

# Indian Customs EDI Systems (ICES): Doing Business In International Trade Made Easier

The Indian Customs EDI Systems (ICES) automates more than 98% of India's Imports and Exports and is a major catalyst in speedy and transparent Customs clearances at Air Cargoes, Sea Ports and Inland Custom Stations. The dynamics of the trade have been diligently incorporated in the form of software with enough scope for future scaling up and provisioning for changes in Business Logic and Government policies.

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**N**ational Informatics Centre undertook a major initiative in the field of International Trade in the year 1992. A Feasibility study was conducted jointly by NIC and Department of Revenue to automate the procedures of Indian Customs at various International Trade locations across the country. The Indian Customs EDI Systems (ICES) was the outcome of this revolutionary study and its subsequent follow up. A more detailed requirements analysis at the New Custom House, Delhi Air Cargo, was conducted in April, 1994 and this formed the basis for the pilot version of ICES, launched in the year 1995.

## OBJECTIVES

The primary objectives which propelled the Application Development included:

- Prompt response to the needs of the trade. It would be an important part of improving ease of doing business.
- Computerize maximum Customs related functionality and procedures. At the same time, the requirement of Transparency in working would be taken into account. The various levels of Customs Officers would be accountable for their actions through an easily accessible process.
- Minimize personal interaction of Trade with Customs officers and various Government agencies like DGFT, EPCs, Ports, Airport Authority of India and Banks. This has been achieved with a robust message exchange mechanism amongst various stakeholders.
- Provide the mechanism for retrieval of consolidated information from various Custom locations to have a holistic view and make useful policy related economic decisions nationally.
- Sharing useful information with

various agencies associated with Export and Import related statistics and investigation.

Currently, the system is in operation at more than 140 locations throughout the country.

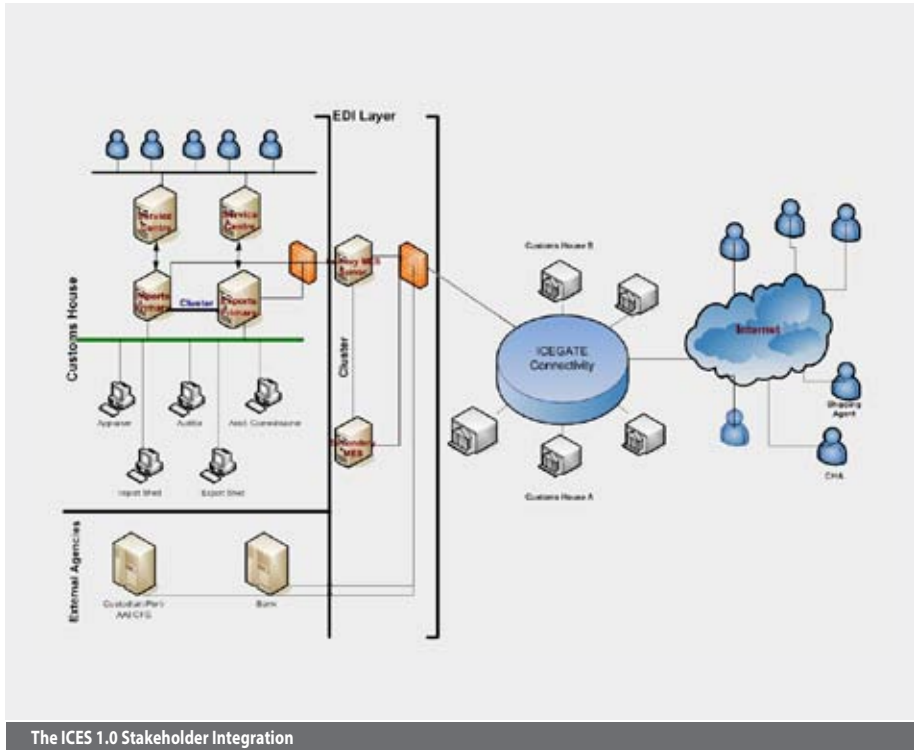
## ABOUT ICES

ICES comprises of two main sub systems, Indian Customs EDI system/ Imports (ICES/I) and Indian Customs EDI System/ Export (ICES/E). ICES/I is used for processing of Bill of Entry and ICES/E for processing of Shipping Bills. The Exporters, Importers and Custom House Agents (CHAs) transmit Bills of Entry, Shipping Bills and other related documents via the Service Centres located at the various Custom Houses and from the comfort of their premises using ICEGATE, a portal that provides e-filing services to the trade and cargo carriers and other clients of Customs Department. Subsequently, they are submitted to the Customs computer system for clearance. The trading community is not required to travel physically to the Custom House for submitting the documents except at the last stage for physical examination of goods, and for taking delivery.

