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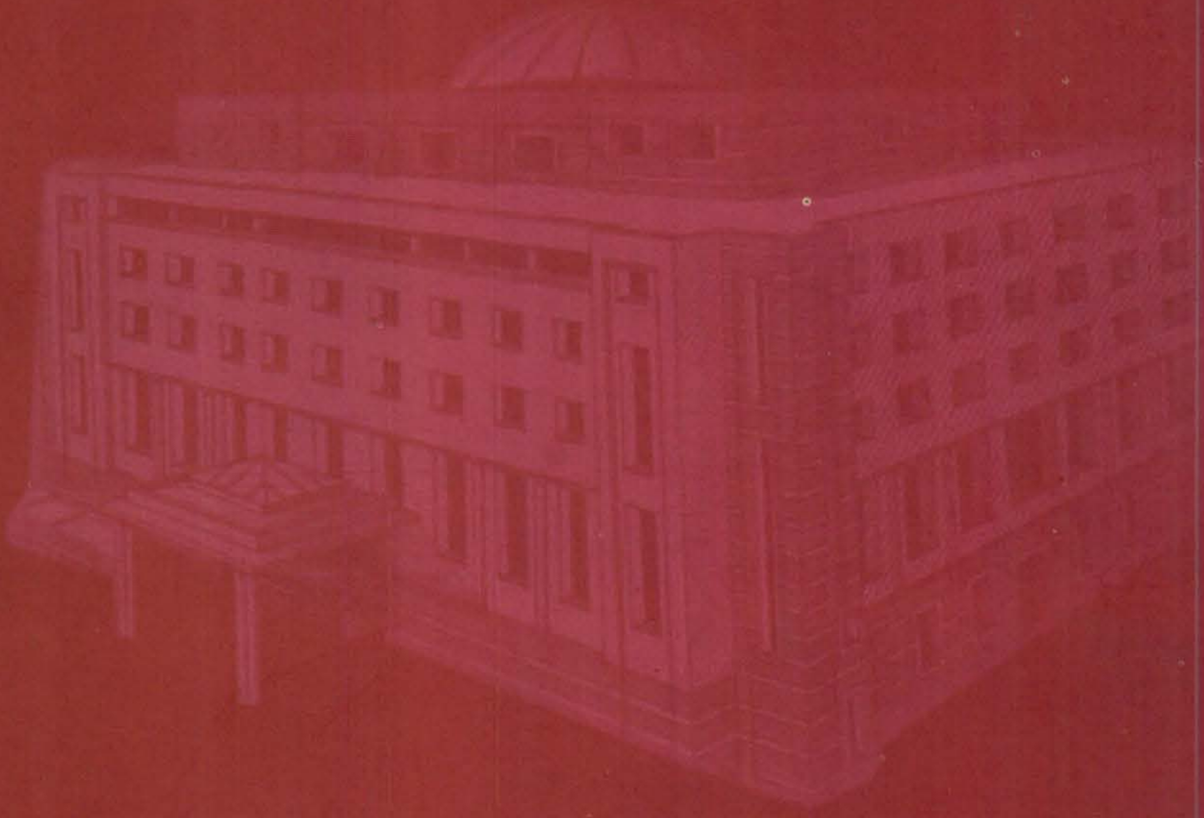
Report of the Comptroller and Auditor General of India



Union Government (Defence Services)
Army and Ordnance Factories
No. 12 of 2010-11

Report of the Comptroller and Auditor General of India

for the year ended March 2009

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PREFACE

This Report for the year ended March 2009 has been prepared for submission to the President of India under Article 151 of the Constitution for being tabled in Parliament. It relates to matters arising from the test audit of the financial transactions of Ministry of Defence pertaining to Army, Ordnance Factories, Department of Defence, Department of Defence Production, Defence Research and Development Organisation, Border Roads Organisation and Military Engineer Services. The matters arising from the Finance and Appropriation Accounts of the Defence Services for 2008-09 have been included in Audit Report No. 1 for the year 2008-09.

The Report includes 35 Paragraphs, reporting important audit observations as discussed from Chapter II onwards.

The cases mentioned in this Report are among those which came to notice in the course of audit for the period 2008-09. Matters relating to earlier years which could not be included in the previous Reports and matters relating to the period subsequent to 2008-09, wherever considered necessary have also been included.

OVERVIEW

Defective Import of SMERCH Multi Barrel Rocket Launcher System

The SMERCH Multi Barrel Rocket Launcher System procured from a foreign firm at a cost of Rs 2633 crore could not be fully operationalised for one to three years due to defects in various sub systems, delay in buying the logistics equipments and non-formulation of War Establishment of the concerned units.

(Paragraph 2.1)

Procurement of low capability missiles

The Ministry procured outdated missiles of 1970s vintage valuing Rs 587.02 crore in 2008 from BDL by compromising the Army's requirement. The Missiles were not only unable to achieve desired range but also did not meet the Army's objective of acquiring third generation missiles.

(Paragraph 2.2)

Non replacement/rectification of imported ammunition

The ammunition 'A' was designed to be fired from T-72 tanks. Indigenous as well as imported version of the ammunition 'A' valuing Rs 273.75 crore reported defective could not be got repaired for over five to eight years. Although the imported ammunition was still under warranty yet the Army HQ did not make efforts to get them rectified or replaced by the supplier.

(Paragraph 2.3)

Excess procurement of batteries and battery chargers

Ministry made excess procurement of batteries and battery chargers costing Rs 5.30 crore due to incorrect assessment of requirement by Army. Timely intervention by Audit not only led to a saving of Rs 5.30 crore but also checked the recurrence of such excess procurement.

(Paragraph 2.4)

Procurement of defective Oxygen Masks

Despite being aware that the oxygen masks offered by foreign vendor had defects, the Ministry contracted for supply of the oxygen masks to Army. This resulted in receipt of defective masks which have been returned by Army aviation units due to difficulties faced by the Pilots in inhaling oxygen. The intended benefit of the expenditure of Rs 5.06 crore on its procurement was therefore not achieved even after more than two years of receipt of the masks.

(Paragraph 2.5)

Overpayment of maintenance charges for Unmanned Aerial Vehicles

Inadequate management of inventory of the Unmanned Aerial Vehicles (UAV) by Army HQ resulted in conclusion of maintenance contract for non-existent UAVs. A payment of Rs 98.59 lakh was made to the contractor for services not rendered. When detected by Audit, Army HQ took up the matter with the contractor and the latter promptly agreed to refund the amount. The recovery of the overpaid amount was however awaited as of November 2009.

(Paragraph 2.6)

Non-inclusion of Pre-Despatch Inspection

Pre-despatch inspection (PDI) of spares contracted for more than Rs 3 crore was made mandatory by the Army HQ, to ensure receipt of correct spares of prescribed quality. Army HQ concluded a contract with a firm in May 2007 without incorporating the PDI clause in the contract violating its own instructions. This had resulted in receipt of non-compatible spares valuing Rs 4.99 crore which were neither repaired nor replaced by vendor as of November 2009.

(Paragraph 3.1)

Overprovision of ammunition for a weapon

Ammunition being a scaled item, its authorisation depends on the Unit Entitlement (UE) of the weapon. The Director General Ordnance Services (DGOS) however carried out provisioning of AK-47 rifles against its UE of 44327 whereas for provisioning of ammunition for those rifles the UE was reckoned as 124012. The anomaly resulted in excess provisioning of 234.23 lakh rounds of ammunition valuing Rs 44.50 crore.

(Paragraph 3.4)

Irregular procurement of short life drug

Simultaneous procurement of a short shelf life drug through central and local purchase resulted in its overstocking. Consequently, 2121 vials costing Rs 2.13 crore remained unconsumed during shelf life. Local purchase of the drug valuing Rs 1.08 core was made by a Commandant AFMSD by violating the spirit of delegated financial powers.

(Paragraph 3.3)

Chronic delay in procurement of Boats

In spite of emergent requirement of Boats for Engineer Regiments, its procurement could be functional only after six years mainly due to projecting the case to wrong CFA and repeated rejection of tender bids. The inordinate delay not only denied the equipment to the Army for its operational preparedness but also exhibited the insensitiveness in the functioning of the agencies involved.

(Paragraph 3.5)

Irregular procurement of Punched Tape Concertina Coil

Punched Tape Concertina Coil -1A is a general item having industrial specification and it is available on DGS&D rate/running contract (RC). Director General Ordnance Services and Chief Engineer of a Corps however resorted to local purchase of these coils at higher rates when the item was available on RC at lower rates. This resulted in avoidable extra expenditure of Rs 2.35 crore.

(Paragraph 3.2)

Irregularities in procurement of slit lamps

Conflicting verdicts of evaluation of Slit Lamp by different Technical Evaluation Committees of DGAFMS resulted in rejection of low priced indigenously made equipment. The equipment had been procured earlier by the DGAFMS after having been found technically acceptable. The irregularity resulted in extra expenditure of Rs 1.65 crore.

(Paragraph 3.7)

Irregular construction of accommodation for a Golf Club

Unauthorised building for Kharga Golf Club at Ambala Cantonment was got constructed under the guise of special repairs to the existing buildings.

(Paragraph 4.1)

Avoidable extra liability due to delay in revision of administrative sanction

Delay and lack of diligence both in Engineering wing in the QMG branch at Army Headquarters and Ministry of Defence in revision of administrative approval resulted in avoidable extra liability of Rs 2.95 crore due to cost escalation.

(Paragraph 4.2)

Additional expenditure on execution of a work due to indecision of the users

The new Commandant of Combat Army Aviation Training School, Nasik stopped the construction work of a project arbitrarily and suggested several changes involving additional special nature of works. This had resulted in delay of two years in conclusion of fresh contract and cost overrun of the project by Rs 1.23 crore.

(Paragraph 4.3)

Hasty procurement of segregators

Director General Border Roads procured six segregators for Rs 4.55 crore without conducting economic feasibility study, ensuring availability of natural aggregates and without obtaining clearance from Forest Department. Thus, these could not be gainfully utilised.

(Paragraph 5.1)

Misappropriation of Government stores

Non-verification of credentials including financial status, business ethics, market standing of contractor before awarding contract and the absence of co-ordination between different Project CEs of BRO, resulted in misappropriation of bitumen worth Rs 1.67 crore intended for transportation to BRO units under two separate contracts.

(Paragraph 5.2)

Additional cost due to delay in opening of commercial bids

Against the stipulated period of two weeks, Director General Border Roads took eight weeks for opening of commercial bid after technical evaluation in procurement of 56 Concrete Mixers and 15 Tandem Vibratory Road Rollers (TVRR). In the intervening period, quantity 44 and 25 respectively of those equipments were procured by placing repeat order at higher rates, which resulted in extra cost of Rs 97.63 lakh.

(Paragraph 5.3)

Injudicious creation of assets

Defence Research and Development Organisation (DRDO) incurred an expenditure of Rs 8.92 crore for creation of assets to draw power from a power corporation without assessing the corporation's ability to supply stable and uninterrupted power for operation of highly sensitive equipment and machines. After commissioning of power supply in November 2001 the imported equipment procured under the programme did not function properly due to variation in voltage with frequent interruption in power supply. As a result, DRDO procured DG Sets at a cost of Rs 3.57 crore for operation of equipments. Thus, the expenditure of Rs 8.92 crore incurred on establishing a sub station to support 66 KV line was rendered infructuous besides burdening itself with a recurring liability of maintaining the redundant assets.

(Paragraph 6.1)

Loss due to damage to imported equipment

DRDO suffered a loss of Rs 6.91 crore on account of damage to the imported equipment due to mishandling by the consolidation agent. The amount of loss could not be recovered from the consolidation agent for over two years.

(Paragraph 6.2)

Injudicious sanction of Ordnance Factory Korwa Project

The project for establishment of a new ordnance factory at Korwa, Amethi at an estimated investment of Rs 408.01 crore by October 2010 to meet an operationally urgent need for acquisition of new generation carbines was sanctioned without finalization of new generation carbines to be produced in the factory. This coupled with selection of inappropriate site and inadequate monitoring resulted in slow progress of the project. The project is likely to be delayed very badly, thereby delaying the supply of urgently required carbines to the Army.

(Paragraph 7.2)

Extra expenditure in procurement of Oleum

The failure of HEF to invoke risk purchase clause coupled with OFB's failure to allot funds in time to make contractual payments for supplies received foreclosed the possibility of obtaining Oleum at an economical cost. It also resulted in an extra expenditure of Rs 2.80 crore incurred in the purchase of Oleum to make good the shortage in supply.

(Paragraph 7.3)

Undue benefit to a firm in procurement of Oleum

Ordnance Factory Itarsi accorded undue benefit to a firm by acceding to their request for acceptance of price variation clause, payment of excise duty components and increased freight charges, after opening of the tender/ placement of order and put an additional burden of Rs 1.07 crore on Defence exchequer.

