freight Station
CHAs	Custom House Agents
DPD	Direct Port Delivery
DPE	Direct Port Entry
EXIM	Export Import
FCL	Full Container Load
FEU	Forty Foot Equivalent Unit
FSSAI	Food Safety and Standards Authority of India
ICDs	Inland Container Depots
ICPs	Integrated Check Posts
ICT	International Courier Terminal
IGM	Import General Manifest
INR	Indian Rupee
IT	Information Technology
JNCH	Jawaharlal Nehru Custom House
JNP	Jawaharlal Nehru Port
LCL	Less than Container Load
LCS	Land Customs Station
LEO	Let Export Order
MSMEs	Micro Small & Medium Enterprises
NCTF	National Committee on Trade Facilitation
NOC	No Objection certificate
NTFAP	National Trade Facilitation Action Plan
NTRS	National Time Release Study
OOC	Out of Charge
PCCV	Pre-payment Customs Compliance Verification

PGAs	Participating Government Agencies
PQIS	Plant Quarantine Information System
RMS	Risk Management System
SB	Shipping Bill
SWIFT	Single Window Interface for Facilitating Trade
TEU	Twenty Foot Equivalent Unit
TFA	Trade Facilitation Agreement
TRS	Time Release Study
VSO	Vessel Sail off
WCCB	Wildlife Crime Control Bureau
WCO	World Customs Organization
WTO	World Trade Organization

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HAJ ABDALLAH T
MALAKAL HARBOR

Foreword

I am happy to present the findings of the National Time Release Study 2025, which emphasizes India's strong commitment to improving the trade facilitation environment. This fifth edition builds on the standardized methodology established in previous years, offering a thorough evaluation of import and export release times across 18 strategically selected ports that account for a substantial share of the country's international trade. Conducted annually, the NTRS provides a comprehensive quantitative assessment of the import and export cargo release processes.

It is appropriate for the TFA-recommended Time Release Study to evaluate progress and identify areas for further improvement, in line with ongoing efforts to implement "TFA Plus" commitments, which include advancements in infrastructure and technology. The NTRS 2025 report brings to light several key observations and trends. Notably, it highlights a decrease in import release times for specific port categories, attributed to a combination of factors such as an improved trade facilitation environment, enhanced facilitation levels, and the introduction of various initiatives like Pre-arrival processing, AEO, and risk-based facilitation. However, challenges remain, including delays in duty payment and increased amendments after filing, which continue to affect the clearance process. In terms of exports, while there have been improvements in certain areas, logistics disruptions and regulatory delays continue to influence overall release times. Despite these challenges, the study underscores our persistent efforts to streamline logistics processes and enhance efficiency.

The NTRS 2025 has broadened its scope to include three ports: Cochin Seaport, Jaigaon LCS, and ICD Garhi Harsaru, thereby setting a benchmark for future evaluations. I would like to express my sincere appreciation to the team behind NTRS 2025 for their dedication and commitment to conducting this study. Their efforts not only provide valuable insights but also establish a foundation for informed decision-making and continuous improvement in our trade facilitation measures. It is important to note that NTRS represents a collaborative initiative aimed at enhancing efficiency among all stakeholders, rather than highlighting the deficiencies or strengths of any particular port or stakeholder.

As we navigate the complexities of global trade, it is crucial that we remain vigilant and adaptable. The findings of NTRS 2025 will serve as a roadmap for further enhancements in our customs processes, ensuring that we continue to foster a supportive environment for trade and economic growth.

Sanjay Kumar Agarwal

Chairman, CBIC


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Foreword

With global value supply chains emerging as a vital area amid increasing trade volumes, there is a clear need for enhanced trade facilitation to meet the demand for swift and harmonized systems across borders. The Central Board of Indirect Taxes and Customs (CBIC) has consistently aimed to drive Trade Facilitation reforms among border management agencies and stakeholders involved in regulating cross-border trade. Conducting the National Time Release Study (NTRS) regularly is one approach to assess the impact of the Trade Facilitation reforms implemented by the Government.

The Time Release Study (TRS) is a valuable tool recommended by the World Customs Organization (WCO) for coordinated border management. It utilizes a comprehensive sample size, scope, and methodology, along with stakeholder involvement, thereby assisting Customs Administrations in developing effective policy formulation initiatives.

The consistent execution of National Time Release Studies (NTRS) in India has played a crucial role in gradually reducing the time taken by various stakeholders—such as Customs, custodians, CFSs, Partner Government Agencies, and traders—involved in the release and clearance process, as well as the time required at different stages of the clearance procedure. The NTRS 2025 has been complemented by a series of initiatives designed to expedite the clearance process. These include increased automation under the 'Turant Customs' initiative, technology adoption, effective risk management, and a unified government approach among regulatory agencies, alongside outreach and capacity-building efforts. The mutual relationship of trust built with the industry and trusted partners under the Authorized Economic Operator program and initiatives such as Direct Port Delivery and Direct Port Entry, which facilitate Just-In-Time movement of cargo, continue to contribute to further reductions in release times.

CBIC has consistently been at the forefront of implementing change while being mindful of the evolving needs of the economy. Several new initiatives were introduced in 2025, including Vision for Expeditious Good release on Arrival, automation of Customs refund and introduction of single All-India Multipurpose Electronic Bond (SEB) all of which will significantly aid the achievement of national objectives.

Historically, CBIC, through its field formations, has been conducting TRS exercises at a formation level for several years. Building on this experience, the NTRS, year after year, has served as an essential tool for performance measurement, fostering continuous introspection and improvement, leading to insight-driven decision-making for all border agencies.

I commend the NTRS 2025 team for their dedicated efforts in this regard.

Surjit Bhujabal

Members (Customs), CBIC

Chapter 1 – Executive Summary

India's National Time Release Study (NTRS) serves as a performance measurement tool that quantitatively assesses cargo release time. The study adopts a robust, inclusive and consultative approach—combining analysis of electronically generated data with qualitative assessments through stakeholder interactions. By leveraging this mixed methodology, NTRS delivers an in-depth evaluation of trade efficiency and the effectiveness of trade facilitation initiatives. It also provides a critical framework for monitoring progress, gauging the impact of policy interventions, and identifying areas for targeted improvement.

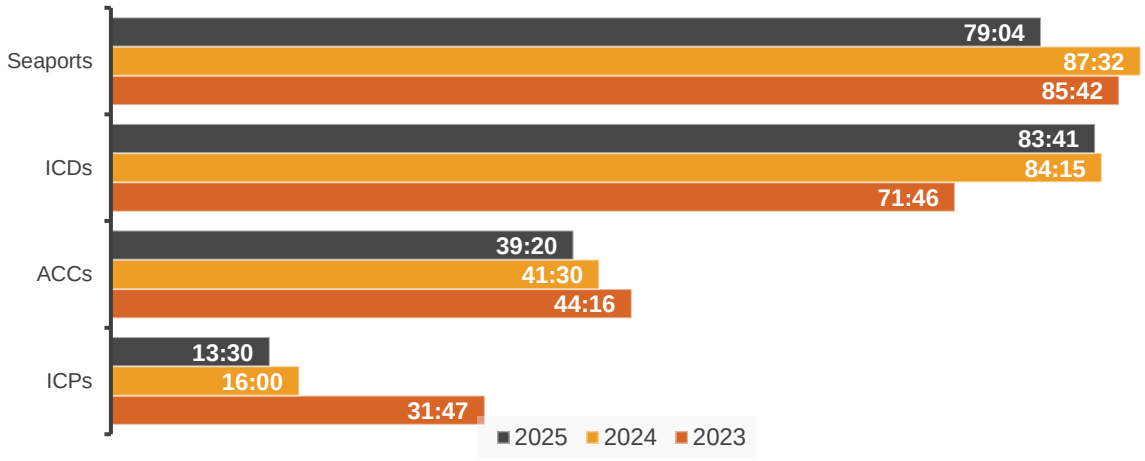
The NTRS 2025 is the fifth national-level edition of this annual study, conducted using a standardized methodology. It covers 62,981 Bills of Entry (BoEs) for imports and 69,533 Shipping Bills (SBs) for exports filed during the first week of January 2025. The study spans 15 major customs formations, grouped under four categories—Seaports, Inland Container Depots (ICDs), Integrated Check Posts (ICPs), and Air Cargo Complexes (ACCs)—which together account for a significant share of the total BoEs and shipping bills filed across India.

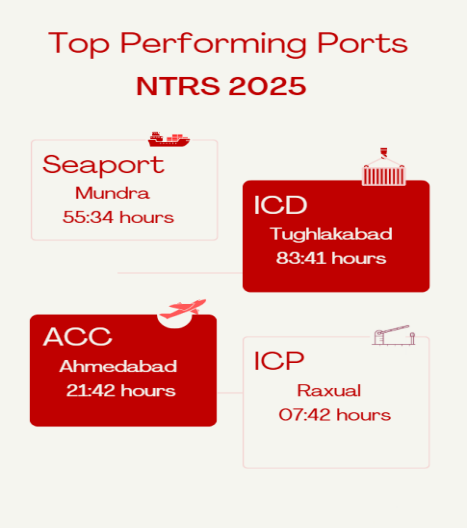
The study also covers three additional ports – on a pilot basis – as well as the assessment of courier cargo handled at the International Courier Terminal in Bengaluru.

Imports

As per analysis results, notable reduction in ART – seaports (~6 hours), ACCs (~ 5 hours), and ICPs (~ 18 hours) – were observed in most port categories between 2023 and 2025. However, ICDs witnessed an increase in ART by around 12 hours as compared to 2023.

Figure 1: Import Release Time, 2023 - 2025





Across port categories, ART has improved vis-à-vis the previous year. Following are the details:

- *Seaports*: ART decreased by more than 8 hours (from 87:32 hours in 2024 to 79:04 hours in 2025).
- *ICDs*: Slight improvement was observed (from 84:15 hours in 2024 to 83:41 hours in 2025).
- *ACCs*: ART dropped from 41:30 hours in 2024 to 39:20 hours in 2025.
- *ICPs*: ART dipped from 16:00 hours in 2024 to 13:30 hours in 2025.

The National Trade Facilitation Action Plan (NTFAP) 3.0 sets cargo release targets of less than 48 hours for seaports, ICDs, and ICPs, and less than 24 hours for ACCs. Port-wise performance showed varied alignment with these benchmarks.

Table 1: Category-Wise Share of BoEs within NTFAP 3.0 Target

Port Type	Overall	Facilitated
Seaports (Target ~ 48 Hours)	51.76%	49.26%
ICDs (Target ~ 48 Hours)	43.70%	40.04%
ACCs (Target ~ 24Hours)	55.03%	52.23%
ICPs (Target ~ 48 Hours)	93.33%	80.45%

ICPs performed best, with 93.33% of cargo released within 48 hours. Raxaul and Petrapole released 99.1% and nearly 87% of consignments respectively within this timeframe. At ACCs, around 55.03% cargo were released within 24 hours. Ahmedabad led among ACCs with over 80% cargo released within stipulated timelines.

In case of seaports and ICDs, around 51.76% and 43.70% of cargo were released within 48 hours respectively. Overall, facilitation emerges as a critical factor in meeting NTFAP timelines.

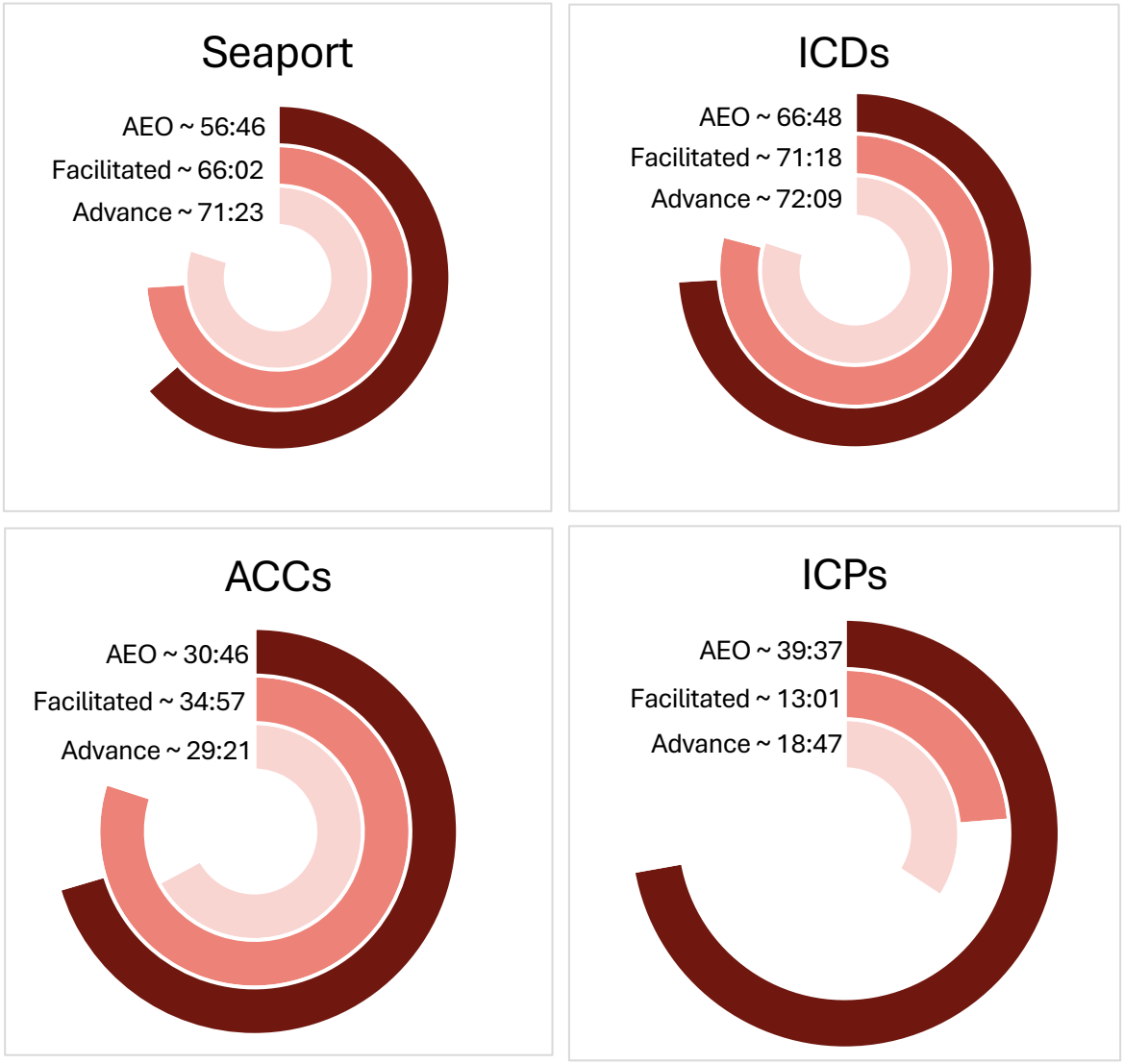
Table 2: Standard Deviation for Imports within NTFAP Target

Port-Wise	2025	2024
Seaport	13:26	36:37
ICDs	12:36	33:33
ACCs	5:34	15:08
ICPs	24:15	39:46

Building on previous studies, this analysis also seeks to assess the uncertainty associated with cargo release in relation to the NTFAP timelines. It reaffirms the findings from NTRS 2024, which indicate that the deviation is the lowest for ACCs—suggesting that the ART for BoEs at ACCs are more consistent and closely aligned with the average.

In contrast, the highest deviation is observed at ICPs, where the ART for BoEs tend to vary more widely and deviate significantly from the average, indicating greater unpredictability in release time at these ports.

Figure 2: Overall ART Analysis with Path to Promptness Parameters - 2025



The “Path to Promptness” framework—comprising advance filing, Risk Management System (RMS) facilitation and AEO accreditation—was instrumental in reducing ART in most of the port categories. BoEs benefiting from all three facilitation measures showed the shortest release time at seaports, ICDs and ACCs. Apart from the aforementioned measures, Direct Port Delivery (DPD) at seaports also proved to be another key driver for reductions in ART. In 2025, DPD containers displayed an overall ART of 65:33 hours, markedly lower than the CFS average of 84:03 hours.

BoE Movement	Arrival to Assessment	Assessment to Payment	Payment to OOC
Seaports	100:41	113:53	53:55
ICDs	100:21	76:02	89:27
ACCs	30:58	62:02	14:20
ICPs	7:09	15:28	11:40

A broad stage-wise timeline analysis was conducted of the import release process, highlighting key stages in the journey of the Bills of Entry. In terms of regulatory activities, seaports faced the longest delays in duty payment, the said delays being more for facilitated BoEs as compared to non-facilitated bills. Assessment timelines were the highest at seaports and ICDs (around 100 hours), whereas ACCs and ICPs displayed relatively better results. Out of Charge (OOC) generation – post completion of payment – was quicker at ACCs (~14 hours) and ICPs (~11 hours) compared to seaports (~54 hours) and ICDs (~89 hours).

India's import release process has evolved considerably over the years, marked by technological advances as well as procedural reforms. Innovations like pre-arrival filing, SWIFT, PCCV and deferred duty payment have accelerated BoE processing. Despite these developments, delays with respect to BoE amendments, customs queries and trader activities/responses continue to inflate clearance timelines. For instance, at ACCs, the ART was as high as 151 hours for BoEs with a single query and the metric exceeded 267 hours when multiple queries were raised.

Release time also varied by shipment type; Less than Container Load (LCL) cargo generally experienced faster release as compared to Full Container Load (FCL) shipments. However, FCL remains the dominant cargo type across port categories such as seaports and ICDs.

The analysis of PCCV—a key initiative under the Turant Customs Programme—revealed a positive impact on overall clearance processes, but with notable variations across ports. Seaports and ICDs displayed longer timelines from registration to PCCV as compared to ACCs and ICPs.

Notably, delays due to late registration and duty payment by importers remained major contributors to overall ART, especially at seaports and ICDs. In terms of fines imposed, seaports recorded the highest penalties for delayed filing, despite these fines applying to only 8% of the total BoEs, amounting to INR 8.45 crore. Further, the findings of the study highlighted that ART is also affected by PGA interventions, which continue to be a significant source of delay. In 2025, seaports, ICDs and ACCs saw notably higher ART for PGA-marked BoEs as compared to overall ART of the respective categories. However, ICPs had a low ART of 4:55 hours for PGA-marked BoEs in 2025. Targeted improvements in PGA processes, optimized use of SWIFT, enhanced inter-agency coordination and greater PGA presence at key gateway ports are essential to reduce these delays.

Although the Customs Automated System designates OOC as the endpoint of the clearance process, this study also considers post-OOC delays i.e. the time taken from OOC to cargo gate-out. In 2025, ICDs faced the highest post-OOC delays, with gate out after OOC generation taking 84:50 hours on an average. Factors such as importer behaviour, provision for free days as well as gaps in logistics coordination, automation and storage access are likely determinants of these delays.

The NTRS 2025 expanded its coverage to three additional locations – namely Kochi Seaport, ICD Garhi Harsaru and Jaigaon LCS – to be assessed on a pilot basis. The analysis revealed varied import performance across these locations. ICD Garhi Harsaru showed improvement, with ART reducing to 57:56 hours from 61:12 hours in 2024. The Kochi Seaport recorded a high ART of 137:06 hours, with even facilitated bills filed in advance by AEOs taking 113:45 hours, substantially above the NTRS seaport averages (79:04 hours and 46:40 hours respectively). Jaigaon LCS performed efficiently, with facilitated BoEs released in around 2 hours, supported by a 98% facilitation rate, though advance filings (7%) and AEO clients (1%) remained lower than the ICP average (17% and 8% respectively).

Further, the study includes the analysis of international courier services. An assessment of the import process for courier cargo at ACC Bengaluru revealed improvements in key operational areas. The ART decreased from 39:49 hours in 2024 to 35:46 hours in 2025; while the ART for facilitated BoEs improved from around 36.5 hours in 2024 to 33.5 hours

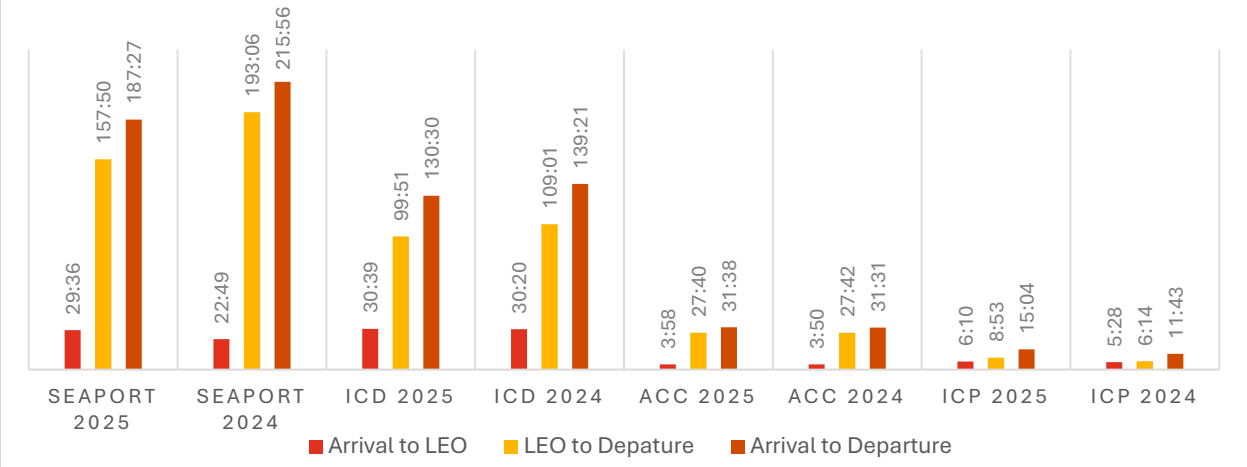
in 2025. Although the share of BoEs requiring amendments remained low, it rose from 0.20% to 0.49%, with the ART for amended BoEs still high, reducing marginally from 317 hours in 2024 to 284 hours in 2025.

In conclusion, the 2025 import performance analysis showed significant improvements in ART since 2023, driven by regulatory reforms as well as improvements in hard and soft infrastructure. While ACCs and ICPs outperformed seaports and ICDs in meeting NTFAP 3.0 targets, delays remain due to duty payment lags, amendments, queries and PGA interventions. Increased levels of facilitation, enhanced facilities of AEO clients, and the incidence of advance filing significantly reduced ART across ports. However, post-clearance delays, especially at ICDs, continue to impact overall efficiency, highlighting the need for targeted procedural and operational improvements.

Exports

The ART for exports—measured as the duration from cargo arrival to final departure—revealed variations in performance across port categories in 2025. Further, breaking down ART into regulatory clearance (Arrival to LEO) and post-regulatory logistics (LEO to Departure) reveals critical patterns.

Figure 3: Average Release Time (Exports), 2024-2025



- *Seaports*: Regulatory clearance increased to 29:36 hours in 2025 (from 22:49 in 2024); post-LEO logistics timelines remained high at 157:50:18 hours, though improved considerably from the 2024 levels.
- *ICDs*: Average time taken for regulatory clearance was around 30 hours; time taken for post-LEO logistics processes improved to 99:51 hours vis-à-vis 109:01 hours recorded in the previous year.
- *ACCs*: High efficiency in regulatory clearance at under 4 hours; post-LEO logistics took 27:40 hours in 2025.
- *ICPs*: Regulatory clearance averaged 06:10 hours in 2025; post-LEO logistics processes took 08:53 hours.

The overall ART performance across port categories highlights varied outcomes against NTFAP 3.0 targets (less than 24 hours for seaports, ICDs and ICPs, and below 12 hours for ACCs).

Table 3: Category-Wise Share of SBs within NTFAP 3.0 Target

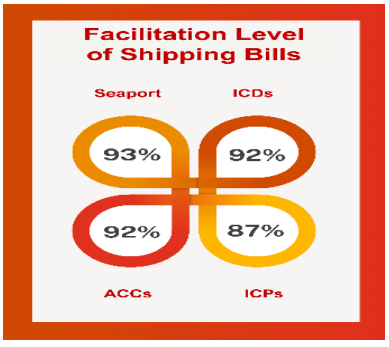
Port Type	Overall	Facilitated
Seaports (Target ~ 24 Hrs)	0.13%	0.11%
ICDs (Target ~ 24 Hrs)	5.68%	5.55%
ACCs (Target ~ 12 Hrs)	19.27%	17.75%
ICPs (Target ~ 24 Hrs)	81.09%	66.71%

Seaports saw most shipments exceeding the target, with only 0.13% of the shipping bills being released within 24 hours. For ICDs the overall share was 5.68%, with ICD Whitefield releasing over 10% of cargo within 24 hours. ICPs displayed considerable compliance with respect to NTFAP targets, with Raxaul releasing over 97% cargo within the stipulated timeframe. ACCs displayed variations in outcomes—Ahmedabad and Hyderabad showed higher compliance, whereas at locations such as Delhi and Mumbai, lower share of cargo met NTFAP targets.

Table 4: Standard Deviation for Exports within NTFAP Target

Port Category	2025	2024
Seaport	5:15	44:51
ICDs	4:50	17:59
ACCs	2:22	7:04
ICPs	6:34	7:18

Further, the standard deviation analysis of SBs within the NTFAP target shows that ACCs have the lowest standard deviation, indicating that for SBs meeting the NTFAP target, the actual release time results are closely clustered around the average. In contrast, ICPs exhibit the highest standard deviation, suggesting greater variability and less predictability with respect to cargo release.