The Custom House Agents use the Remote EDI System (RES) which is a standalone software package for preparation of Bill of Entry and Shipping Bills and other related documents. It has been developed by NIC as part of Indian Customs EDI System.

## ICES 1.5: THE UPDATED VERSION

Issues like distributed deployment and high setup and maintenance costs led to the Migration from ICES 1.0 to ICES 1.5. A major exercise was initiated in 2009 to migrate the then existing decentralized version of the ICES Application running at various sites to a single, uniform centralized software which culminated successfully on June 9, 2009 with the launch of



- Consolidation of Data for National Level MIS
- Centralized Directory Management
- Centralized License and Bond Management
- Accuracy, transparency, accountability and better supervision
- Reduced interface between officers and trade
- Standardized procedures across the country
- Reduction in manual administrative processes resulting in fewer errors and no duplication
- Harmonized business relationships with Customs Community members, namely Ports, DGFT, Airlines, Container Depots etc
- Electronic clearances provided quicker cargo releases, resulting in reduced dwell time
- Reduced cost on processing documents
- Electronic messaging resulting in minimized data capture

the Pilot version of the ICES 1.5 or Central Server based application. Subsequently the existing sites were migrated to the Centralized platform with minimum inconvenience to the various stakeholders. The thought process behind the activity involved the following:

- To have built in Multi Location Functionality.
- Single Database with Partitions for users to access data only for their location.
- Centralized maintenance and updation of the software.
- Faster and better communication with external stakeholders, banks etc.
- Integration would lead to a better response time in case troubleshooting is required.

### MAJOR FEATURES

- ICES 1.0 migrated to Oracle 10g Database Server/ Oracle 10g Forms/ Reports and deployed over HP/ UX
- Part of consolidation project of CBEC
- Deployed from Data Centre and accessible through high speed MPLS Wide Area Network (WAN) at Custom and Central Excise field formations number-

ing around 582 offices

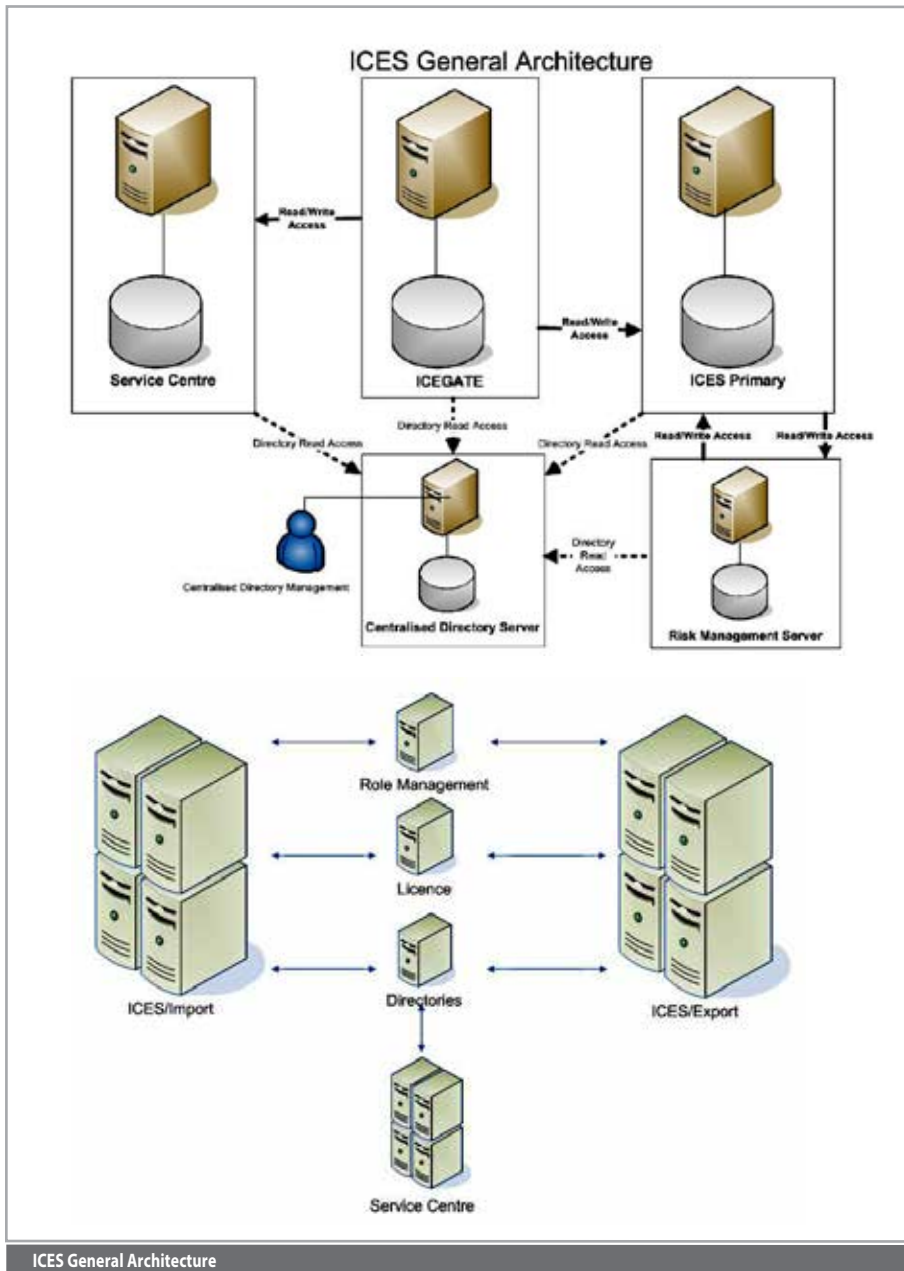
- High Availability/ resilient Infrastructure with Data Centre and Business Continuity at VSNL GK-1 and Bangla Sahib Marg, Delhi & DR Site at Chennai
- Single web based interface to users
- Tight integration with ICEGATE (Indian Customs & Excise Gateway)
- All sites provided with thin clients and application access over CITRIX.