(Paragraph 7.4)

Non-utilisation of propellant

Ordnance Factory Badmal accepted two propellants in mismatched quantities from the foreign firm resulting in non-utilisation of one propellant valuing Rs 40.55 lakh. The prospect of its utilization is uncertain as two propellants need to be satisfactorily cleared in confirmatory test as to the ballistic parameters.

(Paragraph 7.5)

Extra expenditure due to delay in finalization of offer

Abnormal delay in finalization of commercial offer received from the foreign collaborator by Heavy Vehicles Factory Avadi and Armoured Vehicles Group of Factories Headquarter Avadi resulted in lapse of commercial offer leading to fresh receipt of offer and procurement of items at an extra expenditure of Rs 2.85 crore

(Paragraph 7.6)

Loss due to non-availing of power and load factor incentives

Non-maintenance of power factor of unity and load factor beyond 75 *per cent* of the contracted demand of electricity by two ordnance factories foreclosed the possibility of obtaining incentives and rebates worth Rs 13.33 crore. Further, one ordnance factory failed to obtain power factor incentives of Rs 0.71 crore on achieving power factor or 0.96 and 0.98

(Paragraph 7.9)

Suspected fraud in reimbursement of Customs duty to suppliers

Two private firms got reimbursement of customs duty of Rs 1.19 crore from Ordnance Equipment Factory Kanpur by producing forged documents. Cross checking by Audit with Customs disclosed that one supplier had produced Customs Duty Exemption Certificate and did not pay Customs duty for the import and another firm undervalued the cost of import machines to pay lower rate of duty to the Customs and managed to obtain reimbursement at higher rate from the factory

(Paragraph 7.10)

CHAPTER I: INTRODUCTION

1.1 Foreword

This report relates to matters arising from the compliance audit of the financial transactions of the Ministry of Defence and its following organisations. :

- Army;
- Ordnance Factories;
- Defence Research and Development Organisation and its laboratories dedicated primarily to Army and Ordnance Factories
- Inter Service Organisations; and
- Defence Accounts Department.

The report also contains the results of compliance audit of the transactions of the Border Roads Organisation under Ministry of Road Transport and Highways.

Compliance audit refers to examination of the transactions relating to expenditure, receipts, assets, and liabilities of the audited entities to ascertain whether the provisions of the Constitution of India, applicable laws, rules, regulations and various orders and instructions issued by the competent authorities are being complied with.

The primary purpose of the report is to bring to notice of the legislature important results of audit. Auditing standards require that the materiality level for reporting should be commensurate with the volume and magnitude of transactions. The findings of audit are expected to enable the executive to take corrective actions as also to frame policies and directives that will lead to improved financial management of the organisations, thus contributing to better governance and improved operational preparedness.

This chapter, in addition to explaining the planning and extent of audit, provides a synopsis of the significant audit observations followed by a brief analysis on the expenditure of the above Organisations. Chapter II onwards, present detailed findings and observations arising out of the compliance audit of the Ministry and the aforementioned Organisations.

1.2 Auditee Profile

Ministry of Defence at the apex level, frames policies on all defence related matters. It is divided into four departments, namely Department of Defence, Department of Defence Production, Department of Research and Development and Department of Ex Servicemen welfare. Each department is headed by a Secretary. The Defence Secretary who is the Head of the Department of Defence also coordinates the activities of other departments.

Army is primarily responsible for the defence of the country against external aggression and to safeguard the territorial integrity of the nation. It also renders aid to the civil authorities at the time of natural calamities and internal disturbances. It is, therefore, incumbent upon the Army to suitably equip, modernize and train itself to meet the challenges.

DRDO, through its chain of laboratories is engaged in research and development primarily to promote self reliance in Indian defence sector. It undertakes research and development in areas like aeronautics, armaments, combat vehicles, electronics, instrumentation, engineering systems, missiles, materials, naval systems, advanced computing, simulation and life sciences.

The Inter Service Organisations like Armed Forces Medical Services, Military Engineer Services (MES), Defence Estates, Quality Assurance, etc. serve the Defence Forces in the fields which are common to the Army, Navy and Air Force. They are responsible for development and maintenance of common resources in order to economize on costs and provide better services. They function directly under Ministry of Defence.

Ordnance Factory Board (OFB) functions under the administrative control of the Department of Defence Production and is headed by Director General, Ordnance Factories. 39 factories are responsible for production and supply of Ordnance stores to the Armed Forces.

1.3 Integrated Financial Advice and Control

Ministry of Defence and the Services have an internal financial control system in place. With fully integrated Finance Division in the Ministry of Defence, the Financial Advisor, Defence Services and his/her officers scrutinize all proposals involving expenditure from the Public Fund. FADS is responsible for providing financial advisory services to Ministry of Defence and the Services at all levels and also for treasury control of the Defence expenditure.

Being Chief Accounting Officer of the Defence Services, FADS is also responsible for the internal audit and accounting of Defence expenditure. This responsibility is discharged through the Defence Accounts Department with the Controller General of Defence Accounts as its head.

1.4 Authority for Audit

The authority for our audit is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. We conduct audit of Ministries/Departments of the Government of India under Section 13[1] of the

[1] Audit of (i) all expenditure from the Consolidated Fund of India (ii) all transactions relating to Contingency Funds and Public Accounts and (iii) all trading, manufacturing, profit & loss accounts & balance-sheets & other subsidiary accounts.

CAG's (DPC) Act. Major Cantonment Boards are audited under Section 14[2] of the said Act. Principles and methodology of compliance audit are prescribed in the "Regulations of Audit and Accounts, 2007".

1.5 Planning and Conduct of Audit

Our audit process starts with the assessment of risk of the Organisation as a whole and each unit based on expenditure incurred, criticality and complexity of activities, level of delegated financial powers, assessment of overall internal controls and concerns of stakeholders. Previous audit findings are also considered in this exercise. Based on this risk assessment, the frequency and extent of audit are decided. An annual audit plan is formulated to conduct audit on the basis of such risk assessment.

After completion of audit of each unit, Local Test Audit Reports (LTARs) containing audit findings are issued to the Head of the unit. The units are requested to furnish replies to the audit findings within a month of receipt of the LTARs. Whenever the replies are received, audit findings are either settled or further action for compliance is advised. Important audit observations arising out of these LTARs are processed for inclusion in the audit reports which are submitted to the President of India under Article 151 of the Constitution of India.

During 2008-09, audit of 950 units/formations was carried out by employing 38052 man days. Our audit plan ensured that most significant units/entities, which are vulnerable to risks, were covered within the available manpower resources.

1.6 Significant Audit Observations

Capital and the Revenue Procurements made by the Ministry of Defence and the Service Organizations form the critical area as far as the audit of Defence Sector is concerned. Audit has been pointing out the deficiencies in the procurement process in its previous reports and the Ministry of Defence has taken several measures to improve the procedures involved. Periodical revisions of the Defence Procurement Procedure (DPP) latest in 2008 and Defence Procurement Manual (DPM) in 2009 are a step to evolve better practices. Despite the same, significant deficiencies exist in the process of procurement, which have been summarized in the report.

The present report highlights cases which assume importance in the light of their impact on operational preparedness and the considerable financial implications. The report also brings out cases which underscore systemic deficiencies like inadequacy in trial and quality inspections, poor management of contracts, inaccuracy in assessment of requirements and non-responsive functioning which require immediate redressal.

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[2] Audit of receipts and expenditure of bodies or authorities substantially financed by grants or loans from the Consolidated Fund of India or of any State or of any Union Territory.

An illustration of defective procurement of Capital nature is the Multi Barrel Rocket Launcher System, SMERCH (Paragraph 2.1). The system was imported at a cost of Rs 2633 crore, but had critical defects in its sub systems, which were revealed during its exploitation. The deficiencies impacted it adversely in effective operationalisation. Non availability of Buyer Furnished Equipments further impaired the functioning of the system. Another typical case of defective purchases was the procurement of Integrated Oxygen and Communication Mask Helmets (Paragraph 2.5). The masks were procured to alleviate the problems related to supply of pressurized oxygen in high altitude areas to Helicopter Pilots of Army. The procurement was done without trial evaluating the masks at high altitudes. On their utilization, users experienced serious defects like erratic and insufficient supply of oxygen, severe headache etc., which forced the withdrawal of the masks. Non adherence of the laid down procedures was very much apparent in the case of procurement of spares for L-70 guns (Paragraph 3.1) where the spares valuing Rs 4.99 crore were accepted by the Army without the mandatory pre-dispatch inspection. On receipt, those were found to be non- compatible for the guns and as a result are lying unused. While cases of receipt of defective ammunition had been highlighted in the previous reports as well, yet the Ministry does not appear to be serious about their implications. As a follow up of a paragraph on receipt of defective ammunition valuing Rs 273.75 crore, reported in the year 2003, Audit found that no concrete action was taken by the Ministry to get the defects rectified. Even after six years, 67453 rounds of the ammunition valuing Rs 245.28 crore were still lying in the segregated state. (Paragraph 2.3).

Defence Public Sector Undertakings were established to provide the Armed Forces state of the art equipments and to enhance country's self reliance in defence production. In a distinct case of role reversal, the Ministry procured outdated Missiles of 1970s vintage worth Rs 587 crore in 2008 merely to favour Bharat Dynamics Limited. The Missiles procured were not only of lower capabilities in terms of the range but also did not meet the Army's long term objective of acquiring third generation missiles which were available in the market (Paragraph 2.2).

Assessment of accurate requirement before any procurement action is extremely important. Nevertheless, Audit found the matter to have been grossly neglected. The report brings out the instances where Army paid a sum of Rs 98.59 lakh for maintenance of Unmanned Aerial Vehicles, which were not even held by it (Paragraph 2.6).The incorrect assessment was also manifest in the purchase of batteries and battery chargers where it resulted in excess procurement worth Rs 5.30 crore (Paragraph 2.4). Procurement of short life drug in excess of requirement led to non-consumption of the drug costing Rs 2.13 crore during its shelf life (Paragraph 3.3). Another instance of inaccuracy in assessment was detected in the provisioning of ammunition for AK-47 rifles, where the assessment was made on the basis exaggerated figures given by the DGOS despite knowing the actual entitlement of the weapons (Paragraph 3.4).

This report includes a case which reflects the gross insensitiveness in the functioning of the Ministry even in emergency procurements. Assault Boats, which were required urgently by the Army, could not be procured for over six years despite the availability of all the ingredients like urgency, availability of budget, adequate number of vendors etc required for speedy decision making (Paragraph 3.5).

Audit of MES works has always been an area of importance. This report also highlights a case of construction of Golf club building under the garb of repair of buildings for which sanctions were actually accorded (Paragraph 4.1). Cases of avoidable expenditure, additional expenditure due to delay in execution of works have also been highlighted in this Chapter.

Irregularities related to working of the Border Roads Organization have been reported separately in Chapter V. The chapter presents two cases demonstrating as to how costly a delay in opening of bids can prove to the exchequer and also as to how inconsiderate functioning could lead to misappropriation of government stores. An instance of unplanned procurement of segregators (Paragraph 5.1) resulting in non utilization of the equipment procured at a cost of Rs 4.55 crore is also a useful disclosure.

The report also brings out issues which depict inadequacies in the functioning and management of R&D Organisation. Instances like creation of assets without ensuring desired power supply for its operation, loss due to damage to imported equipment, poor planning of works services, loss due to lack of coordination in procurement of a life saving item are highlighted in Chapter VI.

In case of Ordnance Factories, Audit has commented on the injudicious sanction of Rs 408.01 crore for setting up a new factory at Korwa without actually finalizing the new generation cabines to be manufactured, opportunity savings of Rs 13.33 crore foregone by two ordnance factories owing to their failure to maintain power and load factor to a desired level while receiving electricity from the electric companies. Special mention is made of the case in paragraph 7.10 in which vendors received reimbursement of customs duty of Rs 1.19 crore allegedly paid by them in import of machinery for Ordnance Equipment Factory Kanpur. Cross checking by Audit with Customs indicated that the said duty had not actually been paid by the vendors. It would appear that letter head and rubber seal of the factory had been used by the vendors in the forged Customs Duty Exemption Certificate produced by them to the customs authorities. This point to strong possibilities of involvement of personnel of the factory.

1.7 Response of the Ministry/Department to Draft Audit Paragraphs

On the recommendations of the Public Accounts Committee, Ministry of Finance (Department of Expenditure) issued directions to all Ministries in June 1960 to send their response to the Draft Audit Paragraphs proposed for inclusion in the Report of the Comptroller and Auditor General of India within six weeks.

The Draft Paragraphs are forwarded to the Secretaries of the Ministry/departments concerned drawing their attention to the audit findings and requesting them to send their response within six weeks. It is brought to their personal attention that in view of likely inclusion of such Paragraphs in the Audit Reports of the Comptroller and Auditor General of India, which are placed before Parliament, it would be desirable to include their comments in the matter.

