OVERVIEW

Inordinate delay in indigenisation of TATRA vehicles

In order to attain self reliance and effect savings in foreign exchange, Bharat Earth Movers Limited, a Defence PSU, signed a collaboration agreement for indigenisation of TATRA vehicles in 1986 with M/s Omnipol of Czechoslovakia to cater the continuous need of the Indian Army. The objective of attaining 86 *per cent* indigenisation by 1991 was envisaged *by* BEML. However, till 2014 the target is yet to be attained. BEML attributed the delay mainly to the failure of Ministry in placing order for sufficient number of vehicles between 1986 and 1991. The process for indigenisation of TATRA vehicles suffered due to lack of clear long term projection of orders by Army to BEML. Resultantly, the objective of self-reliance in production of TATRA vehicles was defeated.

(Paragraph 2.1)

Procurement of unacceptable equipment valuing ₹ 27.32 crore

Ministry of Defence imported 999 number of Individual Chemical Agent Detectors (ICADs) worth ₹ 27.32 crore between January 2010 and October 2010 for detecting the presence of chemical agents and toxic industrial compounds. Non conducting Field Evaluation Trials in conditions where equipment is likely to be deployed as prescribed by DPP, had resulted in acceptance of defective ICADs worth ₹ 27.32 crore. These equipment were awaiting replacement since August 2011 by the firm as of June 2014.

(Paragraph 2.2)

Loss of revenue due to unauthorized use of Defence land by United Services Club, Mumbai

Failure of the Local Military Authorities at Colaba and further lack of pursuance by Defence Estate Department for obtaining Government sanction for entering into a lease for the defence land occupied by the United Services Club, Mumbai resulted in recurring revenue loss of ₹ 5.74 crore per annum to Government exchequer. The MoD on their part, failed to monitor the assurance given to the Public Accounts Committee of the Parliament to review the arrangements with US Club which continued to commercially exploit A-1 defence land valuing ₹ 114.85 crore without Government sanction and paying a nominal rent of ₹ 0.36 lakh per annum.

(Paragraph 2.3)

Irregular construction on Defence leased land

Old Grant Bungalow along with adjoining land measuring 4.56 acre at Kirkee Cantonment was leased for residential purpose. Execution of an irregular deed for reconstruction by Defence Estates Officer (DEO) with Power of Attorney Holder (POAH) and failure on the part of DEO and Cantonment Executive Officer to take appropriate action against the POAH/Holder of Occupancy Right facilitated the POAH to illegally construct a Community Centre which was misused for religious activities on Defence land worth ₹ 22.14 crore.

(Paragraph 2.4)

Nugatory expenditure of ₹ 88.39 crore in the procurement of Chemical, Biological, Radiological and Nuclear (CBRN) equipment

Injudicious planning by IHQ of MoD, Army in the procurement of nine items under Individual Protective Equipment relating to Chemical, Biological, Radiological and Nuclear Equipment, resulted in non-procurement of NBC suit Permeable, the main constituent of IPE. An expenditure of ₹ 88.39 crore on other eight items of IPE without addressing the compatibility issue defeated the purpose of ensuring protection in case of NBC Warfare.

(Paragraph 3.1)

Loss of revenue due to non-collection of metal scrap from Field Firing Range

Despite instructions for collecting metal scrap of fired ammunition from Field Firing Ranges through hired civil labour in case of non conclusion of regular contract for the same, Army authorities failed to collect metal scrap of 285 MT (approximate quantity) worth ₹ 2.32 crore.

(Paragraph 3.3)

Procurement of defective tyres

Army Headquarters incurred an expenditure of ₹ 2.65 crore on procurement of tyres despite the knowledge that the tyres were manufactured with inferior quality material.

(Paragraph 3.4)

Over provisioning and uneconomical issue of Batteries by COD Agra

Over provisioning of batteries 'A' worth ₹ 7.16 crore during 2009 by Army Headquarters led to uneconomical issue of batteries 'A' worth ₹ 1.91 crore during 2013 against demands for low cost batteries 'B' and 'C' in order to liquidate the huge stock.