### ADVANTAGES

- Single sign-on and central management of sites/ users by National System Manager
- National System Manager to designate the Site System Manager
- Improved User Interface on Website

- Secure data sharing between different agencies
- Accountability through Time-Stamping
- Successfully running at more than 140 locations across India.
- Customs Duty worth 700 crores being collected across the country via ICES Application daily.
- Around 12 Lakhs documents are processed monthly.
- SMS/ Email based update on Status of Document to Importers / Exporters
- Module for Return of State Levy is made by NIC, on behalf of Ministry of Textiles
- Deferred Duty Payment for specified Importers registered AEO.
- Export Duty Drawback benefits being





'Window' would allow importers and exporters to lodge their clearance documents online at a single point only. Required permissions, if any, from other regulatory agencies would be obtained online without the trader having to approach these agencies.

The Single Window Interface for Trade (SWIFT), would reduce interface with Governmental agencies, dwell time and the cost of doing business. The objectives of SWIFT are in line with two key programmes of Government namely 'Make in India' and the 'Digital India' Initiative.

- Migration of the Existing ICES Application to Oracle 12c environment.
- E-Signing of Document
- Implementation of Single Window Interface in Exports
- OTP Based Login and Processing of Documents by Customs officers and other users
- Changes pertaining to GST to be incorporated in conformity with the announcement of relevant Act.

### FINAL WORD

NIC has taken a diligent care of the complete ICT requirement of more than 98% of the International Trade of India for more than 20 years. There are other stakeholders also involved at certain stages but the Domain expertise obtained by the NIC team over the years has been instrumental. The partnership between the Central Board of Excise and Customs and the National Informatics Centre has flourished over the years and will continue growing stronger in the years to come.

paid of around Rupees 2000 crores per month, nationally.

- Return of the State Levy in Exports, for the Documents processed is ready to be paid to the tune of Rupees 300 crores.
- System Manager to assign roles to User to access ICES application.

### AWARDS & RECOGNITION

The prestigious World Customs Organization (WCO) was awarded to NIC for its contribution towards achieving the goal of Digital Customs through the ICES Application, at New Delhi.

The ICES development team members were also awarded certificates of merit for their support towards the timely implementation of the Single Window Application, a major landmark in Trade Facilitation.

### THE WAY FORWARD

As part of the "Ease of Doing Business" initiatives, the Central Board of Excise & Customs, Government of India has taken up implementation of the Single Window Project to facilitate trading across borders in India. The 'Indian Customs Single

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