Draft paragraphs proposed for inclusion in this Report were forwarded to the Secretaries concerned between June 2009 and October 2009 through letters addressed to them personally.

Ministry of Defence did not send replies to 11 out of 25 Paragraphs featured in Chapters II to VI. Department of Defence Production also did not send reply to 08 out of 10 Paragraphs included in Chapter VII of this Report. However, the response of Ordnance Factory Board, wherever received, had been suitably incorporated in the paragraphs in Chapter VII.

1.8 Action taken on earlier Audit Paragraphs

With a view to enforcing accountability of the executive in respect of all issues dealt with in various Audit Reports, the Public Accounts Committee desired that Action Taken Notes (ATNs) on all paragraphs pertaining to the Audit Reports for the year ended 31 March 1996 onwards be submitted to them duly vetted by Audit within four months from the date of laying of the Reports in Parliament.

Review of ATNs relating to the Army as of April 2010 indicated that ATNs on 80 paragraphs included in the Audit Reports up to and for the year ended March 2008 remain outstanding, of which the Ministry had not submitted even the initial ATNs in respect of 20 Paragraphs as shown in **Annexure-IA**. 28 are outstanding for more than 10 years. With regard to Ordnance Factory Board as of March 2010, Ministry of Defence had not submitted ATNs in respect of 12 Paragraphs included in the Audit Report for the years ended March 2007 to March 2009 even for the first time as per **Annexure-IB**. Further, Audit could not vet ATN in respect of other 11 Audit Paragraphs, as per the details given in the **Annexure-IC**, for want of revised Action Taken Note based on Audit's observations.

1.9 Financial Aspects/ Budgetary Management

What is commonly known as Defence expenditure comprises expenditure under six Grants. Grant No. 21 authorises expenditure on Army, Inter Service Organisations and others like Inspection Organisations, NCC, Rashtriya Rifles including Stores and Transportation etc. Grants No. 22 and 23 relate to Navy and Air Force Grant No. 24 authorises expenditure on Ordnance Factories.

Grant No. 25 relates to expenditure for Defence Research and Development Organisation. Grant No. 26 authorises Capital Outlay on all Services.

Defence Outlays can broadly be categorized into Revenue and Capital. Revenue Outlays cover Pay and Allowances, Stores, Transportation etc. Capital Outlays cover expenditure on acquisition of new weapons and ammunitions, replenishment of obsolete stores with modern variety. Much of the modernization of Services takes place under Capital expenditure.

The budgetary provision (Voted portion) on Defence Services has increased from Rs. 92170.05 crore in 2006-07 to Rs. 125358.64 crore in 2008-09-an increase of 36 *per cent*. The increase on the revenue side (Voted segment) was 41 *per cent* – an increase from Rs. 54725.80 crore to Rs. 77382.54 crore during the period primarily due to revision of pay of defence forces on the recommendations of Sixth Pay Commission. The Capital Outlay was increased by 28.13 *per cent* from Rs. 37444.25 crore to Rs. 47976.10 crore.

The actual Revenue expenditure increased by 41 *per cent* from Rs. 54827.49 crore in 2006-07 to Rs. 77074.06 crore in 2008-09. The increase in the Capital expenditure was 21 *per cent* from Rs. 33791.20 crore in 2006-07 to Rs. 40894.97 crore in 2008-09. The unspent provision under Capital had increased from Rs 3653.05 crore in 2006-07 to Rs. 7081.13 crore in 2008-09- an increase of 93.84 *per cent*. This would indicate the lack of capacity in the Ministry to process acquisitions in a timely manner.

1.10 Analysis of Revenue Expenditure of Army

For the year 2008-09, the Voted portion of the Original Grant of the Army for Revenue Expenditure was Rs 37662 crore. Another Rs 12199 crore was sanctioned in the Supplementary Grant making the Final Grant of Rs 49861 crore. As against this, the expenditure recorded was Rs 49053 crore registering an unspent provision of Rs 808 crore. In the earlier financial year of 2007-08, there was an excess expenditure of Rs 71 crore.

Pay and Allowances for the Army constituted 49 per cent (Rs 24276 crore) of the total expenditure in 2008-09. If Pay and Allowances for Civilians (Rs 2378 crore) and Auxiliary Forces (Rs 480 crore) are added, the Pay and Allowances component would constitute 55 per cent, Stores (Rs 10972.47 crore; 22 per cent) Transportation (Rs 1384 crore; 3 per cent) Works (Rs 4445.66 crore; 9 per cent) were other significant components of expenditure.

While comparing the expenditure within the Grant, significant savings took place in almost all the heads, especially the heads involving Stores (Rs 260 crore), Works (Rs 163 crore) and Pay and Allowances of Army (Rs 92 crore), Auxiliary Forces (Rs 79 crore) and Civilians (Rs 25 crore). The savings in Stores took place due to reduction in rates of superior kerosene oil (SKO), drawal of less quantity of food in North East region due to bird flu, non-drawal of Tetra packed milk, SKO, non-conclusion of annual maintenance contract of UAV and non-delivery of UAV spares. Savings in Works was mainly due to reduced expenditure in maintenance, special repairs, other revenue works, reduced usage of electricity consumption, non-completion of the ongoing projects, non-supply of office equipment by Vendors in time due to natural calamities and social disturbances.

Unlike the sharp increase witnessed in 2008-09 in the Army's revenue budget due to implementation of the recommendations of the sixth Pay Commission, the trend indicated a nominal decrease during 2009-10. As against the budget estimates of Rs.33126 crore for 2009-10 for Pay and allowances for Army, the revised estimates stand at Rs.33048 crore. The budget estimates for 2010-11 for these are at Rs.31599 crore.

1.11 Analysis of Revenue Expenditure of Ordnance Factories

The bulk of expenditure of Ordnance Factories is met by "deduct recoveries" for supplies to Army, Navy and Air Force. In addition, Ordnance Factories also do Civil Trade and sell stores to para-military forces and to the public. These are booked as Receipts into the Consolidated Fund of India. The following table will give the picture:

(Rupees in crore)

Year	Expenditure	Deduct Recovery	Receipt on supply of surplus stores	Net Receipt
2004-05	6389.89	5330.35	1264.63	205.09
2005-06	6847.13	5701.31	1537.81	391.99
2006-07	6191.89	5147.77	1384.52	340.40
2007-08	7125.63	5850.65	1464.12	189.14
2008-09	9081.28	6123.38	1474.54	(-)1483.36

The trend of generating surplus of receipts over expenditure in Ordnance Factory Organisation has been reversed in 2008-09 mainly due to cost increase in manufacturing resulting from increase in pay and allowances, payment of arrears of pay on implementation of recommendations of Sixth Central Pay Commission (CPC) and non-materialisation of certain CKD/SKD* items.

In the revised estimates for 2009-10, net budgetary support from the Consolidated Fund of India after adjustment of Deduct Recoveries and Revenue Receipts has been pegged at Rs 2187.32 crore. For the year 2010-11, the net budgetary support has been estimated at Rs 246.19 crore. In large number of cases the issue prices are less than the actual cost of production.

While, till 2007-08, the Ordnance Factories had been able to maintain negative charge to the Consolidated Fund of India, supplies to the Services have never

* CKD/SKD – Complete Knocked Down/Semi Knocked Down

been able to match the budget provision indicating less supply than anticipated. Against the budgeted supply of Rs 6597 crore in 2008-09, the supplies booked were at Rs 6123 crore registering a shortfall of Rs 474 crore. In 2007-08, the shortfall was of Rs 594 crore and in 2006-07, it amounted to Rs 633 crore.

Overall performance of ordnance factories for the year 2008-09 has been analysed at Paragraph 7.1 in this report.

1.12 Analysis of Army Capital Expenditure

In 2007-08, Army could spend Rs. 11912 crore against a Capital Outlay of Rs 11864 crore leading to an excess expenditure of Rs 48 crore. In 2008-09, however it spent Rs 10611 crore against an allocation of Rs. 10947 crore. However, detailed analysis indicates that there are several areas where money has remained unutilized as would be evident from the following table:-

(Rupees in crore)

	2007-2008				2008-2009			
	O	**R**	**FG**	**Actual**	**O**	**R**	**FG**	**Actual**
Aircraft & Aero engines	1040.49	(+) 513.78	1554.27	1560.62	426.70	(+) 108.55	535.25	602.61
Heavy & Medium Vehicles	719.19	(+) 670.21	1389.40	1378.61	1285.26	(-) 58.48	1226.78	1114.86
Other Equipment	6616.47	(-) 555.87	6060.60	6136.31	8345.33	(-) 2179.50	6165.83	5965.81
Rolling Stock	72.00	(-) 46.96	25.04	25.35	114.80	(-) 74.96	39.84	(-) 0.18
ECHS	57.00	(-) 48.90	8.10	9.65	60.00	(-) 50.50	9.50	7.57
Rashtriya Rifles	72.95	(-) 48.40	24.55	26.47	21.98	(+) 4.36	26.34	26.41
Construction Works	2932.77	(-) 178.56	2754.21	2758.16	2992.25	(-) 86.92	2905.33	2855.00

O-Original Grant; R-Re-appropriations; FG-Final Grant; ECHS-Ex Servicemen's Contributory Health Scheme

The increase in Appropriation of Rs 109 crore for Aircraft and Aero Engines was mainly due to seeking of additional amount against advanced light helicopter. The increase of Rs 4 crore under Rashtriya Rifles was mainly due to variation in cost of ECM JAMMERS, payment and adjustments of pending bills for Light Vehicle Based Direction Finder. Much of the savings have taken place in Heavy and Medium Vehicles, Other Equipments, Rolling Stock, construction works and Ex-servicemen Contributory Health Scheme. The savings were mainly due to allocation of more funds, non-payment for PINAKA due to non-completion of Joint Receipt inspection, non-release of payment against 4 new schemes for want of bank guarantees by the Vendors/non-submission of bills, reduction in targets by Director General Ordnance Factories, non-clearance of bills by Director General Operational Logistics till end of Financial Year due to design defects/modification, non-materialisation of supply order in time, reduced expenditure in New Works etc.

Capital Budget Outlay for Army in 2009-10 was Rs.18020 crore. In the Revised Estimates in the year, it has been brought down to Rs 12816 crore. The trend of under-utilisation of capital outlay is expected to continue.

1.13 Capital expenditure of Ordnance Factories and DRDO

The capital expenditure of Ordnance Factories during 2008-09 was Rs 323.99 crore. Normally, expenditure on renewal and replacement in the ordnance factories are met from the renewal and replacement fund created out of the revenue expenditure. During the year 2008-09, the amount transferred to the renewal and replacement fund was Rs 271 crore and the expenditure incurred from it was Rs 276 crore.

In the case of DRDO, the capital expenditure during 2008-09 was Rs 3855 crore. Of this, expenditure on machinery and equipment was Rs 3442 crore and it constituted 89 *per cent*. The capital expenditure on DRDO nearly equalled the revenue expenditure during the year, which stood at Rs 3876 crore.

1.14 Rush of expenditure in the last quarter of the financial year and in particular, in the month of March

Ministry of Defence (Finance/Budget) has from time to time, issued instructions to maintain an even pace of expenditure through the year. Such instructions had, however, little effect on the pace of expenditure. 62 *per cent* of the annual Capital expenditure for all services to Budget Estimates was spent during the last quarter of 2008-09. 43 *per cent* of the expenditure to Budget estimates took place in the month of March, at the fag end of the year.

CHAPTER II : MINISTRY OF DEFENCE

2.1 Defective import of SMERCH Multi Barrel Rocket Launcher System

The import of defective SMERCH MBRLS at the cost of Rs 2633 crore, delay in purchase of buyer furnished equipment and formulation of War Establishment had resulted in non operationalisation of the system.

Ministry of Defence signed two contracts in December 2005 and March 2007 with M/s Rosoboronexport, Russia for import of a total number of 42 SMERCH Multi Barrel Rocket Launcher System (MBRLS) at the total cost aggregating Rs 2633 crore which included spares and Rocket Projectiles (RP) of different ranges. The system comprises of Launch Vehicle (LV), Trans-loader Vehicle (TLV), Command and Staff Vehicle (CSV), Meteorological Support (MET) Complex Vehicle and Workshop Repair Vehicle. Supplies against the first contract commenced from June 2007 and were completed by 2008-09. The supplies of systems against the second contract were completed in May 2009 except a few rocket projectiles. The audit scrutiny of the import revealed the following:

Exploitation of the system

The first consignment of MBRLS supplied was inducted in July 2007 in three Rocket regiments. The equipment was exploited to its limit in the annual practice- cum- firing conducted by one regiment in October/November 2008. The exploitation revealed critical defects in the sub systems SOCRIG[3] (of ALFCS)[4] and DTE[5] as stated below:

Failures in Launch Vehicles

In respect of the LVs the failures in two hydro pneumatic device which acts as a lifting and balancing mechanism of the LV and cost Rs 25 lakh each, were reported within the warranty period. Though the defects were attended to by the vendor yet the replacement was made from the two devices held by the Regiment under Spare Parts Tools and Accessories (SPTAs). While no more hydraulic assembly was available in the SPTA contracted, the two numbers earlier consumed by the warranty team were yet to be replenished. In the absence of ready availability of SPTAs, the failures in the hydro pneumatic device of the LV would result in forced dependence on the vendor when large scale exploitation of weapon system takes place. The Ministry had stated in November 2009 that the OEM had been directed to replenish all consumed SPTAs at the earliest.