(Paragraph 3.5)

Recoveries, savings and adjustment in accounts at the instance of Audit

In pursuance of Audit observations, the audited entities recovered overpaid pay and allowances, sundry charges and recovered electricity charges, cancelled irregular works sanctions and amended annual accounts, having a net effect of ₹ 68.01 crore

(Paragraph 3.6)

Avoidable expenditure on construction of excess dwelling units

The failure of Local Military Authorities at Chennai to correctly assess the requirement of married accommodation for JCOs resulted in construction of 17 dwelling units in excess of the requirement at a total cost of ₹ 1.79 crore.

(Paragraph 4.1)

Inordinate delay in handing over the clear site to the contractor resulted in avoidable payment of escalation charges

Chief Engineer, Shillong Zone concluded contract for construction of 13 Ammunition storage accommodations for which GE Guwahati issued an inaccurate certificate for availability of clear site. This inordinately delayed the completion of work leading to avoidable payment of extra escalation charges of ₹ 4.58 crore over and above normal escalation charges admissible to the contractor for completion of work within completion period.

(Paragraph 4.2)

Selection of improper site resulted in foreclosure of work after an expenditure of ₹ 5.49 crores

Military Engineer Services and Local Army authorities could not identify the proper site at planning stage for construction of other than married (OTM) accommodation for Army. This resulted in foreclosure of the work after incurring expenditure of ₹ 5.49 crore.

(Paragraph 4.3)

Unauthorised utilization of funds for construction of a Multipurpose Hall

Funds amounting to ₹ 0.93 crore allotted for the construction of two storage accommodations for two Border Road Task Forces were unauthorisedly utilized to construct a bigger Multipurpose Hall, with an area of 1,556 sqm against the sanctioned area of 489 sqm.

(Paragraph 5.1)

Construction of a bridge without sub-soil investigation resulted in loss of ₹ 0.75 crore

An expenditure of ₹ 0.75 crore incurred on excavation in foundation for a bridge work by Task Force under Chief Engineer (Project) Pushpak without sub-soil investigation as required under Codes of Indian Road Congress resulted in loss of public money as the site became landslide prone area which could have been forewarned after sub-soil investigation.

(Paragraph 5.2)

Project Management in Vehicle Research and Development Establishment, Ahmednagar and Combat Vehicles Research and Development Establishment, Avadi

Audit scrutiny of the **Staff and TD/R&D projects** taken up by CVRDE and VRDE during the period April 1998 to March 2013 for delivery of products required by Defence Forces revealed the following:

Staff Projects

***At CVRDE*:** Two Staff projects were closed during April 1998 to March 2013 out of which one project was undergoing Transfer of Technology but was yet to be productionised. In another project though the system developed was accepted by the user, yet the project could not be productionised due to imposition of ban on the foreign vendor.

***At VRDE*:** Of the nine closed projects during April 1998 to March 2013, only one underwent productionisation. For another project though stated to have been successfully completed by the lab, the details of acceptance by the user leading to induction into Service could not be produced by the lab. Third project partly achieved the project requirement and the remaining six projects could not achieve success in terms of acceptance by the users.

Initiation of projects without firm General Staff Qualitative Requirement, failure of the laboratory to develop the desired deliverables and defective planning were the main reasons for failure.

Technology Demonstration/R&D Projects

The status of **Technology Demonstration projects** undertaken by the two labs was also not encouraging as 36 out of 51 closed projects did not lead to the utilisation of such technology in Staff projects.

(Chapter-VI)

Defence Grants-in-Aid Scheme of Defence Research and Development Organization

The Defence Grants-in-Aid Scheme was instituted to utilize the indigenously available research talent and facilities in IITs, Universities, Higher Technological Institute, *etc.* for undertaking research and development work on problems of scientific value and preferably in areas of interests to Defence. Audit observed that there were critical shortfalls in the management and monitoring of the Scheme such as awarding the project without arriving at viable and specific research objectives and not defining the quantitative and qualitative targets to be attained. The major expenditure was on purchase of equipments but in majority of cases the disposal of equipments was left at the discretion of the Grantee institutions in the manner desired. In these circumstances the scheme is far from satisfaction. The money was also sanctioned for creation of basic infrastructure against the provisions of the scheme.