Facilitation through CBIC's RMS continued to improve in 2025. The share of facilitated shipping bills reached 93% at seaports, 92% at ACCs and ICDs, and 87% at ICPs. Further, among AEO clients, ART was slightly better at seaports (displaying an improvement of more than 9 hours vis-à-vis non-AEO clients) and ACCs (an improvement of around 2.5 hours), though ICDs and ICPs showed higher timelines for AEOs.

A deeper analysis of process-level factors offers insight into certain operational aspects:

- LCL cargo took 12% longer than FCL at seaports and 22% longer than FCL cargo at ICDs, mainly due to post-LEO delays.
- Factory stuffed cargo mostly showed lower ART than ICD stuffed shipments. For example, at ICD Ludhiana, ART for factory stuffed cargo was 78:07 hours, while for ICD stuffed cargo it was 144:07 hours.
- Refrigerated cargo at ACCs continued to move faster than non-refrigerated shipments—21:38 hours vs. 35:48 hours in 2025—a trend consistent in the recent years, reflecting priority handling protocols for perishables.

Further, the intra-day pattern of export cargo release at ACCs and ICPs reveals distinct operational characteristics. At ACCs, cargo arrivals peaked between 12 PM and 6 PM, with over half of the shipments arriving during this window. The time between LEO generation and aircraft departure ranged from 23 to 34 hours, with the longest durations observed for cargo cleared between 6 AM and 12 PM. At ICPs, arrivals were more evenly distributed throughout the day, with notable peaks between 12 PM and 6 PM and 12 AM to 6 AM. LEO generation and registration also peaked during the 12 PM to 6 PM window. Departure activity was highest between 6 AM and 12 PM.

The analysis of export cargo at the pilot ports reveals that these ports are performing better as compared to the national averages for their respective categories. ICD Garhi Harsaru showed a marginal improvement in ART, down to 82:13 hours from 86:16 hours in 2024, with reduced time from Arrival to LEO (21:29 hours compared to national ICD average of 30:39 hours) but a slight increase in post-LEO logistics processes. Notably, over 75% of the ART was attributed to post-regulatory processes. Facilitated cargo saw improved timelines at 79:53 hours, outperforming both its 2024 level (83:26 hours) and the overall ICD average (129:30 hours).

At Kochi Seaport, the ART stood at 152:38 hours, better than the NTRS seaport average of 187:27 hours. Kochi showed fast regulatory clearance (under 10 hours) and relatively efficient post-LEO logistics (143:01 hours, compared to the seaport average of 157:50 hours). Facilitated (~151 hours) and AEO consignments (~138 hours) also witnessed faster release time as compared to the national average of around 188 hours and 181 hours respectively. Jaigaon LCS stood out with an considerably low export ART of 3:58 hours – time taken from arrival to LEO generation being 03:56 hours as compared to the national average of 06:10 hours – considerably better than the ICP average of 15:04 hours. Further, AEO consignments at Jaigaon were cleared in just 44 minutes compared to national average of around 20 hours.

Further, export cargo analysis for international courier service at ACC Bengaluru reveals a marginal increase in the ART for courier exports. The ART rose by approximately 1 hour, from 12:47 hours in 2024 to 13:43 hours in 2025. Notably, the time from arrival to LEO constituted 40% of the total ART, amounting to 05:30 hours, while the time taken for post-

LEO logistics processes stood at 08:12 hours. The ART for both facilitated and non-facilitated SBs was nearly identical at 13:43 hours and 13:36 hours respectively.

In conclusion, export clearance timelines have shown measurable improvements across multiple ports and cargo categories. While facilitation levels and specific efficiency parameters—with respect to ACCs or for refrigerated cargo—show progress, systemic delays remain, particularly at seaports and ICDs. Differences in cargo type, stuffing method and time-of-day patterns further shape release time. Achieving the NTFAP 3.0 targets will require targeted process reforms, greater coordination among stakeholders and enhanced use of risk-based facilitation to streamline export clearances.

Based on the overall analysis, recommendations with respect to key categories—customs, custodians, traders, and infrastructure & connectivity—have been proposed. For customs, there is scope for increased advance filing at port categories such as ICPs and ACCs. The incidence of amendments at seaports may further be brought down through targeted reforms. In terms of custodians, deployment of automated gates for entry/exit of containers should be prioritized. There is also scope for reduction of manual documentation processes at port gates, with respect to Form 13, EIR, etc. With respect to the trade fraternity, response to queries raised needs to be made timebound for faster resolution and consequently clearance. Amendment processes may also be made faster through prompt trader responses. Instances of delays in duty payment also needs to be minimized. Further, necessary awareness generation and capacity building will be key for enhanced adoption and usage of digital platforms. In terms of infrastructure, there is scope for enhanced gate infrastructure (including IT systems), scanning facilities, temperature-controlled facilities for perishable cargo, etc. across ports. Post-clearance logistics processes need to be improved to achieve faster release time and streamlined movement of cargo.

Chapter 2 – Scope, Methodology and Limitations

The National Time Release Study (NTRS) 2025 employs a strong, inclusive, and consultative strategy, integrating analysis of electronically obtained data with qualitative evaluations derived from direct engagement with stakeholders. This two-pronged approach ensures a comprehensive evaluation of key trade processes while capturing both systemic efficiencies and operational challenges.

The study focuses on two key aspects: Administration and Analytics of TRS. Administration involves port visits to review processes and identify operational challenges, along with stakeholder consultations to incorporate qualitative insights for inclusivity. Analytics emphasizes data integration from multiple stakeholders, supported by the appointment of nodal officers to ensure timely collection and seamless linking of data. By leveraging diverse data sources from across the supply chain, the study ensures a holistic and evidence-based analysis. Additionally, a consultative TRS Working Group oversees the process, guiding reforms and enhancing the effectiveness of trade facilitation initiatives.

2.1. Geographic Coverage

The scope of NTRS 2025 extends across 15 major customs formations, categorized into four key port types—Seaports, Inland Container Depots (ICDs), Integrated Check Posts (ICPs) and Air Cargo Complexes (ACCs). The ports assessed under NTRS 2025 are as follows:

- *Seaports*: Chennai, Kolkata, Mundra and Nhava Sheva
- *Air Cargo Complexes (ACCs)*: Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad and Mumbai
- *Inland Container Depots (ICDs)*: Tughlakabad, Ludhiana and Whitefield
- *Integrated Check Posts (ICPs)*: Petrapole and Raxaul

Further, the study includes three additional ports – Kochi Seaport, ICD Garhi Harsaru and LCS Jaigaon – on pilot basis. Also, cargo handled at the International Courier Terminal at Bengaluru have been assessed in detail as a part of this study.

2.2. Study Duration and Phases

The NTRS 2025 is a five-month study, beginning in November 2024 and concluding in April 2025. The analysis is based on a sample period from January 1 to January 7, 2025, ensuring a focused assessment of trade processes for Bills of Entry/Shipping Bills filed in

that duration. The study is conducted in three distinct phases, each playing a crucial role in ensuring comprehensive and methodical evaluation of key parameters:

a. **Phase I – Inception / Preparation of the Study**
   This phase involves appointing nodal officers and forming a TRS Working Group. Outreach and capacity-building activities are undertaken to sensitize stakeholders about the TRS exercise. Further, this includes finalization and circulation of data collection templates.

b. **Phase 2 - Data Collection and Analysis**
   For analysis of EXIM cargo, customs/regulatory data for all Bills of Entry/Shipping Bills filed during the sample period is collected, with Out-of-Charge (OOC)/Let Export Order (LEO) issued within 30 days post-sample period. Consequently, nodal officers at ports gather logistics data – based on detailed templates shared – for the import and export cycles, including details from terminals, CFS, parking plazas, customs pre-gate zones, and other relevant areas. The regulatory and logistics data received are meticulously stitched to ensure maximum coverage, which is followed by detailed analysis of average release time as well as timelines specific to ports, processes, cargo variants, facilitation parameters, etc. among others. The initial findings are validated through stakeholder consultations and field visits to selected Seaports, ICDs, LCSs/ICPs and ACCs.

c. **Phase 3 - Recommendations**
   In this phase, quantitative and qualitative conclusions derived as a result of data analysis and feedback from field visits as well as stakeholder interactions are consolidated to highlight the impact of reform facilitation measures as well as identify bottlenecks causing procedural delays. Further, actionable recommendations are proposed at this stage to facilitate progress in terms of adherence to the National Trade Facilitation Action Plan (NTFAP) targets for cargo release times.

2.3. Data Analytics

Unit of the Study

The units for NTRS 2025 are Bill of Entry for imports and Shipping Bill for exports. Across the years, these documentary units have allowed for ready electronic data capturing from the Customs Automated System for all four port categories under assessment.

Data Sourcing

India's NTRS derives its reliability from precise and robust data sourced from the Customs Automated System, managed by the Directorate General of Systems and Data Management, CBIC. With the entire cargo clearance process operating within an

electronic environment, accurate timestamps for every stage ensure the NTRS provides superior insights compared to survey-based assessments. This data is further enriched with logistics information from relevant custodians, creating a comprehensive supply chain overview.

Data Assessment

Specifically, the import release time is determined as the arithmetic mean of the period between 'Arrival of Goods' and Customs' granting of 'Out of Charge', signifying regulatory clearance. The granting of Entry Inwards at seaports, the arrival of cargo at ICDs and ICPs, and the arrival of the aircraft at ACCs all signify the arrival of cargo. Once OOC orders have been issued, goods can be cleared from the customs station at the importer's convenience. NTRS 2025 has also recorded the average time from grant of OOC to cargo evacuation from the customs station.

The average export release time is determined as the arithmetic mean of the time between cargo's arrival at the port/customs station and its final departure from the port/customs station. Final departure refers to the 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.

2.4. Stakeholders Involved

As NTRS follows a robust consultative approach, multiple stakeholders actively contribute to the preparation of the report, ensuring a comprehensive and inclusive assessment of trade processes. These stakeholders include officials from various government organizations such as Customs, Port Authorities (all four port categories) and Participating Government Agencies (PGAs), who play a crucial role in trade regulation, clearance and compliance. Their insights help in evaluating procedural efficiency, identifying bottlenecks and formulating policy recommendations.

In addition to government bodies, private sector stakeholders also play a significant role in shaping the study. These include Custom House Agents (CHAs), Container Freight Stations (CFS), airline service providers, transporters, logistics companies, etc. who are directly involved in handling, warehousing, transporting and clearing of goods at various customs points. Their participation ensures that the study captures ground-level challenges, practical constraints and operational best practices, offering a well-rounded perspective on trade facilitation.

2.5. Sample Details

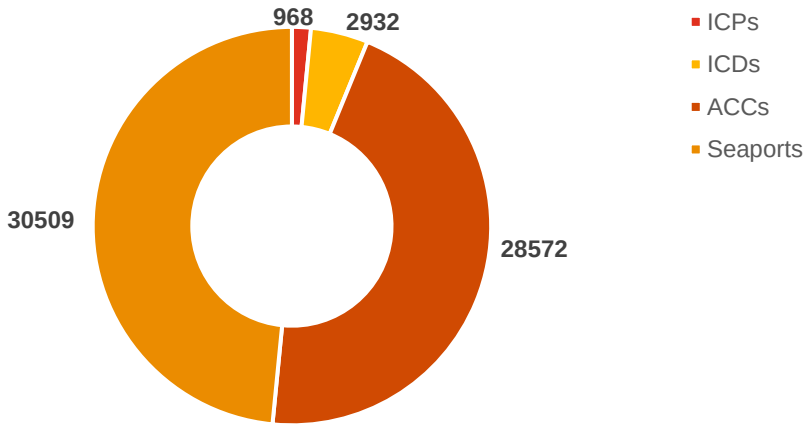
The sample period for NTRS 2025 has been the first week of January 2025 i.e. from January 1st to January 7th 2025.

2.5.1. Imports

In case of imports, the total number of bills of entry filed during the sample period (January 01 – January 07, 2025) was 63,191, of which particular bills of entry were excluded

wherein OOC was not granted till 7th February 2025 and arrival of cargo happened before 1st December 2024. These standard criteria resulted in the exclusion of about 0.33% (210) bills of entry from the analysis. Therefore, the sample size for import release time assessment for NTRS 2025 was 62,981 bills of entry. The break-up of the overall import sample for NTRS 2025 has been represented in Figure 4.

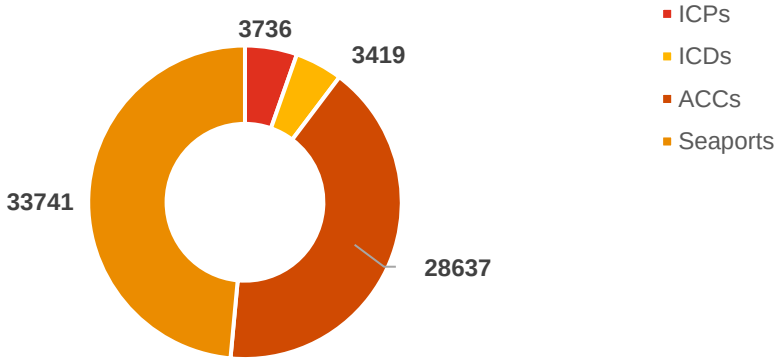
Figure 4: Number of Bills of Entry Analyzed



2.5.2. Exports

With respect to exports, the total number of shipping bills filed during the sample period (January 01 – January 07, 2025) was 90,404, of which particular shipping bills were excluded where LEO was not granted till 7th February 2025. Further, inconsistent/incorrect data entries, blank entries and mismatch between regulatory and logistics datasets also resulted in exclusions in the export sample. After necessary exclusions, the sample size for the export release time analysis for NTRS 2025 was 69,533 shipping bills. The breakup of the export sample has been provided in Figure 5.

Figure 5: Number of Shipping Bills Analyzed



2.6. Key Assessment Parameters

For imports, the study undertook a detailed assessment of Average Release Time (ART), calculated as the arithmetic mean of the duration between the arrival of goods and the granting of Out of Charge (OOC) by Customs. To identify the drivers of expedited clearance, an assessment of Path to Promptness parameters was conducted. This involved examining the following key enablers: advance filing, RMS facilitation, Authorised Economic Operators (AEO) and Direct Port Delivery (DPD). Further, a stage-wise analysis was carried out to assess the journey of bills of entry, covering key parameters such as arrival, assessment, examination, payment and post-clearance logistics processes. Operational aspects such as differences in release time between FCL and LCL cargo were also explored to provide a comprehensive view of import performance.

For exports, the study entailed the calculation of ART from the arrival of cargo at the customs station to its final departure. This was complemented by detailed analysis of the time taken from arrival to goods to the grant of Let Export Order (LEO) as well as from LEO generation to final departure, giving an overview of regulatory and logistics efficiency. As part of the export process, shipping bills are required to be filed prior to cargo arrival, enabling pre-arrival processing through the Customs Risk Management System (RMS) and, where applicable, additional regulatory screening. The study also examined the level of facilitation, including assessment of AEO status, to gather insights on the impact of these parameters on ART. Subsequently, category-specific assessments were carried out—comparing FCL and LCL cargo, evaluating stage-wise timelines at ICDs (for both factory-stuffed and ICD-stuffed containers), and analyzing differences between refrigerated and non-refrigerated cargo at ACCs.

2.7. Limitations

The study has certain limitations which should be considered while interpreting its findings. Firstly, the analysis is based on data collected during the first week of January (1st January – 07th January) each year, which may not fully capture seasonal variations or the broader operational landscape throughout the year.

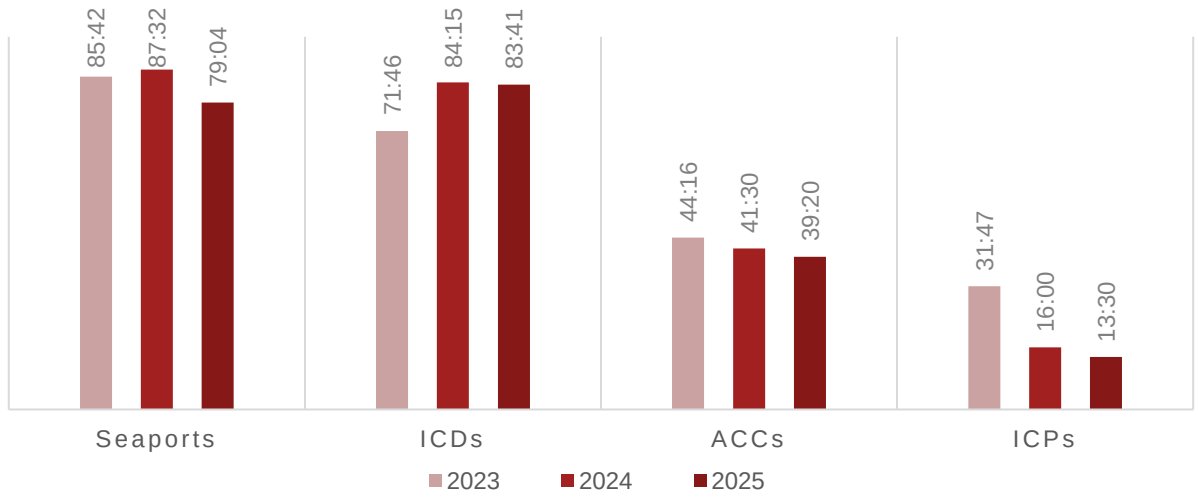
Additionally, since the NTRS is a consultative process involving inputs from various stakeholders, there is a risk pertaining to the subjective nature of stakeholder feedback, which can influence the interpretation of the data/analysis results. Finally, the study encompasses 18 ports across four distinct categories—Seaports, ICDs, ICPs and ACCs. Each port operates under unique conditions with varied processes, which makes direct comparison of findings challenging in certain instances.

Chapter 3 – Imports

3.1 Import Release Time

The Average Release Time (ART) for imports has improved for all port categories by 7.68%, over the past three years (2023-2025). This improvement reflects the positive impact of ongoing reforms such as digitalization, streamlined customs processes and infrastructure upgrades.

Figure 6: Comparison of Import Average Release Time across Port Categories



At seaports, the average release time reduced from 87:32 hours in 2024 to 79:04 hours in 2025, indicating an improvement of more than 8 hours. This dip has been majorly fueled by Mundra seaport – achieving an ART of 55:34 hours as well as consistent growth in container throughput – which displayed significant handling speed and streamlined processes. ICDs showed marginal improvement, with ART decreasing slightly from 84:15 hours in 2024 to 83:41 hours in 2025—an improvement of around 30 minutes.

ACCs demonstrated the most consistent improvements – with the average release time declining from 41:30 hours in 2024 to 39:20 hours in 2025, representing a reduction of around 15 hours since 2023. ICPs, which have already met the NTFAP 3.0 targets and have the lowest average release time across port categories, further witnessed a dip in the metric from around 16 hours in 2024 to 13:30 hours in 2025.

A detailed port-wise analysis reveals that 7 out of 15 ports recorded a decrease in ART in 2025 (refer to Annexure Table A2). Among the notable improvements, Mundra Port saw a significant reduction in release time—from 91:15 hours in 2024 to 55:34 hours in 2025—reflecting considerable operational efficiency. In contrast, Kolkata Port

experienced a sharp increase of nearly 20 hours, with ART rising from 121:15 hours to 140:45 hours, making it the port with the highest release time across all categories.

As per analysis results, ICD Ludhiana reported an increase of around 12 hours in ART compared to 2024; while ICD Whitefield experienced notable improvements over the same period. A similar trend was observed among ICPs, where Petrapole experienced a 26% increase in ART, whereas Raxaul saw a reduction in release time.

The comparison of ART over the years for various port categories has been summarised in Table 5.

Table 5: Port-wise Import Average Release Time in 2025

Port	ART (2025)
Seaports	
Chennai	**88:42**
Kolkata	**140:45**
Mundra	**55:34**
Nhava Sheva	**72:50**
Kochi[1]	**137:06**
ICDs	
Ludhiana	**122:34**
Tughlakabad	**78:19**
Whitefield	**82:12**
Garhi Harsaru	**57:56**
ACCs	
Ahmedabad	**21:42**
Bengaluru	**40:50**
Chennai	**39:04**
Delhi	**35:03**
Hyderabad	**31:20**
Mumbai	**45:08**
ICPs	
Petrapole	**20:02**
Raxaul	**7:42**
LCS Jaigaon	**2:08**

[1] Ports mentioned in **Grey** are not included in the calculations of overall ART and other analyses

3.1.1. Assessment of ART vis-à-vis NTFAP targets

The National Trade Facilitation Action Plan (NTFAP) 3.0 sets ambitious targets for import clearance – less than 48 hours for seaports, ICDs, and ICPs, and less than 24 hours for ACCs. The performance of individual ports across these categories highlights the degree of alignment with these benchmarks.

Overall, the percentage of import cargo released within the prescribed NTFAP targets was 51.76% at seaports, 43.70% at ICDs, 93.33% at ICPs, and 55.03% at ACCs. Among these, ICPs exhibited the strongest performance, with more than 90% of cargo being released within the target timeframe (48 hours). Raxaul excelled with an exceptional 99% of cargo cleared within 48 hours, while Petrapole followed closely with nearly 87% cleared within 48 hours. ACCs also demonstrated strong performance, with around 55% of overall cargo released within 48 hours. Ahmedabad ACC performed notably well, releasing over 80% of shipments within 48 hours. Seaports and ICDs showed relatively lower adherence to the NTFAP targets. At seaports, around 52% of import cargo was released within the 48-hour benchmark. The share was the lowest for Kolkata, with only around 14% cargo released within 48 hours. At ICDs, only around 44% cargo was released within 48 hours.

Table 6: Share of BoEs Meeting NTFAP Targets

Port	Overall	Facilitated
Seaports (NTFAP Target ~ 48 hours)		
Chennai	47.90%	47.77%
Kolkata	13.92%	13.71%
Mundra	62.38%	56.95%
Nhava Sheva	55.15%	51.74%
Overall	**51.76%**	**49.26%**
ICDs (NTFAP Target ~ 48 hours)		
Ludhiana	39.46%	25.08%
Tughlakabad	47.09%	43.26%
Whitefield	40.66%	39.28%
Overall	**43.70%**	**40.04%**
ICP (NTFAP Target ~ 48 hours)		
Petrapole	86.80%	67.01%
Raxaul	99.10%	92.36%
Overall	**93.33%**	**80.45%**
ACCs (NTFAP Target ~ 24 hours)		
Ahmedabad	80.05%	72.44%
Bengaluru	63.25%	61.64%
Chennai	54.22%	52.47%
Delhi	51.68%	47.61%
Hyderabad	64.34%	61.24%
Mumbai	49.63%	46.88%
Overall	**55.03%**	**52.23%**

3.2 Path to Promptness

The Path to Promptness indicators were initially established in the year 2019 in Time Release Study of Jawaharlal Nehru Custom House (JNCH), which analyzed the goals of the National Trade Facilitation Action Plan (NTFAP). The action plan aimed to streamline cross-border clearance by implementing efficient, transparent, risk-based, coordinated, digital, and technology-driven procedures. At the core of the NTFAP, four key strategies were introduced, which have significantly reduced release times over the years:

1. Prior processing of documentation
2. Risk-based interdiction
3. Authorized Economic Operator (AEO) initiative
4. Port-based clearances like DPD and DPE

In recent years, these strategies have been quantitatively assessed to measure their impact on trade facilitation. For example, to improve prior processing of documentation, customs authorities have enabled advance filing of BoEs, facilitating pre-arrival processing. Additionally, the automated Risk Management System (RMS) ensures cargo is randomly assigned to Facilitated, First Check or Second Check categories, thereby enhancing efficiency.

Moreover, India's AEO Programme, launched in 2011, has played a pivotal role in expediting cargo movement at Indian ports, leading to significant time and cost savings for traders. To further promote the Ease of Doing Business, initiatives like Direct Port Delivery (DPD) and Direct Port Entry (DPE) were introduced. As of FY 2024-25, DPD at Jawaharlal Nehru Port (JNP)—one of India's premier ports—has increased 16.35% year-on-year, reaching over 1.6 million TEUs, which accounts for 79% of total TEUs handled under DPD[2].

The share of Advance BoEs at seaports remained consistently high at 91% in both 2024 and 2025, reflecting sustained adherence to advance filing practices. ACCs and ICPs displayed a declining trend, moving from 59% to 58% and 23% to 17%, respectively. A more pronounced change was observed at ICDs, where the share of advance BoEs was considerably lower in 2025 compared to 2024. These shifts collectively resulted in a marginal dip in the overall share of advance filings, from 73% to 71%.

Meanwhile, the share of Facilitated BoEs showed steady improvement, increasing from 85% in 2024 to 86% in 2025. ACCs continued to lead with 91% of facilitated BoEs, followed by ICPs and seaports, both of which registered improvements. Regarding AEO BoEs, the overall share remained relatively stable, with a marginal decrease from 37% in 2024 to 36% in 2025. Seaports recorded a modest improvement, while ACCs and ICDs maintained consistent levels in comparison to the previous year. However, ICPs continued to experience a gradual decline compared to previous years.