[3] SOCRIG – Self orienting Coarse Roll Indicating Gyroscopic System is provided in the LV for automatic laying and fire control. It is critical for accuracy of weapon system.

[4] ALFCS – Auto laying Fire Control System

[5] DTE – Data Transmission Equipment for Encrypted Data communication. Automation of the Weapon System depends largely on the reliability of the DTE.

Failures in sub system of launch vehicle - SOCRIG

The trials of the system were conducted in three phases between June and August 2002 prior to conclusion of contract in December 2005. In the General Staff Evaluation (GSE) of the trials, the Director General Quality Assurance (DGQA) (L) observed that electronic components should be able to function in operating environment specification of minus 40ºC to plus 50ºC. However, the maximum temperature recorded during trials was stated to be up to 36ºC only when the trials were conducted. The need for verification of these aspects before finalization of contract was emphasized in the GSE.

Seven out of thirteen SOCRIG failed completely during exploitation of sub systems. As one sub system costs Rs 50 lakh and is critical for the accuracy of the system, the matter was taken up with the supplier who suggested to carry out the product improvement by installing a cooling system at the cost of buyer.

One of the possible reasons for the failure of SOCRIG was attributed to high temperature prevailing in Indian field conditions which suggested that despite the apprehensions expressed during trial evaluation the system was not tested at the temperatures stipulated in the contract.

Failure of Data Transmission Equipment (DTE)

The sub-system DTE is fitted in LV, TLV, CSV and MET Complex for encrypted data communication. Eleven DTEs each costing Rs 25 lakh reported complete/partial failures due to defect in the internal component. The equipment is critical for the reliability of the system since complete automation depends on it. The Ministry stated in November 2009 that the matter had been taken up with the OEM who had agreed to carry out modifications in the manufacturing process and also carry out modifications in the sub system supplied. The Army Technical Board had taken up a project with IIT, Delhi to develop an alternative system so that it can be used in case of failure in future.

The SPTAs of SOCRIG and DTE were provided in a very limited quantity in the contract as the quantities were meant for four years of operation. The Ministry stated in November 2009 that the matter had been taken up with the supplier to make up the deficiencies created by using group SPTA item for repair. However at the present rate of failure, the spares were not expected to last even beyond one year after expiry of warranty of 18 months.

Deficiencies in Communication system

Radio Set R 171 M supplied by the vendor has a tuning system which was reported to be more defect prone than other sub systems of radio sets and also had reduced range. Though the defects reported so far had been rectified by using the SPTA, yet for long term use the diagnosis of fault in the communication control system of CSV was reported to be not possible in the absence of manuals for repair. The Ministry stated in November, 2009 that OEM has been directed to replenish all consumed SPTAs at the earliest and the requirement of manuals for repair can be co-ordinated with Electronics and Mechanical Engineers (EME).

It was further noticed in audit that defective clause in contract and shortcomings in Pre-Despatch Inspection (PDI)/improper inspection as enumerated in succeeding paragraphs had resulted in import of defective SMERCH MBRLS.

The contract provided for PDI by the DGQA and sixteen personnel were trained in Russia to carry out inspection. The PDI could not be carried out properly as the team members were not exposed to the weapon system in the short training.

The clauses governing the PDI in the contract, with M/s Rosoboronexport (Russia) envisaged acceptance of Quality Certificates issued by the manufacturer, a third party. This rendered the outcome of the PDI as a foregone conclusion necessitating acceptance of the equipments offered. Reliance on third party inspection without enabling clauses in the contract defining the vendor's responsibility had increased risks in importing a defect prone system and the buyer's interest unprotected.

The PDI team involved in inspection of the LVs etc was not permitted by the vendor to carry out live firing from the LV (9A – 52 – 2T) supplied owing to defective wording of the contract. The scope of PDI under Article 12.1.3 of the contract stipulates 'check up of the major aggregates and assemblies of the equipment for serviceability and functioning in compliance with the chapter Acceptance Trials from technical conditions of the manufacturing plant.' The PDI of the RPs were conducted by the DGQA team by firing from the Launch Vehicle 9A-52-2 (of 1993 year of production) in the proof range at Russia and not from the Launch Vehicle 9A-52-2T covered under the scope of contract of December 2005 resulting in non validation of the LV by firing before acceptance. Later several critical defects in subsystems of the LV were reported by the Rocket Regiment during its exploitation /firing.

Further, the Buyer Furnished Equipments (BFE) mainly High Mobility Ammunition Vehicles (HMVs), Global Positioning System (GPS) Heavy Recovery Vehicle (HRV), Trailer etc. required to operationalise the SMERCH system could not yet (November 2009) be procured. The formation HQ stated that War Establishment (WE) which authorises vehicles and equipments was yet to be approved. The requirement felt by the SMERCH stocking depot (CAD Pulgaon) in September 2006 for special Material Handling Equipments (MHEs) for movement of SMERCH ammunition within the depot could not be met. Due to non-availability of the special MHEs, four rockets were damaged during internal shifting in January 2009, resulting in loss of Rs 2.36 crore.

The Ministry replied in November 2009 that defects of SOCRIG and DTE had been taken up with OEM, who might come up with a comprehensive solution. The Ministry further stated that WE for authorisation of Ammunition Vehicle, GPS etc. to the units for SMERCH Weapon System was under formulation and units would be able to demand such items on its approval.

Thus, the SMERCH Weapon System procured at a cost of Rs 2633 crore could not be fully operationalised due to defects in various systems, delay in buying the logistics support equipment and formulation of War Establishment. The absence of suitable material handling equipment led to damage of four rockets and resultant loss of Rs 2.36 crore.

2.2 Procurement of low capability missiles

Outdated Missiles of 1970s vintage valuing Rs 587.02 crore were contracted in 2008 for procurement from BDL by compromising the Army's requirement, though the third generation missiles are available globally.

The Anti Tank Guided Missile (ATGM) Milan-2 held by the Army is a second generation missile of late seventies vintage. It was produced by M/s Bharat Dynamics Ltd. (BDL) since early eighties under Transfer of Technology (TOT) arrangement with a foreign firm and supplied to the Indian Army. The missile with single warhead has limited capability to defeat modern tanks but its upgrade version i.e. Milan-2T fitted with Tandem[6] warhead can defeat modern tanks. Army HQ formulated a General Staff Qualitative Requirement (GSQR) in 2003 for the upgrade version, with tandem warhead. The tandem warhead was to be obtained under TOT from the OEM. The GSQR of in-service missile Milan-2 provided for essential range as 1850 metres and desirable range of 2000 metres. The GSQR of 2003 for Milan 2T indicated the range as 2000 metres to meet the need of modernisation of forces. Based on GSQR of 2003, RFP for procurement of 4100 Milan 2T was issued to BDL in January 2007. The Technical Evaluation Committee (TEC) did not find the product offered by BDL compliant with the GSQR as the range of 2000 metres offered had only 1850 metres under guidance phase while the last 150 metres was left unguided. The case for procurement was therefore closed in May 2007.

Subsequently, the BDL confirmed that the range of Milan 2T would be 2000 metres. The case was reopened and trials of Milan 2T were conducted in February 2008. Based on trial results, the General Staff did not recommend its introduction into service in view of difficulties in engaging moving targets during last 150 metres. Besides, requirement was not met as regards flight time and weight. Further, third generation missiles were already available in the global market.

Based on the representation of Staff union of the BDL to the then Raksha Up Rajya Mantri that non-placement of order for Milan-2T, would result in redeployment of work force of BDL and wastage of already procured material common to Milan-2/2T, it was decided to procure minimum required quantity of Milan-2T in May 2008 by amending the GSQR for Milan 2T with 1850 meters range and with waiver of trials, considering the time required for procurement of the 3rd generation missile and that the shelf life of existing stock of Milan-2 would expire by 2013. In August 2008, the GSQR of 2003

[6] Tandem Warhead: Two Warheads, one behind the other.

was amended in favour of BDL to suit the trial results of February 2008. The revised RFP was issued to BDL in September 2008 as per amended GSQR seeking commercial offer.

The Ministry concluded a contract with BDL, Hyderabad in December 2008 for supply of 4100 Milan ATGM equipped with Tandem warhead (Milan 2T) at a cost of Rs 587.02 crore with a staggered delivery schedule to be completed within 36 months from the effective date of contract.

Audit scrutiny revealed that even before issue of the first RFP to BDL in January 2007, Army was aware that an adversary was having ATGM of range longer than the Milan-2T and as such reducing the standards of GSQR of 2003 was not desirable. The Army in fact wanted ATGM of even longer range so as to avoid risk of exposure. It was also known to Army (June 2006) that third generation missiles were available in the global market. The Army had not even formulated GSQR for third generation missile for over two years when GSQR for Milan-2T was amended (August 2008).

Thus, due to reduction in standards of Milan-2T to suit the offer of BDL and to avoid wastage of material already procured, Milan-2T missiles of lower capability were contracted at the cost of Rs 587.02 crore by compromising the Army's actual requirements. This is when the missile was being phased out in the country of origin and better systems were available in global market.

In their reply, the Ministry stated in November 2009 that the holding of Milan missiles in May 2008 was below the operational requirements of Army. In view of the critical void in the holdings of missiles, procurement of quantity 4100 Milan 2T had been made as a stopgap – interim measure pending the selection and induction of the 3rd generation ATGM. The fact remains that low capability missiles were procured by compromising the Army's requirements in spite of availability of better missiles in the global market as BDL could not produce them. Further, Army has failed to formulate GSQR for third generation missiles for over three years.

2.3 Non replacement/rectification of imported ammunition

Indigenous and imported ammunition valuing Rs 273.75 crore reported defective was awaiting repairs for over five to eight years. Although the imported ammunition was still under warranty, Army HQ did not make efforts to get it rectified/replaced from the supplier under warranty.

The Ammunition 'A' was designated to be fired from T-72 Tanks. Mention was made in the paragraph 8 of the Report No. 6 of 2003 of the Comptroller and Auditor General of India, Union Government – Defence Services (Army and Ordnance Factories), about the defects in manufacture of the ammunition and the resultant segregation of ammunition valued at Rs 607.43 crore since January 2002. In their Action Taken Note, the Ministry stated in January 2005 that 38,200 rounds of the 1.35 lakh segregated ammunition had been made serviceable and action to get the remaining quantity repaired/replaced was under progress. Audit, however, observed that as of November 2009, 67,453 rounds valuing Rs 245.28 crore were still lying in segregated state.

Audit further observed that 1906 rounds of the ammunition were rejected during visual inspection by Western Command in August 2004, due to the reasons such as loose/cracked primary and secondary cartridges and shot detached from cartridge case and reported it to Army HQ. This ammunition was part of the 26,000 rounds of ammunition imported under a contract concluded by the Ministry in July 1999, about which mention was made in paragraph 4.6 of the Report No. 7A of 2001 of the Comptroller and Auditor General of India on Review of procurement for OP Vijay (Army).

Although the imported ammunition was under warranty for a period of 10 years and the seller was contractually bound to either replace or rectify the defects free of charge, Army HQ did not take up the matter with the seller. Instead, Army HQ in September 2008 requested Ordnance Factory Board to carry out thorough analysis of ammunition and to carry out repair or replacement of 67,453 rounds (valuing Rs 245.28 crore) of indigenous ammunition and 6191 rounds of imported ammunition (valuing Rs 28.47 crore) held in defective state.

In November 2008, Directorate General of Quality Assurance suggested to Army HQ to take up the matter with supplier as the imported ammunition was under warranty. Army HQ however did not take up the matter with the supplier as of November 2009. In reply to an audit query, Master General of Ordnance (MGO) branch of Integrated HQ/MOD stated in November 2009 that the delay in taking further action was due to the delay in getting complete details of defective lots from all the Depots. MGO reported to OFB in December 2009 that there had been no progress in carrying out repair or replacement of 67,453 rounds of indigenous ammunition and 6191 rounds of imported ammunition, despite repeated requests.

