Executive Summary

The Indian Customs Electronic Data Interchange System (ICES) was developed as the core ICT system through which import and export documents {Bills of Entry, Shipping Bills, Import General Manifests (IGMs) and Export General Manifests (EGMs)} were to be processed. The main objectives of ICES were to ensure uniformity of assessments and valuations; ensure faster processing; reduce transaction cost, interaction of the Trade with government agencies, and provide quick and accurate import/export statistics for compilation by the DGC&IS. ICES Ver 1.0 was initially launched as a Pilot project at Delhi Custom House in 1995. It was gradually made operational at other custom houses from 1997.

Audit reviewed the Customs EDI System for the first time in the year 2000-01 and reported its findings in CAG's Report No. 10 of 2002 (Customs). The review focused on procurement and software development. ICES 1.0 was again reviewed in the year 2008, primarily to verify whether it had mapped the processes and provisions of the Customs Act and allied rules and regulations, effectively. The audit review had revealed deficiencies in (i) system design leading to incomplete capture of data resulting in manual interventions, (ii) incorrect mapping of business rules, (iii) absence of appropriate input controls, (iv) absence of validation between 'customs tariff heading' and the serial number of the notification for ensuring correct availing of exemption notification, (v) absence of validation of licence and scheme code, (vi) inadequate change management controls and (vii) wastage of resources as the data available in the system was not utilised and manual processes were resorted instead. In all, five recommendations designed to address the system deficiencies were included in the report (Report No. PA 24 of 2009-10 Customs). The Ministry accepted all the recommendations.

ICES 1.5, an upgrade of the original ICES 1.0 Version was rolled out in a phased manner across various customs locations from June 2009. The main features of the upgraded version were a migration from Oracle database 8i to 10g, which runs in an environment with a centralised application having:

- I. Multi-locational functionality;
- II. Single database with partitions for users to access data only for their location;
- III. Centralized maintenance and updating of software.

The overall goal of the Directorate of Systems and Data Management (DoS) is to provide technical support to operations and safeguard resources by strengthening the computing infrastructure of CBEC. ICES was selected for performance audit since it forms the basis for Customs public interface and is posited to leverage the CBEC revenue administration strategy as an operational solution, which is efficient, effective, transparent and reduces transaction cost while augmenting facilitation of the trade.

In this PA, we reviewed the adequacy of the Indian Customs Electronic Data Interchange (EDI) System with a control objective based assessment:

- a. to safeguard assets (data, technology, applications, facilities and people),
- b. to maintain data confidentiality, integrity, and
- c. to ensure fulfilment of the department's business requirements stated in the Customs Act and allied rules and regulations by effectively mapping the processes and provisions of the Customs Act and allied rules and regulations through the ICES 1.5 application and its interfaces.

Audit came across systemic issues and issues involving inadequate scoping and functionality of the application. The total revenue implication of this PA report is ₹ 847.16 crore. There are 44 observations and nine recommendations. Out of nine recommendations made in this PA, CBEC accepted five recommendations.

CBEC's IS management style is repeatable but intuitive with few definable processes and creates a risk of undetected non-compliance in a rapidly changing business and technology environment. There were few qualitative changes in the management of IS while migrating from ICES 1.0 to ICES 1.5 as observed by C&AG since 2008 Performance Audit. Though DoS informed that they have drawn up risk registers and identified the risks, the register(s) were not produced to audit for scrutiny. Similarly management of benchmarks for measurement of the Key performance indicators that cover timeliness and quality of services were deficient as indicated by the systemic issues and those based on scoping and functionality of the application.