(Chapter VII)

Performance of Ordnance Factory Board

The Ordnance Factory Organisation comprising 41 Ordnance Factories (including two ordnance factories under project stage) with manpower of 96,317 is engaged in production of arms, ammunition, equipment, clothing *etc.* primarily for the Armed Forces of the country. The factories function under the Ordnance Factory Board (Board). Revenue expenditure showed 11 *per cent* increase in 2011-12 but decreased marginally by 2 *per cent* in 2012-13. Stores (48 *per cent*) and manufacture expenditure (36 *per cent*) constituted 74 *per cent* of the total revenue expenditure. Both components, however, registered a dip in 2012-13: stores by 7 *per cent* and manufacturing by 2 *per cent*.

Capital expenditure of ₹ 349 crore during 2012-13 remained almost at the same level of 2008-09 and comprised only 3 *per cent* of the total expenditure of the Board.

Of 529 items targeted for manufacture during 2012-13, Ordnance Factories achieved success rate of only 31 *per cent.* Inability to source quality components on time and fluctuations in demands were the reasons for the low success rate.

During 2012-13, the cost of production (₹ 15,972.44 crore) almost remained static when compared with 2011-12 with share of Stores, Labour and Overhead cost at 61 *per cent*, 11 *per cent* and 28 *per cent* respectively. In eight ordnance factories, the percentage of overhead to cost of production exceeded 50 *per cent*. High supervision charges, with one supervisory officer for every 1.97 direct labour, contributed to the high overhead.

During 2012-13, the Board reported an increase of total receipts of ₹ 71 crore (0.56 *per cent*) over 2011-12. On the other hand, surplus generated during 2012-13 fell by ₹ 118 crore (16 *per cent*). Cross-subsidisation across the products led to inadequate cost control by the Board.

Revenue earned from exports reduced from ₹ 46 crore in 2011-12 to ₹ 15 crore in 2012-13 (67 *per cent*)

(*Paragraph 8.1)*

Inventory Management in Ordnance Factories

The Ordnance Factories held an inventory of ₹ 10,490 crore (31 March 2013) which accounted for two-third of the cost of production. Our audit covers the performance of Ordnance Factory Board and nine sampled Ordnance Factories in respect of Inventory Management in the years 2010-11 to 2012-13. The sampled Factories together held inventory worth ₹ 4,799 crore which represented 46 *per cent* of the total inventory held in all Ordnance Factories as of 31 March 2013.

Stores-in-hand (SIH) *i.e.* inventory of raw material with the Stores Section of the Factory is an area of concern in inventory management in the Factories. At the level of ₹ 2,425 crore , SIH constituted over 50 *per cent* of the inventory holding in the nine sampled factories as of 31 March 2013. In the nine sampled factories non-moving SIH, *i.e.* items which were not consumed for a period of three or more years after purchase, increased by 73 *per cent* during 2010-13. Our analysis showed that 95 *per cent* of the SIH in the sampled Factories exceeded the prescribed limits. Over four-fifth of these items held in excess of the limits were items which were not consumed at all during the year under our analysis, 2012-13. Items worth ₹ 96 crore were not only held in excess of the prescribed holding limits but also had not been used even once after their procurement during 2010-13. The current procedure to exhaust all options of potential usage had in effect failed and led to build-up of non-active stores. On the other hand, the definition of "active" stores (an item is categorised as active even if only one unit is consumed during the year) creates a potential risk of token consumption in order to keep the items off the "non-moving" category. All nine sample Factories together registered token consumption against 5,925 items valued at ₹ 373 crore, indicating a common trend.

Works-in-Progress (WIP) are inventory held by the Factory Production Shop, which are under production. WIP in the nine Factories increased by 21 *per cent* during the period 2010-13 and as of March 2013, the value of WIP stood at ₹ 1,501 crore. The increase in WIP without a correlated increase in cost of production points to a risk of fraudulent booking of material or labour against open warrants *i.e.* warrants not closed although production against them had stopped for variety of reasons. Although warrants are required to be closed within six months, 17 *per cent* of warrants of eight sampled factories were over a year old. The value of warrants that were open for more than one year was ₹ 434 crore. The Factories had been reflecting rejected stocks as WIP or Stores-in-transit between Factories, in some cases for over 20 years, which remained un-detected. A protracted process for review of inventory and to fix accountability for loss due to rejections, led to a tendency in the Factories to "hide" rejections by categorising rejected stores under WIP or SIT even as delays in fixing accountability defeated the purpose.