The Ministry stated in April 2010 that 1705 rounds of the imported ammunition was held in segregated state, but added that no defective ammunition was held. The contention of the Ministry that no defective ammunition was held is indefensible since only ammunition in doubtful category are kept in segregated state. As mentioned in the foregoing paragraph, even in December 2009, the MGO had reported to the OFB about the delay in carrying out repair/replacement of the indigenous/imported ammunition. Thus, indigenous and imported ammunition costing Rs 273.75 crore remained in a state "unfit for use" for over five to eight years. Such delays in making the ammunition fit for use are inexplicable.

2.4 Excess procurement of batteries and battery chargers

Erroneous assessment of requirement of batteries and battery chargers for a class of radio sets used by the Army resulted in their excess procurement costing Rs 5.30 crore. Timely intervention by Audit prevented further over-provisioning and proportionate reduction of requirement from the subsequent procurement of the batteries/chargers.

Army placed indents on M/s BEL in March 2007 for supply of 4000 each of 5Watt and 25Watt radio sets along with spares support valuing Rs 467.61

crore. The entire lot of 4000 radio sets of 5W capacity was to be in man-pack version while 2400 numbers of 25W were in man-pack version and the remaining 1600 in vehicular version.

The radio sets to be used in High Altitude Area (HAA) were required to be fitted with non-chargeable battery, which would be discarded after use. The radio sets to be used in other than HAA were required to be fitted with rechargeable battery which is to be charged through a battery charger for re-use. One battery charger was required for three radio sets.

Since 1000 5W radio sets and 600 25W radio sets included in the 4000 sets ordered as above were for use in HAA, they did not require rechargeable batteries. However, rechargeable batteries worth Rs 3.47 crore were procured for those 1600 sets. In addition, 533 battery chargers at the scale of one for three radio sets were also procured for those 1600 sets at a cost of Rs 2.93 crore. Thus, the procurement of batteries and chargers worth Rs 6.40 crore for the radio sets meant for use in HAA was unwarranted.

In November 2008, Army HQ projected a requirement for batteries and chargers, once again disregarding the fact that the radio sets to be used in HAA did not need rechargeable batteries. In January 2009, the Ministry requested BEL to quote for supply of the items as demanded by Army HQ. In February 2009, when Audit pointed out the excess procurement of batteries and chargers against the indents of March 2007, Army HQ amended the requirement projected in November 2008 not only to make it realistic, but also to adjust the excess procurement made earlier. Similar reduction was also made in respect of the battery chargers.

In October 2009, the Ministry of Defence agreed that 1600 rechargeable batteries were procured in excess which had been offset by reducing equal number from the subsequent purchase of March 2009. Regarding battery chargers, it stated that only 333 chargers were excess in the earlier purchase since there has been an increase in their requirement. This too had been reduced when subsequent purchase was made. Thus, timely intervention by Audit not only led to a saving of Rs 5.30 crore, but also checked the recurrence of such excess procurement.

In their reply to the Audit comment about weakness in system of internal control that led to excess procurement of high value items, the Ministry stated the requirement had been worked out more scrupulously in the subsequent procurement. The existing system of controls warrants comprehensive improvement to avoid such unwarranted procurements.

2.5 Procurement of defective Oxygen Masks

Despite being aware that the oxygen masks offered by a foreign vendor have serious defects, the Ministry did not ensure that the defects are rectified by the vendor before effecting supply to the Army. This resulted in purchase of defective masks valuing Rs 5.06 crore which have been returned by the Army Aviation Units on account of difficulties being faced by the pilots in inhaling oxygen from the cylinders.

Pilots of Army Aviation operating in high altitude areas have to use oxygen from oxygen cylinders as the cockpits of Cheetah and Cheetak Helicopters are not pressurized. To alleviate this problem, Army Aviation Directorate had projected a case for procurement of 177 Integrated Oxygen and Communication Mask Helmets (IOCMH) for aviators operating in high altitude areas which was approved in 1996. Ministry of Defence concluded a contract in 1998 with M/s Ulmer Aeronatique, France for procurement of 177 units of IOCMH which was cancelled in October 2001 as the vendor did not submit the performance bond.

Fresh request for proposal was issued in December 2001 to four vendors including M/s Ulmer, France and the technical proposals of these firms were opened in February 2002. Technical Evaluation Committee found that the equipment of M/s Ulmer met essential General Staff Qualitative Requirement (GSQR) characteristics and recommended it for trial evaluation. The trial team made following essential recommendation to be addressed by the vendor before its induction into the Army Aviation:-

1. Investigate the cause of reverberations felt while inhaling oxygen with the regulator set to 100 *per cent* and rectify the deficiency in the regulator/masks.
2. Rectify the problem of inspiration resistance and unusual fluttering sound during inspiration
3. Increase the length of the tube connecting regulator inlet by six inches.

Based on trial team recommendation, General Staff evaluation was accepted in January 2004 subject to the above rectifications/modifications. The improvement to be undertaken by the Original Equipment Manufacturer could be validated for completion and correctness during bulk production clearance as it related to optimisation after performance of the equipment.

Ministry in June 2004 requested the vendor to produce the equipment with said modifications for confirmatory trial. Army Aviation Project Team Bangalore received two sets of IOCMH for confirmatory trials in August 2004 which were validated by the trial team. These were found satisfactory and recommended for induction. Accordingly, Ministry concluded contract with M/s Ulmer, France in March 2006 for procurement of 177 units of IOCMH with Manufacturer's recommended list of spares at a total cost of EURO 910,581.82 (Rs 5.06 crore) which included the clause for inspection by buyer's inspectors/Army experts at the seller's factory to witness inspection of the goods in order to check their compliance with specification in accordance with its usual standard procedure. The Pre-dispatch Inspection (PDI) was carried out in June 2007 and the store was inspected as per Acceptance Test Procedure (ATP) given by the firm. Some additional tests of flexing and load test of R/T chord were also carried out at the firm premises. The team recommended for acceptance of the consignment. The vendor supplied the entire stores within delivery period and payment for Rs 5.06 crore was made in September 2007. During Joint Receipt Inspection (JRI) carried out in August 2007, no deficiencies were noticed and the whole quantity was accepted and issued to the user units, barring 16 kept in reserve.

In December 2007, one of the user units intimated about the defect found in five masks out of 18 masks issued to them. In September 2008, Additional Director General Army Aviation intimated the firm about temporary withdrawal of the IOCMH from operations on the ground that during its exploitation by the field units in high altitude areas (HAA) some problems like erratic supply/delivery of oxygen during flight, puckering of mask and loud fluttering noise during inhaling while on 100 *per cent* setting, not getting enough oxygen on normal setting and severe headache were reported by the pilots. The Defence Bio-Engineering and Electro-Medical Laboratory was requested by Army Aviation to carry out trial for the equipment. They found that Oxygen system (Regulator) was inadequate in delivering required concentration at desired flow rates. Accordingly ADG Army Aviation stopped usage of the equipment. The test result was also sent to the firm in February 2009 for rectification of the equipment. 24 Quality claims were raised for various defects. The firm had taken a sample of IOC MH for defect investigation. In October 2009, firm confirmed the defect of fluttering and rectified the sample unit by replacing valve and promised to investigate more units for the defects of dilution of oxygen.

In November 2009 Army HQ stated that the rectified unit would be put to test for confirmation of snag rectifications and after successful testing, the equipment would be fully exploited. The fact remains that confirmatory trial, PDI and JRI failed to deliver correct evaluation of product. The expenditure of Rs 5.06 crore on procurement of equipment did not serve any intended purpose as of November 2009 after more than two year of delivery of stores and future use of equipment was yet to be decided.

The matter was referred to the Ministry in September 2009; their reply was awaited as of April 2010.

2.6 Overpayment of maintenance charges for Unmanned Aerial Vehicles

Absence of monitoring of the work done against maintenance contract resulted in overpayment of Rs 98.59 lakh to a contractor. Army HQ even paid for non-existent unmanned aerial vehicles. Though the firm agreed in March 2009 to repay the overpaid amount, the amount was yet to be received as of November 2009.

Unmanned Aerial Vehicle (UAV) searcher is deployed for aerial surveillance of ground areas, target acquisition, artillery adjustment and assessment of damage. These UAVs along with ground support equipments and related spares were being imported by the Army from the Original Equipment Manufacturer (OEM). Some of those vehicles had crashed over the period of time. Out of the crashed vehicles, one was repaired and replaced by the OEM.

Annual Maintenance Contract (AMC) was concluded by the Ministry of Defence with the OEM on a regular basis for maintenance of the UAVs. The AMC for the period November 2007 to October 2008 was concluded in March 2008 for US $ 47.94 lakh (Rs 19.12 crore)[7]. Audit pointed out in February 2009 that the AMC catered for maintenance of one additional UAV than those actually held. In reply, the DGEME[8] (Aviation) i.e., the maintenance authority in Army HQ, stated that the matter was taken up with the OEM and the latter had admitted in March 2009 that some damaged UAVs had been unintentionally included in the AMCs during the period from 2005-06 to 2007-08. The OEM added that the error occurred since the hardware list was not updated during contract negotiation meetings. The OEM, therefore, offered in March 2009 to adjust the overcharged sum of US$ 1.96[9] lakh (Rs 98.59 lakh). Instead of independently investigating the circumstances leading to overpayment and evaluating the actual amount involved, the DGEME merely relied on the admission of claim by the vendor.

In reply to the draft audit paragraph, Master General of Ordnance (MGO) branch of Army HQ stated in November 2009 that overpayments were due to inclusion of severely damaged UAVs in the previous three AMC. MGO also admitted that the representatives of the user directorate failed to bring out the unserviceable state of the UAVs, though they were present at various stages of negotiations for the AMC.

The case therefore indicated an absence of effective system in the inventory control of operationally sensitive equipments like UAV which resulted in unmonitored payments for a period of three consecutive years. Further, the mechanism for ascertaining the actual amount of the overpayment and recovery thereof was also non-existent. Though the OEM had agreed to refund of US$ 1.96 lakh in March 2009, the recovery of the overpaid amount was still awaited as of November 2009, despite its detection at the instance of Audit in February 2009.

The matter was referred to the Ministry in August 2009; their reply was awaited as of April 2010.

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[7] USD = Rs 39.89

[8] Director General Electronics and Mechanical Engineering

[9] USD = Rs 50.30

CHAPTER III : ARMY

3.1 Non-inclusion of Pre-Despatch Inspection

Non-inclusion of PDI clause in the contract resulted in procurement of non-compatible spares for L-70 Guns valuing Rs 4.99 crore which were yet to be replaced/rectified by the vendor.

Army Headquarter had issued instructions in March 2003 which necessitated pre-despatch inspection (PDI) by the Directorate General of Quality Assurance (DGQA) or ultimate consignee in the contracts for spares valuing more than Rs 3 crore. These instructions were not adhered to in a contract concluded in May 2007 for procurement of spares for L-70 Guns. Acceptance of stores without PDI resulted in receipt of non-compatible spares worth Rs 4.99 crore from a foreign vendor. The spares were neither repaired nor replaced by vendor and lying unutilized as of November 2009. The case is discussed below:

Army HQ concluded a contract with the firm in May 2007 for procurement of two types of spares for L-70 guns viz; Unit Oil Pump (66 qty) and Pump Oil Pisco (134 qty) at a total cost of EURO 805520 (Rs 4.68 crore) without incorporating the PDI clause in the contract.

The firm supplied the complete quantity in two batches by February 2008 without PDI and received payment of Rs 4.99 crore during January/ March 2008. During Joint Receipt Inspection (JRI) held in May 2008 and July 2008, both the spares were found unacceptable due to the following deviations:

1) In Unit Oil Pump the motor of assembly could not be fitted with the (specified) securing provision of central platform due to space constraints. The problems arose due to increased size of motor, shaft dia, cooling fan and coupling.

2) Pump Oil Pisco could not be assembled as there were only 6 to 7 threads provided against 10 threads specified in drawing.

Accordingly, two quality claims against the receipt of defective stores were raised in June 2008 and August 2008 respectively. In response to the quality claims, firm requested in October 2008 for repeating the trial of the assembly of the equipment and intimated that they would supply the 200 units of 'Nut' (66 for unit oil pump and 134 for pump oil pisco) free of cost. Based on the firm's request, DGQA Jabalpur carried out the trial of Unit Oil Pump in November 2008 and found that fitment of the complete assembly was not feasible due to above said deviations. Similarly, fitment and functional trial of Pisco Oil Pump could not be done with existing equipment due to non-receipt of 'Nut'. After receipt of special spanner from supplier fitment trial in respect of assembly of motor for pump oil Pisco and Unit oil pump was carried out in July 2009 but was not found satisfactory.

Thus Army HQ violated its own instruction of 2003 by not including PDI clause in contract for verification of dimension and quality of spares at seller's premises. This resulted in receipt of non-compatible spares valuing Rs 4.99 crore which were neither repaired nor replaced by vendor as of November 2009.