[2] DPD at JNPT Port – FY 2024-25
https://www.jnport.gov.in/uploads/content_manager/DPD_Report_All_Terminals_-2024-25.pdf

Table 7: Overall Share of BoEs with Path to Promptness Parameters

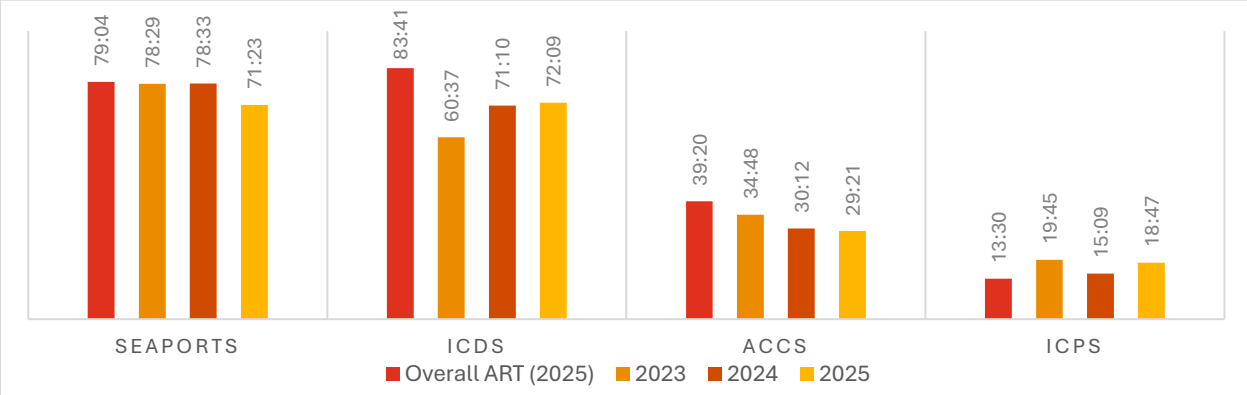
Category	Advance Bills of Entry			Facilitated Bills of Entry			AEO Bills of Entry		
Year	2025	2024	2023	2025	2024	2023	2025	2024	2023
Seaports	**91%**	91%	92%	**82%**	79%	77%	**33%**	32%	31%
ICDs	**0.65%**	67%	74%	**82%**	84%	83%	**21%**	20%	21%
ACCs	**58%**	59%	62%	**91%**	89%	87%	**41%**	42%	40%
ICPs	**17%**	23%	27%	**88%**	85%	81%	**8%**	10%	13%
Overall	**71%**	73%	76%	**86%**	85%	82%	**36%**	37%	35%

3.2.1 Pre-Arrival Process and Advance Bill of Entry

The pre-arrival process for the imported goods begins with the carrier filing the Import General Manifest (IGM). IGM serves as the basis for the importer to file the Bill of Entry (BoE), initiating regulatory procedures. Filing of BoEs is classified into two categories: Advance Filing (BoEs filed before goods arrive at the port) and Late Filing (those filed after arrival).

Advance filing allows for the processing of documents before physical arrival of cargo in customs control, thereby saving time in release after its arrival at the customs port. The trade community widely favors advance filing of BoEs because it offers significant cost and time savings. This is evident from the high adoption rate, with 91% of BoEs at seaports being filed in advance.

Figure 7: Import ART for Advance Filing



While seaports and ACCs continued to benefit from reduced clearance times, the ICDs and ICPs presented contrasting outcomes.

At seaports, the ART in case of advance filing of BoEs decreased from 78:33 hours in 2024 to 71:23 hours in 2025, marking a noteworthy reduction of over seven hours. ACCs continued to display consistent improvement, with ART dropping from 30:12 hours in 2024 to 29:21 hours in 2025, a 3.0% decrease. In contrast, ICDs saw a slight increase in ART – of about 1.4% – in the category. This uptick was preceded by a 17% rise in ART observed between 2023 and 2024. ICPs also experienced an upward trend, with ART for BoEs filed in advance increasing from 15:09 hours in 2024 to 18:47 hours in 2025—a rise of approximately 24%.

In summary, while the advance filing continues to support faster clearance at key nodes such as seaports and ACCs, the uneven trends across other port categories highlight the importance of reinforcing consistency in their implementation.

Table 8: ART for BoEs with Late Filing

Category	Overall ART (2025)	2025	2024	2023
Seaports	79:04	**158:59**	176:55	167:38
ICDs	83:41	**83:44**	110:45	104:06
ACCs	39:20	**53:24**	57:33	59:29
ICPs	13:30	**12:13**	18:13	36:12

The ART in case of late filing of BoEs, which do not entail the benefit of pre-arrival processing, broadly showed an improving trend in most port categories in 2025. This improvement highlights the effectiveness of ongoing trade facilitation reforms and process streamlining initiatives.

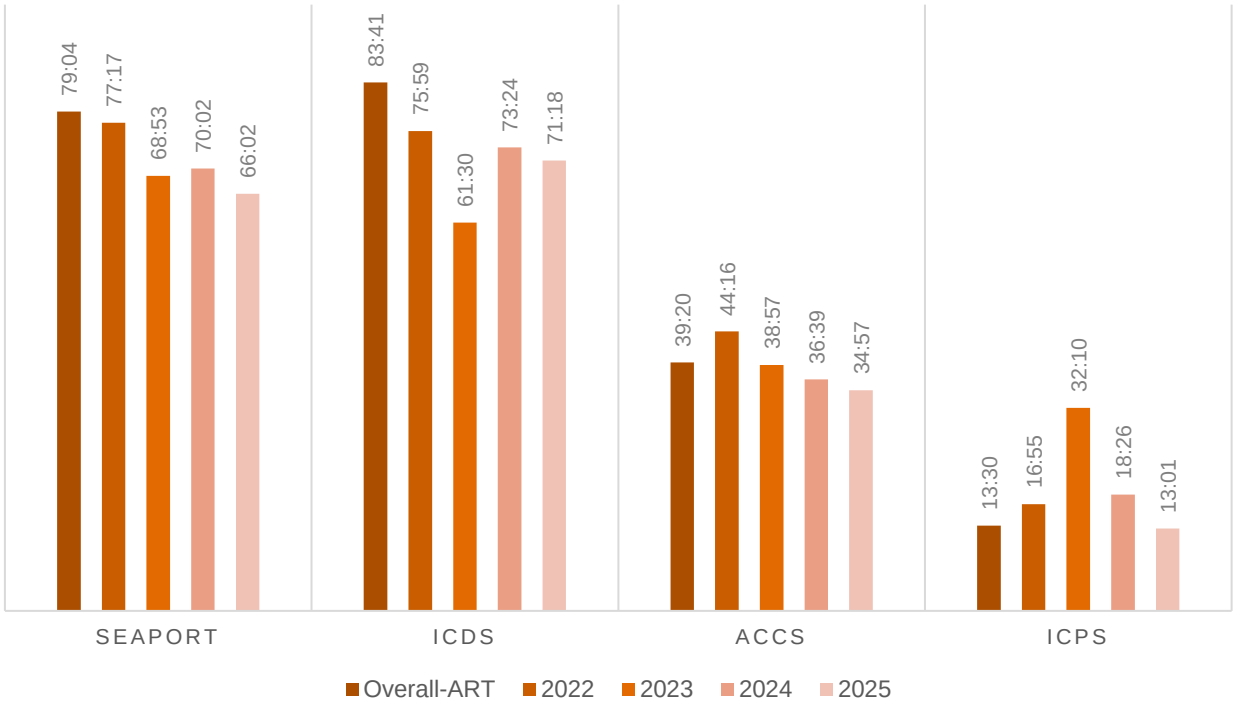
At seaports, the ART in case of late filing decreased significantly by 10.1%. Similarly, both ICDs and ACCs recorded substantial improvements, with ART declining by 24% and 7% respectively. ICPs exhibited a notable drop in ART in the category, decreasing from 18:13 hours in 2024 to 12:13 hours in 2025.

3.2.2 Levels of Facilitation

The levels of facilitation and nature of interdiction vary depending on the extent or nature of risk. Based thereon, bills of entry are classified as: (a) facilitated bills of entry, wherein only documentary verification and no physical examination is conducted; (b) non-facilitated bills of entry which may involve physical examination; where first check is the most rigorous process, wherein assessment is contingent upon prior physical examination.

The nature of facilitation and interdiction plays a critical role in determining the ART for BoEs, with risk-based assessments significantly affecting the release time of goods. Figure 8 highlights the ART for RMS-facilitated BoEs, which are cleared with minimal intervention from customs authorities. Seaports recorded a reduction in ART for facilitated BoEs from 70:02 hours in 2024 to 66:02 hours in 2025, while ACCs saw a similar improvement from 36:39 to 34:57 hours. ICDs also registered a marginal decline in ART, reflecting incremental gains from ongoing process optimizations. ICPs also witnessed notable improvements in the metric vis-à-vis the previous year, decreasing from 18:26 hours to 13:01 hours.

Figure 8: Import ART for Facilitated Bills of Entry



Based on the level of facilitation, BoEs are categorized into two types i.e. facilitated and non-facilitated. The facilitated BoEs undergo documentary verification, and no physical examination is conducted. Finally, the non-facilitated BoEs may require physical

examination; with first check being the most rigorous—where assessment is conducted only after a prior physical inspection of the goods.

Table 9: Impact of Facilitation and Assessment on BoEs

	Facilitated but Assessed (Category 1)			Non-Facilitated with both Assessment and Examination (Category 2)			ART for First Check		
Category	2025	2024	2023	2025	2024	2023	2025	2024	2023
Seaports	**100:08**	111:14	103:18	**139:01**	163:33	144:05	**217:48**	163:33	265:39
ICDs	**123:38**	111:29	90:43	**136:22**	150:15	125:59	**220:23**	150:10	240:47
ACCs	**68:07**	75:53	74:11	**85:23**	88:11	83:55	**163:01**	88:11	127:00
ICPs	**2:41**	7:45	53:41	**15:41**	64:54	17:11	**31:30**	-	27:34

Table 9 shows that facilitated BoEs continue to have the lowest ART across all port categories, with minor improvements observed vis-à-vis the previous year. For Category 1 BoEs, which were facilitated but underwent assessment, results were mixed. Seaports recorded a 10% reduction in ART (from 111:14 to 100:08); while ICPs exhibited a sharp 65% reduction in ART from 7:45 hours to 2:41 hours. Conversely, ICDs witnessed a 10.9% increase in ART in this category, rising from 111:29 hours to 123:38 hours.

Non-facilitated BoEs (Category 2), which undergo both assessment and examination, continued to experience higher ART as compared to Category 1. However, ART for BoEs requiring first check, which involves a physical examination before assessment saw substantial increases. At seaports, it surged by 33%, rising from 163:33 in 2024 to 217:48 in 2025. ICDs followed a similar trend with a 47% increase and ACCs with an 85% increase. ICPs, in comparison to 2023, displayed an upward trend in ART for BoEs requiring first check as well.

These findings reinforce that the level and nature of interdiction affects the release time. The benefits of facilitation are quite profound in all port categories, which is visible the results across various levels of facilitation. Finally, other government initiatives such as advance filing also impact on the ART of facilitated and non-facilitated BoE. Table 10 reflects the changes in Advance BoEs based on level of facilitation.

Table 10: ART for BoEs Filed in Advance based on Level of Facilitation

Category	Advance Filing and Facilitated	Share	Advance Filing and Non-Facilitated	Share
Seaports	60:00	76%	129:38	15%
ICDs	71:26	0.58%	78:10	0.07%
ACCs	26:29	54%	60:19	5%
ICPs	19:05	15%	16:06	2%

The analysis results indicate that seaports account for the largest share of facilitated BoEs filed in advance, with an ART of 60 hours—significantly lower than the overall ART for BoEs experiencing advance filing (71:23 hours) and Facilitated BoEs (66:02 hours) considered individually. Further, the difference in release time is considerable when compared to non-facilitated BoEs which were filed in advance at seaports, which take nearly 130 hours for release. A similar trend is observed at ACCs, where 54% of BoEs were filed in advance and were facilitated, resulting in an ART of only 26:29 hours—less than half the time taken for non-facilitated BoEs filed in advance (60:19 hours). ICDs also reflect this trend, with lower ART for facilitated consignments with advance filing of BoEs.

However, an exception to this pattern was noted at ICPs, where non-facilitated BoEs with advance filing recorded a slightly lower ART (16:06 hours) compared to facilitated bills filed in advance (19:05 hours).

Table 11: ART for BoEs Witnessing Late Filing based on Level of Facilitation

Category	Late Filing and Facilitated	Share	Late Filing and Non-Facilitated	Share
Seaports	147:01	6%	180:55	3%
ICDs	71:17	81 %	131:15	18%
ACCs	47:12	37%	105:18	4%
ICPs	11:28	73%	16:24	11%

The data for BoEs filed late i.e. post arrival of cargo revealed a consistent trend—facilitation effectively reduced clearance times across all port categories. At seaports, although the share of such BoEs was relatively lower (6% facilitated, 3% non-facilitated), the difference in ART was substantial—147 hours for facilitated as compared to 181 hours for non-facilitated. A more pronounced difference was observed at ICDs, where 81% BoEs filed late were facilitated with an ART of 71:17 hours. In contrast, non-facilitated late BoEs – comprising 18% of overall BoEs – displayed a nearly doubled release time at 131:15 hours. ACCs showed a similar trend in the category, with facilitated bills released in 47:12 hours, compared to 105:18 hours for non-facilitated bills. The lowest ART in the category overall was observed at ICPs, with facilitated late BoEs released in around 11:28 hours—significantly faster than non-facilitated bills, the timelines for which stood at 16:24 hours.

3.2.3 Authorized Economic Operators (AEO)

The AEO scheme is a trust-based risk management initiative aimed at streamlining trade facilitation while maintaining regulatory control. As an integral part of a risk-based clearance system, the AEO programme categorizes importers based on their compliance history and risk profiles. The scheme provides accredited importers with enhanced facilitation benefits, including priority processing, reduced customs interventions, and deferred duty payment privileges for AEO Tier 2 and Tier 3 clients. By fostering a secure

and efficient trade environment, the AEO framework strengthens supply chain reliability while reducing clearance times and compliance burdens for trusted traders.

Figure 9: Import ART for AEO Clients

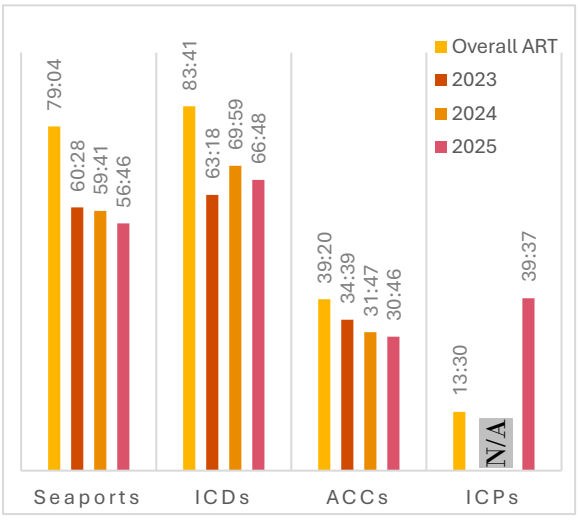


Figure 10: Import ART for Non-AEO Clients

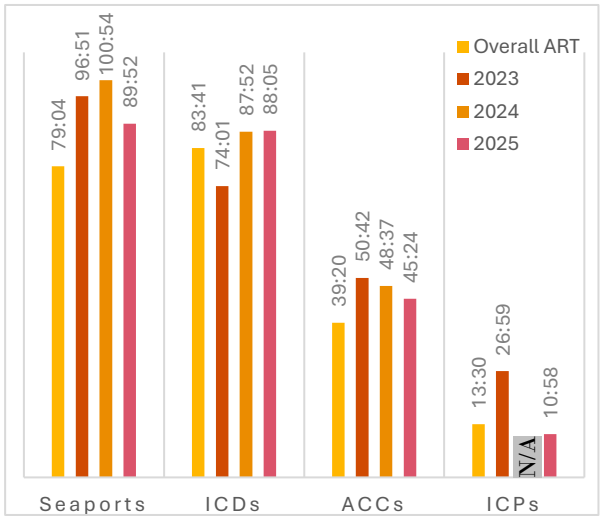


Figure 9 and 10 illustrates that AEO clients generally enjoy lower ART across most port categories, reinforcing the benefits of risk-based facilitation. However, ICPs present an anomaly, where AEO clients experienced considerably higher ART compared to non-AEO clients in 2025. Further, non-AEO ART at ICPs have improved significantly since 2023.

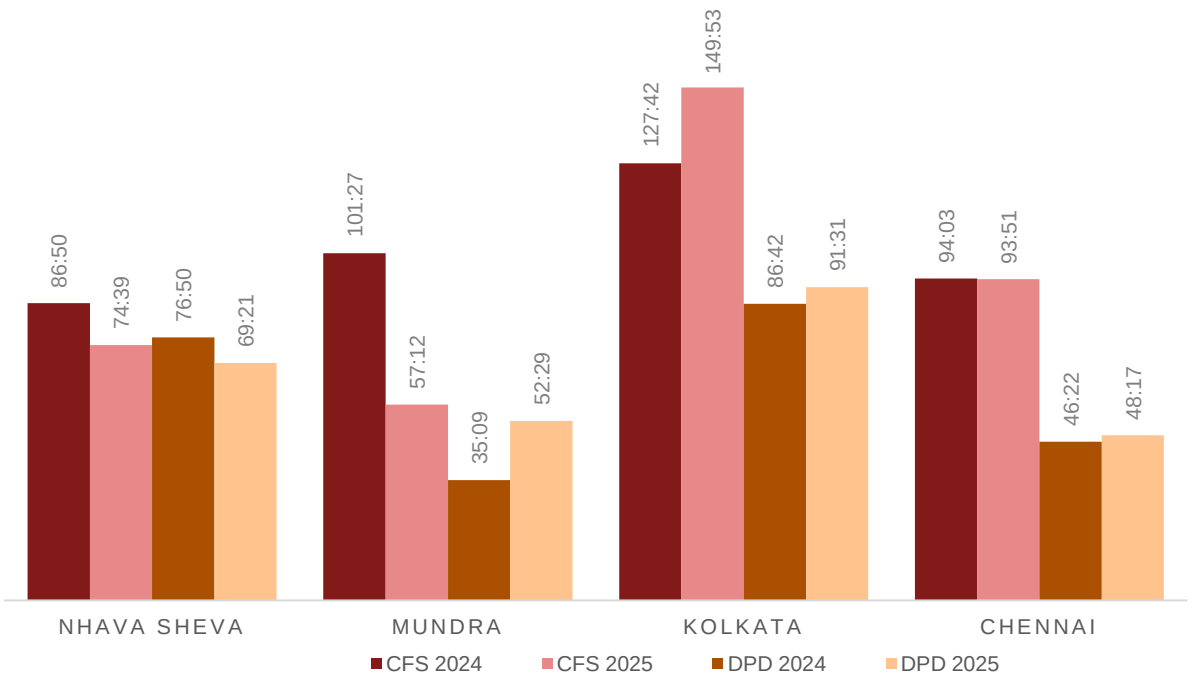
At seaports, AEO clients experienced significantly faster release time compared to non-AEOs, with ART for AEO advance BoEs at 51:03 hours compared to 81:45 hours for non-AEOs (refer to Annexure Table A5). A similar trend was seen in RMS-facilitated consignments. At ICDs, the difference in ART between AEO and non-AEO consignments remained, although the gap narrowed. AEO advance BoEs were cleared in 46:38 hours, while non-AEOs took 75:09 hours. A similar trend was visible in AEO RMS as well vis-à-vis Non-AEO RMS. At ACCs, AEO advance BoEs were released in 23:25 hours compared to 33:42 hours for non-AEOs. For AEO RMS and Non-AEO RMS cargo at ACCs, the release times were 29:06 hours and 39:39 hours respectively.

Thereby, while AEO clients continue to benefit from reduced release time across most categories, a declining share in both advance (from 58% in 2024 to 0.07% in 2025) and RMS-facilitated clearances (from 97% in 2024 to 20% in 2025) at ICDs also indicated that AEO's prefer port-based clearances like DPD and DPE compared to routing their cargo through ICDs.

3.2.4 Direct Port Delivery (DPD) Scheme

In 2008, CBIC introduced the flagship DPD scheme, which allowed for facilitated consignments to be given out of charge directly from the terminal premises. NTRS 2025 reveals a consistent trend—DPD continues to offer faster clearance than the traditional CFS route, reaffirming its role as a critical enabler of efficient cargo handling.

Figure 11: Import ART - CFS vs DPD Cargo at Seaports (2024 – 2025)



In 2025, the overall ART across select Seaports (Nhava Sheva, Mundra, Kolkata and Chennai) for DPD cargo was recorded at 65:33 hours, which was lower than the CFS average of 84:03 hours. At the port level, Chennai reported a DPD ART of 48:17 hours, compared to 93:51 hours for CFS clearances. Nhava Sheva also reported a decline in DPD ART, from 76:50 hours in 2024 to 69:21 hours in 2025. While the ART for CFS-handled containers remains relatively high at seaports, it is important to contextualize this within the operational model of CFSs, which often provide integrated warehousing and storage services. Further, most CFSs offer free days for such services i.e. 'import laden storage' at no charge upto seven days (including the day of arrival) or more, reflecting a business practice that may influence dwell time patterns.

Table 12: Facilitation at Seaports Imports for AEO Clients – CFS Vs. DPD

Category	AEO DPD		AEO CFS		Non-AEO DPD		Non-AEO CFS	
	ART	% share AEO Clients	ART	% share AEO Clients	ART	% share Non AEO Clients	ART	% share Non AEO Clients
Chennai	44:22	8.9%	65:03	35.5%	63:04	2.4%	113:05	53.2%
Kolkata	71:35	9.3%	140:36	13.2%	121:05	6.3%	151:36	71.1%
Mundra	29:54	12.3%	35:21	10.5%	64:59	22.3%	61:23	54.9%
Nhava Sheva	49:02	12.8%	56:12	16.2%	81:30	21.5%	80:43	49.5%

An analysis of the level of facilitation for AEO and non-AEO clients across major ports shows that AEO clients consistently benefit from faster cargo clearance through both DPD and CFS modes compared to non-AEO clients.

At Nhava Sheva, AEO clients availing DPD achieved an ART of 49:02 hours, significantly lower than the 81:30 hours for non-AEO DPD. Similarly, at Chennai, the ART for AEO DPD stood at 44:22 hours, significantly lower compared to 63:04 hours for non-AEO DPD. Mundra Port demonstrated a wider gap, with AEO DPD ART at 29:54 hours, less than half of the non-AEO DPD ART (64:59 hours). However, in terms of choice of delivery mode, non-AEO clients predominantly opted for the CFS route, particularly at Kolkata, where over 70% of non-AEO consignments were routed through CFS with an ART of 151:36 hours. The above trends reaffirm the operational benefits of AEO accreditation, particularly when paired with DPD, for enhanced trade facilitation.

3.2.5. Overall ART Analysis with Path to Promptness Parameters

The path to promptness parameters provide quantifiable measures to evaluate the impact of government schemes and programmes on clearance measures as well as logistics efficiency.

Table 13: Overall Import ART Analysis with Path to Promptness Parameters

Category	2025				2024			
	Overall	Advance	Facilitated	AEO	Overall	Advance	Facilitated	AEO
Seaport	79:04	71:23	66:02	56:46	87:32	78:33	70:02	59:41
ICDs	83:41	72:09	71:18	66:48	84:15	71:10	73:24	69:59
ACCs	39:20	29:21	34:57	30:46	41:30	30:12	36:39	31:47
ICPs	13:30	18:47	13:01	39:37	16:00	15:09	18:26	29:27

A comparative analysis of the ART in 2025 across port categories shows that cargo benefitting from all three "Path to Promptness" parameters — Advance filing, RMS facilitation, and AEO accreditation — recorded the lowest ART. For instance, at seaports, the overall ART in 2025 stood at 79:04 hours but ART for AEO stood at 56:46 hours which

is ~30% of the average ART. Similarly in case ICDs and ACCs sizable difference was observed between overall ART when compared to ART for AEOs. These findings stress the importance of consistent implementation of facilitation measures and addressing bottlenecks at specific port categories to ensure sustained improvements in trade efficiency. For instance, stakeholder awareness and feedback programme may be undertaken to identify and address the challenges faced in Advance filing of the BoEs at ICDs and AEO programme uptake across port categories.

3.3. Customs Clearance: Assessment of Key Stages

This section presents a broad stage-wise timeline assessment of the import clearance process, focusing on the movement of BoEs across port categories. The journey of BoEs captures the procedural flow within the customs ecosystem, beginning with cargo arrival, followed by assessment, payment of duties and culminating in the issuance of the OOC. This journey forms the core of the customs clearance process.

BoE Movement	Arrival to Assessment	Assessment to Payment	Payment to OOC
Seaports	100:41	113:53	53:55
ICDs	100:21	76:02	89:27
ACCs	30:58	62:02	14:20
ICPs	7:09	15:28	11:40

Seaports recorded the longest duration from assessment to duty payment, averaging over 113 hours, with facilitated BoEs (117:45 hours) taking even longer than non-facilitated BoEs (96:31 hours) for duty payment (refer to Annexure Table A6). This indicates a trend of delayed duty payments for facilitated BoEs by importers. This trend has been observed across all port categories, where facilitated BoEs experience more delays in duty payments as compared to non-facilitated bills.

In the preceding stage—from arrival to assessment—both seaports and ICDs showed notably high average timelines, the process taking around 100 hours. The assessment of facilitated cargo is faster across port categories, as compared to non-facilitated cargo. ACCs and ICPs displayed higher efficiency at this stage, with assessment time of approximately 31 hours and 7 hours respectively. ICPs, in particular, reflect significantly streamlined processes at the assessment stage.

