1. Introduction

AST or Assessment Information System is one of the important modules in the Income Tax Department (ITD) Applications. The Government approved the Comprehensive Computerization Programme with ITD Applications for all the important functions of the Income tax Department in 1993. This included the AST module and is currently in its third phase.

The AST module was conceptualized as an online, menu driven software capable of carrying out all assessment and related functions. This system was conceptualized in 1994 and development was completed in 1997. The objective of AST is to "assist the assessing officer in doing assessments and related proceedings". The system was to also monitor progress and results of a case at various stages viz. assessments, re-assessments, appeal, revision, rectification, penalty, waiver, settlement commission, penalty proceedings as well as prosecutions and audit objections. In practice however the software is being used for only processing income tax returns under section 143 (1) and rectification u/s 154.

There are some other important modules of the ITD Applications, which are critical for the working of the AST module. They are

- The TAS module now renamed OLTAS;
- The TDS module now renamed as e-TDS; and
- The AIS (PAN Database) module
- The IRLA module

Tax payments by the subscribers to government account, by way of Advance Tax, Self Assessment tax etc., through the authorized banks, are credited and accounted for by the banks in the OLTAS system.

Tax deducted or collected at source by entities making payments to assessees, where required to be done, is accounted for in the e-TDS System.

Using the unique assessee identification number, Permanent Account Number (PAN) which is available in the AIS module of the ITD Applications, these receipts are to be routed through IRLA and then sent to the AST module to be credited to the correct assessee. The AST

¹ AST User Manual Section 1.1

module calculates the tax due, adjusts the credits as afforded from these two systems and arrives at the net tax or refund due which is then uploaded back to IRLA, providing a snapshot of the tax payer entity's account with the department. The net tax effect appearing in the IRLA with the amount due from or to the assessee is expected to be available online to the assessee.

The following diagram shows these linkages.

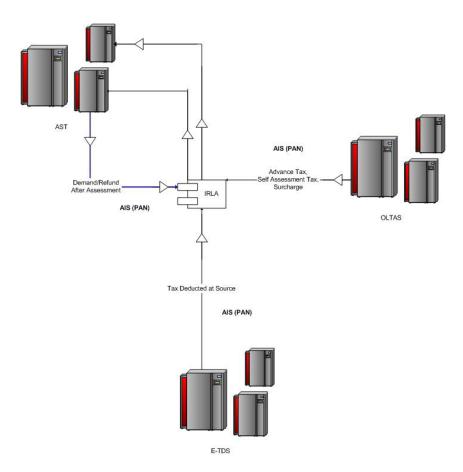


Figure 1: AST in context of other ITD Applications

The information regarding Advance Tax, Self Assessment Tax, surcharge and TDS is uploaded to IRLA through OLTAS and e-TDS and demands/refunds from AST to IRLA using the PAN for identification of assessees.

2. Audit Scope and Sampling

AST has been implemented at different stations at different points of time. Audit evaluation of the performance of the system was made for the years 2001-02 to 2004-05 taking into account the actual date of implementation at the selected stations.

AST is currently operational at 60 stations of a total of 514 stations in the country. In terms of number of assessing officers 2571 out of 4436 are using the system. An in-house application called TMS is used at the other stations.

Twelve out of these 60 stations were selected for audit, keeping in mind the coverage in terms of revenue and number of assessees and the need to arrive at a judicious mixture of the large, medium and small stations so as to present a representative picture of the country as a whole. The selection covers approximately 50% of the total number of assessing officers using AST. The sample was chosen for the 12 selected stations listed in the table as detailed below:

Table 1 : Audit Sample

Serial No./Station	Sample size for Assessing Officers Units	Sample size for Returns
1.Mumbai	2%	2%
2.Delhi	2%	2%
3.Kolkata	2%	2%
4.Chennai	2%	2%
5.Bangalore	2%	2%
6.Hyderabad	2%	2%
7.Chandigarh	5%	5%
8.Simla	5%	5%
9.Rajkot	5%	5%
10.Lucknow	5%	5%
11.Jaipur	5%	5%
12.Ranchi	5%	5%

3. Audit Objectives and Methodology

The Audit of AST system was conducted using the CoBiT framework of the IT Governance Institute, which has been adopted by the Comptroller and Auditor General of India as the framework for conducting information technology audits. The framework provides a set of internationally accepted benchmarks against which the information technology activities of an organization can be evaluated.

