2.3 I.T. Review on Integrated Check Post Software (ICPS) in Commercial Taxes Department

Computerisation at check posts in Commercial Taxes Department

Andhra Pradesh has five Integrated Check Posts situated at strategic locations bordering with other States. These check posts facilitate six major Government departments viz. Commercial taxes, Transport, Marketing, Excise and prohibition, Mines and geology and Forest to track the movement of goods. To provide quality services by automating processes and to implement different Acts by respective departments through single window checking facility, a common software for integrated check posts (ICP) was developed (April 2003).

HIGHLIGHTS

Procurement of software without following the tender process and lack of planning in implementation

[Paragraphs 2.3.5 and 2.3.6]

Non utilisation of application by other participating departments defeated the primary objective of implementation

[Paragraph 2.3.7]

Improper input validations resulted in misclassification of movement types of vehicles

[Paragraph 2.3.8.1]

Non finalisation of assessments in all cases of unsurrendered transit passes led to potential loss of revenue

[Paragraph 2.3.8.5]

Non elimination of manual intervention in arriving at details of un surrendered transit passes and blacklisting of vehicles

[Paragraph 2.3.8.2]

Non utilisation of employee module due to training not having been imparted to departmental personnel

[Paragraph 2.3.9]

2.3.1 Introduction

Integrated Check Post Software (ICPS) application was developed (April 2003) by M/s Holool e-Business Private Limited for better functioning of the five Integrated Check Posts* (ICPs) through single window checking facility. The application mainly emphasises on tracking movement of vehicles/ consignment passing through these check posts. The objectives of the application were reduction of duplication of work, optimising transaction-processing time, reduction of traffic disruption at check posts, to prevent tax evasion and augment state revenues.

Earlier, Compact 2020; a package developed by M/s Ram Informatics Limited (RIL) was in force at the ICPs and Border Check Posts (BCPs). The ICPS application was implemented in one^{*} ICP in June 2003 and in the remaining four^{*} ICPs in June 2004.

Subsequently, COACH^{*}, a package developed by M/s Holool e-Business, to maintain data integrity between ICPs and BCPs was implemented at 10 BCPs during the period May and November 2005 and in the remaining two BCPs^{*} thereafter.

2.3.2 IT organisational structure in the department

IT organisation in the Commercial Tax Department(CTD) is headed by a Committee on Information Technology & e-Governance for Commercial Taxes which is assisted by one Advisory-cum-tender-cum-purchase committee, Commissioner (CT), one Special Commissioner, one Joint Commissioner who is assisted by one Assistant Commissioner, one CTO/DCTO and data entry operators (DEOs).

For administrative purposes the CTD is divided into divisions, circles and unit offices. Each check post operates under the jurisdiction of a Commercial Tax Officer (CTO) at the circle level and Deputy Commissioner (DC) at Division level, who in turn function under the control of Joint Commissioner (Enforcement).

2.3.3 Information Systems set up

The ICPS application was developed on VERSATATM platform with Oracle 9i and 10g as backend. The operating systems in use were Windows 2000 server family & professional and the networking software and the system management was through CA Unicentre[®]. The IT system architecture was web based-central and distributed.

Integrated Check Posts at Bhoraj-Adilabad district, Ichapuram-Srikakulam District, Tada-Nellore district, Naraharipet-Chittoor district and Saloora-Nizamabad district

^{*} ICP, Tada

^{*} ICP-Bhoraj, Ichapuram, Saloora and Naraharipet

^{*} Comprehensive Application for Check Posts

^{*} BCP Tadukupet and Chiragpally

The Central Computer Wing (CCW) in Office of the CCT is connected through BSNL leased line (2 Mbps) to each division/circle/check post. The data gets updated in the central server at the CCW from all the ICPs and the database is synchronised on a 'real time' basis every four hours among these locations. In case of connectivity problems, mainly due to problems in power supply, the data is stored in CDs and sent to CCW and the database is updated.