In terms of OOC generation post duty payment, ACCs and ICPs displayed considerably lower timelines, the average time taken at this stage being around 14 hours and 11 hours respectively. In contrast, the metric was considerably higher at seaports and ICDs, at around 54 hours and 89 hours respectively.

3.4. Category-Specific Assessment

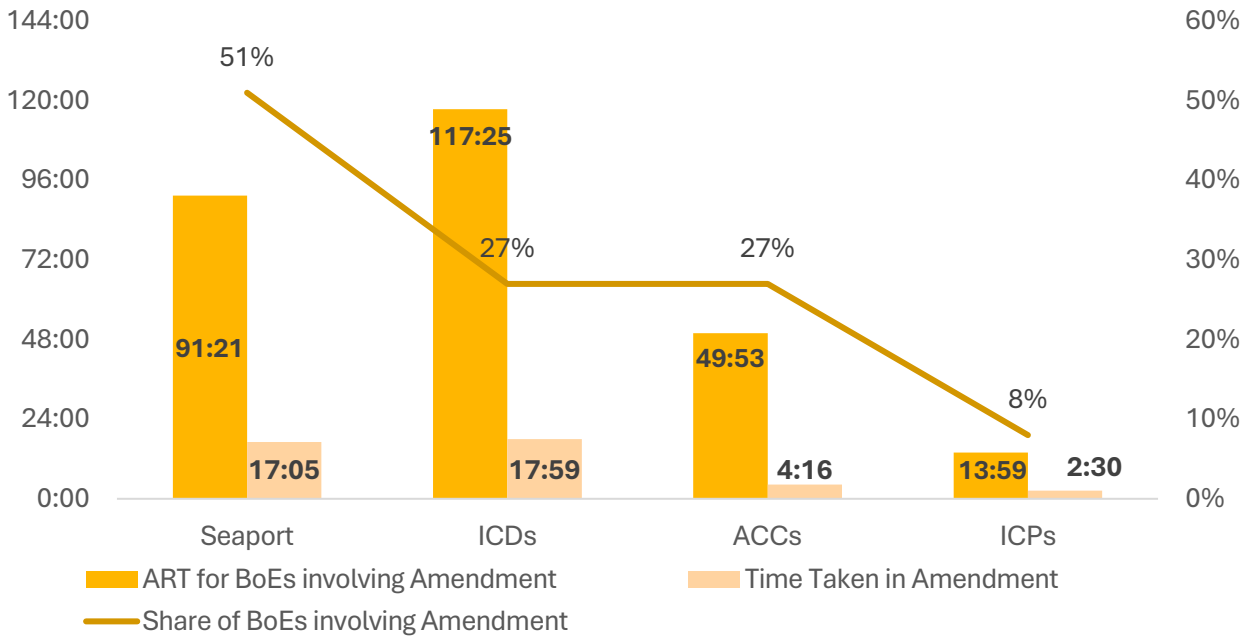
The cargo clearance process has undergone a significant transformation evolving from a standardized, sequential system that commenced only after cargo arrival and the filing of the Bill of Entry (BoE), to a more efficient, technology-driven approach. Key innovations such as electronic filing, pre-arrival processing, risk-based facilitation, the Single Window Interface for Facilitating Trade (SWIFT), deferred duty payment, and Prepayment Customs Compliance Verification (PCCV) have facilitated parallel processing of procedures. These reforms have considerably reduced cargo release times, enhanced transparency, and improved overall efficiency in customs operations.

Several procedural factors affect the time taken for cargo release, such as amendments to Bills of Entry, queries, stakeholder response times and duty payments. Various legal provisions—including Section 149 of the Customs Act and related notifications—govern these processes and allow for rectifications, thereby influencing processing timelines.

3.4.1 Bills of Entry involving Amendment

Across all categories, BoEs involving amendments consistently exhibit higher release times compared to the overall average, highlighting amendments as a significant contributing factor to delays. At seaports, which handle a large share of import traffic, the share of amended BoEs was 51% in 2025—the highest among all categories. The average release time for amended BoEs at seaports stood at 91:21 hours. Amongst the amended BoEs, 95% were filed in advance. The above findings reflect the continued need for enhancement of trader awareness and capacity building so as to bring down the instances of amendment, to improve overall release timelines.

Figure 12: Impact of Amendments on Import ART, 2025



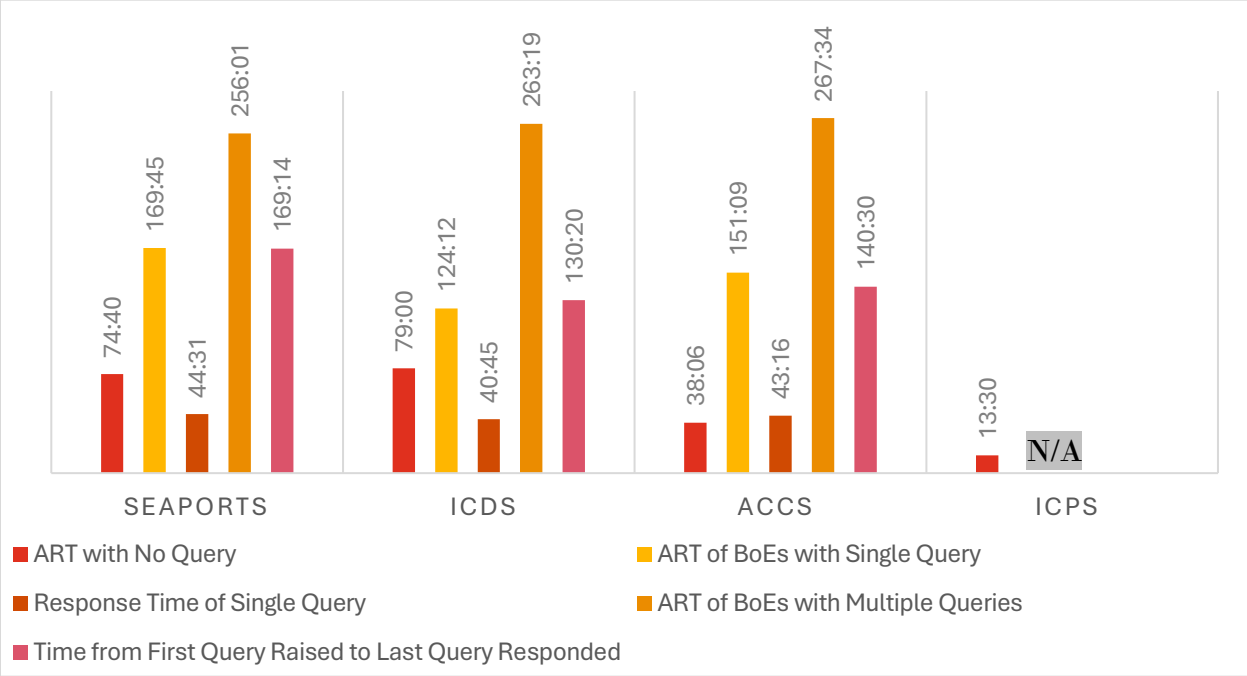
Further, although only 27% of BoEs involved amendments at ICDs, the related processing time was nearly 18 hours. This indicates that even a smaller share of amendments can negatively impact clearance timelines and overall ART at these facilities. Further, it was observed that the share of BoEs involving amendments, especially at ICDs, have displayed an increasing trend over the years – from 17% in 2024 to 27% in 2025 (refer to Annexure Table A7).

ACCs, in contrast, show the most efficient handling of amendments. The ART for BoEs involving amendments, pegged at 49:53 hours, was considerably lower as compared to seaports and ICDs. ICPs recorded the lowest incidence of amendments (8%) and the fastest turnaround for approval of amendment (2:30 hours), with minimal difference between the ART of amended and non-amended BoEs.

3.4.2 Bills of Entry with Queries

To facilitate and streamline trade processes and reduce overall dwell time, measures have been undertaken at every stage of regulatory assessment. The analysis results indicate that single queries were raised in less than 5% of cases across all port categories in 2025, with multiple queries occurring in under 1.5% of BoEs during the study period. It was observed that the ART of BoEs involving queries was higher than those with no queries across port categories. Further, the ART of BoEs with single query raised was more than those involving multiple queries as per analysis results.

Figure 13: Impact of Queries on Import ART



At seaports, the overall ART is approximately 79 hours; however, this increases substantially when queries are involved. A single query raises the ART to nearly 170 hours, while multiple queries extend it to over 256 hours, indicating that queries can more than triple the time taken for cargo release. This trend is similarly observed at ICDs, where the overall ART stands at around 84 hours, but climbs to 124 hours with a single query and a substantial 263 hours when multiple queries are handled.

ACCs, despite being the most efficient under standard processing—with an overall ART of just 39 hours, exhibit the most dramatic escalation in release time when queries are raised. The ART nearly quadruples to 151 hours with a single query and jumps to over 267 hours in case of multiple queries. This suggests that while regular air cargo processing is streamlined, the clearance procedures are highly impacted when queries have to be raised.

The time taken for query resolution varies depending on whether a single query or multiple queries are involved. For standalone (single) queries, the average resolution time ranges from 1.5 to 2 days across all port categories. However, for multiple queries, resolution time differs significantly by port type. For example, at seaports, the average duration from the first query raised to the last query resolved is approximately 169:14 hours (around 7 days). Similarly, at ICDs, this timeframe averages around 130:20 hours (around 5 days).

3.4.3. Full Container Load vs Less than Container Load

The clearance process for FCL and LCL shipments differs significantly, with LCL cargo requiring disaggregated clearance due to multiple Bills of Entry, while FCL cargo is

processed as a single unit, typically associated with larger consignments. Since LCL shipments are often associated with MSMEs, this categorization helps assess the impact of trade facilitation on smaller businesses.

Data from 2023 to 2025 shows a consistent trend of faster release time for LCL cargo compared to FCL cargo, across most locations. For instance, in 2025, ART for FCL cargo at seaports was 83:54 hours, while LCL clearance was nearly 16 hours quicker at 67:55 hours. This gap has persisted over the years and is particularly pronounced at locations like Nhava Sheva and Chennai, where LCL cargo cleared significantly faster despite representing a smaller share of the traffic (31.1% and 40%, respectively in 2025). Interestingly, Kolkata Port saw minimal differentiation in ART between FCL and LCL in 2025, with both exceeding 140 hours. Notably, Mundra Port has undergone a dramatic shift, transitioning from predominantly LCL handling (99%) in 2023 to almost exclusively FCL by 2025 (99.5%).

Among ICDs also the pattern largely holds, with LCL shipments clearing faster at every location. For examples, at ICD Tughlakabad, FCL cargo took 84:37 hours on average, while LCL cleared in 54:46 hours. However, ICD Ludhiana presented notable variations, wherein for LCL cargo – comprising round 17.5% of traffic – the ART was considerably high (109:23). Further, ICD Whitefield, having a higher share of LCL cargo (60.4%) vis-à-vis other ICDs, showed nearly equal ART for both FCL and LCL shipments.

Table 14: Comparison of Import ART of FCL and LCL

Category	2025		2024		2023	
	FCL	LCL	FCL	LCL	FCL	LCL
Seaports	**83:54 (69.8%)**	**67:55 (30.2%)**	92:01 (73%)	75:36 (27%)	80:25 (29%)	87:40 (71%)
Chennai	**100:03 (60%)**	**71:41 (40%)**	100:27 (63%)	67:48 (37%)	68:26 (39%)	98:34 (61%)
Kolkata	**140:21 (86.6%)**	**143:21 (13.4%)**	116:36 (86%)	154:02 (14%)	141:13 (14%)	121:43 (86%)
Mundra	**55:46 (99.5%)**	**14:41 (0.5%)**	91:34 (98%)	75:02 (2%)	31:38 (1%)	72:09 (99%)
Nhava Sheva	**77:16 (68.9%)**	**63:01 (31.1%)**	86:32 (71%)	76:01 (29%)	84:29 (31%)	83:22 (69%)
ICDs	**87:49 (64.4%)**	**68:20 (35.6%)**	86:45 (85%)	63:07 (15%)	64:29 (45%)	77:37 (55%)
Ludhiana	**124:12 (82.5%)**	**109:23 (17.5%)**	106:48 (97%)	249:34 (3%)	82:50 (15%)	85:58 (85%)
Tughlakabad	**84:37 (75.5%)**	**54:46 (24.5%)**	80:28 (81%)	49:48 (19%)	52:16 (25%)	76:03 (75%)
Whitefield	**79:24 (39.6%)**	**76:04 (60.4%)**	95:37 (91%)	143:02 (9%)	68:31 (77%)	75:40 (23%)

While FCL continues to dominate cargo volumes across seaports and ICDs, LCL cargo generally entail faster clearance processes. This is largely because, unlike FCL shipments, involving larger consignment sizes and higher duty payments, LCL consignments typically comprise smaller cargo volumes. Hence it attracts lower duties, enabling quicker duty payment and expedited release. Given LCL's strong association with MSME trade, improvements in LCL processing have an outsized significance for inclusive trade facilitation.

3.4.4. Duty Payment

Under the Customs Act, importers are required to pay import duty either on the date of Bill of Entry (BoE) submission (for self-assessed cases) or within one working day after assessment, reassessment, or provisional assessment—except in cases of deferred duty payment.

The NTRS 2025 analysis results reaffirm that duty payment remains a key contributor to overall ART. As shown in Table 15, the time taken from assessment to payment in 2025 remains high compared to 2024. The average time taken from arrival to payment was highest at ICDs (103:22 hours) and seaports (85:54 hours), while average time taken from assessment to payment was 102:22 hours at seaports and 67:45 hours at ICDs. These figures indicate substantial delays by the traders or CHAs in initiating payment, which adversely affects release time. In contrast, ACCs and ICPs show significantly faster timelines, with time taken for payment from arrival as well as assessment at around 43 hours at ACCs and 12 hours at ICPs.

Table 15: Time Taken in Duty Payment for Imports

Category	Time Taken from Arrival to Payment (When Payment is Made after Arrival and No Deferred Payment)		Time Taken from Assessment to Payment (When Payment is Made after Assessment and No Deferred Payment)	
	2025	2024	2025	2024
Seaports	**85:54**	89:41	**102:22**	98:39
ICDs	**103:22**	93:51	**67:45**	57:34
ACCs	**42:42**	44:39	**43:09**	43:35
ICPs	**12:14**	13:41	**12:38**	16:51

Delays in duty payment significantly impact the import release process, as evidenced by the lower ART for BoEs with deferred duty payment across all port categories. Further, the data (refer to Table 16) reveals that deferred duty payment – the incidence of which is found in a relatively small share of total BoEs – is associated with faster clearance times compared to regular payment methods.

Table 16: Import ART of BoEs with Deferred Payment

Category	Share of BEs involving Deferred Payment			ART for BEs involving Deferred Payment		
	2025	2024	2023	2025	2024	2023
Seaports	**9%**	9%	7%	**42:47**	47:21	45:48
ICDs	**5%**	5%	4%	**50:31**	48:22	51:19
ACCs	**13%**	17%	10%	**25:41**	26:32	29:58
ICPs	**1%**	0%	3%	**58:28**	24:44	08:10

In 2025, around 9% of BoEs at seaports and 5% at ICDs involved deferred payment. The ART of these BoEs were 42:47 hours and 50:31 hours respectively, both significantly lower than the overall ARTs reported for these gateways. The share at ACCs was notably higher, at 13%, with the lowest ART across categories i.e. 25:41 hours, reflecting the effect of deferred payment on release time. In contrast, for ICPs, only 1% of the total BoEs analysed involved deferred payment in 2025, with a much higher ART of 58:28 hours compared to previous years. These trends highlight the potential benefits of expanding deferred duty payment benefit under AEO programme to further reduce clearance times and enhance trade facilitation.

3.4.4.1 Interest on Duty and Total Fine Paid

A significant proportion of BoEs incur interest on delayed duty payments, with approximately one-third of BoEs attracting interest over the past three years—33% in 2025, 35% in 2024, and 34% in 2023 (refer to Annexure Table A8). Seaports and ACCs showed similar patterns, with 32% of BoEs involving interest payments in 2025, the total interest amount being ₹1.85 crore at seaports and ₹0.37 crore at ACCs. ICDs had the highest share of BoEs attracting interest at 51%, a marginal increase from previous years (49% in 2024 and 2023). However, despite this high incidence, the total interest amount collected at ICDs remained relatively low at ₹0.44 crore in 2025, potentially reflecting lower duty values for consignments handled. ICPs, handling smaller volumes and lower-value consignments, reported the lowest incidence and value of interest, with only 19% of BoEs involving interest payments and INR 18,641 collected in 2025.

Fines for delayed filing were imposed on a smaller subset of BoEs, ranging from 1% to 9% across port categories, but the total amounts collected were substantial. For instance, at seaports, only 9% of the total BoEs involved fines for delayed filing, yet the total fine amount was INR 4.95 crore.

Overall, while interest on delayed duty payment is relatively widespread, the financial impact varies based on transaction size. Fines for delayed filing, though less frequent, entail considerable cost to the trade, particularly at seaports and ACCs. These trends underline the importance of timely compliance by importers and CHAs to avoid financial penalties and facilitate improvements in clearance efficiency.

3.4.4.2 Pre-payment Customs Compliance Verification (PCCV)

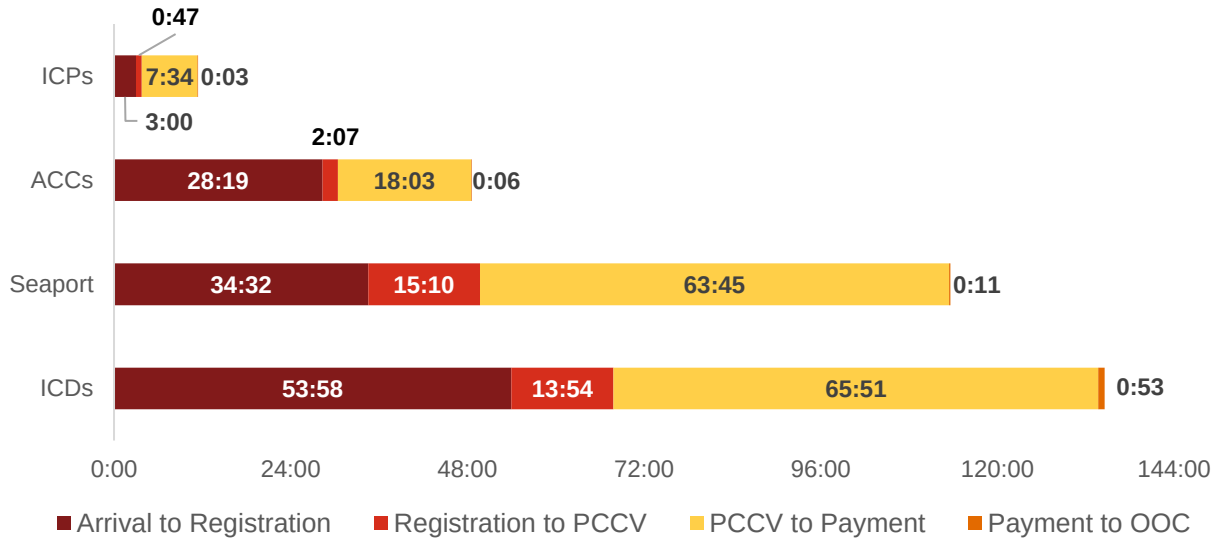
As a part of analysis of duty payment, this study examined the Pre-payment Customs Compliance Verification (PCCV) initiative which is a part of the Turant Customs Programme designed to facilitate compliance verification of a Bill of Entry (BoE) before duty is paid. The analysis reveals considerable variation in timelines across different port categories, with seaports and ICDs taking significantly longer for PCCV than ACCs and ICPs.

The average time taken from registration to PCCV, reflecting the customs verification workload and process readiness, was relatively consistent across categories, apart from ICDs, wherein the metric almost doubled vis-à-vis the previous year (refer to Annexure Table A9). In 2025, the timelines for this stage ranged from approximately 50 minutes at ICPs to around 15 hours and almost 14 hours at seaports and ICDs respectively.

The PCCV to duty payment phase experienced particularly high timelines at seaports and ICDs in 2025 i.e. 63:45 hours and 65:51 hours respectively. These figures indicate considerable lag between customs verification and payment from the trade perspective. In contrast, payments were comparatively faster at ACCs and ICPs, average time taken being 18:03 and 07:34 hours respectively, facilitating faster turnaround.

The time taken from payment to OOC generation was minimal across all categories, reaffirming that once duties are paid, release is almost immediate. In 2025, this step required less than an hour at ICDs, and around 3 to11 minutes at other port categories.

Figure 14: Pre-payment Customs Compliance Verification (PCCV) - 2025



Overall, data shows that the effect of PCCV has been positive on overall customs clearance timelines. However, delays in registration and duty payment by the trade have resulted in delays, particularly at seaports and ICDs.

3.4.5. Impact of Partner Government Agencies (PGAs)

The cargo clearance process is often referred to as customs clearance, as customs authorities primarily oversee it in most countries. However, certain categories of imported goods require additional clearance or a "no objection" certificate from designated regulatory bodies before customs can grant release. In India, these agencies are known as Participating Government Agencies (PGAs) and play a critical role in ensuring compliance with sector-specific regulations.

India has a vast regulatory ecosystem, with over 63 PGAs governing EXIM trade. The adoption of electronic processing has streamlined cargo clearance by enabling parallel and pre-arrival processing through the Single Window Interface for Facilitating Trade (SWIFT), introduced by the CBIC to advance the Coordinated Border Management framework promoted by the WCO. Key PGAs under SWIFT (involved in live import clearance) include the Food Safety and Standards Authority of India (FSSAI), Animal Quarantine and Certification Service (AQCS), Plant Quarantine Information System (PQIS), Drug Controller General (CDRUG), and the Wildlife Crime Control Bureau (WCCB).

Despite these advancements, BoEs marked for PGA interventions continue to experience significantly higher ART across all port categories. The analysis of ART for BoEs marked to PGAs shows a consistent trend across 2024 and 2025 – BoEs involving PGA interventions take significantly longer to clear than the overall average. In 2025, seaports recorded an ART of 129:15 hours for PGA-marked BoEs, compared to 79:04 hours overall — an excess of over 50 hours. Similarly, at ICDs, PGA involvement raised ART from 83:41 hours to 119:28 hours. ACCs also showed a notable increase in ART when PGAs were involved. However, ICPs showed a low ART (4:55 hours) for BoEs marked to PGAs in 2025.

Overall, the data suggests that PGA interventions continue to be a key driver of delays in cargo clearance and merit targeted process improvements to lower release time. Further, optimization of SWIFT, enhanced inter-agency coordination and increased presence of PGAs at gateway ports could help minimize these delays.

Table 17: Comparison of Overall Import ART of BoEs and BoEs Marked to PGAs

Category	2025		2024	
	Overall ART	PGA	Overall ART	PGA
Seaport	79:04	129:15	87:32	131:23
ICDs	83:41	119:28	84:15	118:50
ACCs	39:20	66:21	41:30	63:48
ICPs	13:30	4:55	-	-

An agency-wise review of ART for BoEs marked to PGAs reveals continued delays, with notable variations across agencies and port categories over the years. Among all PGAs, FSSAI-marked consignments consistently exhibited the highest ART across seaports, ICDs, and ACCs, with seaports recording an ART – for BoEs marked to FSSAI – of 170:54

hours in 2025, up from 162:22 hours in 2024 (refer to Annexure Table A10). ICDs and ACCs also reported high ART of 171:24 and 214:23 hours respectively in 2025, underscoring persistent delays for food-related imports.

Furthermore, BoEs marked to PQIS (Plant Quarantine) also showed significant delays, particularly at ACCs, where the ART of relevant BoEs rose by 8.1% as compared to the previous year. BoEs marked to AQCS (Animal Quarantine) and CDRUG (Drug Controller) generally showed somewhat lower ARTs than those associated with FSSAI or PQIS, although delays remained significant. For instance, at ACCs, ART for BoEs marked to AQCS increased from 123:41 hours in 2024 to 134:23 hours in 2025, representing a rise of 8.6%. In contrast, ART for bills marked to CDRUG remained largely stable at around 56:51 hours, increasing by only 2.9% from 55:14 hours in 2024. BoEs marked to WCCB (Wildlife Crime Control Bureau) mostly displayed lower ART in 2025 vis-à-vis other PGAs. ICP processing remained the fastest, with ART below 8 hours across all bills marked to PGAs. These trends underscore the necessity for targeted improvements in PGA coordination and presence, especially for FSSAI and AQCS, to enhance overall efficiency.

3.5. Non-Regulatory Processes

The Customs Automated System designates the "Grant of Out of Charge" as the final milestone in the cargo clearance process. Consequently, consistent with previous studies, this study extends the analysis by estimating the time taken for goods to physically exit the port premises following the receipt of customs clearance.