The matter was referred to the Ministry in September 2009; their reply was awaited as of April 2010.

3.2 Irregular procurement of Punched Tape Concertina Coil

Procurement of Punched Tape Concertina Coil from open market instead of through Rate contract of DGS&D led to extra expenditure of Rs 2.35 crore.

Regulations provide that if a store is available on Rate Contract (RC), the same will not be obtained from any other source. Punched Tape Concertina Coil-1A is a general item having industrial specification and is used for fencing. The item was available at Rate/running contracts of Director General of Supplies and Disposals (DGS&D) during the period from 1.2.2007 to 31.1.2009. Audit scrutiny revealed that Director General Ordnance Services (DGOS) and Chief Engineer (CE) of a Corps resorted to local purchase of these coils at higher rates resulting in extra expenditure of Rs 2.35 crore.

The cases are discussed below:

Case-I

DGS&D had concluded a rate contract (RC) on 01 February 2008 with ten suppliers for supply of Punched Tape Concertina Coil (coils) valid from 01 February 2008 to 31 January 2009. Rate per coil was Rs 938.83 inclusive of excise duty and exclusive of sales tax F.O.R.[10] Delhi/New Delhi/Bahadurgarh (Haryana).

Audit scrutiny in two Engineer regiments 'A' and 'B' during June-July 2009 revealed that the CE had placed two orders for supply of 4500 coils each on DGS&D rates to M/s SG Engineers, Rohtak Road, New Delhi and M/s Perfect Drop Pins Mfg. Co. Rohtak Road, New Delhi[11] in May 2008 for delivery by 30 June 2008. Both the firms expressed their helplessness to supply the stores due to rise in steel prices. CE cancelled the supply order on both firms on 30 June 2008 without taking up the matter with the DGS&D regarding refusal of the firms to supply coils at the DGS&D rates. The firms subsequently made request to DGS&D on 4 July 2008 to foreclose the RC citing hike in raw material price when it had provision for adjusting price for regular hike. DGS&D agreed to short-close RC with effect from 18 August 2008 with the condition that supply orders placed on them prior to the date of foreclosure

[10] Free on rail

[11] Both these firms have same address; H-48 Udyog Nagar Rohatak Road having same fax No. 91-11-25472576

were to be executed by the firms. But the CE resorted to local purchase of these coil from two vendors including M/s Perfect Drop Pins Mfq. Co. on which he had placed the order under RC in May 2008 and which did not supply the coil. The CE justified the local purchase at higher rates on grounds of operational requirement.

The Local purchase resulted in an extra expenditure of Rs 0.95 crore as evident from table below:

Engineer regiment	Supply order No and date	Name of supplier	Quantity	Rate per coil Rs.		Difference in rate per coil (Rs in lakhs)	Extra expenditure (Rs in lakh)
				As per supply order*	As per rate contract*		
1.	2.	3.	4.	5.	6.	7. (5-6)	8. (7x4)
A	16 dt 9 July 2008	Perfect Drop Pins Mfq.Co New Delhi	11450	1391	1089.63	301.37	34.51
B	22 dt 9 July 2008	Global Technocrafts, New Delhi	20000	1395	1093.68	301.32	60.26
Total			31450				94.77

*Inclusive of taxes/cartage   Say Rs 0.95 crore

The CE's act of cancelling the supply orders placed on M/s SG Engineers and M/s Perfect Drop Pins Mfg. Co. in June 2008 when the RC was still current was unjustified. DGS&D had stipulated in July 2008 while agreeing to short-close the RCs that all supply orders already placed under the RC have to be executed. Further, by resorting to local purchase at higher rate from the same vendor who defaulted in supply under a valid RC, the CE had extended undue benefit to the vendor. Audit had also observed that operational requirement projected as the reason for making local purchase at higher rate was unreasonable since Regiment 'B' had enough stock (61604) of the coils. Thus, the additional expenditure of Rs 0.95 crore incurred in the local purchase as above was avoidable.

Case-II

Based on the requirement worked out in February 2007, DGOS advertised a tender enquiry in December 2007 for purchase of 44531 Punched Tape Concertina coil though the item was available on DGS&D RC, which was valid up to 31.1.2008, at Rs 917 per coil, (F.O.R. Jalandhar City) inclusive of taxes. Seven vendors participated in bid and M/s Indian Quality Product Zone was found L-1 with quoted rate of Rs1386 each coil, inclusive of all taxes. L-1 firm, however, offered to supply only 10,000 coils. Tender Purchase Committee (TPC) decided on 20 March 2008 for capacity verification of L-I firm and to give counter offer to all remaining firms. Firm L-1 failed in capacity verification. Three firms accepted counter offer for supply of subject item. TPC perused the maximum production capacity (MPC) of three firms and decided to place the supply orders in proportion of their MPC. DGOS placed supply orders, inclusive of one order each on M/s SG Engineers and

M/s Perfect Drop Pins Mfg. Co., for procurement of 44531 coils costing Rs 6.17 crore at Rs 1386 per coil in June 2008 for delivery at Central Ordnance Depot Kanpur though it was available on a fresh RC of DGS&D at Rs 1056, inclusive of tax.

On being pointed out in audit, DGOS stated in April 2009 that specification of store available on RC was old and outdated and that the procurement made in June 2008 was on upgraded specification. Independent enquiry made by Audit from Controllerate of Quality Assurance (Engineering Equipment) revealed that the amendment in specification was only procedural for improvement of quality by changing testing procedure of glavanising coating thickness and it did not have any effect on the cost of equipment. DGOS should have ascertained this before advertising the open tender enquiry in December 2007 so that the procurement could have been made under the RC. Instead, DGOS resorted to open tender enquiry and agreed to pay Rs 1386 per coil. Further, Chief Engineer (CE) of a Corps had been making the procurement of coils through 2008 on the basis of older specification only even in Jammu area which is nearer to the border. Thus, the purchase at 31 *per cent* higher than RC rate resulted in extra expenditure of Rs 1.40 crore for procurement of 44531 coil.

Thus, the purchase of the coil at higher rates by the CE and DGOS involved an avoidable extra expenditure of Rs 2.35 crore. The cases merit investigation to fix responsibility for the lapse and consequential extra expenditure.

The matter was referred to the Ministry in September 2009; their reply was awaited as of April 2010.

3.3 Irregular procurement of short life drug

Simultaneous procurement of a drug[12], centrally by the DGAFMS and locally by the Commandant AFMSD Delhi Cantonment resulted in its over stocking. Consequently, 2121 vials costing Rs 2.13 crore remained unconsumed during shelf life. Besides, 1078 vials valuing Rs 1.08 crore were procured locally by the Commandant AFMSD violating the spirit of delegated financial powers.

Drugs are procured for the Army hospitals both centrally by the Director General, Armed Forces Medical Services (DGAFMS) and locally by the stores depots/units within their delegated powers. Indenting procedure for medical stores issued in December 2005 by the DGAFMS lays down that medical stores having shelf life up to two years will be treated as short life items and stocking of these items will be done for six months' requirement. The aim of this procedure was to ensure availability of adequate stock at all level and avoid over stocking.

[12] Injection Anti Lymphocyte Globulin (ALG) 250 mg /5 ml vial (PVMS No. 010702/Old PV No. 011005N)

Against a rate contract of August 2005, DGAFMS procured centrally during September 2005 to June 2006, 3606 vials of Injection Anti Lymphocyte Globulin, a short life drug valuing Rs 3.62 crore for Armed Forces Medical Stores Depot (AFMSD), Delhi Cantonment including Army Hospital (R&R) at the rate of Rs 9650 per vial plus VAT @ 4 *per cent* as under: -

Sl. No.	Date of Supply Order	Quantity (in vial)	Amount (Rs in crore)	Date of receipt
1.	22 Sept 05	690	0.69	28 Dec 05
2.	28 Feb 06	816	0.82	22 Mar 06
3.	15 June 06	2100	2.11	17 July 06
	Total	3606	3.62	

As of August 2006, out of 3606 vials procured centrally, 540 vials were issued and 55 vials were used in testing, leaving a balance of 3011 vials in stock. Inspite of central procurement of such huge quantity of the drug by the DGAFMS, the Commandant AFMSD Delhi Cantonment through various supply orders, placed between October 2005 and September 2006, procured locally a quantity of 1078 vials of the same drug for Rs 1.08 crore from the same firm. He also split the purchase orders to keep the amount of each supply order within his delegated financial powers (Rs 1.5 lakh).

Further, the AFMSD Delhi Cantonment has been issuing the drug to Army Hospital (R&R) Delhi Cantonment as per their requirement. However, this hospital had been delinked for supply from AFMSD with effect from October 2006. The DGAFMS in May 2007 procured 1560 vials costing Rs 1.57 crore separately for the Army Hospital.

Due to less consumption of the drug, 2133 vials costing Rs 2.14 crore nearing expiry could not be issued by the AFMSD and were held in stock as of July 2008. This quantity of the drug was stated to have been replaced by the firm, free of cost during April/July 2008 although no such provision existed in the contract. Interestingly, no entry of replacement of the drug was available in the Stock Register and no inspection certificate of the Inspection Authority for replaced drug was available on record. As of April 2009, a quantity of 1233 vials costing Rs 1.24 crore was held with the AFMSD and 888 vials costing Rs 89.12 lakh by the Army Hospital.

The case revealed that:-

1. Procurement of the drug centrally by the DGAFMS and locally by the Commandant AFMSD, Delhi Cantonment without ascertaining the actual requirement had resulted in over stocking of the short life costly drug for over three years against stocking requirement of six months as per policy. Consequently, unconsumed quantity of 2121 vials of the drug costing Rs 2.13 crore was held in stock of the AFMSD and Army Hospital (R&R) Delhi Cantonment as of April 2009.

2. The replacement of the short life drug costing Rs 2.14 crore free of cost by the firm was questionable in the absence of test results and entry in the Stock Register.

3. Despite availability of sufficient stock of the drug through central sources, the Commandant AFMSD Delhi Cantonment locally procured 1078 vials costing Rs 1.08 crore unnecessarily by splitting the requirement and thereby misusing his delegated financial powers.

4. There was no coordination between the DGAFMS and the Commandant AFMSD Delhi Cantonment with regard to purchase of medicines.

The Ministry stated in April 2010 that the supply orders placed by the Commandant AFMSD, Delhi Cantonment were prior to the receipt of stores under central supply and the drug received under both the mode, i.e. local purchase and central supply was accounted for in same stock sheet. The Ministry's statement is incorrect as stock of 690 vials and 816 vials was received by the AFMSD on 28 December 2005 and 22 March 2006 respectively through central source, whereas 504 vials of the drug were procured locally by the Commandant AFMSD from January to September 2006. Further, although supply order for procurement of 690 vials through central source was placed in September 2005, yet 574 vials of the drug were procured locally from the same firm through various supply orders placed between October and December 2005 instead of following up with the firm for supply of the drug against the supply order of September 2005. Secondly, during January 2006 to July 2007, the stocks of the drug received through both the mode were accounted for in separate sheets of the Stock Register under PVMS Nos. 10702 and 011005N.

3.4 Overprovisioning of ammunition for a weapon

Incorrect assessment of authorisation of ammunition for AK-47 Rifle resulted in excess provisioning of 234.23 lakh rounds of ammunition valuing Rs 44.50 crore.

Provision of weapons and ammunition for the Army is made by the Armament and the Ammunition Directorates respectively at Army HQ. Both the directorates function under Director General Ordnance Services (DGOS). Provisioning of ammunition is done on the basis of the Unit Entitlements (UE) and Unit Holdings of the weapon as per authorised scale. For AK-47 rifle, ammunition is authorised at the scale of 720 rounds per rifle.

The UE of AK-47 rifle, as reckoned in October 2006 by the Armament Directorate for provisioning of the rifle during 2007-08 was 44,327. However, Ammunition Directorate reckoned its UE as 1,24,012 for provisioning ammunition for the rifle during 2007-08. Thus, the two directorates of DGOS considered totally different UEs for the provision of weapon and its ammunition. As such 234.23 lakh rounds of ammunition valuing Rs 44.50 crore were overprovisioned.

When pointed out in audit, Army HQ accepted the facts and attributed the overprovisioning to non-realistic calculation of UE. Army HQ stated that Annual Provision Review (APR) was vetted by other directorates of Army HQ and the Ministry, which implied that the irregularity was not noticed by those agencies as well. The fact, however, remains that the onus for provision of armament and ammunition lies on the DGOS. The irregularity was reconciled in November 2008 based on inputs from various directorates and the UE of the rifle reworked as 48,428 numbers. To minimise the surpluses caused due to the excess provisioning, the DGOS in February 2009 cancelled an indent for 200 lakh rounds of ammunition costing Rs 38 crore placed on the Director General Ordnance Factories in August 2007.