2.3.4 Objectives, scope and methodology of audit

Audit had the following objectives:

- * Obtain assurance regarding IT controls and resultant effect on efficiency, economy and effectiveness of the performance of Commercial Taxes Department (CTD);
- * Examine IT system development, maintenance and operations in the department; and
- * Review the system followed by the department to maintain data integrity as different packages were in force till March 2005 at ICPs (Holool) and BCPs (compact 2020).

The data relating to the period June 2003 to March 2005 was analysed using $IDEA^*$ and MS Excel as $CAAT^*s$. An entry conference was also conducted with the CCT in October 2005, where the officers in charge of the ICPs and BCPs were also present.

AUDIT FINDINGS

2.3.5 Procurement of software without following tender process

It was noticed that the vendor (Holool) had approached the department directly with a letter of introduction and offered to develop a 'proof of concept'. After demonstration, without following tender process as per financial rules, CTD agreed to the proposal of the vendor to develop a pilot project at one of the ICPs (in June 2003) free of development charges. However the application was further replicated at the other four ICPs in June 2004 at a project cost of Rs.34.38 lakh, including development charges.

Department replied (July 2006 and August 2006) that merely not following the financial rules and procedural labyrinth may not be considered as a serious lapse and the deviation might have occurred due to engrossment in following more of the technical aspects than the financial procedures in vogue. The reply is not tenable because a tender process would have given the department not only financial leverage but greater technical options as well. Further, it is evident from the findings of this report, that application has not been able to achieve the objectives in entirety.

^{*} Interactive Data Extraction and Analysis

Computer Assisted Audit Techniques

2.3.6 Lack of planning in implementation

The ICPS application was implemented at the five ICPs only (from June 2003 to June 2004). Compact 2020, software (developed by M/s RIL) was in use before the implementation of ICPS at ICPs and was in use at the BCPs till 2005. As assessments are required to be completed within four years, data of earlier years (four at the least) need to be captured/ported from the legacy system. Directions issued to M/s RIL to make necessary changes in their package to suit the requirements of ICPS package were not acted upon till December 2004.

As the data in the earlier software was not integrated with ICPS, data relating to earlier years were not available at ICPs to enable the assessing authorities to cross verify the facts while finalising the assessments.

A transit vehicle passes through the State to other neighbouring States which may enter through an ICP and exit through a BCP. Operation of two non-integrated packages resulted in non-generation of transit pass mis-match reports^{*} between 2003 and 2005. Ultimately, to maintain data integrity, a new package (COACH) was developed at a cost of Rs.7.58 lakh by M/s. Holool India Ltd and implemented at BCPs.

Department replied (July and August 2006) that a need based approach was adopted, mis-match reports could be generated at the head office by synchronising the data received from ICPs and BCPs. Further, 'GIS', a module being developed by M/s TCS as a part of VATIS^{*} to administer check post functions will replace the existing application in due course and efforts would be taken to rationalise the entire procedure.

However, verification showed that nine out of twelve BCPs forward the data only in hard copies and even the data transmitted electronically from remaining BCPs, was not communicated to the jurisdictional CTOs for reference. The generation of the mis-match reports was therefore not possible. Thus, lack of proper planning had resulted in operation of two different software packages[#] between 2003 and 2005 paralysing the basic functions of the check post.

2.3.7 Non utilisation of package by participating departments

The primary objective of the ICPS package was to provide single window checking facility for various departments. However, it was noticed that except CTD other participating departments were not using ICPS and still operating through separate counters. Further, the entire project cost was also borne by the CTD. It was also noticed that, Excise and Prohibition Department, one of the participating departments, could not utilise ICPS in view of the denial by CTD.

Department replied (August 2006) that since the real purpose is served for the

^{*} Report on transit incoming vehicles which have entered the state of Andhra Pradesh through entry check post but corresponding entry is not available at the exit check post as a proof of exit from the state of Andhra Pradesh

^{*} VATIS: Value Added Tax Information System

[#] ICPS for ICPs by M/s Holool and Compact 2020 by M/s Ram Informatics Ltd

CTD, which is the largest revenue yielding department, the project cost was borne by CTD and other participating departments were also being encouraged to utilise the package.