Table 18: Time Taken after Regulatory Clearance for Imports

Port Category	OOC to Port Gate Out			
	2025	2024	2023	2022
Seaports	**Overall: 27:26 (DPD): 32:15; (CFS): 25:12**	DPD: 30:20; CFS: 81:36	DPD: 29:28; CFS: 69:02	56:49:00 (DPD: 51:42 CFS: 59:04)
ICDs	**84:50**	84:40	96:18	66:04
ACCs	**11:24**	10:52	11:58	18:58
ICPs	**06:51**	00:15	03:03	05:00

Findings indicate that cargo often remains at the port for a significant period even after OOC is granted, as reflected in table 18. Several factors contribute to this delay, including importer behavior, urgency of cargo delivery, storage and transportation planning and logistical constraints. Addressing these post-clearance delays could further enhance supply chain efficiency and reduce overall dwell time at ports.

In 2025, the time taken from OOC to Gate Out was the highest at ICDs, averaging 84:50 hours, almost unchanged from 2024. This persistent lag suggests continued challenges

in container evacuation and logistics coordination between ICD operators and consignees.

At seaports, the overall average time taken from OOC generation to gate out was 27:26 hours, but with wide variation depending on whether the cargo was cleared via DPD or routed through CFS. DPD cargo, though designed for expedited movement, took 32:15 hours, while CFS cargo averaged 25:12 hours in terms of evacuation from the port post OOC generation. The ACCs performed relatively better, with OOC to gate out averaging 11:24 hours, marginally higher than the 10:52 hours in 2024. At ICPs, the metric rose significantly to 6:51 hours in 2025, from merely 15 minutes in 2024.

Overall, the data suggests that delays in cargo evacuation post customs clearance remain a key issue across port categories, particularly at ICDs.

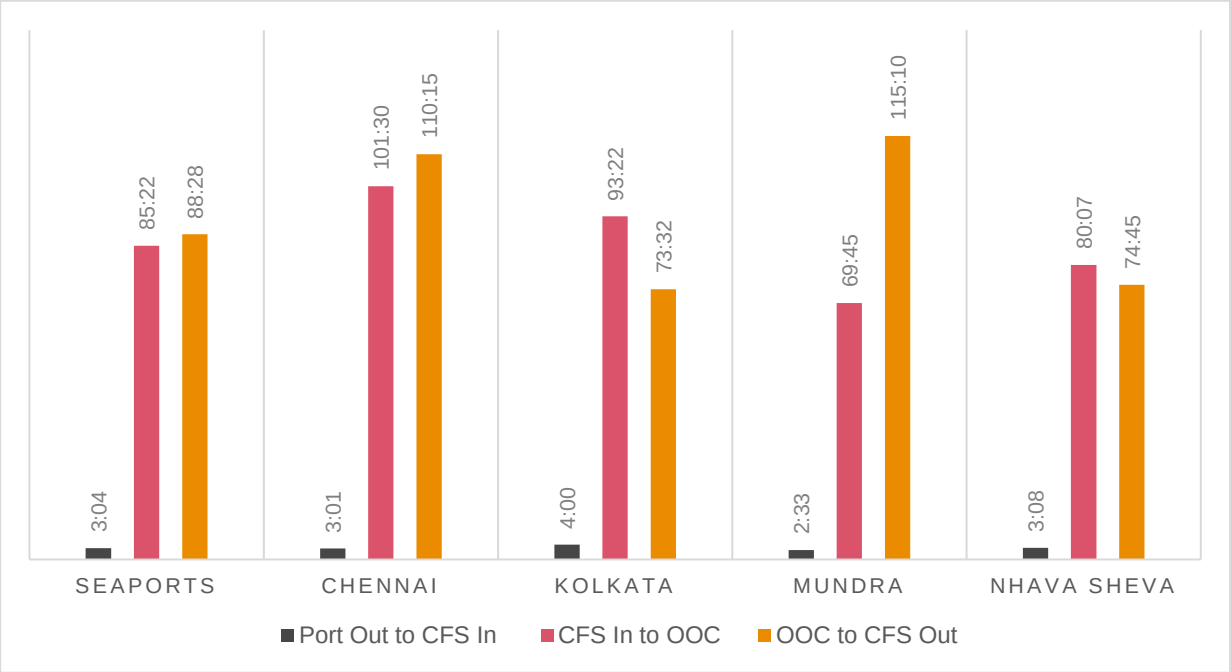
Considerable free time is provided by shipping lines to importers which can be about 14 days to a non-reefer container and 7 days for a reefer container. Similarly, CFS around ports also extend a ground rent free time period of 14 days to importers. So, importers have flexibility of releasing the container to shipping lines or taking delivery of the cargo till 14 days from day of arrival of container. Further, ICD operators are also giving free time upto 45 days for storage of both EXIM empty and loaded containers. This contributes to high logistics time linked to Customs ports being used as storage of cargo laden containers by traders.

Time Taken for Container Freight Station (CFS) Containers after Dispatch from the Port

Given that CFS-bound cargo continues to experience longer release times, this study examined the average time taken for cargo to move from seaports to various CFSs, and the processes therein, before the cargo is made available to the importers. The results highlight variations in the time taken for CFS container movement across seaports, particularly in terms of OOC generation and final dispatch of cargo.

Across all seaports assessed, the average duration from port out to CFS entry was around 2.5 to 4 hours. However, substantial variation is observed in the following stages. The overall average time taken from arrival at CFS to OOC generation was around 85 hours. But among individual ports, Mundra (69:45) and Nhava Sheva (80:07) displayed lower timelines as compared to Chennai (101:30) and Kolkata (93:22).

Figure 15: Time Taken for CFS Containers for Imports



The average time taken from OOC generation to CFS gate out, which typically reflects the duration containers remain at the CFS after customs clearance, is significantly high at around 88 hours. This is largely due to the free period offered by CFS operators, during which containers can be kept with the CFS without incurring storage charges. Notably, Kolkata (73:32 hours) and Nhava Sheva (74:45 hours) showed lower delays at this stage, whereas Mundra (115:10 hours) and Chennai (110:15 hours) reported higher durations.

Overall, while the physical movement from port to CFS is relatively less time consuming, procedural and dispatch related delays at the CFS—particularly in the post-OOC stage—contribute substantially to the inflations in release time. Notably, CFSs often offer integrated warehousing and storage services – with considerable free days – to importers during the post-OOC period as part of their commercial operations, which may influence the timing of cargo release.

Chapter 4 – Exports

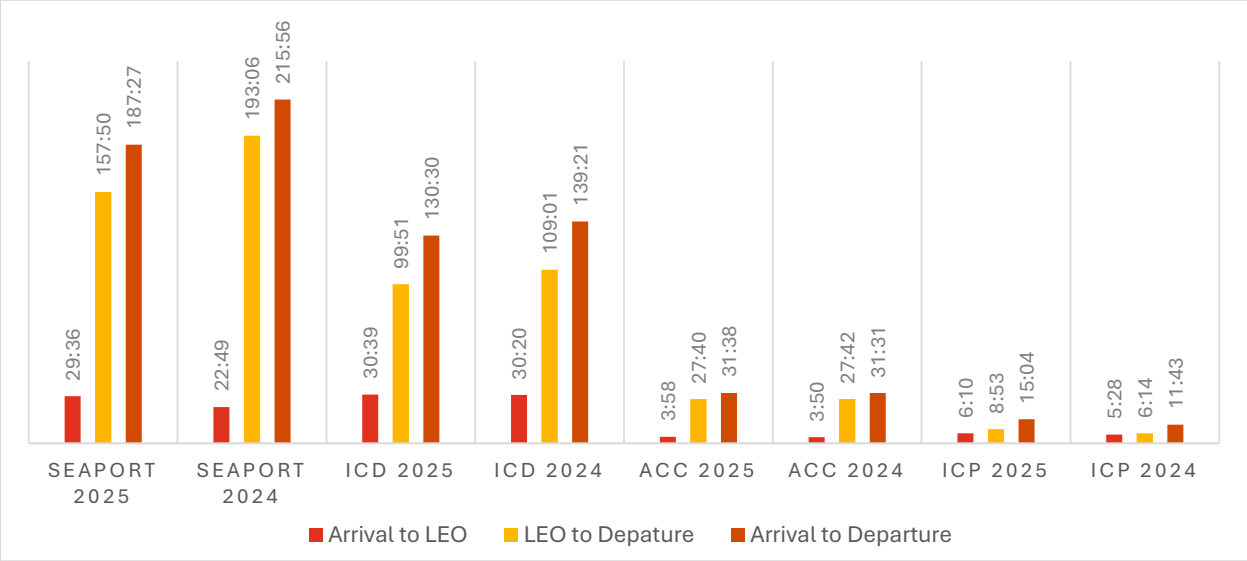
4.1. Export Release Time

The average release time for exports is calculated as the arithmetic mean of the time between cargo's arrival at the port/customs station and its final departure from the port/customs station. The departure of the goods differs in different port categories: a) for seaports, it is departure of the vessel from port or vessel sail off; b) for ICDs, it is loading on the rake; c) for ICPs it is dispatching the truck from the border; and for ACCs, it is take-off of the aircraft.

Segregation of ART into two components - regulatory clearance (Arrival to Let Export Order i.e. LEO) and post-regulatory logistics activity (LEO to Departure) reveals key patterns in export processing across port categories.

In 2025, the time required for regulatory clearance at seaports increased to 29:36 hours in 2025 (up from 22:49 hours in 2024). Meanwhile, post-LEO logistics timelines at seaports remained high at 157:50 hours, despite showing improvements from the spike observed in 2024. ICDs maintained similar regulatory clearance timelines (~30 hours) vis-à-vis the previous year, with time taken in post-LEO logistics processes improving to 99:51 hours. ACCs and ICPs displayed higher efficiency comparatively. ACCs completed regulatory processes in under 4 hours on an average, with logistics processes taking around 27:40 hours in 2025. For ICPs, average regulatory clearance time and time taken for post-regulatory logistics activities were 06:10 hours and 08:53 hours respectively.

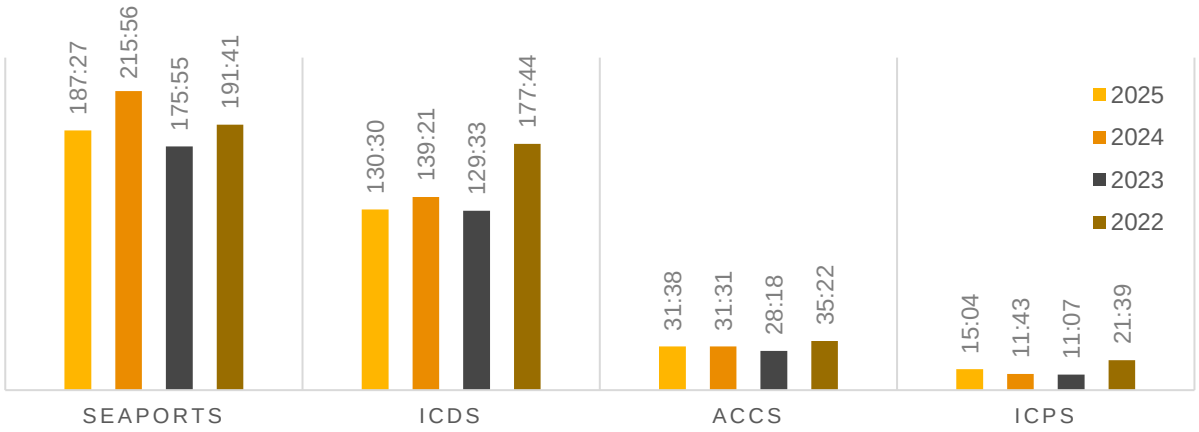
Figure 16: Export ART Components, 2024-2025



The overall ART, which captures the total duration from cargo arrival to final release, reflects notable trends across port categories. At seaports, ART reduced from 215:56 hours in 2024 to 187:27 hours in 2025, marking an 13% improvement. However, it remains higher than the 2023 level of 175:55 hours. ICDs also experienced an ART reduction of around 6%, dropping from 139:21 hours in 2024 to 130:30 hours in 2025, nearly regaining the 2023 levels (129:33 hours). This indicates steady improvement, especially when compared to 2022 (177:44 hours).

ACCs maintained similar efficiency vis-à-vis the previous year, with ART stable at around 31.5 hours in 2024 and 2025. ICPs continued to record the lowest ART across port categories, although ART increased to 15:04 hours in 2025 from 11:43 hours in 2024. However, the overall ART of ICPs has improved considerably from the 2022 levels and has consistently remained within the NTFAP targets in recent years.

Figure 17: Export Average Release Time across Port Categories (2022 – 2025)



A port-wise analysis of export ART revealed varied results across different types of ports. Seaports generally experienced longer delays, particularly in the post-LEO stage, with Chennai recording the highest ART in 2025 at over 218 hours (largely driven by a significant 184:51 hours required for sail off post the granting of LEO). In contrast, Mundra showed notable improvement, reducing its ART by more than 50 hours compared to 2024 (refer to Table A4 in annexure). Among ICDs, Whitefield experienced improvement in ART, although Tughlakabad continued to face logistics delays after grant of LEO. ACCs displayed considerable regulatory efficiency, with time taken from arrival to LEO generation typically ranging between 1-6 hours. ART of ACCs approximately ranged between 12-40 hours, with Ahmedabad (12:40 hours), Chennai (21:27 hours) and Hyderabad (22:17 hours) showing improvements vis-a-vis the previous year. With regards to ICPs, both Raxaul and Petrapole experienced marginal increase in ART vis-a-vis the previous year. However, the ART for Petrapole was considerably higher as compared to Raxaul, with notable variations in timelines of both regulatory and post-regulatory stages.

Table 19: Port-Wise Export Release Time Components 2025

Port	Arrival to LEO	LEO to Departure	Export ART
Seaports			
Chennai	33:12	184:51	218:04
Kolkata	31:57	149:22	181:19
Mundra	20:45	131:47	152:33
Nhava Sheva	34:37	171:15	205:52
Kochi[3]	9:37	143:01	152:38
ICDs			
Ludhiana	34:30	78:10	112:40
Tughlakabad	27:52	123:29	151:21
Whitefield	32:48	76:49	109:38
Garhi Harsaru	21:29	60:44	82:13
ACCs			
Ahmedabad	3:09	9:31	12:40
Bengaluru	3:14	36:55	40:10
Chennai	2:29	18:58	21:27
Delhi	6:14	32:01	38:16
Hyderabad	1:16	21:00	22:17
Mumbai	3:57	28:14	32:12
ICPs			
Petrapole	8:56	13:05	22:02
Raxaul	3:47	5:16	9:03
LCS Jaigaon	3:56	0:01	3:58

4.1.1 Assessment of ART vis-à-vis NTFAP targets

The NTFAP 3.0 sets a target of 24 hours for exports at seaports, ICDs and ICPs, and 12 hours for ACCs. Table 20 presents the share of export cargo released within the NTFAP 3.0 targets across four port categories. The analysis results indicate substantial variation in performance, with release time significantly exceeding the targeted benchmarks at most locations, especially at seaports and ICDs.

Seaports, which handle a significant share of export volume, appear to face persistent delays, with nearly all shipments – more than 99% at all ports – taking more than 24 hours for release. Notably, of the total cargo cleared within the NTFAP 3.0 target, 0.11% is RMS-facilitated cargo. At ICDs, over 5% cargo is released within the stipulated target, with ICD Whitefield releasing more than 10% of its cargo within the 24-hour benchmark. Additionally, over 5.55% of such cargo at ICDs is facilitated.

[3] Ports mentioned in Grey are not included in the calculations of overall ART and other analyses

Further, ICPs demonstrated greater adherence to target timelines. Raxaul achieved a remarkable milestone by processing over 97% of its shipments within 24 hours with facilitated bills accounting for around 75%. ACCs released around 20% of cargo within the target 12 hours. While Ahmedabad, Hyderabad and Chennai ACCs released around 56%, 45% and 36% of cargo within 12 hours respectively, the share was considerably lower for ACCs such as Delhi and Mumbai. Further, it is important to note that high shares of cargo missing the NTFAP targets – especially at seaports, ICDs and ACCs – also indicate that release time for facilitated shipping bills have also been on the higher side.

Table 20: Share of SBs Meeting NTFAP Targets

Port Type	Overall	Facilitated
Seaports (NTFAP Target ~ 24 hours)		
Chennai	-	-
Kolkata	0.18%	0.18%
Mundra	0.15%	0.15%
Nhava Sheva	0.14%	0.10%
Overall	**0.13%**	**0.11%**
ICDs (NTFAP Target ~ 24 hours)		
Ludhiana	8.70%	8.70%
Tughlakabad	1.30%	1.24%
Whitefield	10.39%	10.08%
Overall	**5.68%**	**5.55%**
ICPs (NTFAP Target ~ 24 hours)		
Petrapole	62.09%	57.92%
Raxaul	97.47%	74.29%
Overall	**81.09%**	**66.71%**
ACCs (NTFAP Target ~ 12 hours)		
Ahmedabad	56.55%	51.21%
Bengaluru	12.37%	11.92%
Chennai	36.18%	32.77%
Delhi	7.53%	7.09%
Hyderabad	44.63%	40.68%
Mumbai	8.25%	7.70%
Overall	**19.27%**	**17.75%**

4.1.2. Arrival to Goods Registration

A comprehensive analysis of the export process typically encompasses three key stages: pre-arrival (covering activities such as the filing of the shipping bill i.e. SB), the regulatory clearance stage (from cargo arrival at the customs station to grant of LEO) and the post-LEO stage, which involves physical departure via vessel, rail, air or road.

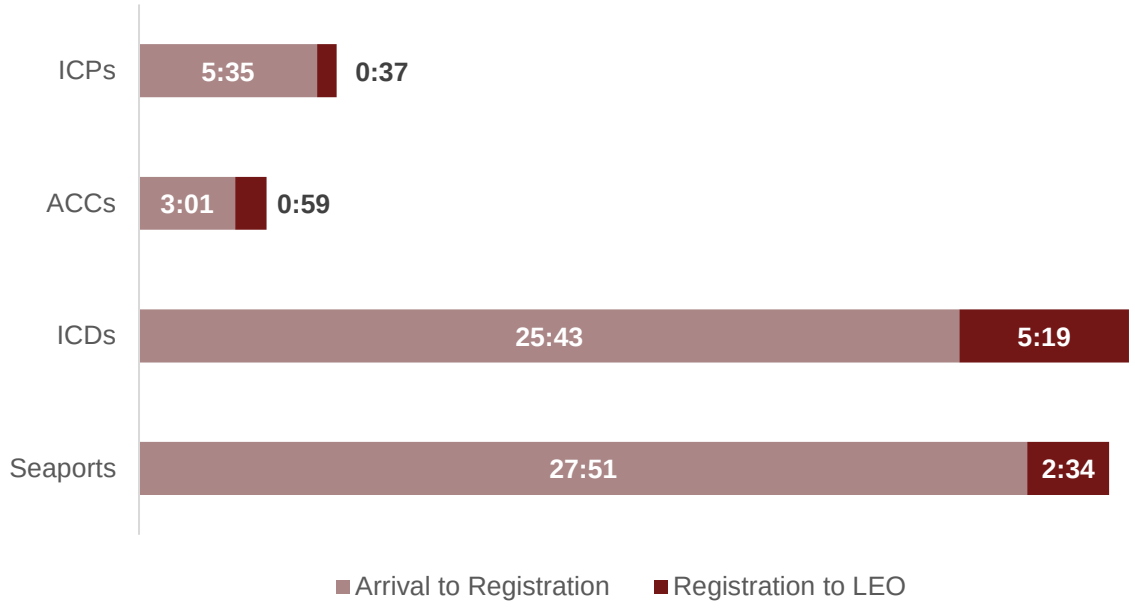
In alignment with the WCO Time Release Study methodology, the National Time Release Study (NTRS) focuses primarily on the second and third stages—beginning with cargo

arrival at the port and ending with its exit—reflecting the areas where most Trade Facilitation Agreement (TFA) commitments are targeted. Regulatory clearance formally begins once the exporter presents goods for registration in the customs system, after filing the SB electronically, often prior to the physical arrival of cargo.

Figure 18 provides an overview of the stage-wise export clearance processes across port categories. In 2025, seaports showed the longest duration from arrival to registration, averaging around 28 hours. Despite this, once registration was completed, the time taken for LEO generation was considerably lower at around 2.5 hours, suggesting that customs processes may be streamlined but are preceded by upstream delays on the trade side. ICDs followed a similar pattern but with lower registration timelines post arrival (about 26 hours) and higher LEO generation timelines (over 5 hours) as compared to seaports.

At ACCs, performance was significantly better on both metrics. The arrival to registration time was considerably low at 3 hours, and subsequently LEO was issued within an hour on an average. This efficiency aligns with the time-sensitive nature of air cargo. ICPs also displayed favourable results, recording 5:35 hours from arrival to registration and less than 40 minutes for LEO generation.

Figure 18: Registration and LEO Generation Timelines for Exports



4.2. Level of Facilitation

In the export process, SBs must be filed before the cargo arrives at the customs station. This enables pre-arrival processing by the Customs RMS and, in some cases, additional regulatory screening.

Once the shipping bills are submitted electronically through the customs automated system, they undergo risk-based assessment. Based on the analysis of various parameters, SBs may be subjected to verification, which could include a self-assessment review and/or physical examination.

The facilitation of SBs has steadily improved over the past four years, with the highest levels observed at Seaports (93%), followed by ACCs (92%), ICDs (92%) and ICPs (87%).

Figure 19: Share of Facilitated Shipping Bills

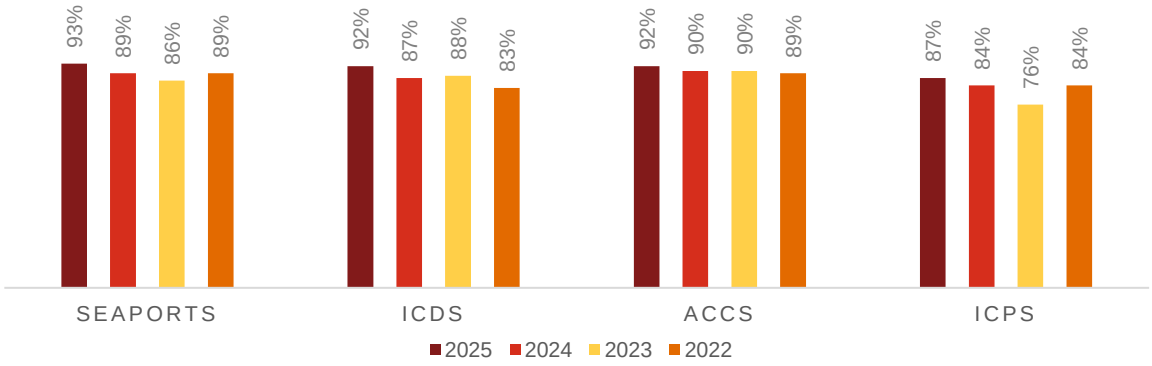


Table 21: Export ART for Facilitated vs Non-Facilitated SBs

Category	Facilitated SBs		Non-Facilitated SBs	
	2025	2024	2025	2024
Seaports	**187:58**	215:45	**181:26**	217:05
ICDs	**129:30**	135:14	**142:23**	166:54
ACCs	**31:39**	31:29	**31:33**	31:52
ICPs	**15:17**	11:33	**13:53**	12:33

The Table 21 compares the release time for facilitated and non-facilitated SBs vis-à-vis the previous year. Notably, ART has improved for seaports and ICDs in both categories. ACCs displayed similar timelines – for both facilitated and non-facilitated shipping bills – as compared to 2024. However, ICPs experienced a surge in ART across both categories in 2025.

4.2.1. Comparative Advantage of Facilitation

Table 22 provides a comparative overview of the advantages—expressed as ratios—of facilitation in export release processes across four port categories over the last three years (2023–2025). A value less than 1 indicates a time advantage (i.e. faster release), while a higher ratio signifies a more substantial time gain – delays in release – over non-facilitated consignments.

Table 22: Comparative Advantage of Facilitation in Exports

Category	2025	2024	2023
Seaports	1.04	0.99	0.93
ICDs	0.91	0.81	0.92
ACCs	1.00	0.99	0.93
ICPs	1.10	0.92	0.87

Note: Advantage of facilitation is calculated as ART of Facilitated Bills as a share of ART of Non-Facilitated Bills. Higher the number, lower the advantage and vice-versa.

The analysis results suggest that the ART of facilitated SBs is generally higher than that of non-facilitated SBs. Notably, seaports, ACCs and ICPs reported values greater than 1, indicating longer release time for facilitated shipments relative to non-facilitated ones. However, the metric has been below 1 for ICDs, in consonance with the previous years.

4.3. Authorized Economic Operators

Table 23: Export ART for AEO vs Non-AEO Clients

Category	AEO	Non-AEO
Seaports	180:59	190:07
ICDs	131:59	130:06
ACCs	29:49	32:17
ICPs	19:57	14:01

The comparison between AEO and non-AEO clients shows modest differences in ART, with no significant variations observed across port categories. At seaports, AEO clients had a slightly lower ART (~181 hours) as compared to non-AEOs (~190 hours). At ICDs, the trend was reversed, with AEOs recording a slightly higher ART (131:59 hours) compared to non-AEO clients (130:06 hours). At ACCs, release time for AEOs was roughly 2.5 hours faster on an average, while for ICPs, the release time for AEO clients was higher as compared to non-AEOs. Overall, although AEO accreditation is intended to support faster processing for compliant traders, the actual time savings appear modest and vary across port categories.

4.3.1. Comparative Advantage of AEO Programme

Table 24 provides a comparative look at the average release time advantages—expressed as ratios—of AEO status in export release processes – vis-à-vis both parameters – across four port categories over the last three years (2023–2025). A value less than 1 indicates a time advantage (i.e. faster release), while a higher ratio signifies a time gain – delays in release – over non-AEO consignments.

