

Technology and Innovation in Indian Customs



April 2023



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Technology and Innovation in Customs

- ✓ Post-pandemic, the increasing role of technology in Customs Trade and Administration has been a global phenomenon. According to WTO, the world's focus is to secure cross-border trade through advanced technology with the help of blockchain, distributed ledger technology, big data, data analytics, artificial intelligence and machine learning (AI&ML).
- ✓ Technology can help provide better transparency, immutability and accessibility of information and data quality, as well as the sharing of relevant information on border management procedures among all stakeholders.

The Central Board of Indirect Tax and Customs (CBIC) is working towards achieving the goal to digitise the overall Indirect Tax Administration, including the Customs Administration, with a focus on the goal of plugging revenue leakage along with providing trade facilitation

CBIC is also focusing on trade facilitation to automate tax compliances with the help of technology and digitization and implemented several reform measures to smoothen trade across borders via ICEGATE and SWIFT

CBIC is working on implementing a single integrated portal for complete export, import, and transit procedures via SWIFT 2.0

Customs RMS has also effectively adopted technology and revolutionized the Customs import clearance

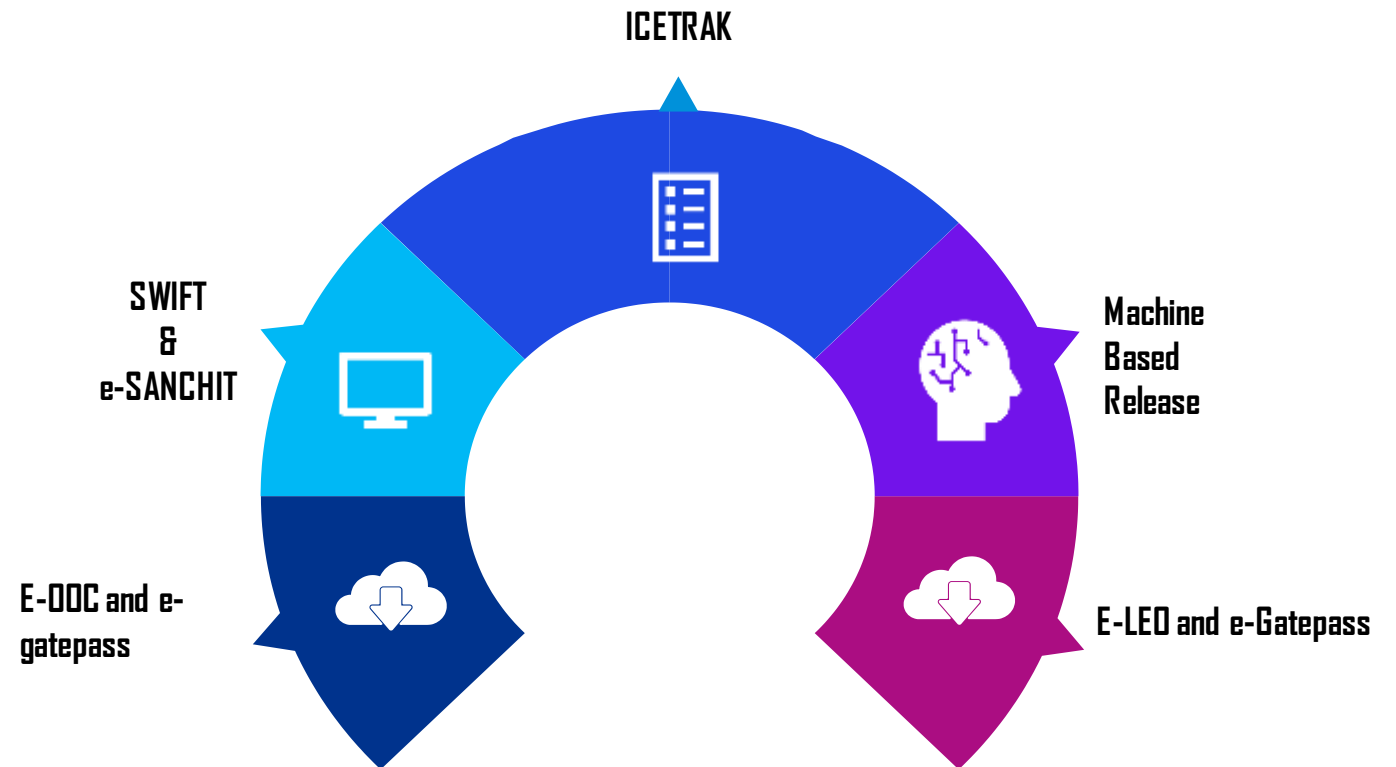
Paperless & Contactless Customs



Paperless customs measures aimed at reducing interface between the Customs authorities and the trader or his/her authorised representative by digitizing inputs to the customs regulatory processes.