2.3.8 Input control and validation checks

2.3.8.1 Incorrect classification of movement types of vehicles

Vehicles moving through the check posts are classified according to their movement type as incoming, outgoing, transit incoming and transit outgoing vehicles. Origin state denotes the place from where the vehicle commences its journey, while destination point is marked by the term destination state. Analysis of data relating to 18,28,632* vehicles revealed absence of input and validation controls in respect of movement type (incoming, outgoing etc.), origin and destination points which resulted in incorrect classification as detailed below:

- * *Destination state* in 3,631 'incoming*' vehicles records was indicated as States other than Andhra Pradesh viz., West Bengal, Uttar Pradesh, Sikkim etc., although these were to terminate in Andhra Pradesh.
- * *Origin state* in 2,089 incoming vehicles was indicated as Andhra Pradesh, which was evidently incorrect since these vehicles were entering Andhra Pradesh from other states.
- * *Destination state* in 2,431 'outgoing^{*}' vehicles were indicated as Andhra Pradesh, which is not possible since these vehicles were leaving Andhra Pradesh for other destinations.
- * *Destination state* in 398 'transit incoming^{*}' vehicles was indicated as Andhra Pradesh. Further analysis revealed that the transit passes issued in these cases were not surrendered indicating that these were incoming vehicles and not transit vehicles.
- * Both '*origin*' and '*destination*' states were indicated as Andhra Pradesh in 1,094 vehicles. Further analysis revealed that out of these, 263 vehicles carrying liquor, general goods and cement had moved repeatedly ranging between two to fifteen times through Naraharipet and Tada check posts.

Besides bringing out inadequacies in input control and validation checks, these instances of misclassification also point to the fact of possible tax evasion in cases where transit passes were issued to incoming vehicles which are actually liable to tax in Andhra Pradesh.

Department replied (August 2006) the observations shall be kept in mind and scrupulously followed while fine-tuning the application.

2.3.8.2 Non elimination of manual intervention for arriving at unsurrendered transit passes

^{*} Break-up vide Annexure I

^{*} Incoming vehicle is that, which is coming into the state of Andhra Pradesh from other states i.e., destination state should be Andhra Pradesh

^{*} Outgoing vehicle is that which is moving out of the state of Andhra Pradesh and destination state should be other than Andhra Pradesh since originating state is Andhra Pradesh

⁶ Transit incoming vehicle is one with origin and destination state other than Andhra Pradesh but which passes through Andhra Pradesh enroute. Transit pass is issued for such vehicles

Even after implementation of ICPS package, transit passes (TP) received back from the exit check post are being manually rounded off for arriving at the number of unsurrendered TPs.

Department replied that (August 2006) manual intervention existed due to the connectivity and power problems.

2.3.8.3 Lack of control over blacklisted vehicles

Vehicles, which do not surrender 'transit pass' at the exit check post, are blacklisted from re-entering the state. If the owner or driver of a vehicle proves that he had in fact exited from the state, the vehicle is deblacklisted. It was observed that blacklisting and deblacklisting is being done manually.

Such manual intervention diluted control over blacklisted vehicles and resulted in allowing a blacklisted vehicle to pass through the state 19 times during the blacklisted period between 17 October 2003 and 29 March 2005.

Analysis of 1,96,691 cases of unsurrendered transit passes revealed that the passes were given to 25,700 vehicles repeatedly ranging between 2 to 57 times even though they had not surrendered the transit passes issued on earlier occasions. Test check of blacklisting status, at ICP Tada revealed that out of 300 vehicles that had not surrendered passes on earlier occasions, only 193 have been blacklisted (between April 2004 and January 2005).

Department replied (August 2006) that the discrepancies were due to operation of two different softwares at ICPs and BCPs and other connectivity problems and blacklisting is being resorted to as a precautionary measure. Though the Act provides for only 30 days to surrender the TPs, the CCT has extended the limit to 45 days (July 2006).