Though the provisioning of both the rifle and ammunition is carried out by the DGOS, yet the demand for ammunition of AK-47 rifles was grossly overestimated by computing the requirement on exaggerated UE of the rifle. The irregularity occurred despite the fact that DGOS was aware of the actual UE, as the same was being considered in the provisioning of rifles. The inaccuracy resulted in over-provisioning of 234.23 lakh rounds of ammunition costing Rs 44.50 crore and eventually led to the cancellation of an order placed on Ordnance Factory Board for 200 lakh rounds costing Rs 38 crore, to minimize the impact of overprovision.

The Ministry in April 2010 confirmed the aforesaid facts stated by the Army HQ.

3.5 Chronic delay in procurement of Boats

While the requirement of BsAUT was approved in 2003 for emergency, yet the supply order for its procurement could be placed in January 2010 despite ready availability of all necessary prerequisites for fast decision making. Reason for the inordinate delay was attributable to the insensitiveness in the functioning of the agencies involved.

Engineer-in-Chief's (E-in-C) Branch at Army HQ carried out Annual Provisioning Review in May 2002 and determined a deficiency of 992 Boats Assault Universal Type (BsAUT). To meet the emergent needs of the Engineers for operational and flood relief requirements, it was decided in August 2003 to procure 492 BsAUT on priority. Remaining 500 numbers were required for Infantry for which a suitable boat was being identified. Proposal for procurement of 492 BsAUT was initiated in August 2003 and the budgetary support of Rs 5.90 crore for the procurement was confirmed in June 2004 by Ordnance Services Directorate. However, supply order for procurement of 992 BsAUT could be placed in January 2010, i.e. after six years. The BsAUT are scheduled for delivery within 18 months from the date of bulk production clearance to be given after evaluation of the pilot samples by the representatives of Director General of Quality Assurance.

Powers to purchase stores from indigenous sources up to Rs 25 crore based on scales and authorized by Provision Reviews were delegated to the Vice Chief of Army Staff (VCOAS) with effect from April 2002. Hence VCOAS was the competent financial authority (CFA) for the subject procurement. It was, however, observed that neither the Engineer Stores and Plant (ESP) Directorate in the E-in-C's Branch of Army HQ nor the Ministry of Defence appeared to be aware of such delegation as the proposal for "acceptance of necessity" was sent by the Directorate to the Ministry, instead of VCOAS. The case was erroneously processed between the Directorate and the Ministry almost for two years, till August 2006, when the Ministry of Defence directed to process the case with appropriate CFA, i.e. VCOAS. Approval of the VCOAS was finally obtained in October 2006, i.e. after more than three years of the initiation of the proposal.

Pending the approval of CFA, Request for Proposal (RFP) had been issued by the Directorate in May 2005 to which three firms had responded in June 2005 with offers valid up to June 2006. As the approval for procurement was awaited till August 2006, all the three vendors were asked to extend the validity of their commercial bid up to 20 October 2006. Two vendors extended the validity. The third vendor M/s Shrachi Engineering and Industries Ltd. did not extend the validity of their offer. For finalizing the commercial offers, bids of all the three firms were opened by the Board of officers. The rate of Rs 8.44 crore quoted by M/s Shrachi Engineering and Industries Ltd. was the lowest (L-1). In spite of the fact that the L-1 was invalid, comparison of the rates offered by other bidders was done with reference to L-1. Without assessing the reasonability of the lowest valid offer, it was decided in January 2007 to retender the bid merely on the ground that the second lowest rate (L-2) was 53 *per cent* higher than the L-1.

Fresh RFP was issued to eight vendors in April 2007 to which three firms responded. The bids again indicated a huge difference of 85 *per cent* between the L-1 and L-2. The supply order for 492 BsAUT was placed on the L-1 viz. M/s DCM Hyundai Ltd. in March 2008 at a total cost of Rs 9.27 crore, but within two months of the order, the firm withdrew their offer due to escalation in the price of raw materials. The procurement action therefore failed yet again. The failure of the second tender revealed an absence of objective analysis in determining the viability of the rates before acceptance. The difference of 85 *per cent* between the L-1 and the other bidders and the fact that L-1 was a mere 10 *per cent* more than the two year old rate received in June 2005 from M/s Shrachi Engineering and Industries Ltd. which they had refused to extend its validity beyond June 2006 should have alerted the price negotiation committee to examine whether it was a viable bid.

The process for tendering was initiated for the third time in August 2008 and the supply order for procurement of 992 BsAUT for Rs 26.51 crore was placed in January 2010 on M/s Perfect Fabricators, New Delhi.

The case illustrates inordinate delay of more than six years caused mainly by projecting the case to the wrong CFA and repeated rejection of tender bids without plausible rate analysis. While all factors like, urgency for procurement, delegation of powers, availability of budget, adequate number of vendors etc. required for fast decision making were readily present yet delay took place at every stage and point. Even after ostensibly industrious effort the procurement could be finalised only after six years. The delay besides denying the equipment to the Engineers for its operational preparedness also exhibited the indifference in the functioning of the agencies involved.

The Ministry admitted in October 2009 that the procurement had been inordinately delayed and could have been avoided to some extent by processing the case initially with the appropriate CFA. Further, the considerable delay in procurement was attributed to backing out by the vendors. The Ministry should take action to avoid such cases.

3.6 Recoveries and savings at the instance of Audit

Recoveries

Based on audit observations the audited entities recovered or agreed to recover excess payments, non-recoveries of rent, electricity/ water charges and departmental charges, etc. amounting to Rs 14.86 crore.

Test check of records of FOL[13]/Supply Depots, Controllers of Defence Accounts (CsDA), Pay and Accounts Offices, Area HQ, DRDO Lab, Military Engineer Services and Border Road Task Force revealed instances of non-refund of interest, excess payments, short recoveries/non-recoveries of rent, electricity and water charges etc aggregating Rs 14.86 crore as per details given in **Annexure-II.** On being pointed by Audit, the units/ formation concerned recovered/agreed to recover the irregular payments.

Savings

HQ Corps, Divisions, Sub Area HQ and Station HQ and certain other units cancelled irregular administrative approvals/sanctions at the instance of Audit, resulting in savings of Rs 3.24 crore.

Consequent upon a test check of accounts at units and formations, Audit noticed instances of irregular sanctions. On being pointed out, the audited units took corrective measures, resulting in savings of Rs 3.24 crore as indicated in **Annexure-III**.

The matter was referred to the Ministry in October 2009; their reply was awaited as of April 2010.

3.7 Irregularities in procurement of slit lamps

Conflicting evaluation[14] of slit lamp offered by the same firm by different Technical Evaluation Committees of DGAFMS within a short period led to rejection of low priced indigenous make though it had been procured earlier, having been found technically acceptable. This led to excess expenditure of Rs 1.65 crore.

Director General Armed Forces Medical Services (DGAFMS), invited tenders in June 2006 for procurement of 76 slit lamps, based on broad qualitative

[13] Fuel Oil and Lubricants

[14] Conflicting verdicts in the evaluation

requirements (QRs). The slit lamps were required for use by Ophthalmologists in Military Hospitals.

On technical evaluation of the four offers received, a Technical Evaluation Committee (TEC) in July 2006 found two offers, viz, those of M/s Appasamy Associate and M/s Rohit Surgical as acceptable. However, Rohit Surgical who had offered imported equipment did not produce copy of Agency Agreement with the foreign supplier. DGAFMS therefore ordered re-tendering in August 2006 on the plea of single vendor situation (SVS), without referring the matter to the Ministry of Defence which was the competent authority in this regard. In October 2006 DGAFMS, however, placed a separate supply order on M/s Appasamy Associate for procurement of 10 slit lamps at a unit rate of Rs 1.51 lakh after following the due procedure of invitation of tender.

In the re-tendering, in October 2006 five firms responded. These included M/s Appasamy Associate and M/s Rohit Surgical whose offers had been found technically acceptable earlier. The TEC convened in November 2006, however recorded that only one offer, i.e., that of M/s Deepak Enterprises was technically acceptable. M/s Rohit Surgical did not put its equipment for demo in November 2006 for the TEC's evaluation. However, later in January 2007 they demonstrated the product in a civil institute (Venu Eye Institute) and a board of officers found it acceptable. Audit found that the TEC which was convened within two months of placing supply order on M/s Appasamy Associate appeared to be oblivious of the order placed on them as there was no mention regarding the performance of the item procured from that supplier. The contract negotiations committee (CNC), in July 2007, however acknowledged the last purchase from M/s Appasamy Associate and also that the TEC did not accept their offer received in response to the re-tender. CNC recommended, in July 2007, acceptance of the negotiated unit rate of Rs 3,67,500 offered by Deepak Enterprises, being the L1 offer. DGAFMS, with the approval of the Ministry, concluded the contract with M/s Deepak Enterprises in July 2008 for the procurement of 76 slit lamps at a total cost of Rs 2.79 crore.

Audit observed instances of conflicting verdicts in the process of procurement, leaving the *bona fides* of technical evaluation open to question. These are specified below:

- The first TEC of July 2006 observed that the offer of M/s Appasamy Associate, the single acceptable offer, met all the parameters of the QRs and adjudged the supplier's past service and equipment as satisfactory. In contrast, the TEC of November 2006, which had a different set of members, gave the verdict that their offer (same model as given in the first offer) was unacceptable due to poor quality of optics and resolution. The second TEC did not record anything about the performance of their equipment, contrary to the satisfaction recorded by the first TEC and also disregarded the order for supply of 10 slit lamps already placed on them in October 2006;

- The offer of Rohit Surgical was rejected in the first call, since they did not produce a copy of the agency agreement with the foreign firm, whose product was offered by them. Nothing was mentioned about the production of a valid agency agreement by them in the second call;

- The broad QRs adopted for invitation of tender and evaluation was deficient regarding resolution, which was shown as "excellent optics to give resolution quality matching that of standard international bio-microscopes". This introduced an element of subjectivity in evaluation and gave room for arbitrariness in decision making by TECs.

Thus, the element of subjectivity introduced in the QRs enabled the TECs within a short period of six months to give conflicting verdicts during technical evaluation. It also resulted in rejection of the low priced indigenous slit lamp offered by M/s Appaswamy Associate, though it had been found acceptable in July 2006 and again in October 2006. The acceptance of the imported slit lamp offered by M/s Deepak Enterprises, despite it being costlier by about 143 *per cent* ended up in an extra expenditure of Rs 1.65 crore in an order valuing Rs 2.79 crore.

The Ministry stated in April 2010 that due to oversight, DGAFMS did not submit the case of single vendor situation that emerged from the first tendering/technical evaluation before ordering re-tendering. The Ministry added that the evaluation, both in the initial tender evaluation and in the re-tender, was based on the same broad QR. However, the model (USA Origin) offered by M/s Deepak Enterprises in the re-tender was found to be superior with outstanding optical performance, superior features and quality, compared to which the slit lamp offered by M/s Appaswamy Associate appeared inferior and not matching international standards.

The Ministry's contention reaffirms the Audit observation of the element of inbuilt subjectivity in evaluation of the characteristics of the slit lamps. Evidently, the indigenous slit lamps offered by M/s Appaswamy Associate, although purchased in October 2006 and also found acceptable in the first technical evaluation got rejected due to its inferiority when compared to the imported slit lamps offered by M/s Deepak Enterprises.

3.8 Extra expenditure due to unrealistic evaluation of rates

Incorrect evaluation of rates resulted in repeated rejection of cheaper offers in procurement of Naphthalene balls. The item was finally procured by the DGOS after more than two years at 1.59 times of the initially offered rates by incurring an extra expenditure of Rs 69.15 lakh. The initial cheaper offer was rejected anticipating better bargain in retendering.

Central Procurement (CP) of Naphthalene balls, which fall in the inventory of general stores held by the Army is carried out by the Director General Ordnance Services (DGOS).

For procurement of 137092 Kg of Naphthalene balls approved for two years requirement, the DGOS invited open tender in April 2006 which generated response from only two firms. The rate of Rs 82.10 per Kg excluding taxes, with the total bid amounting to Rs 1.18 crore as quoted by M/s Jai Chemical Industries Kanpur (JCI) was the lowest (L-1). The Price Negotiation Committee (PNC) however, rejected the offer on the grounds that the rate was high and that the attitude of the firm was monopolistic. Tenders were re-invited in December 2006 and again two bids including one from M/s JCI, were received. The lowest bid of Rs 118.60 per Kg excluding taxes quoted by M/s JCI was again rejected on the grounds of high rates and poor competition. The open tenders were invited for the third time in November 2007 which yet again generated response from only two firms with the lowest quote of Rs 116.90 per Kg excluding excise duty @ 16.48 *per cent* and VAT @ 12.5 *per cent*, offered by M/s JCI. Notwithstanding the reasons for cancellation of previous bids, the rate of Rs 116.65 per Kg achieved after negotiations was considered reasonable and the supply order placed in June 2008 despite the rates being much higher than those received in the first offer. Meanwhile, COD Chheoki had made local purchase of Naphthalene balls in March & July 2008 at the rate of Rs 97 per Kg, which was also suggestive of the fact that the rate of Rs 116.65 per Kg accepted by the DGOS for central purchase was considerably higher.