Table 24: Comparative Advantage of AEO in Exports

Category	2025	2024	2023
Seaports	0.95	1.03	1.08
ICDs	1.01	0.98	0.99
ACCs	0.92	1.11	0.99
ICPs	1.42	1.11	1.02

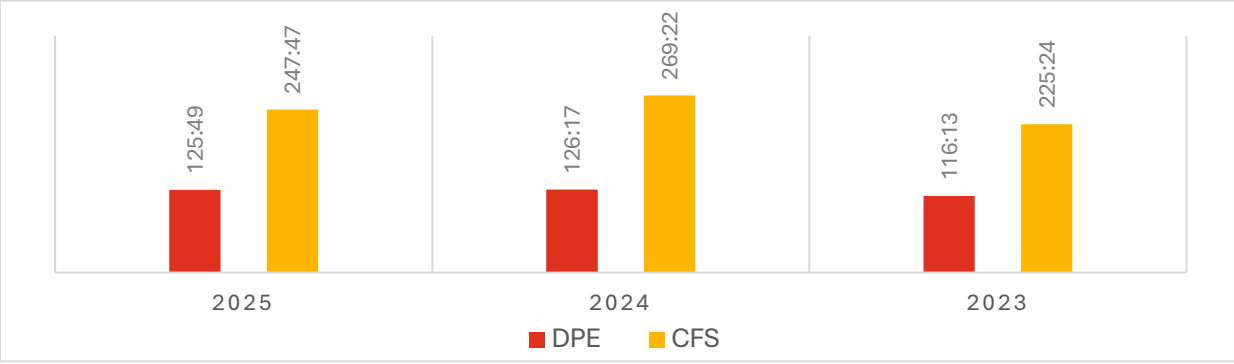
Note: Advantage of AEO programme is calculated as ART of AEO as a share of ART of Non-AEO. Higher the number, lower the advantage and vice-versa.

In terms of ratios pertaining to advantage of AEO, seaports show a gradual improvement (1.08 in 2023 to 0.95 in 2025). For ICDs and ICPs, the ART was comparatively higher for AEO consignments. ACCs, reported the lowest ratio (0.92) among port categories, also indicating an improving comparison between AEO and non-AEO clients vis-à-vis the preceding years.

4.4. Direct Port Entry

Cargo opting for the Direct Port Entry (DPE) mode continues to outperform cargo routed through CFS. While the overall ART for DPE cargo decreased marginally—by about 30 minutes—from 126:17 hours in 2024 to 125:49 hours in 2025, it still continues to remain substantially lower than that of CFS cargo. This underscores the positive impact of the government's initiative to facilitate direct entry for factory-stuffed export cargo.

Figure 20: Export ART Across Mode of Delivery



Meanwhile, CFS cargo recorded a notable reduction in ART—declining by approximately 20 hours as compared to the preceding year. The persistent difference in ART between DPE and CFS cargo can be attributed to several factors, including the handling of LCL consignments via CFS, delays due to cargo waiting for vessel-aligned stuffing schedules, and the use of CFSs as storage facilities for ready-to-export goods.

4.5. Category-Specific Assessment

This section closely examines various procedural aspects – and associated stages – of the export release process to understand how specific operational factors affect overall timelines. Instead of focusing solely on average timelines alone, it breaks down performance across key categories that can influence efficiency. These include differences in release time for FCL and LCL shipments, comparison of factory-stuffed versus ICD-stuffed cargo at ICDs, time-of-day patterns in clearance at ICDs and ICPs, and variations in release time for refrigerated versus non-refrigerated cargo at ACCs. These highlight specific areas facing delays, wherein procedural improvements may be most effective.

4.5.1. Full Container Load vs Less than Container Load

To determine whether the aggregation and consolidation of cargo at CFS also impacts the release time for seaports, an assessment was conducted to compare ART of relevant categories over the years. Compared to 2024, the release time for FCL and LCL cargo has improved by approximately 20 hours; however, the 2025 results are higher than the 2023 levels.

Table 25: Export ART (Arrival to Departure) at CFS

Category	FCL			LCL		
	2025	2024	2023	2025	2024	2023
Seaports	**236:12**	252:47	207:24	**256:58**	275:53	239:57

The analysis results indicate that LCL shipments consistently experience higher ART than FCL shipments at CFSs across seaports. In 2025, the ART for FCL cargo stood at 236:12 hours, compared to 256:53 hours for LCL cargo—a difference of approximately 8%. This gap has been fairly consistent over the years, with LCL ART exceeding FCL by around 9% in 2024 and 16% in 2023. However, as previously stated, year-on-year comparisons show a modest improvement in release time for both categories. From 2024 to 2025, ART for both FCL and LCL cargo reduced by about 6.5–7%. FCL ART declined from 252:47 to 236:12 hours, while LCL ART dropped from 275:53 to 256:58 hours.

Furthermore, a stage-wise analysis of FCL and LCL cargo at ICDs was conducted to analyse the variations in process-specific timelines between the two categories. In 2025, FCL cargo took around 127:04 hours to release, an increase from 124:35 hours in 2024, but significantly higher than the levels (85:37 hours) achieved in 2023. The results indicate

a 48.5% increase in ART from 2023 to 2025 for FCL cargo. In contrast, LCL cargo recorded an ART of 155:05 hours in 2025 – showing notable improvement as compared to 2024 (169:38 hours) and 2023 (163:15 hours) – displaying an 8.5% year-on-year reduction in ART from 2024 to 2025.

Table 26: Comparison of Stage-wise Time Taken for FCL vs. LCL Cargo at ICDs

Category	FCL			LCL		
	2025	2024	2023	2025	2024	2023
ART (ICD Gate In to Loading on the Rake)	**127:04**	124:35	85:37	**155:05**	169:38	163:15
ICD Gate In to LEO	**34:57**	37:50	27:00	**30:22**	30:59	37:25
LEO to Loading on the Rake	**92:06**	86:45	58:37	**124:42**	138:39	125:49
Share	**22%**	24%	43%	**47%**	48%	57%

A comparison of FCL and LCL export cargo at ICDs highlights that LCL shipments consistently experience higher release time as compared to FCL cargo over the years. In 2025, the overall ART – from gate-in to rake loading – was around 127:04 hours for FCL cargo and 155:05 hours – 22% higher – for LCL cargo handled at ICDs. However, it is important to note that clearance timelines – time taken from arrival to LEO generation – were significantly lower as compared to overall ART for both cargo categories. Notably, LCL cargo took less time for regulatory clearance (30:22 hours) vis-a-vis FCL cargo (34:57 hours). However, the post-LEO logistics processes entailed higher timelines—124:42 hours for LCL (around 35% more) as compared to 92:06 hours for FCL cargo. The shares of FCL and LCL cargo at ICDs in 2025 were 22% and 47% respectively.

4.5.2. Factory Stuffed vs. ICD Stuffed Cargo at ICDs

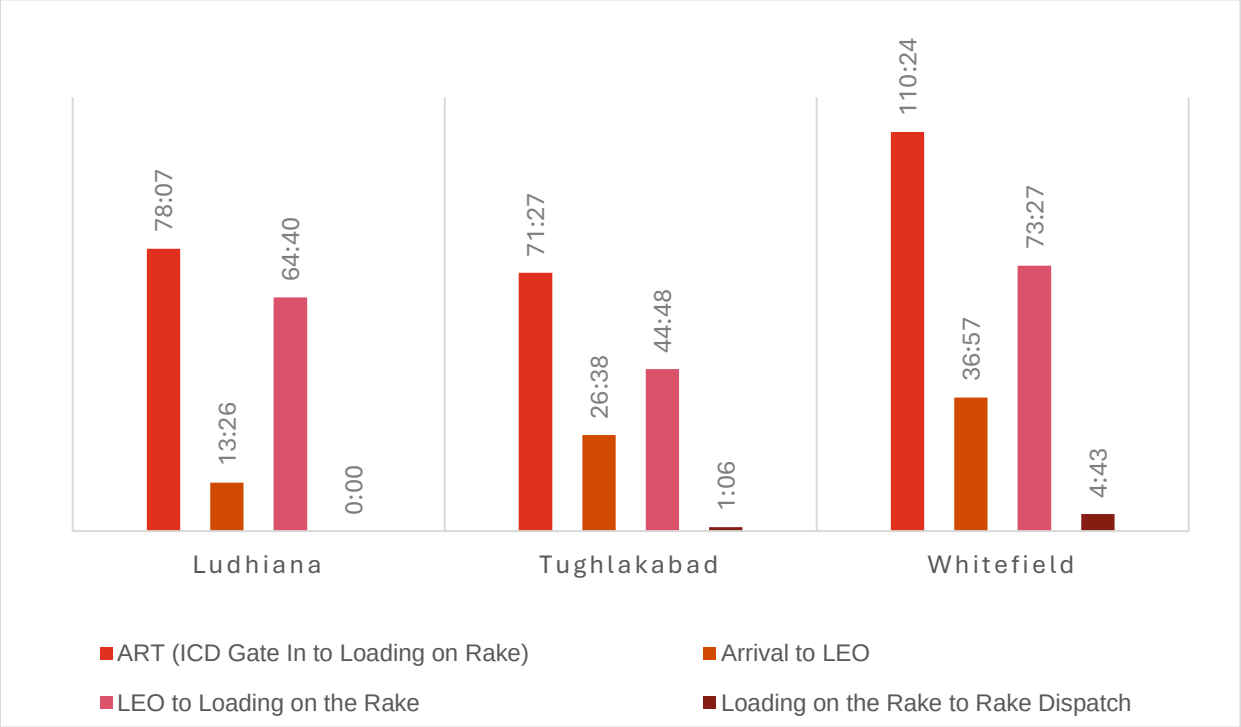
The nature of export cargo – i.e. factory stuffed and ICD stuffed – at ICDs also entails notable operational differences and variations in both overall and process-specific timelines. Notably, factory stuffed cargo is allowed to be stuffed into containers at the exporter's premises, while ICD stuffed cargo must undergo the stuffing process at the ICD. In this context, tables A11 and A12 (annexed) present a stage-wise analysis of the two categories.

4.5.2.1 Factory Stuffed

For factory stuffed cargo, while overall ART improved vis-à-vis the previous year – especially for ICD Ludhiana and ICD Whitefield – the logistics processes – from LEO generation to loading of containers on rake – continued to face delays at all ICDs. At ICD Ludhiana, the ART was 78:07 hours in 2025, slightly improved as compared to the 2024 levels but higher than 2023 (refer to Annexure Table A11). The time taken from arrival to LEO generation was nearly 13 hours, while the LEO to rake loading phase accounted for

a major share (64:40 hours) of the overall time taken. The final dispatch happened almost immediately, indicating considerable efficiency in the process.

Figure 21: Stage-wise Time Taken in Exports for Factory-Stuffed Cargo at ICDs

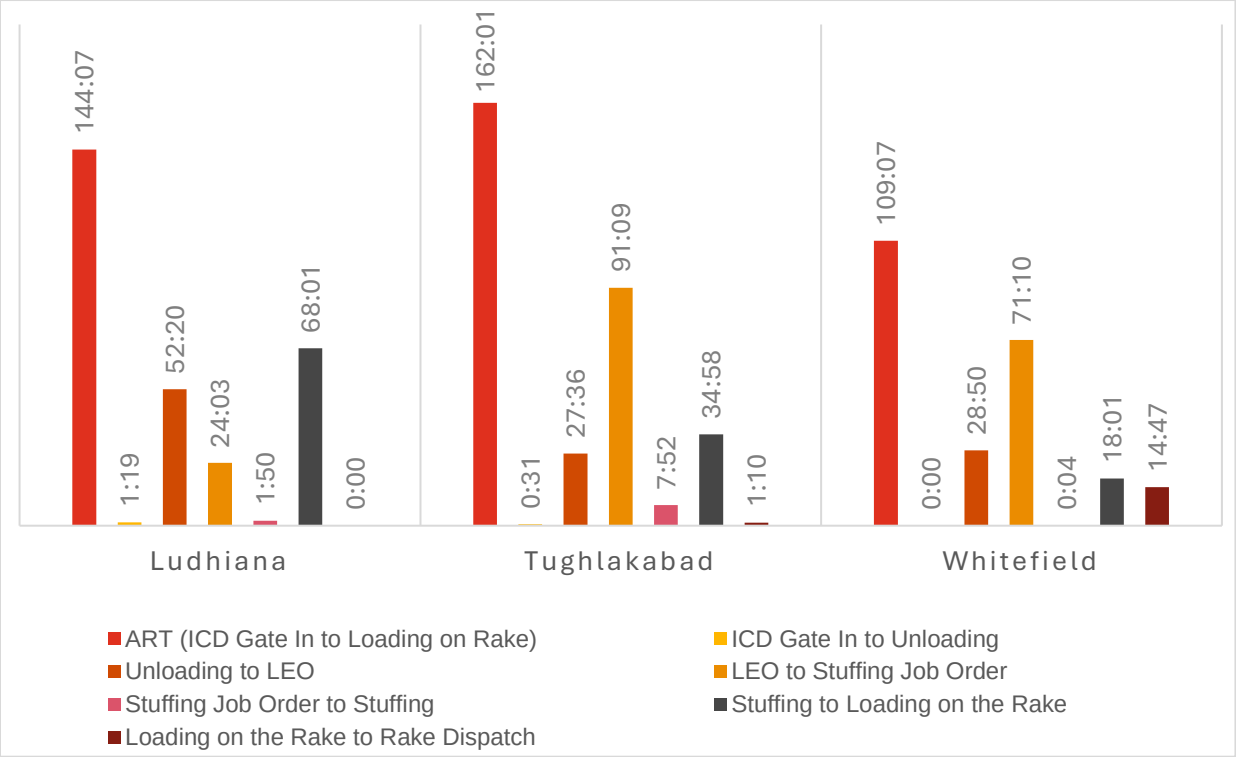


At Tughlakabad, ART was around 71 hours in 2025, with minimal changes as compared to the previous years. It is to be noted that arrival to LEO generation took more than 1 day at 26:38 hours. However, in the post-LEO phase, the LEO generation to loading time (44:48 hours) showed an uptrend vis-à-vis 2024, eventually accounting for more than half the overall release time in 2025. The average time taken from loading to rake dispatch was a little over an hour. ICD Whitefield, however, saw a notable increase in ART in 2024 (134:10 hours), before declining to 110:24 hours in 2025. The arrival to LEO phase accounted for around 37 hours (1.5 days), the time taken from LEO generation to loading on rake being more than 73 hours. Incidentally, timelines for loading on rake and subsequent dispatch of rake witnessed notable increase as compared to 2024.

4.5.2.2 ICD Stuffed

For ICD stuffed containers, ART depends on an array of processes i.e. unloading, LEO generation, issue of stuffing job order, stuffing and loading on rake. At ICD Ludhiana, the ART rose sharply from 85:13 hours in 2023 to 144:07 hours in 2025 (refer to Annexure Table A12). Some of the prolonged processes include generation of LEO post unloading (which increased from 17:55 hours in 2023 to 52:20 hours in 2025), issuance of stuffing job order after LEO generation (24:03 hours in 2025) and time taken for loading on rake once stuffing is completed (68:01 hours in 2025).

Figure 22: Stage-wise Time Taken in Exports for ICD-Stuffed Cargo at ICDs



At ICD Tughlakabad, ART for ICD stuffed cargo was pegged at 162:01 in 2025, indicating minor improvement from the previous year. However, increase in time taken for issuance of stuffing job order (91:09 hours) post LEO generation and loading time post completion of stuffing (~35 hours) was observed in 2025.

In contrast, at ICD Whitefield, the ART reduced significantly to 109:07 hours in 2025 from 129:38 hours in 2024. Notable time reductions were observed in key processes such as the issuance of the stuffing job order and the actual stuffing among others.

4.5.3. Refrigerated vs Non-Refrigerated Cargos at ACCs

An analysis of export release timelines for refrigerated and non-refrigerated cargo at ACCs highlights consistently lower release time for perishable shipments over the years.

Table 27: Export of Refrigerated and Non-refrigerated cargo at ACCs

Refrigerated	2025	2024	2023
Yes	**21:38**	23:36	19:54
No	**35:48**	31:55	31:38

The distinct handling requirements of refrigerated and non-refrigerated cargo at ACCs have been reflected in the ART trends. In 2025, refrigerated cargo took an average of 21:38 hours from arrival to departure, significantly faster than the release time (35:48

hours) for non-refrigerated consignments. A similar trend has been observed in the preceding years as well.

4.5.4. Intra-day Pattern of Cargo Release at ACCs and ICPs

The intra-day pattern of export cargo release at ACCs and ICPs reveals distinct operational characteristics (refer to Annexure Table A13).

At ACCs, cargo arrivals peaked between noon and 6 PM, with 18,446 SBs recorded during this window in 2025—accounting for more than half of the arrivals. This was followed by the 6 PM to midnight slot with 6,348 SBs, while the early morning window (midnight to 6 AM) saw a significant drop to just 119 SBs in 2025, down from 8,564 in 2024. Similarly, registration and grant of LEO peaked between noon and midnight, suggesting that customs processing primarily took place during the latter half of the day. Aircraft departures happened throughout the day, with count of SBs mostly consistent across time intervals. The time taken between LEO generation and aircraft departure ranged between 23-34 hours across time intervals during the day. For instance, cargo cleared between 6 AM and noon faced an average LEO-to-departure duration of 33:45 hours in 2025, while for LEOs granted between 6 PM and midnight, average departure time was around 24 hours.

In case of ICPs, arrivals happen consistently throughout the day, with maximum arrivals between noon and 6 PM and from midnight to 6 AM. Registration (1,938 SBs) and LEO generation (2,195 SBs) processes peak during the noon to 6 PM window, the numbers being notable for the 6 AM to noon interval as well. In terms of departures, the numbers were higher for the noon to 6 PM window (2305 SBs), followed by the 6 PM to midnight interval (1511 SBs). The time taken from LEO to departure was the highest between 6 AM to noon (19:46 hours), the time taken being significantly lower in the other intervals.

Chapter 5 – Assessment of Pilot Ports

The National Time Release Study (NTRS) 2025 has further broadened its scope by including three additional ports: Kochi (Seaport), Jaigaon (LCS) and Garhi Harsaru (ICD). This increase in coverage – in terms of ports under assessment – has been done to enhance the comprehensiveness of the study, by capturing time release patterns across a more diverse set of gateways. By incorporating these locations, the study has attempted to provide a more representative overview of clearance processes and logistics performance across varied operational settings within India's trade ecosystem.

5.1. Garhi Harsaru

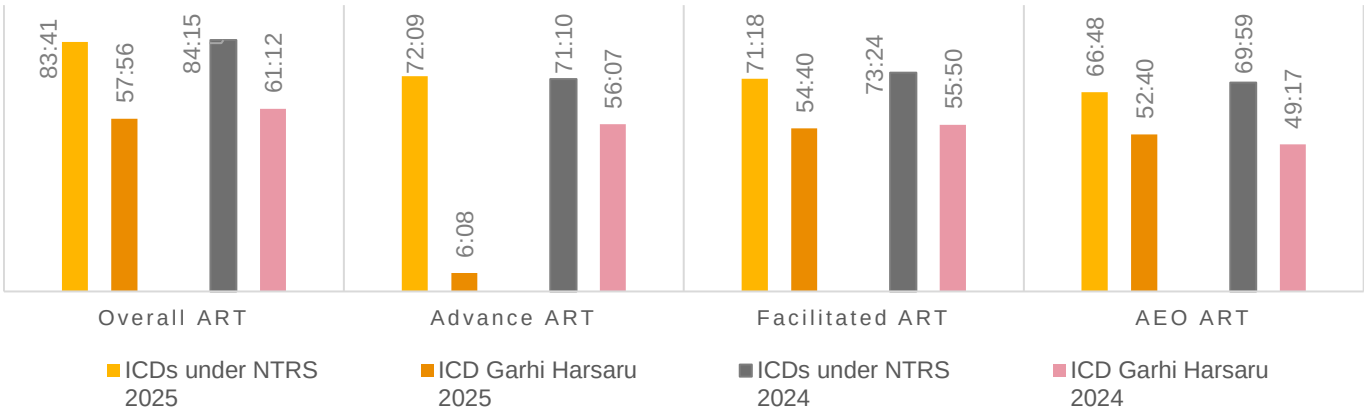
Located in Gurgaon, Haryana, Garhi Harsaru is a strategically placed ICD to cover the industrial hubs in NCR (Gurgaon, Manesar, Faridabad, Ghaziabad), Haryana (Hisar, Panipat, Sonipat) and Rajasthan (Bhiwadi, Rewari, Dharuhera, Neemrana). This ICD is spread across 90 acres and is equipped to handle around 2,60,000 TEUs per year. The port was first included as a case study in the NTRS 2024. The inclusion of Garhi Harsaru as a pilot port provides an opportunity to benchmark the performance of the ICD vis-à-vis the previous year.

5.1.1. Imports

The assessment of import cargo handled by ICD Garhi Harsaru during the study period provides insights into aspects related to procedural efficiency, by benchmarking its performance against the overall import performance of ICDs covered in the NTRS 2025 sample. The analysis covered 779 – out of 910, after accounting for exclusions – unique BoEs filed at the ICD during the study period (1st–7th January 2025) (refer to Annexure Table A14).

ICD Garhi Harsaru experienced a dip in ART in 2025 (57:56 hours) in comparison to 2024 (61:12 hours). The ICD also continued to report a lower ART compared to the overall ART (83:41 hours) observed across ICDs under NTRS 2025. Notably, there was an 89% reduction in ART for BoEs filed in advance—dropping from 56:07 hours in 2024 to 06:08 hours in 2025. In line with the sample ICDs, there was a considerable drop in the share of advance filing at ICD Garhi Harsaru from 98% in 2024 to 1.67% in 2025. Further, it was observed that all advance BoEs were RMS-facilitated and pertained to AEO clients. Also, the ART for facilitated BoEs and those filed by AEOs – which were considerably lower as compared to the overall average of sample ICDs for NTRS 2025 – remained similar in comparison to the 2024 levels.

Figure 23: Import Release Time: ICD Garhi Harsaru

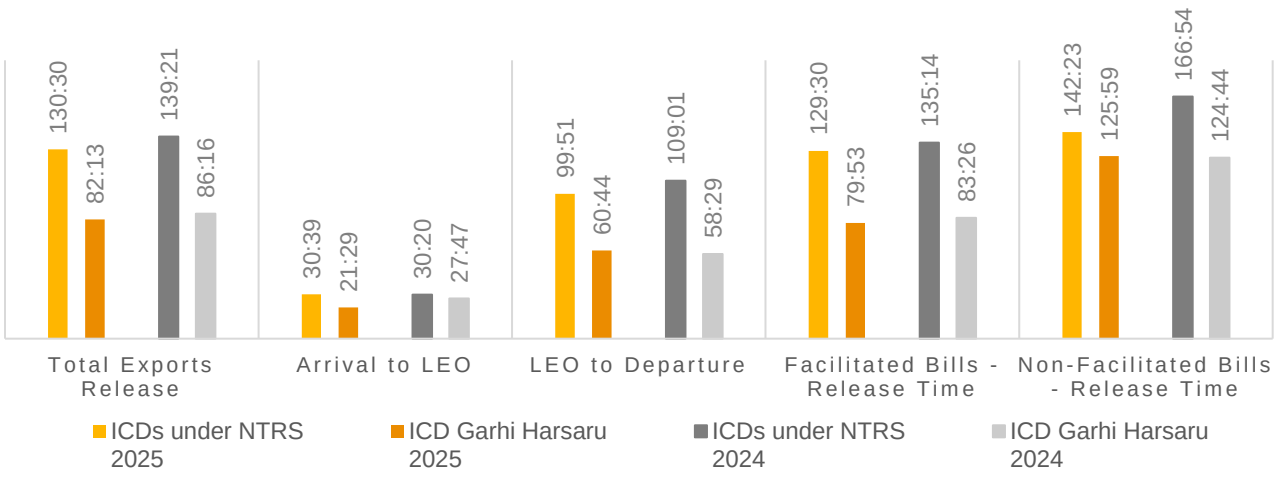


4.1.2. Exports

Out of 641 SBs filed at ICD Garhi Harsaru during the study period, analysis was conducted on 485 SBs after necessary exclusions were made. The export ART for Garhi Harsaru stood at 82:13 hours – down from 86:16 hours reported in 2024 – which was considerably lower than the overall ART for ICDs (130:30 hours). A deep dive into the results revealed that, compared to 2024, the time taken from Arrival to LEO at ICD Garhi Harsaru has decreased i.e. from 27:47 hours to 21:29 hours. However, the ICD displayed a surge in time taken from LEO to Departure—from 58:29 hours in 2024 to 60:44 hours in 2025. It was observed that the post-regulatory stage accounted for over 75% of the total export release time at the ICD (refer to Annexure Table A15).

For facilitated cargo, the ART at Garhi Harsaru was 79:53 hours, which remains significantly lower than both the overall ICD average in the category (129:30 hours) and the ART achieved in 2024 (83:26 hours). In contrast, non-facilitated export cargo handled at ICD Garhi Harsaru continued to exhibit higher release times compared to the overall export ART.