2.3.8.4 Numbers of transshipment vehicles being same

The same vehicle carrying goods which has entered the State has to pass through exit check post (details of which are given in the TP). However, in case of break downs/accidents/non availability of permits, goods are moved into another vehicle. Such vehicles are indicated as transshipment vehicles. Analysis revealed that reasons for transshipment were recorded only in 690 out of 11,641 cases. Out of the remaining, in 99 cases, the old and new vehicle numbers were the same. The transshipment had taken place mostly at four^{*} check posts. It was evident that in the absence of mandatory requirement to record the reasons for transshipment and since reporting is not being done to higher authorities; the management was not in possession of adequate and accurate information to weild control in this area.

Further, for the management to ascertain the total number of cases transshipped and to enable fixing targets for physical verification of transshipped vehicles, it is essential that a report is generated.

Department attributed (August 2006) data entry errors as the cause for the mistakes and stated that the issue of generating a report on transshipment would be taken up with the software vendor.

^{*} A.S.Peta, Ichapuram, Hyderabad and Vijayawada

2.3.8.5 Assessments not conducted on unsurrendered transit passes

Under Section 29-B of APGST Act, 1957 read with rule 46 A (9) of APGST Rules, if the original copy of transit pass was not received back within thirty days of issue, the officer shall send a report to CTO of the concerned check post or barrier for further action on the owner of the goods vehicle and levy tax. However, no such provision was made in the application software. Further, information regarding unsurrendered TPs was not sent to the respective CTOs manually too.

Data analysis revealed that

- * 1,96,691* out of 2,97,622 TPs, issued between June 2003 and March 2005, were not surrendered. Tax in respect of goods transported through these vehicles as per applicable tax rates was Rs.2,691.20 crore. Further analysis revealed that a tax of Rs.1,467.12 crore related to 256 cases, and out of that Rs.1,169.40 crore related to only three cases indicating unreliability of the database.
- * Out of 1,96,691 TPs, 38,135^{*} allowed vehicles to cross the border at 28 exit points, other than the five ICPs and 12 BCPs, in contravention of the executive instructions[#] and despite the fact that there is no mechanism/ infrastructure existing in the department to watch surrender of TPs at such exit points. Lack of input validation allowed entry of such points, which were neither ICPs nor BCPs. Further 151 transit passes were issued for which exit check post was not indicated.
- * Analysis of the commodity tax rates and commodity details incorporated in master tables in the application revealed that, out of 319 commodities, in respect of 67 commodities^{*} there was huge variation in tax rates included in the application and the existing tax rates.

^{*} Details vide Annexure II

^{* 2003-04:1571} cases and 2004-05:36564 cases

[#] JC (CT) Enforcement Ref No.D2/88/96 Dated 24.7.2003

^{*} Details of 67 commodities vide Annexure III of this report

* As against 1,96,691 TPs compiled through database, the number of unsurrendered TPs as per manual record were only 76,683, indicating unreliability of the database.

Following interesting instances were also noticed

25,760 out of 38,135* TPs were issued from ICP, Ichapuram where the destination points indicated certain northern/eastern states in the country, whereas

- * 810 TPs were issued to an exit point 'CFM' which borders southern part of Karnataka.
- * 11,746 TPs were issued to an exit point 'BVP' which borders northern part of Tamilnadu.
- * 5,600 TPs were issued to an exit point 'KOD' which borders southern part of Karnataka.

Department replied (August 2006) that

- manual system of watching the unsurrendered TPs is still in vogue and when reliability of the software was not established dependence on the software alone for all the functions at the check posts gives rise to many problems;
- * few observation points other than the scheduled exit points were set up temporarily during agricultural seasons to watch movement of vehicles not entering through regular check posts. As such there was variation in the entry/exit points being more than the notified check posts and accordingly some TPs and mismatches and
- * there is a provision in the application to generate a list of unsurrendered transit passes.

The reply of the department is not tenable because using ICPS application built in with proper input and validation controls could facilitate enforcing various provisions of the APGST Act in an accurate and reliable manner. Further, creation of temporary exit points was also against the said executive instructions and transit passes should not have been issued in respect of those vehicles. Provision to generate report of unsurrendered TPs could not be accepted as creation of such report was not provided for in the application.