Customs Single Window Environment:

- Electronic declarations
- Integration with logistics/port IS
- Paperless Transit
- E-Payments
- EDI Linkage at customs ports
- Cross-Broder data exchange
- PGAs risk criteria onboarded in RMS
- Document storage & retrieval



Single Window-SWIFT



SWIFT: Customs had introduced SWIFT (Single Window Interface for Facilitating trade) w.e.f. 01.04.2016 for ensuring ease of doing business.

This facility allows parties involved in trade and transport to lodge standardized information and documents with a single-entry point

Some of the core facilities that are being provided under Single Window through SWIFT are as follows:

- Integrated Declaration - – merging 9 separate Declarations sought by PGAs
- Automatic Routing of Bills to PGAs
- Integrated Risk Assessment
- Online grant of NOC by PGAs
- Lab Module in Indian Customs EDI Systems (ICES) for Textile Committee

Benefits of this facility are-

- Reduced cost of doing business
- Enhanced transparency
- Reduced duplicity and cost of compliance
- Optional utilization of manpower

Single Window 2.0 – Proposed Features



SWIFT 2.0 Features

Single Sign-On

- Single Sign On Platform
- Online synchronization of data
- Single form with part A (Common) and Part B (Specific)
- Approvals to be transmitted electronically

Unified Application

- Submission processing and verification in single application
- Approvals transmitted electronically
- Eliminates multiple touchpoints



Unified Dashboard

- Act as single point of visual information
- Analysis and dashboard updating in real-time
- Single touchpoint for all notices
- Robust grievance redressal mechanism

Unified Payments

- Processing fees to be paid online electronically
- Enabled by single wallet based on electronic cash ledger

Advanced Analytics in Indirect Taxation (ADVAIT)



- ✓ CBIC has been at the forefront of increasing role of Big Data, data analytics and Machine Learning in Customs Trade and Administration.
- ✓ The Project ADVAIT (Advanced Analytics in Indirect Taxes) has been rolled out in 2021, as a flagship analytics project for Indirect Taxes, by Central Board for Indirect Taxes and Customs (CBIC). The project uses capabilities of big data and Artificial Intelligence as well.

ADVAIT has been envisaged with a three-fold objective of enhancing Indirect Tax revenue, increasing taxpayer base, and supporting data-driven tax policy. ADVAIT provides business outputs in three formats

- 1 Reports
- 2 Interactive Dashboard
- 3 Analytical Models

Designed to aid and assist officers in their day-to-day operations that range from reporting and ensuring tax compliance to detecting tax evasion.

The portal has advanced analytical capabilities including **data matching, network analysis, pattern recognition, predictive analytics, text mining, forecasting and policy studies.**