Figure 24: Export Release Time – ICD Garhi Harsaru



5.2. Kochi

Kochi is an all-weather natural harbour, strategically located near two of the world's busiest international maritime routes: (1) the Gulf–Singapore–Far East corridor, just 11 nautical miles from the port, and (2) the Suez–Singapore/Far East route, located 74 nautical miles away.

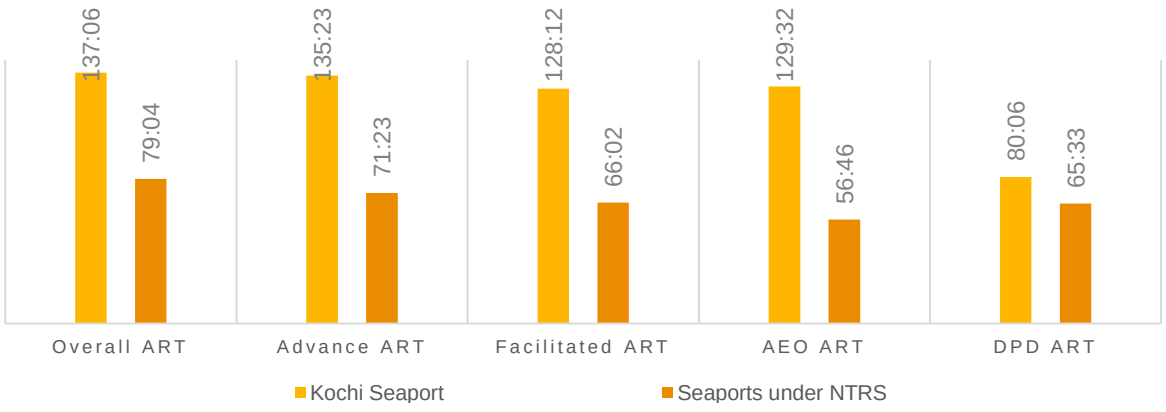
Among all major Indian ports, Kochi is the nearest to the key East–West international shipping lanes, giving it a significant geo-strategic advantage. The port is well-connected to its hinterland, encompassing Kerala, southern Tamil Nadu and southern Karnataka, via major national highways—NH 47 (Kanyakumari to Salem), NH 49 (Kochi to Madurai), and NH 17 (Kochi to Mumbai). In addition, the Indian Railways network ensures seamless connectivity to the southern and central regions of the country. Inland transportation is further enhanced by National Waterway 3, which links the port to southern Kerala. The proximity of an international airport further boosts its multimodal connectivity potential.

5.2.1. Import

During the study period, 562 BoEs were filed at Kochi Seaport, with zero exclusions from analysis (refer to Annexure Table A16). The ART at Kochi Seaport was around 137:06 hours. This performance was benchmarked against the overall average of seaports studied under NTRS 2025. Kochi consistently recorded higher release times in majority of the categories as compared to the NTRS seaports. Similarly, the ART for DPD containers at Kochi, which stood at 80:06 hours, was higher than the overall NTRS seaport DPD ART of 65:33 hours.

Interestingly, the share of Advance (91%), Facilitated (80%), and AEO BoEs (20%) at Kochi were similar to the averages observed across NTRS seaports (91%, 82% and 33% respectively). Despite the similarities in the extent of facilitation, Kochi showed significantly longer release times, particularly for Facilitated BoEs.

Figure 25: Import Release Time - Kochi Seaport

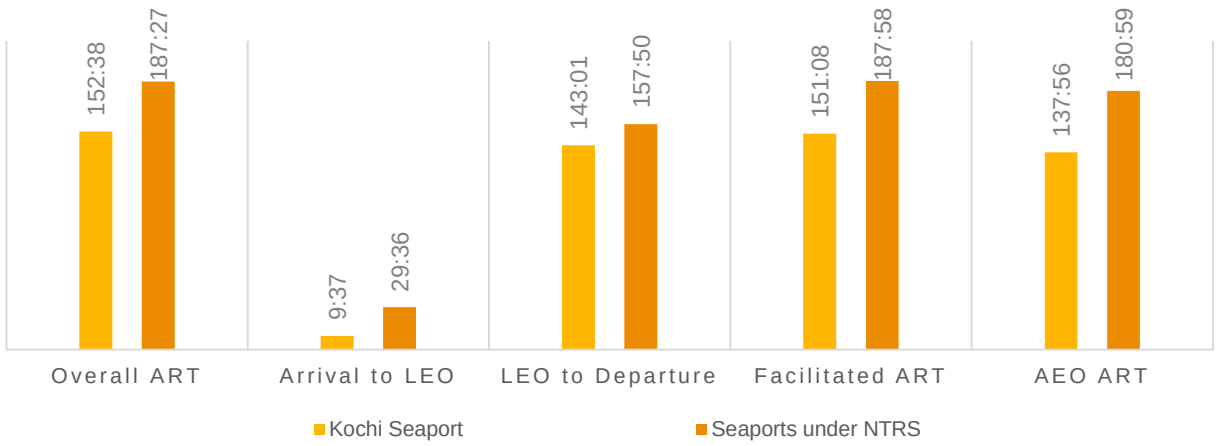


5.2.2. Export

The export analysis for Kochi seaport was based on 482 unique SBs – out of 1,708 SBs filed during the study period – after exclusions (refer to Annexure Table A17). The ART for exports at Kochi stood at 152:38 hours, which was considerably lower than the overall ART of 198:34 hours recorded for NTRS sample seaports.

It may be highlighted that is that the average time taken from Arrival to LEO Generation at Kochi was less than 10 hours, considerably below the average of around 29.5 hours recorded for NTRS sample seaports. Notably, clearance time accounted for only 6% of the total ART at Kochi. The metric was low for NTRS seaports as well, indicating post-LEO logistics delays. In terms of time taken from LEO to departure, Kochi reported lower timelines vis-à-vis NTRS seaports, reflecting relatively higher efficiency in post-regulatory logistics processes. The analysis results further revealed that Facilitated and AEO export consignments at Kochi also experienced shorter release time as compared to NTRS sample ports.

Figure 26: Export Release Time: Kochi Seaport



5.3. Jaigaon LCS

Land Port Jaigaon, situated in the Alipurduar district of West Bengal, plays a critical role in facilitating the transit of Bhutanese merchandise trade to third countries. Strategically positioned, the port is well-connected by road, located at a distance of merely 0.13 kilometers from State Highway (SH)-12A and approximately 4 kilometers from Asian Highway (AH)-48. The nearest railway connectivity is provided by the Harsimar Railway Station, located at around 17.9 kilometers from the port. Further, Jaigaon is poised to become the first ICP on the India-Bhutan international border, underlining its significance as a critical trade node in the region.

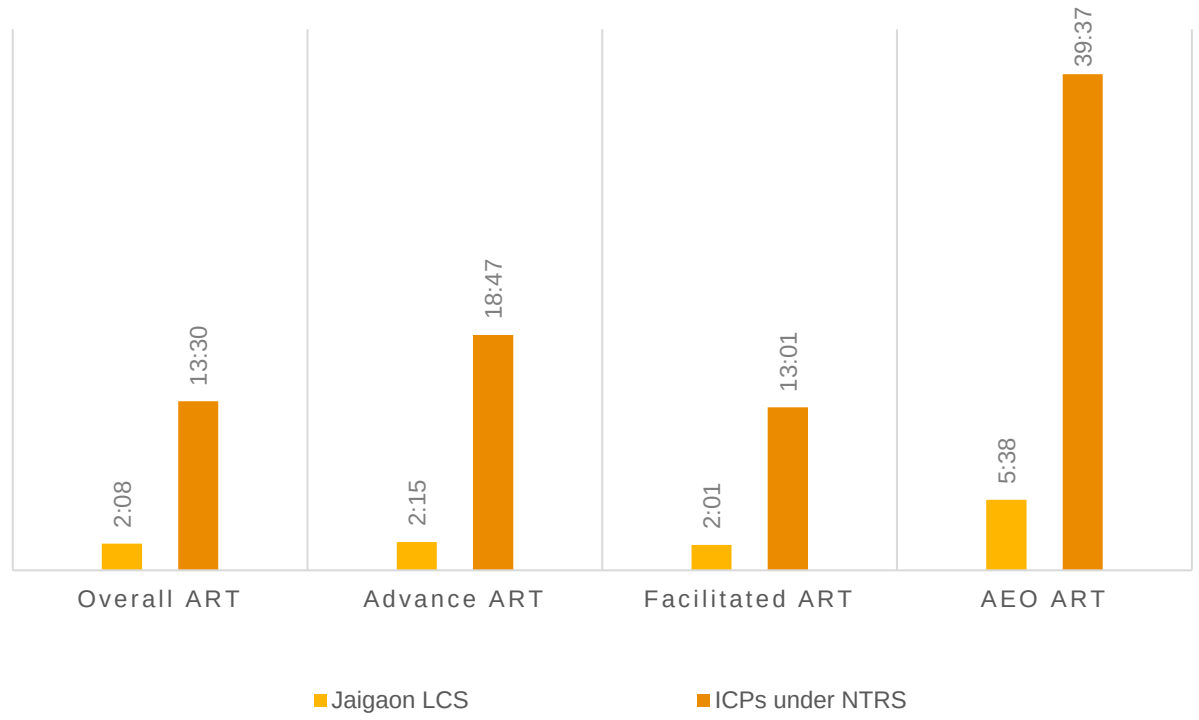
5.3.1. Import

During the study period, 1,066 BoEs were filed at LCS Jaigaon, with zero exclusions from analysis (refer to Annexure Table A18). The ART at LCS Jaigaon was 02:08 hours, lower

than the overall ART of 13:30 hours observed for sample ICPs assessed under the NTRS 2025. Further, the ART for advance BoEs was 2:15 hours vis-à-vis 18:47 hours for NTRS ports.

The ART for facilitated BoEs at Jaigaon was also merely around 2 hours. Notably, 98% of the BoEs at Jaigaon were facilitated, which was considerably higher than the overall average of 88% across sample ICPs. However, Jaigaon had a lower share of BoEs filed in advance (7%) as well as those filed by AEO clients (1%), compared to the overall averages of 17% and 8% respectively for ICPs under NTRS 2025.

Figure 27: Import Release Time: Jaigaon LCS



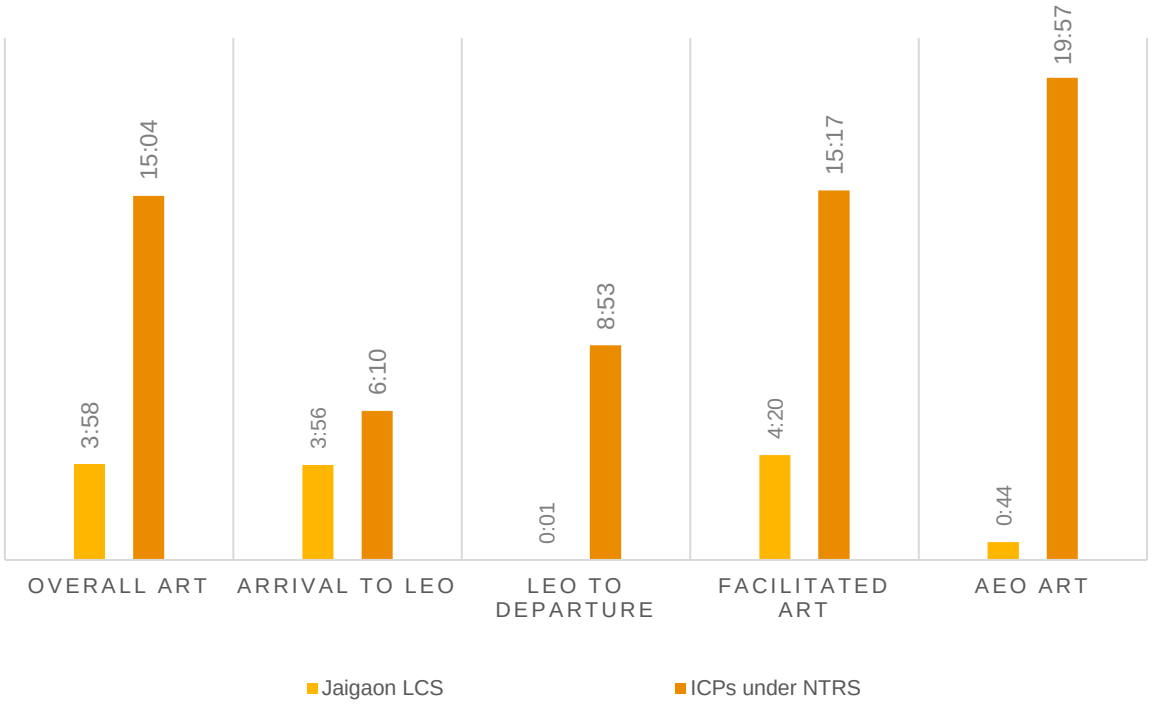
5.3.2. Export

The export analysis for Jaigaon LCS was based on 1,905 SBs filed during the study period – after exclusions (refer to Annexure Table A19). Jaigaon LCS demonstrated a notably lower export release time when compared to the ICPs studied under NTRS 2025. The overall ART at Jaigaon was recorded at just 3:58 hours, which was significantly lower than the overall average of 15:04 hours for sample NTRS 2025 ICPs. A detailed breakdown of the export process reveals that the time taken from Arrival to LEO at Jaigaon was 3:56 hours—considerably faster than the 6:10 hours average for other ICPs under NTRS 2025. Notably, LEO generation timelines post arrival accounts for 99% of the overall ART at Jaigaon, compared to 49% sample NTRS 2025 ICPs.

The time taken from LEO to Departure, typically a major component of the export ART, was minimal at Jaigaon, taking only 1 minute on an average, in stark contrast to the

overall average of 8:53 hours recorded for NTRS 2025 sample ICPs. Facilitated cargo also witnessed considerably lower ART at Jaigaon. Also, AEO consignments at Jaigaon were released in just 44 minutes, whereas the overall release time for such cargo was nearly 20 hours on an average for ICPs under NTRS 2025.

Figure 28: Export Release Time – Jaigaon LCS and ICPs under NTRS



Chapter 6 – Other Case Studies

6.1 Courier Cargo, ACC Bengaluru

In 2021, the Kempegowda International Airport, Bengaluru inaugurated India's first dedicated Express Cargo Terminal for export and import of international couriers. The international courier terminal is well connected to international markets i.e. approximately to 14 cargo airlines and over 50 domestic destinations.

With the increasing demand for express logistics, the scope of the NTRS has expanded to include international courier services. In 2024, the first analysis of the release time of such cargo at ACC Bengaluru was presented. Following the evolving scope of the study, NTRS 2025 also covers time taken for the release of courier cargo at the selected port.

6.1.1. Exports

Out of 51,126 unique SB filed during the study period, the analysis was performed – after accounting for exclusions – on 48,278 SBs. Compared to 2024, the number of unique SBs analyzed increased by approximately 39%.

Table 28: Export Analysis – Courier cargo (Bengaluru)

Parameter	2025	2024
Unique SBs Filed	51126	45051
Exclusion	2848	4066
SBs Analysed	48278	40985
Average Release Time		
ART (Arrival to Departure)	13:43	12:47
Arrival to LEO	05:30	05:27
Share of Arrival to LEO in ART	40%	43%
LEO to Departure	08:12	07:20
Share of LEO to Departure in ART	60%	57%
Facilitation		
Facilitated ART	13:43	12:24
Non-Facilitated ART	13:36	18:49

From Table 28, it can be observed that the ART for courier exports marginally increased by around 1 hour, from 12:47 hours in 2024 to 13:43 hours in 2025.

It was observed that most of the time is taken in the post-customs processes i.e. from LEO generation to departure (comprising around 60% of the overall ART). The average time taken from arrival to LEO increased marginally (by 3 minutes), while the time taken

from LEO to departure increased by nearly 1 hour, directly impacting the overall ART for export parcels.

Notably, the ART for both facilitated and non-facilitated SBs was nearly the same at 13:43 hours and 13:36 hours respectively. The ART for facilitated SBs increased from 12:24 hours in 2024 to 13:43 hours in 2025. However, the ART for non-facilitated SBs significantly decreased from 18:49 hours in 2024 to 13:36 hours in 2025.

A stage-wise analysis of the export process, from truck arrival to cargo loading in the aircraft and departure, reveals notable changes. While the overall ART remained similar between 2024 and 2025, there was a significant 70.5% reduction in the time taken from Unit Loading Advice (Stacking) to the weighment of Unit Load Devices (ULD). In contrast, an increase in the time taken from Load Advice Generation to ULD release was reported, which rose from 14 minutes in 2024 to 3:29 hours in 2025. Additionally, there was an overall increase in processing time at multiple stages, as summarised in Table 29.

Table 29: Export Process for Courier Cargo (Bengaluru)

Stages	2025	2024
Truck Arrival at Buffer Parking to Truck Arrival at Terminal Gate/Gate In	00:33	00:05
Truck Arrival at Terminal Gate to Weighment of Cargo	00:46	00:17
Weighment of Cargo to Truck Docking	00:22	00:02
Truck Docking to Unloading of Cargo from Truck	00:26	00:42
Unloading of Cargo from Truck to ULD (Stacking)	03:19	03:59
Unit Loading Advice (Stacking) to Weighment of ULD	01:53	06:24
Weighment of ULD to Load Advice Generation	04:07	03:35
Load Advice Generation to ULD Release by Custodian	03:29	00:14
ULD Release by Custodian to Loading of Cargo on Aircraft	01:33	01:13
Loading of Cargo on Aircraft to Departure	01:06	00:44

6.1.2. Import

The assessment of the import process with respect to courier cargo at ACC Bengaluru provides insights into relevant procedural aspects at the dedicated courier cargo terminal. With over 11,000 BoEs analysed, the ART improved, reducing from 39:49 hours in 2024 to 35:46 hours in 2025. In terms of path-to-promptness indicators, the ART for BoEs filed in advance saw a decline of nearly 40% from 9:15 hours in 2024 to 5:36 hours in 2025.

Similarly, a decline of 3 hours in ART was observed in facilitated BoEs from 36.5 hours in 2024 to 33.5 hours in 2025. In contrast, the ART for AEO clients increased from 24:18 hours in 2024 to around 26 hours in 2025. The share of AEO consignments dipped slightly from 19% to 17%.

While the share of BoEs requiring amendments remained low, it increased from 0.20% in 2024 to 0.49% in 2025. The ART of bills requiring amendments, though reduced from around 317 hours to 284 hours, continues to be significantly high.

Table 30: Import Analysis – Courier Cargo (Bengaluru)

Parameter	2025	2024
Unique BoEs filed	11845	14511
Exclusion	68	693
BoEs Analysed	11777	13818
Average Release Time		
Arrival to OOC	35:46	39:49
Path to Promptness		
Advance ART	05:36	09:15
Advance BoE Share	64%	67%
Facilitated ART	33:36	36:38
Share of RMS Facilitated BoEs	97%	90%
AEO ART	25:54	24:18
AEO Share	17%	19%
Impact of Amendments		
ART of BoEs involving Amendments	284:26	317:18
Share of BoEs involving Amendments	0.49%	0.20%

An examination of the stages of import release process for courier cargo in 2025 reveals a shift in the time taken across various activities when compared to 2024. For instance, the average time taken from aircraft arrival to unloading of cargo increased slightly from 26 minutes to 37 minutes. However, the subsequent stage—from unloading to entry into the terminal or arrival scan—improved, with the average duration dropping significantly from 1:37 hours in 2024 to 53 minutes in 2025.

Table 31: Import Process for Courier Cargo (Bengaluru)

Particulars	2025	2024
Aircraft Arrival at Airport to Unloading of Cargo from Aircraft	00:37	00:26
Unloading of Cargo from Aircraft to Entry of Cargo/Arrival Scan	00:53	01:37
Entry of Cargo/Arrival Scan to Segregation of Cargo	NA[4]	01:56
Segregation of Cargo in Truck Gate In		46:57
Entry of Cargo/Arrival Scan to Truck Gate In	57:15	-
Truck Gate In to Loading of Cargo on Truck	01:48	44:29
Assessment to Payment	31:57	37:35
OOC to Gate Out	01:45	46:13

The time taken from arrival scan to truck gate in continued to be high at 57:15 hours. However, in terms of handling of cargo, notable improvements were observed, with time taken for loading on truck post the gate in of truck displaying a considerable dip from 44:29 hours in 2024 to merely 1:48 hours in 2025. In terms of post clearance logistics processes, the average time taken from OOC to Gate Out improved significantly, dropping from 46:13 hours in 2024 to 1:45 hours in 2025. Further, the average time taken from assessment to payment was also lower in 2025 (31:57 hours) as compared to the previous year. Overall, the 2025 data reflected considerable improvements in key operational stages, particularly in the post-assessment and post-OOC stages, indicating lower delays by the trade and streamlined logistics processes.

In terms of the segregation of cargo, the segregation report is filed online by the custodian and made accessible to the importer so that necessary amendments can be made in cases of excess lading or short lading. ART varies based on cargo having excess lading, short lading or normal lading. In 2025, majority of the consignments fell under normal lading (99.77%) with an ART of 42:54 hours, slightly higher than the previous year. Excess lading, though comprising a very low share (0.16%), saw a significant rise in ART, reaching around 101 hours in 2025. Short lading represented a negligible share and posted similar timelines as compared to the previous year.

Table 32: Impact of Segregation and Demurrage

Particulars	Share (2025)	ART (2025)	Share (2024)	ART (2024)
Segregation Status ART				
Excess Lading	0.16%	101:00	0.33%	69:49
Normal Lading	99.77%	42:54	99.66%	39:43
Short Lading	0.07%	55:12	0.01%	55:21

In 2025, around 12% of the consignments incurred demurrage charges, up from 10% in 2024. The total demurrage value also rose substantially to around ₹12.87 lakh, compared to approximately ₹9.27 lakh incurred in the preceding year. Despite this increase in

[4] Data on Segregation of Cargo not received; therefore, the average time taken from arrival scan to truck gate in has been incorporated in this year's analysis

incidence and cost, the ART for demurrage consignments remained largely unchanged at around 209 hours in 2025, similar to around 211 hours reported in 2024.

Table 33: Impact of Demurrage at Courier Cargo (Bengaluru)

Particulars	2025	2024
Share	12%	10%
Value	₹ 12,87,119	₹ 9,27,496
ART	209:15	211:18

Also, ART varied depending on the type of bill of entry. The various types of BoE include: Courier Bill of Entry-XI (CBE-XI) for documents, CBE-XII for free gifts and samples, CBE-XIII for low-value dutiable consignments[5], and CBE-XIV for other dutiable consignments.

Table 34: Variation by the Type of BoE at Courier Cargo (Bengaluru)

BoE Type	2025		2024	
	ART	Share of Advance Filing	ART	Share of Advance Filing
XI	10:01	79.22%	04:53	100%
XII	-	-	13:25	96%
XIII	53:03	66.37%	37:38	88%
XIV	59:56	44.93%	69:51	97%

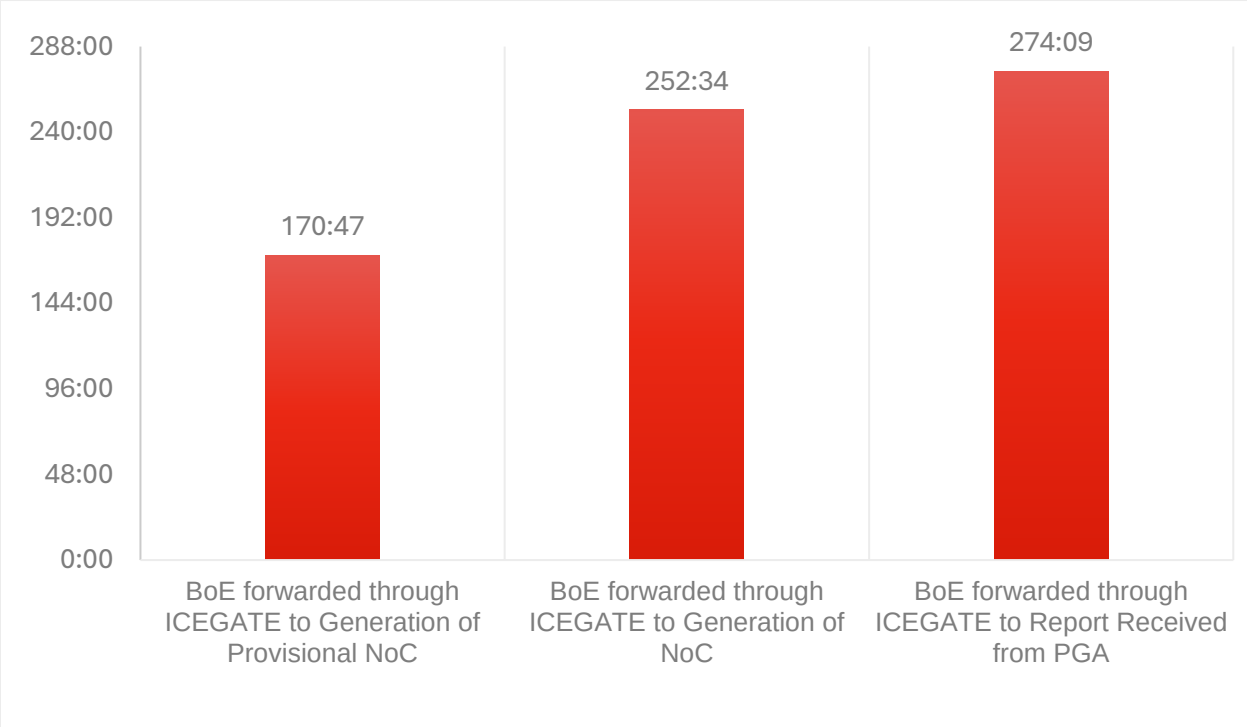
From the table, it can be noted that ART and share of advance filing vary significantly across different types of BoEs. CBE-XI, with the highest share of advance filing at 79.22% in 2025, recorded the lowest ART of 10:01 hours; however, ART for this BoE Type was higher in 2025 as compared to 2024, wherein an ART of under 5 hours was recorded for this category. CBE-XIII and XIV, with lower advance filing shares of 66.37% and 44.93% respectively, recorded considerably higher ARTs at 53:03 hours and 59:56 hours in 2025. These trends reaffirm the strong correlation between advance filing and faster clearance, especially for documents and low-value consignments.