The four high level domains of the CoBiT framework consist of macro level statements of desired state of processes. Each of the domains is further broken down into high-level control objectives and detailed control objectives.

Two domains and eight high-level control objectives were selected in concordance with the audit objectives. The audit guidelines of the CoBiT framework were suitably adapted to the functioning of the AST system.

The audit objectives were mapped to the CoBiT framework and the following high level control objectives were selected for evaluation.

Domain

High Level CoBiT Control Objectives

Acquisition and Implementation

Identify Automated Solution

Acquire and Maintain Application Software

Develop and Maintain Procedures

Manage Changes

Delivery and Support

Manage Third Party Services

Educate and Train Users

Manage Problems and Incidents

Manage Data

Table 2: Selected CoBiT Domains and High Level Control Objectives

A uniform approach to audit all over the country was adopted by issuing:

- The relevant CoBiT guidelines;
- Questionnaires for the three different levels of the National Computer Centre, the Regional Computer Centers and the Assessing Officers; and

• A detailed Audit Work Programme.

A random sample of all assessing officers units at the concerned stations was selected as per the sampling table given above. Separate questionnaires were issued to the National Computer Centre and the Regional Computer Centres, if any, at the selected stations, and the selected assessing officer units. For each Assessing Officer Unit a random selection of 2% or 5% of the Returns filed were taken as per the sampling table given above. The detailed audit checks in the Audit Work Programme were applied as follows:

Table 3: Audit Checks at different points

Audit check	RCC	Randomly selected AO Unit	Randomly selected Returns
1.Receipt and preliminary checking of returns	Not Applicable	Applicable	Not Applicable
2.Making of Bundles	Not Applicable	Applicable	Not Applicable
3.Data entry of RRR	Not Applicable	Applicable	Not Applicable
4.Data entry of Acknowledgement Sheet	Not Applicable	Not Applicable	Applicable
5.Generation of Notices	Not Applicable	Applicable	Applicable
6.Allocation of Bundles	Not Applicable	Applicable	Not Applicable
7.Systemic errors	Not Applicable	Not Applicable	Applicable
8.Computation of output	Not Applicable	Not Applicable	Applicable
9.Despatch of output	Not Applicable	Not Applicable	Applicable
10.Efficiency	Applicable	Applicable	Not Applicable
11.Security	Applicable	Applicable	Applicable
12.Availability	Applicable	Applicable	Not Applicable
13.Scrutiny Assessment	Applicable	Applicable	Not Applicable
14.Outsourcing	Applicable	Applicable	Applicable
15.Miscellaneous	Applicable	Applicable	Applicable

The Management was familiarised with the methodology used through an entry conference. At the entry conference, management stated that AST is not a separate project but a part of the customised modules of ITD Applications which is being implemented in a phased manner. It is a legacy system which should be examined with reference to the technology and management

practices in existence at the relevant time i.e. in the mid 1990s and the CoBiT framework was not in existence when ITD applications were conceptualized and designed.

The concerns of the management are appreciated and have been taken into account during the audit. Further, the criteria set out in CoBit embody a set of best practices which are universally valid for the analysis of information systems.

SQL Query:

As per the methodology it was envisaged that the indicative errors in the system thrown up in the sample selected and audited would further be validated by running queries based on these errors at the concerned RCC for the entire set of data at the selected stations.

The DIT Systems was sent a detailed list of these queries after consolidation of data received from all the 12 stations. Part of the query relating to interest calculations could not be fully run at the stations of Mumbai and Bangalore. The data available through the queries has been suitably incorporated in this report.

4. Audit Findings, Conclusions and Recommendations

Audit findings, conclusions and recommendations have been arranged in the order of high-level control objectives grouped in the two selected Domains of CoBiT. The high level control objectives further consist of detailed control objectives. The findings, conclusions and recommendations have been separately set out for each of these detailed control objectives.

The *audit criteria* are specified as the "description" of the high level control objectives. Audit Observations are given under the heading "control notes" and the audit conclusions are given under the heading "assessment". After taking into account the management response, suitable recommendations have been framed.