The assurance to be provided by the physical verification was inadequate and did not reflect the correct position on physical availability of stores. The use of "loan issues" of material without a demand note from the Shop does not have the sanction of Board and constitutes a bad practice. The review of inventory holding by the Board was not comprehensive and did not yield clear and firm directions to the Factories.

(*Paragraph 8.2)*

Indigenous production of MBT Arjun and T-90 Bhisma Tank

Against the Ministry's revised plan to induct 124 MBT Arjun in 2002-09, Ordnance Factories issued 119 MBT Arjun to the Army during 2004-13. The production of 300 indigenous T-90 tanks, scheduled for delivery in 2006-10 based on Transfer of Technology from Russia (2001), lagged behind with production of 225 T-90 and issue of only 167 T-90 tanks to the Army during 2009-13. Inordinate delays in production of both the tanks led to fresh import (November 2007) of T-90 tanks worth ₹ 4,913 crore. While the progress of the project for augmentation of production capacity of T-90 tanks sanctioned in September 2011 was very slow, the existing facilities for MBT Arjun remained underutilised in absence of further order of MBT Arjun from the Army.

(*Paragraph 8.3)*

Capacity addition in Ordnance Factories

Procurement of machinery in ten Ordnance Factories (test checked) did not enhance the production capacity as the availability of machine hours showed a downward trend from 683 lakh hours in 2010-11 to 639 lakh hours in 2012-13. Delays in receipt of 170 machines (36 *per cent*) valuing ₹ 343 crore and delays in commissioning of 213 machines (29 *per cent*) valuing ₹ 317 crore deprived the Factories of the timely benefits of modernisation. Deficiencies in pre-dispatch inspection and pre-commissioning trials led to delays in commissioning and in some cases, acceptance of machinery compromising the quality. High incidence of under-utilisation (21 to 24 *per cent* machines utilised up to 30 *per cent* of capacity) and of breakdowns, affected the ability of the factories to meet the targets placed on them. These issues which have a direct bearing on the performance of the Board, did not receive focused attention of the top management.

(*Paragraph 8.4)*

Avoidable extra expenditure on procurement of components

Procurement of Copper Tube/Aluminium Alloy extruded Rod by Ordnance Factory Kanpur (OFC) from Ordnance Factory Katni/Ordnance Factory Ambarnath, despite material cost of those sister factories being higher than the total trade cost, led to avoidable extra expenditure of ₹ 3.99 crore.

(*Paragraph 8.6)*

Acceptance of defective stores before bulk production clearance

Acceptance of defective stores before receipt of clearance for bulk production in violation of the Ordnance Factory Board's instruction led to a loss of ₹ 93.61 lakh.

(*Paragraph 8.7)*

Injudicious procurement leading to uneconomical manufacture

Despite adequate stock of magazine assemblies through inter factory demand, the Rifle Factory Ishapore bought spring platforms at a cost of ₹ 1.27 crore which was avoidable and led to higher cost of production.

(*Paragraph 8.9)*

Defective manufacture of mines

Manufacture of defective mines by Ordnance Factory Chanda/High Explosive Factory Kirkee coupled with their failure to seal the joints properly led to segregating of mines valuing ₹ 35.97 crore at Army Depots without repair/ replacement.

(*Paragraph 8.10)*

Undue benefit to a private power utility provider

Failure of the Board/Gun and Shell Factory Cossipore to recover the lease rent and premium from the private electricity supplier as per the prescribed rates resulted in revenue loss of ₹ 2.64 crore and led to undue benefit to the private electricity supplier.

(*Paragraph 8.13)*

Licence production of Su-30 MKI aircraft

Since the ageing fleet of MiG 21 series of aircraft nearing completion of their total technical life were to be phased out from 2000 to 2010, Ministry of Defence (MoD) directly purchased (1996 and 1998) 50 Su-30 MK aircraft from the Russian Government. An Inter-Governmental Agreement was concluded (October 2000) with Russia for transfer of licence and technical documentation to India for production of 140 aircraft, 920 engines and 140 sets of air-borne equipment.