[5] If the assessable value of goods does not exceed one lakh (INR 1,00,000)
https://courier.cbic.gov.in/ECCS/PN%20Mumbai/Public_Notice_25MUMBAI.pdf

6.2 Case Study for FSSAI – Imports

The NTRS 2025 study attempted to explore the time taken for import clearance processes at FSSAI based on data received from the PGA. FSSAI has been a pioneering government agency in adopting digitalization of processes through an online system for clearance of food imports, Food Import Clearance System (FICS)[6]. This is seamlessly integrated with the Customs ICEGATE portal through SWIFT. The integration enables a streamlined and paperless process for food import documentation and regulatory clearance.

Figure 29: Time Taken for Key Processes at FSSAI



The time taken by FSSAI for import clearance processes can be categorized based on the nature of imported cargo. For time-sensitive consignments, a Provisional No Objection Certificate (P-NOC) is issued by the Authorizing Officer (A.O.) based on the importer's undertaking, without waiting for the final lab analysis report. For other consignments, a regular No Objection Certificate (NOC) is issued after the completion of testing.

For this analysis, data received – for the sample period 01st to 07th January 2025 – from FSSAI was used. Figure 29 presents the average timelines at FSSAI for key processes with respect to the clearance of food import consignments. As per analysis results, the

[6] Food Import Clearance System
https://fics.fssai.gov.in/AOLogin.aspx

average time taken from the forwarding of the BoE through ICEGATE to the generation of the P-NoC was approximately 170:47 hours for relevant consignments, while it took around 252:34 hours for the generation of regular NoC. The average time taken from forwarding of BoE to the receipt of report from FSSAI was 274:09 hours as per data received from FSSAI.

Table 35 presents a stage-wise breakdown of the time taken for various processes with respect to import consignments marked to FSSAI. As per analysis results, an initial delay was faced from forwarding of the BoE to FSSAI and the submission of the application by the trader, which takes around 60:15 hours on an average. This delay by the trade may also include cases of advance filing by the trader/CHA, wherein the actual application was submitted only once the goods arrived at the port. Once the application is submitted, scrutiny by the Authorizing Officer (AO) was completed in around 14.5 hours. This process involves examining accompanying documents to verify compliance with the prescribed standards for food articles, ingredients and additives under the Food Safety and Standards (FSS) Regulation.

Table 35: Stage-Wise Analysis for BoEs Marked to FSSAI

Particulars	Timelines
Forwarded to PGA to Submission of Application by the Trader	60:15
Submission of Application by the Trader to Scrutiny of Application	14:34
Scrutiny of Application to Fee Charged	65:40
Fee Charged to Sample Collection	39:16
Sample Collection to Generation of P-NOC	23:16
Generation of P-NOC to Lab Report Generation	72:53
Lab Report Generation to Generation of NoC	04:13
Generation of NoC to Received Report from PGA	42:55

The next stage—from completion of application scrutiny to the charging of testing fee—took 65:40 hours, reflecting a significant delay, including likely delays by the trade side in responding to the fee intimation and making the payment. After payment, sample collection was carried out in 39:16 hours on an average, with nearly 89% of consignments undergoing sampling as per information received. For time-sensitive consignments, P-NoC was issued to the customs in 23:16 hours post sample collection, allowing for movement of consignments to relevant storage facilities without waiting for the lab analysis report. Lab report generation took more than 72 hours from the generation of P-NoC for such consignments on an average. Following the lab report generation, the issuance of the final NoC occurred swiftly at FSSAI i.e. within 4:13 hours on an average. However, delays were considerable from the issuance of NOC to the receipt of final report from FSSAI, a process which took as much as 42:55 hours as per analysis results.

Annexures

Table A1: Import Sample Size

	BEs Filed					Exclusions[7]				
Ports	**2025**	**2024**	**2023**	**2022**	**2021**	**2025**	**2024**	**2023**	**2022**	**2021**
Seaports	**30523**	**24352**	**28474**	**30240**	**26225**	**14**	**79**	**62**	**122**	**731**
Chennai	8709	5634	7181	10709	6197	1	9	5	24	231
Kolkata	1446	1315	1662	1631	1881	2	3	9	7	23
Mundra	2655	2765	2835	2633	2556	2	26	7	15	38
Nhava Sheva	17713	14638	16796	15267	15591	9	41	41	76	439
ICDs	**3066**	**2194**	**2490**	**3400**	**3580**	**134**	**247**	**220**	**863**	**1081**
Ludhiana	203	158	245	187	254	14	3	0	0	3
Tughlakabad	1527	1041	1225	2015	2408	23	100	103	6	379
Whitefield	1336	995	1020	1198	918	97	144	117	857	699
ACCs	**28592**	**27513**	**29189**	**28916**	**25779**	**20**	**40**	**35**	**56**	**348**
Ahmedabad	381	343	369	369	353	0	0	0	2	0
Bengaluru	6531	5920	6573	6100	5243	3	6	6	25	104
Chennai	4566	4296	4613	4554	4494	3	7	6	5	33
Delhi	8642	8625	8309	8012	7095	5	10	12	4	60
Hyderabad	1034	880	1227	1219	1028	2	2	0	5	24
Mumbai	7438	7449	8098	8662	7566	7	15	11	15	127
ICPs	**1010**	**452**	**568**	**567**	**511**	**42**	**5**	**1**	**103**	**0**
Petrapole	395	304	367	279	261	1	3	1	103	0
Raxaul	615	148	201	288	250	41	2	0	0	0

[7] Exclusions: Bills of Entry were excluded where OOC was granted post 7th February 2025 or Arrival of cargo happened before 1st December 2024.

Table A2: Port-wise Import Average Release Time 2021 - 2025

Port	2025	2024	2023	2022	2021
Seaports					
Chennai	**88:42**	88:22	86:39	93:07	102:46
Kolkata	**140:45**	121:15	126:15	144:23	144:45
Mundra	**55:34**	91:15	71:14	106:56	137:58
Nhava Sheva	**72:50**	83:26	83:44	88:23	100:08
Kochi	**137:06**	-	-	-	-
ICDs					
Ludhiana	**122:34**	110:29	85:30	76:02	141:43
Tughlakabad	**78:19**	74:40	70:01	91:04	98:38
Whitefield	**82:12**	90:05	70:12	88:08	89:03
Garhi Harsaru	**57:56**	-	-	-	-
ACCs					
Ahmedabad	**21:42**	65:52	47:34	51:12	68:29
Bengaluru	**40:50**	43:27	45:50	54:55	57:15
Chennai	**39:04**	38:25	43:28	43:26	52:25
Delhi	**35:03**	39:16	43:17	42:32	54:56
Hyderabad	**31:20**	25:12	35:49	64:11	77:21
Mumbai	**45:08**	45:06	45:34	54:37	66:46
ICPs					
Petrapole	**20:02**	15:53	40:15	31:18:00	24:24
Raxaul	**7:42**	16:16	16:26	8:21:00	5:59
LCS Jaigaon	**2:08**	-	-	-	-

Table A3: Export Sample Size

	SBs Filed					Exclusions[8]				
	2025	2024	2023	2022	2021	2025	2024	2023	2022	2021
Seaports	**45098**	**39630**	**43281**	**42751**	**41101**	**11357**	**8179**	**13321**	**26386**	**30647**
Chennai	7190	6427	6656	6698	6153	4138	4216	3783	5685	5898
Kolkata	1561	1546	1658	1531	1654	684	239	558	880	1539
Mundra	8308	9479	9444	8447	9797	840	1828	2021	3001	2152
Nhava Sheva	28039	22178	25523	26075	23497	5695	1896	6959	16820	21058
ICDs	**3760**	**4033**	**3512**	**3658**	**3681**	**341**	**733**	**239**	**990**	**2494**
Ludhiana	495	467	478	476	501	7	4	0	5	117
Tughlakabad	1749	1599	1662	1681	1783	18	16	19	29	1500
Whitefield	1516	1967	1372	1501	1397	316	713	220	956	877
ACCs	**36813**	**34531**	**33109**	**32871**	**29411**	**8176**	**2122**	**6198**	**6249**	**8454**
Ahmedabad	2695	2408	2318	2314	1945	0	1179	1	117	1006
Bengaluru	6679	6093	5825	5627	5172	212	0	0	2976	2627
Chennai	4589	4253	4038	3886	3510	100	441	1076	675	470
Delhi	12139	12132	11086	11569	10212	4878	157	139	2240	3475
Hyderabad	1455	1223	1322	1453	1280	393	233	511	7	29
Mumbai	9256	8422	8520	8022	7292	2593	112	4471	234	847
ICPs	**4733**	**3365**	**3956**	**5165**	**2915**	**997**	**186**	**553**	**164**	**783**
Petrapole	1946	1083	1276	1554	1462	441	56	28	158	783
Raxaul	2787	2282	2680	3611	1453	556	130	525	6	0

[8] Exclusions: LEO after 7th February 2025 and data inconsistencies – data mismatch between regulatory and logistics datasets, data entries, LEO before arrival, and LEO after departure

Table A4: Export Release Time with Components 2022 – 2025

Port	Arrival to LEO				LEO to Departure				Export ART			
	2025	2024	2023	2022	2025	2024	2023	2022	2025	2024	2023	2022
Seaports												
Chennai	33:12	36:17	23:54	20:38	184:51	198:34	169:28	162:06	218:04	234:52	193:22	181:38
Kolkata	31:57	42:05	25:14	24:13	149:22	162:00	151:39	162:49	181:19	204:06	176:53	187:02
Mundra	20:45	25:47	18:05	26:39	131:47	182:05	176:18	176:25	152:33	207:52	194:24	202:49
Nhava Sheva	34:37	19:00	19:09	33:02	171:15	198:39	146:37	153:32	205:52	217:40	165:46	186:34
Kochi	9:37				143:01				152:38			
ICDs												
Ludhiana	34:30	22:28	15:36	24:24	78:10	77:00	58:48	73:33	112:40	99:39	74:25	97:54
Tughlakabad	27:52	32:16	32:20	42:58	123:29	125:12	128:32	153:41	151:21	157:28	160:52	196:21
Whitefield	32:48	30:43	40:52	87:12	76:49	100:23	66:52	134:42	109:38	131:07	107:45	190:17
Garhi Harsaru	21:29				60:44				82:13			
ACCs												
Ahmedabad	3:09	6:08	5:30	6:30	9:31	33:19	17:15	73:08	12:40	38:52	22:45	73:26
Bengaluru	3:14	2:44	2:51	2:05	36:55	32:28	26:23	28:06	40:10	35:13	29:14	30:05
Chennai	2:29	3:01	2:06	1:27	18:58	20:02	15:20	22:10	21:27	23:03	17:27	23:25
Delhi	6:14	5:18	5:38	5:57	32:01	26:22	24:53	31:47	38:16	31:40	30:32	37:33
Hyderabad	1:16	0:56	2:14	11:17	21:00	22:18	18:27	25:17	22:17	23:15	20:42	25:30
Mumbai	3:57	2:56	2:57	2:25	28:14	29:28	30:37	29:36	32:12	32:24	33:34	30:38
ICPs												
Petrapole	8:56	8:39	6:51	26:36	13:05	9:51	7:14	24:56	22:02	18:30	14:06	50:59
Raxaul	3:47	3:57	3:13	3:55	5:16	4:30	6:10	8:11	9:03	8:28	9:24	10:15
LCS Jaigaon	3:56				0:01				3:58			

Table A5: Level of Facilitation for AEO Clients for Imports

	2025								2024							
Category	AEO Advance		Non AEO Advance		AEO RMS		Non-AEO RMS		AEO Advance		Non AEO Advance		AEO RMS		Non-AEO RMS	
	ART	% Share	ART	% Share	ART	% Share	ART	% Share	ART	% Share	ART	% Share	ART	% Share	ART	% Share
Seaports	51:03	31%	81:45	60%	51:43	31%	74:47	51%	54:30	95%	90:52	89%	52:23	92%	80:52	73%
ICDs	46:38	0.07%	75:09	0.5%	62:47	20%	74:06	61%	54:38	58%	74:40	69%	55:42	97%	74:45	81%
ACCs	23:25	25%	33:42	34%	29:06	40%	39:39	50%	24:13	61%	34:54	57%	31:59	96%	42:4	84%
ICPs	45:20	4%	10:26	13%	37:16	7%	10:22	80%	13:07	47%	15:39	20%	51:13	95%	17:13	84%

Table A6: Arrival to OOC – Journey of BoE

Category	Arrival to Assessment			Assessment to Duty Payment			Duty Payment to OOC		
	Overall	Facilitated	Non-Facilitated	Overall	Facilitated	Non-Facilitated	Overall	Facilitated	Non-Facilitated
Seaport	100:41	90:43	108:59	113:53	117:45	96:31	53:55	51:46	62:39
ICDs	100:21	86:09	111:14	76:02	79:05	63:58	89:27	87:20	97:27
ACCs	30:58	25:06	67:53	62:02	63:38	47:00	14:20	12:45	26:52
ICPs	07:09	05:16	10:29	15:28	16:26	8:17	11:40	12:24	06:33

Table A7: Impact of Amendments on Import ARTs

Category	Overall ART			ART for BoEs involving Amendment			Share of BoEs involving Amendment			Time Taken in Amendment		
	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
Seaports	**79:04**	87:32	85:42	**91:21**	102:43	94:31	**51%**	45%	50%	**17:05**	16:35	15:14
ICDs	**83:41**	84:15	71:46	**117:25**	140:41	120:13	**27%**	17%	14%	**17:59**	20:57	18:57
ACCs	**39:20**	41:30	44:16	**49:53**	54:11	60:06	**27%**	26%	26%	**4:16**	6:27	7:40
ICPs	**13:30**	16:00	31:47	**13:59**	14:35	26:38	**8%**	5%	8%	**02:30**	0:00	6:13

Table A8: Interest on Duty and Fine Paid for Imports during the Study Period

Category	Share Paying Interest on Duty			Total Interest Amount (INR)			Share Paying Fine for Delayed Filing			Total Fine Amount (INR)		
	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
Overall	**33%**	35%	34%	**2.67 Cr.**	2.1 Cr.	2.1 Cr.	**8%**	9%	7%	**8.45 Cr.**	7.4 Cr.	6.4 Cr.
Seaports	**32%**	36%	30%	**1.85 Cr.**	1.5 Cr.	1.6 Cr.	**9%**	9%	8%	**4.95 Cr.**	4.0 Cr.	3.7 Cr.
ICDs	**51%**	49%	49%	**0.44 Cr.**	0.13 Cr.	0.17 Cr.	**9%**	13%	11%	**0.58 Cr.**	0.35 Cr.	0.34 Cr.
ACCs	**32%**	33%	36%	**0.37 Cr.**	0.45 Cr.	0.37 Cr.	**7%**	8%	6%	**2.90 Cr.**	3.0 Cr.	2.3 Cr.
ICPs	**19%**	14%	15%	**18641**	7832	13751	**1%**	1%	1%	**46000**	19534	30000

Table A9: Pre-payment Customs Compliance Verification (PCCV) – 2024 - 25

Category	2025				2024			
	Arrival to Registration	Registration to PCCV	PCCV to Payment	Payment to OOC	Entry to Registration	Registration to PCCV	PCCV to Payment	Payment to OOC
Seaport	34:32	15:10	63:45	0:11	38:06	18:31	60:57	0:03
ICDs	53:58	13:54	65:51	0:52	56:35	7:26	51:19	0:03
ACCs	28:19	02:07	18:03	0:06	30:28	2:42	19:03	0:03
ICPs	03:00	0:47	07:34	0:03	0:38	2:25	18:23	0:03

Table A10: PGA-Wise Analysis of Import ART

Category	AQCS			CDRUG			FSSAI			PQIS			WCCB		
	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
Seaport	**120:51**	131:44	122:46	**102:39**	86:22	88:40	**170:54**	162:22	166:54	**142:43**	165:48	132:17	**76:58**	109:49	110:19
ICDs	**125:02**	103:05	153:15	**99:25**	125:45	46:27	**171:24**	88:33	136:55	**76:41**	126:33	115:13	-	81:53	113:25
ACCs	**134:23**	123:41	100:32	**56:51**	55:14	57:47	**214:23**	252:58	197:28	**167:53**	155:27	171:51	**79:23**	52:09	51:09
ICPs	**3:51**	-	-	**2:10**	-	-	**7:10**	-	-	**-**	-	-	**-**	-	-

Table A11: Stage-wise Assessment of Factory Stuffed Cargo

ICD	ART (ICD Gate In to Loading on Rake)			Arrival to LEO			LEO to Loading on the Rake			Loading on the Rake to Rake Dispatch		
	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
Ludhiana	**78:07**	80:16	62:09	**13:26**	-	-	**64:40**	67:20	46:43	**0:00**	0:00	1:13
Tughlakabad	**71:27**	71:23	70:18	**26:38**	-	-	**44:48**	44:17	20:54	**1:06**	1:26	1:19
Whitefield	**110:24**	134:10	87:07	**36:57**	-	-	**73:27**	71:35	32:22	**4:43**	0:48	0:00

Table A12: Stage-wise Assessment of ICD Stuffed Cargo for Exports

ICD	ART (ICD Gate In to Loading on Rake)			ICD Gate In to Unloading			Unloading to LEO			LEO to Stuffing Job Order			Stuffing Job Order to Stuffing			Stuffing to Loading on the Rake			Loading on the Rake to Rake Dispatch		
	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
Ludhiana	144:07	112:05	85:13	**1:19**	2:33	0:20	**52:20**	27:37	17:55	**24:03**	74:00	28:49	**1:50**	8:42	26:47	**68:01**	53:10	16:38	**0:00**	0:00	1:07
Tughlakabad	162:01	169:46	174:17	**0:31**	0:38	50:00	**27:36**	32:35	31:25	**91:09**	91:20	88:57	**7:52**	9:34	8:03	**34:58**	35:51	21:23	**1:10**	1:24	0:00
Whitefield	109:07	129:38	116:30	**0:00**	14:18	2:01	**28:50**	24:46	61:36	**71:10**	90:52	60:11	**0:04**	0:56	0:16	**18:01**	14:23	15:47	**14:47**	0:24	3:35

Table A13: Intraday Clearance at ACCs and ICPs

Port Category	Time Interval	Arrival of Goods (Count of SBs)			Registration of Goods (Count of SBs)			Grant of LEO (Count of SBs)			Aircraft /Truck Departure (Count of SBs)			Time from LEO to Departure (based on aircraft/truck departure)		
		2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023	2025	2024	2023
ACC	**Midnight to 6 AM**	119	8564	1844	708	660	310	931	817	422	7942	9932	7194	23:12	25:42	24:51
	6 AM to Noon	3724	8816	3950	793	913	803	291	292	166	7557	11466	9991	33:45	28:41	23:12
	Noon – 6 PM	18446	10895	16494	15633	17770	17457	12893	15253	14206	5799	5208	4532	30:14	33:27	26:53
	6 PM to Midnight	6348	4134	4623	11503	13066	8341	14522	16047	12117	7339	5803	5194	24:13	24:04	22:43
ICP	**Midnight to 6 AM**	1260	394	472	-	-	-	-	-	-	-	1	-	-	5:11	-
	6 AM to Noon	881	838	1295	1903	900	887	1452	629	553	900	285	347	19:46	17:42	14:16
	Noon – 6 PM	1963	1558	1511	1938	1964	2063	2195	1893	2151	2305	1610	1612	7:49	4:58	4:50
	6 PM to Midnight	612	389	125	875	315	453	1069	657	699	1511	1283	1444	4:03	5:17	6:38

Table A14: Import Analysis for ICD Garhi Harsaru

Parameters	2025		2024	
	ICD Garhi Harsaru	ICDs under NTRS	ICD Garhi Harsaru	ICDs under NTRS
Unique BoEs Filed	**910**	**3066**	707	2194
Exclusions	**131**	**134**	30	247
BoEs Analysed	**779**	**2932**	677	1947
ART				
ART (Arrival to OOC)	**57:56**	**83:41**	61:12	84:15
Path to Promptness				
Advance BoEs ART	**6:08**	**72:09**	56:07	71:10
Advance BoEs Share	***1.67%***	***0.65%***	*98%*	*67%*
Facilitated BoEs ART	**54:40**	**71:18**	55:50	73:24
Facilitated BoEs Share	***88%***	***82%***	*89%*	*84%*
AEO ART	**52:40**	**66:48**	49:17	69:59
AEO Share	***31%***	***21%***	*38%*	*20%*
Stage-wise Assessment				
Assessment to Payment (Payment after assessment and no deferred payment)	**48:47**	**67:45**	60:02	57:34
OOC to Gate Out	**102:53**	**84:50**	93:00	84:40

Table A15: Export Analysis of Garhi Harsaru

Particulars	2025		2024	
	ICD Garhi Harsaru	ICDs under NTRS	ICD Garhi Harsaru	ICDs under NTRS
Unique SBs Filed	**641**	**3760**	570	4033
Exclusions	**156**	**341**	120	733
SBs Analysed	**485**	**3419**	450	3300
ART				
Arrival to Departure	**82:13**	**130:30**	86:16	139:21
Stage-wise				
Filing of SB to Arrival	**22:27**	**34:07**	19:02	37:28
Arrival to LEO	**21:29**	**30:39**	27:47	30:20
LEO to Departure	**60:44**	**99:51**	58:29	109:01
Share of Arrival to LEO in ART	***26.14%***	***23.5%***	*32%*	*22%*
Share of LEO to Departure in ART	***73.86%***	***76.5%***	*68%*	*78%*
Facilitation				
Facilitated ART	**79:53**	**129:30**	83:26	135:14
Non-Facilitated ART	**125:59**	**142:23**	124:44	166:54

Table A16: Import Analysis for Kochi Seaport

Particular	Kochi Seaport	Seaports under NTRS
Unique BoEs Filed	562	30523
Exclusions	-	14
BoEs Analysed	562	30509
ART		
ART (Arrival to OOC)	137:06	79:04
Path to Promptness		
Advance BoEs ART	135:23	71:23
Advance BoEs Share	*91%*	*91%*
Facilitated BEs ART	128:12	66:02
Facilitated BoEs Share	*80%*	*82%*
AEO ART	129:32	56:46
AEO Share	*20%*	*33%*
DPD ART	80:06	65:33
Stage-wise		
Assessment to Payment (Payment after assessment and no deferred payment)	142:07	102:22
OOC to Gate Out	43:30	Overall: 27:26 (DPD): 32:15; (CFS): 25:12

Table A17: Export Analysis for Kochi Seaport

Particulars	Kochi Seaport	Seaports under NTRS
Unique SBs Filed	1708	45098
Exclusions	1226	11357
SBs Analysed	482	33741
ART		
ART (Arrival to Departure)	152:38	187:27
Stage-wise		
Filing of SB to Arrival	21:21	35:24
Arrival to LEO	09:37	29:36
LEO to Departure	143:01	157:50
Share of Arrival to LEO in ART	*6.3%*	*15.80%*
Share of LEO to Departure in ART	93.7%	*84.20%*
Facilitation and AEO		
Facilitated ART	151:08	187:58
Non-Facilitated ART	161:56	181:26
AEO ART	137:56	180:59
Non-AEO ART	155:14	190:07

Table A18: Import Analysis for Jaigaon LCS

Particulars	Jaigaon LCS	ICPs under NTRS
Unique BoEs Filed	1066	1010
Exclusions	-	42
BoEs Analysed	1066	968
ART		
ART (Arrival to OOC)	02:08	13:30
Path to Promptness		
Advance ART	02:15	18:47
Advance Share	*7%*	17%
Facilitated BoEs ART	02:01	13:01
Facilitated BoEs Share	*98%*	*88%*
AEO ART	05:38	39:37
AEO Share	*1%*	*8%*
Stage-wise		
Assessment to Payment (Payment after assessment and no deferred payment)	06:54	12:38
OOC to Gate Out	00:00	06:51

Table A19: Export Analysis for Jaigaon LCS

Particular	Jaigaon LCS	ICPs under NTRS
Unique SBs Filed	1905	4733
Exclusions	-	997
SBs Analysed	1905	3736
ART		
ART (Arrival to Departure)	03:58	15:04
Stage-wise		
Filing of SB to Arrival	14:58	30:52
Arrival to LEO	03:56	06:10
LEO to Departure	00:01	08:53
Share of Arrival to LEO in ART	*99.16%*	*49%*
Share of LEO to Departure in ART	*0.84%*	51%
Facilitation and AEO		
Facilitated ART	04:20	15:17
Non-Facilitated ART	01:02	13:53
AEO ART	00:44	19:57
Non-AEO ART	04:24	14:01