2.3.8.6 Logical access controls

In one check post^{*}, it was observed that user identification and user authentication were same for all the users.

Department noted the observation (August 2006) for compliance. **2.3.9 Training**

^{*} Details vide Annexure IV

^{*} Integrated Check Post, Bhoraj, Adilabad District

The entire data entry work at check posts was outsourced (to M/s APTECH) with a view to bring administrative reforms at the check posts and reduce unethical practices. Audit observed that an amount of Rs.97, 94,196 was spent on training and data entry work towards the personnel of M/s APTECH for the period June 2003 to June 2005. The contract was then awarded to M/s RIL with effect from July 2005. As a result, Rs.1,50,000 had to be spent again on training to personnel of M/s RIL (September 2005). As none of the departmental staff* presently working at the check posts were trained in ICPS package, the employee module that enables the departmental officer (ACTO) to monitor the transactions, could not be put to use even after two and half years of implementation and transactions are still monitored manually.

The department replied (August 2006) that efforts are being made to train the officials and the employee module will be put to use.

2.3.10 Other observations

Large amount of data is being captured at the check posts from all the four types of goods vehicles i.e., incoming, outgoing, transit incoming, transit outgoing vehicles. Cross verification of data with the books of consignee/ consignor would provide enormous scope for improving tax revenues.

It was noticed that

- * 18 out of 24 DC/circle offices were not aware of the provision to access and utilise check post data;
- crucial information viz., registration numbers of sales tax, central sales tax, value added tax relating to consignors, which could be referred to during finalisation of annual assessment, were not captured in respect of 8,127 outgoing vehicles and
- * report on sensitive commodities could not be generated as updated commodity codes and tax rates were not captured in the system.

All check posts are provided with valuable IT assets such as servers, monitors, video cameras, CCTVs, printers and other net working infrastructure. Proper maintenance of stock registers therefore assumes significance. Certain deficiencies in maintenance of stock register of IT assets such as non availability of check post wise details of hardware issued, cost of assets, non conducting of physical verification as required under Andhra Pradesh Financial Code (APFC) were noticed. In one check post the stock register was not even maintained.

^{*} Deputy Commercial Tax Officer, Assistant Commercial Tax Officers and Senior Assistants

Department replied (August 2006) that the observation made by audit is noted, instructions would be issued to maintain proper records and more emphasis shall be laid on popularising the link across all offices in the State. A feature is also being introduced to check existing drawbacks.

2.3.11 Conclusion

Government decided to implement integrated check post software, to facilitate data integration between the six participating departments at ICPs, to reduce transaction processing time and to facilitate enforcement of different acts by respective departments. Not only was data relating to vehicles only partially captured, the objective of providing a single window facility could not be achieved due to non utilisation of the application by all except one participating department. The functions of Commercial Taxes Department at the check posts also could not be totally automated due to operation of different applications at ICPs and BCPs during the period 2003-2005. Serious defects in data validations and very low data reliability were noticed. This coupled with absence of some core functions rendered the system incapable of generating accurate information on unsurrendered TPs for being forwarded to CTOs concerned for assessments to be conducted in such cases. Absence of trained departmental manpower also resulted in non utilisation of various modules.

2.3.12 Recommendations

- * All the user departments should be made to use the system.
- * All the ICPs and BCPs should be interconnected so as to have a foolproof mechanism to generate reports on unsurrendered transit passes online, at the ICP or BCP itself without manual involvement.
- * Distinct user identification and authentication should be provided to all the DEOs and employees for better security and monitoring.
- * Proper input and validation controls should be ensured.
- * Data captured at check posts should be made available to all divisions/ circles for the purpose of cross verification.
- * The system should be utilised for generating comprehensive MIS reports to provide the management with adequate information for exercising control over the functioning of check posts.

Government accepted (October 2006) the major audit observations. The above points were also discussed with the Principal Secretary (Revenue) and Commissioner of Commercial Taxes in an Audit Review Committee meeting held in November 2006. The recommendations were also discussed. Government stated that rectificatory measures would be taken.