(Paragraph 9.1.2.1)

Pursuant to this and considering the immediate requirement, IAF ordered (January 2001) 140 aircraft from HAL in four phase composition stipulating the deliveries up to 2017-18. HAL in turn signed (December 2000) a General Contract with Rosoboronexport (ROE) for facilitating licence production. In March 2006, considering the sharp depletion in combat aircraft force levels the deliveries were advanced to 2014-15 with changed phase composition.

(Paragraph 9.1.2.3)

Based on IAF's proposal seeking additional 40 aircraft as urgent requirement, another order was placed on HAL considering its request to amend the procurement from 'buy' to 'make'. Another order for supply of 42 aircraft was placed on HAL as a repeat order to avoid depletion in IAF's force levels and to use ToT available with HAL.

(Paragraph 9.1.2.5)

HAL did not receive all the components of transfer of technology from ROE as required impacting the timely supply of deliverables. Production of engines from raw material stage scheduled from 2009-10 was yet to start even as of December 2013. There was delay in receipt of documentation for Repair and Overhaul of Aircraft and engines resulting in delay in setting up of facilities for Repair and Overhaul. HAL procured inventory of ₹ 1,725.41 crore in advance of requirement due to non-synchronisation of purchases production schedule. Delayed setting up of Repair and Overhaul facilities for Aircraft at HAL led to TBO life extension from 10 years to 12 years by IAF.

(Paragraph 9.1.3.2, 9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.1.3.6)

IAF received 81 aircraft against 112 due till 2012-13 from HAL. This was due to delay in receipt of technical documents and rectification of defective toolings received from ROE. There were delays up to 275 days in ferry out of aircraft after signaling out due to snag rectification. MoD recovered liquidated damages of ₹ 96.26 crore from HAL due to delayed supply of aircraft. Though the delay was attributable to ROE, HAL could not recover the same from ROE in the absence of enabling provision. Further, due to delayed conclusion of agreements for role equipments with ROE, HAL could not deliver the same in time resulting in levy of liquidated damages of ₹ 4.77 crore by MoD. Acceptance of a new rate by HAL for procurement of engine kits disregarding the price stipulated in the General Contract of December 2000 resulted in additional expenditure of ₹ 66 crore.

(Paragraph 9.1.4.1, 9.1.4.2, 9.1.4.4 and 9.1.4.10)

HAL could not recover ₹ 66.61 crore in supply of Ground Handling Equipment / Ground Support Equipment to IAF due to quoting rates without reference to year of incurrence and non-inclusion of escalation clause in the contract with MoD.

(Paragraph 9.1.4.5.1)

Owing to adoption of incorrect exchange rate by MoD, while amending the contract, HAL incurred a loss of ₹ 101.72 crore in supply of aircrafts towards additional contract for 40 aircrafts.

(Paragraph 9.1.4.6)

Mandatory fatigue test of airframe was not conducted on aircraft manufactured indigenously from raw materials.

(Paragraph 9.1.4.11)

Loss due to non utilisation of power for captive consumption

Non utilization of power generated by wind mill farm for captive consumption and sale of power to Hubli Electricity Supply Company Limited (HESCOM) by BEML Limited at a price lower than they paid to Bangalore Electricity Supply Company Limited (BESCOM) and Bhoruka Power Corporation Limited for purchase of power resulted in loss of ₹ 5.67 crore.

(Paragraph 9.2)

Non-recovery of liquidated damages

BEML Limited's acceptance of non-enforceable terms of LD coupled with failure to withhold the payments resulted in non-recovery of LD of ₹ 12 crore.

(Paragraph 9.3)

Loss of ₹ 9.81 crore in supply of ACEMU Coaches

Non-inclusion of Value Added Tax / Central Sales Tax in the offer for supply of Air conditioned Electric Multiple Units by BEML Limited, resulted in non-recovery of ₹ 5.51 crore and delayed supplies of coaches resulted in payment of Liquidated Damages of ₹ 2.99 crore. Further, the Company had to absorb ₹ 1.31 crore being the Excise Duty paid for deliveries beyond stipulated delivery schedule as the extension of delivery schedule was with denial clause.

(Paragraph 9.4)

Loss due to delay in procurement of material

Delay in procurement of raw material led to non-recovery of price escalation of ₹ 15.52 crore and consequent delay in supplies resulted in levy of LD of ₹ 1.47 crore on Mishra Dhatu Nigam Limited.

(Paragraph 9.5)