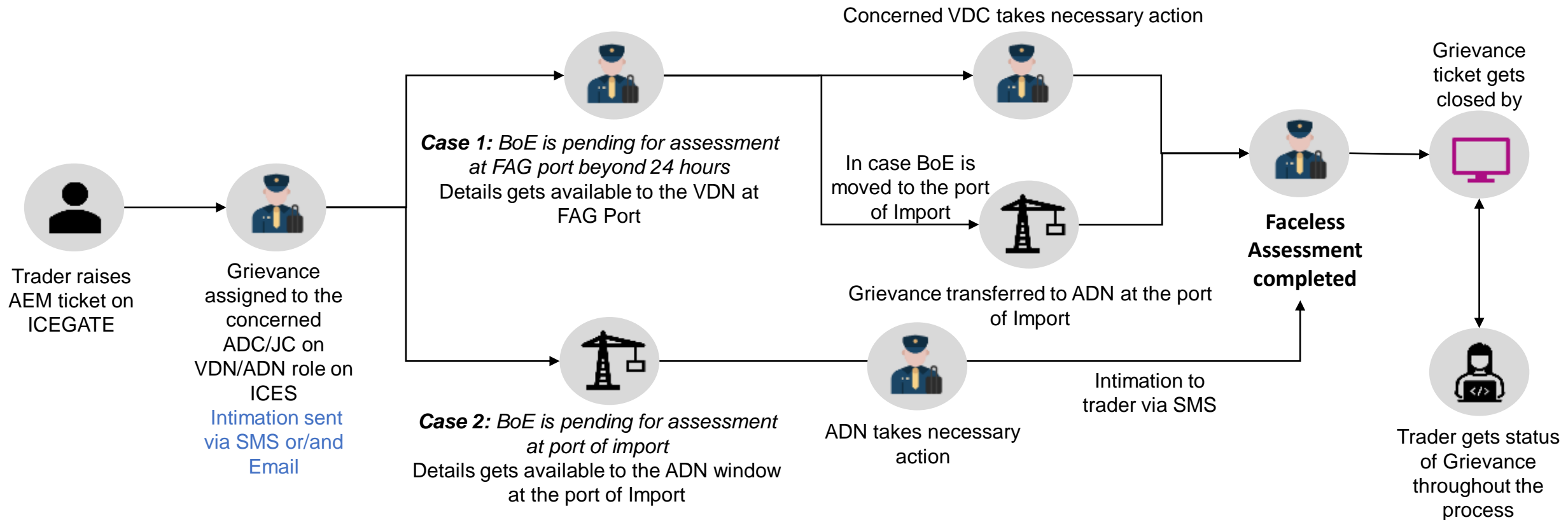


ADVAIT has been developed in a knowledge-driven data ecosystem using some of the most advanced data warehousing business intelligence solutions, keeping in view the 3 I's: **Information, Insights, Intelligence**

Anonymised Escalation Mechanism (AEM)



- ✓ As a measure of Trade Facilitation and quick grievance redressal, CBIC has implemented Anonymized Escalation Mechanism for ICEGATE registered users where one can **submit grievances pertaining to delay in Bill of Entry** clearance under faceless assessment.
- ✓ The facility also enables users to **track the status of grievances** submitted by them till the eventual resolution. Process flow given below depicts the flow of queries raised on AEM.



E-Cash Ledger



- ✓ An additional mode of duty payment to pay Custom duties **Online** in addition to Internet Banking and NEFT/RTGS
- ✓ Every transaction towards duty payment to go through ECL
- ✓ Creation of virtual account/wallet on ICEGATE
- ✓ A wallet can be activated by registered IEC holders and deposits can be made into it through internet Banking/NEFT/RTGS
- ✓ To ensure no unauthorized access of Cash Ledger account the service is only available post login and to further enhance the access control mobile and email OTP based mechanism is envisaged in e-Cash Ledger

Salient features

1

API Based Solution

2

OTP based utilization from ECL account

3

Better handling in case of transaction failure

4

Relief from double duty payment

5

Seamless and quick duty payment

6

Available post login on ICEGATE

Other technological Initiatives of Indian Customs (1/2)



✓ Pilot Project on Pre-Arrival Customs Data Exchange between India-Maldives:

A pilot project on pre-arrival Customs data exchange between India and Maldives was launched on 23.12.2021. The project leverages technology which enables the two Customs Administrations to share Customs data on real-time basis. It is expected to enhance facilitation of bilateral trade using risk management as well as aid compliance monitoring and swifter Export Import (EXIM) clearances. Pilot project on Pre-Arrival Customs Data Exchange between the two countries would fast-track Customs payments, help identify frauds and reduce the time for clearances. It will even strengthen the supply chains to further enhance bilateral trade

✓ Blockchain Based Electronic Cargo Tracking System (ECTS)

Pilot project with truck carrying domestic bonded goods from ICD Tughlakabad sealed with Electronic Cargo Tracking System (ECTS) was flagged off on 14.10.2021. This project has been conceived for moving goods to bonded warehouses and for bond-to-bond movement of imported cargo, making use of twin technologies i.e., blockchain, to have a transparent, paperless, and secure documentation system and ECTS to secure the movement of transshipment cargo and avoid theft/ pilferage.

Other technological Initiatives of Indian Customs (2/2)



✓ Improving transparency using boarding Jacket fitted with Body Worn Camera (BWC)

Customs officials clearing cargo at seaports will be provided with sports jacket with Body Worn Camera with video and audio recording facility. CBIC has made it mandatory for all boarding officers engaged in sea Customs, starting from April 15.

This will improve transparency and ease of doing business through technology and present more professionally the role of the Boarding Officer, keeping scope for upfront evidence in case of an offence or likely offence, and enhancing the protection of interest of the Customs Officer

✓ QR code-based Sampling Solution

Customs at JNPT and Chennai port have deployed an application to assist as a monitoring mechanism to capture the timestamp of activities at the various stages of entire sampling process chain of the samples drawn for testing at ports laboratory, which was not available earlier.

The new Sampling Solution provides for the time stamping at various stages of processes involved with sampling and thereby enables analysis of the time taken by various stakeholders in sampling process so that bottlenecks may be identified which was not available to trade before

Thank You