Audit analysed the reasons for rejection of cheaper offers and found that:

- The first offer of Rs 82.10 per Kg was rejected purely for the failure of the firm to attend PNC meeting. Though the rates were stated to be higher than the last purchase price, yet the PNC opined that there was corresponding hike in petroleum prices as well. A comparative analysis of the lowest quoted rate carried out with the Delhi Chemical Market Index (DCMI) rate also justified the fact that the rejected rate in the first offer was more reasonable than that was finally accepted. In case of the rejected offer, the L-1 of Rs 82.10 per Kg was only 28 *per cent* higher than the corresponding DCMI rates whereas the rate of Rs 116.65 per Kg accepted in the second recall was 39 *per cent* higher than the corresponding DCMI rates.

- Poor competition, as stated to be the reason for scrapping the tenders on first two occasions was very much evident in the final tender as well, indicating inconsistency in the decision making; and

- Local purchase rate of Rs 97 per Kg, as accepted by COD Chheoki, was also not considered while accepting the CP rate.

Again, Audit found that a total payment of Rs 202.64 lakh was made to supplier at variable rate of taxes and duties, as notified from time to time. In the process a sum of Rs 15.30 lakh was overpaid to the supplier on account of incorrect application of Value Added Tax (VAT). While the VAT on Naphthalene balls was admissible at the rate only 4 *per cent*, yet the supply order stipulated the rate as 12.5 *per cent*. The supplier also claimed VAT at the rate of 12.5 *per cent*. The overpaid amount was, however, recovered in August 2009 after being pursued by Audit.

The Army HQ in November 2009 stated that the initial bids were rejected on the hope that retender would generate lower rates but when the market trend was seen to be upward the third offer was accepted. The reply was not only suggestive of poor and speculative market analysis by the DGOS but also demonstrated absence of realism in rejection of the offer which was 28 *per cent* above the DCMI rate and acceptance of the offer which was 39 *per cent* above the DCMI rate.

The unrealistic evaluation of the rates in the procurement of 137092 kg of Naphthalene balls at Rs 116.65 per Kg instead of Rs 82.10 per Kg of basic rate resulted in an extra expenditure of Rs 47.37 lakh, and Rs 21.78 lakh in taxes, etc paid.

The matter was referred to the Ministry in September 2009; their reply was awaited as of April 2010.

3.9 Non-identification of imported stores

Acceptance of the imported stores worth Rs 32.21 lakh by the Army without ascertaining basic information such as the indentor, supply order, source of the consignment and what the stores were meant for, led to non-utilization of the stores for over five years. Besides, it reflects weak internal controls and inadequate security controls in the organization.

Embarkation HQ Mumbai in September 2004 collected from DHL Worldwide Express (I) Pvt. Ltd. a consignment worth Rs 32.21 lakh from USA, intended for delivery to Engineer Park, Ambala Cantonment. However, since the Engineer Park had been disbanded way back in 1992, an engineer regiment collected the consignment from Embarkation HQ in May 2005 on the directions of Engineer-in-Chief Army HQ and kept it unaccounted as the stores were neither demanded nor required by them.

Since Embarkation HQ could not provide the details of the indentor or contract for import of the stores as the Airways bills mentioned no contract details, HQ 474 Engr. Brigade, convened a Board of Officers to open the consignment and identify the stores. The Board having failed to identify the stores recommended in November 2005 for their disposal. The Engineer Brigade sought disposal instructions from Engineer-in-Chief, Army HQ in January 2006. The items could not be disposed off for over three years since then. Chief Engineer Western Command convened another Board of Officers in April 2008. The Board could neither identify the items nor their use and recommended in April 2008 their write off through a loss statement. The stores were, however, not disposed off as of February 2010.

Army HQ admitted in February 2010 that inspite of their best efforts, they have not been able to identify the imported stores as airways bills did not mention contract details nor any ordnance consignees has reported non receipt of stores to them.

Thus, due to acceptance of the imported goods without getting even the basic information such as the consignee/indentor, supply order, source from where the consignment was despatched and what the stores were meant for, Army HQ could not gainfully utilize the imported goods worth Rs 32.21 lakh in the last five years. The case therefore not only indicates poor internal controls in the Army, but more seriously also reflects inadequate security controls leading to the acceptance of unidentified object/item from a foreign source.

The case was referred to Ministry in June 2009; their reply was awaited as of April 2010.

CHAPTER IV : WORKS AND MILITARY ENGINEER SERVICES

4.1 Irregular sanction and construction of accommodation for a Golf Club

Commanders of a Corps HQ and an Independent Sub Area got constructed new unauthorised accommodation for a Golf Club at Kharga Golf Course under the guise of special repairs to existing buildings.

Misuse of financial powers by General-Officer-Commanding-in-Chief Western Command for purchase of golf carts had been commented upon in paragraph 3.6 of the Report No. CA 17 of 2008-09 of the Comptroller and Auditor General of India. Similarly, paragraph 2.7 of the same Report had highlighted use of Defence land by a Golf Course, without payment of rent of about Rs 54.95 crore for over two decades. In yet another case of misuse of financial powers, Commander of HQ 2 Corps and Commander Punjab, Haryana and Himachal Pradesh (Independent) Sub Area [PH&HP(I)] got a building constructed for a Golf Club in Ambala Cantonment, under the cover of sanctions issued for carrying out special repairs and construction of storage accommodation etc, for some Army Units. The details of the case are discussed in the ensuing paragraphs.

Commanders of Headquarters 2 Corps and PH&HP (I) Sub Area sanctioned four different jobs in December 2006 for construction of accommodation for stores/office for three Army units and special repairs to three buildings at different locations in Ambala Cantonment at a total cost of Rs 57.65 lakh, which were revised to Rs 66.75 lakh in March/December 2007 as shown below:-

(Rs in lakh)

Sl. No.	Job No./Name of work	Sanctioning authority	Date of sanction/ revised sanction	Amount/ revised amount	Completion cost
1	09/2C/SR/2006-07: Provn of special repairs to building No. P-258, T-207 and T-170 at Ambala Cantt.	Commander, HQ 2 Corps	22 December 2006	28.61	31.41
2	PH & HP(I) SA/W-87/LBW/2006-07: Provision of Storage accommodation for 16 Engineer Store Platoon at Ambala Cantt.	Commander, HQ 2 Corps	12 December 2006 08 March 2007	9.38 9.38	10.27
3	PH & HP (I) SA/W-86/LBW/2006-07: Provision of Accommodation for Training Stores of 65 Engineer Regiment (PMS) at Ambala Cantt.	Commander PH& HP(I)	12 December 2006 10 December 2007	9.85 14.24	15.66
4	PH & HP (I) SA/W-88/LB/2006-07: Provision of Office Accommodation for Training Staff at 2 Corps Training Area, Ambala Cantt.	Commander, HQ 2 Corps	12 December 2006 17 December 2007	9.81 14.52	14.52
Total				**66.75**	**71.86**

The jobs sanctioned for different units and locations were clubbed and executed through one contract concluded by the Commander Works Engineer(CWE) in May 2007, which was completed in February 2008 at a cost of Rs 71.86 lakh.

The CWE had concluded contract of the nature of special repairs and no drawing was forming part of the contract. However, an unauthorised Club building, i.e. a double storey building having a restaurant, kitchen, bar, committee room, museum, library, Golf Secretary's Office, reception, toilets block, etc was got constructed in Kharga Environmental Park and Training Area (KEPTA), an another name of Golf Club. It was also revealed that building P-258 was demolished by the contractor and new building for Golf Club came up at the site as per drawings and specifications provided by the HQ 2 Corps. Such accommodation is not authorised in training area and was shown as covered by the aforementioned sanctions. After the irregularities were pointed out by Audit, the Commander HQ 2 Corps amended the sanction of special repairs for three buildings in September 2009 by deleting the special repairs of T-207 and T-170 buildings at Harding Line without, however, reducing the total amount of the sanction. This was done to meet the enhanced cost for the building No. P-258.

The Ministry replied in March 2010 that all sanctioned works have been executed on ground. The low budgeted works have been carried out on three separate buildings and handed over to the respective units. It was further stated that the building No. P-258 already existed at site and was put under special repairs. The Ministry's contentions are factually incorrect as records indicate that during execution of the contract, the entire building P-258 was demolished and new building for the Golf Club was constructed at the site as per design and drawings provided to the contractor, although no drawing formed part of the contract.

4.2 Avoidable extra liability due to delay in revision of administrative sanction

Delay in revision of administrative approval resulted in an avoidable extra liability of Rs 2.95 crore due to cost escalation.

The Defence Works Procedure issued by the Ministry of Defence (MOD) stipulates that in the event of the tender cost for the item or items of work exceeds their corresponding administrative approval (A/A) amount by more than 10 *per cent*, the case will be taken up for grant of financial concurrence (FC) of the competent financial authority (CFA) to enable the Engineer authority to conclude the contract pending issue of revised A/A.

Planning for provision of other than married accommodation at Rajput Regimental Centre Fatehgarh was carried out by the Zonal Chief Engineer, Lucknow (CE) in 2004. The approximate estimates (AEs) for the work were prepared by the CE in August 2004 based on Standard Schedule of Rates (SSR) – 1996. As the revised SSR-2004 had been introduced in July 2004, the CE, revised the AEs based on the new SSR of 2004, in August 2005 and requested Army HQ to obtain sanction based on the revised AEs.

Without considering the effect of revision in SSR, the work was sanctioned by the MOD in September 2005 at a cost of Rs 17.29 crore on the basis of pre-revised estimates. However, before initiating the tender procedure, the CE again proposed that the sanction be obtained on the revised AEs to avoid seeking FC on account of insufficient availability of funds at a later date. Engineer-in-Chief (E-in-C) however advised the CE in February 2006 to go ahead with tender action without delay based on the already sanctioned amount. While the CE called for tenders in June 2006, Army HQ had also taken up the case in May 2006 for issue of corrigendum to the Administrative Approval based on the revised estimates.

Tenders for the work were received in December 2006 and the lowest offer valid upto 20 March 2007 of Rs 21.68 crore was considered reasonable. As the quoted amount exceeded the funds available including the permissible tolerance the CE initiated the case for fresh FC. The Quarter Master General's (QMG) branch at Army HQ however did not process the FC further stating (March 2007) that the necessity for the same did not exist as the corrigendum for the revised estimated cost was in advanced stage of finalisation at the MOD and advised E-in-C to get the validity of the tender extended to 30 April 2007. Army HQ however did not pursue the case for obtaining the revised approval and by the time the corrigendum for enhancing the sanction to Rs 21.35 crore, was issued on 31 March 2007, the validity of the tender had expired on 21 March 2007.

The contract for execution of the work was ultimately concluded in December 2007 in the third call of tenders by the CE at a cost of Rs 24.63 crore, after obtaining FC. Incidentally, in all three tenders L1 was the same firm. An extra liability of Rs 2.95 crore on account of cost escalation was thereby caused due to delay in approval of the revised cost.

Analysis of the reasons for the failure to accept the first call revealed that though the Army HQ decided not to initiate a fresh proposal for FC in anticipation of timely issue of corrigendum by the MOD in response to the proposal sent in August 2005, yet MOD was not kept informed that the tender procedure had been initiated and the validity of the offer of the lowest bidder.

The MOD stated in January 2010 that the excess liability was due to procedural time delay in scrutiny of cases at all levels. The Staff Court of Inquiry ordered to fix the responsibility for the lapse also concluded that the delay in issue of revised administrative approval was due to lengthy processes involving lot of time at each stage.

However, it is clear that the lapse was not due to lengthy processes involved at each stage but delays and lack of diligence both in the Engineering Wing in the QMG branch at Army headquarters and in MOD. There was no system in place to ensure that the AE was based on the new SSR and to monitor the timely preparation and approval of the revised AE.

4.3 Additional expenditure on execution of a work due to indecision by the users

Changes suggested by the user after technical sanction and lack of agreement between the user and the executing authority resulted in additional expenditure to the extent of Rs 1.23 crore.

Defence Works Procedure lays down two stage approval of any new work, viz. administrative approval accorded by the competent financial authority (CFA) based on approximate estimates and technical sanction by the competent engineering authority before tender documents are issued. The engineering officer competent to accord technical sanctions may, wherever necessary, deviate from the specifications shown in the approximate estimates provided such deviations are for engineering reasons and not such that they alter the scope of the work or exceed the total cost of the project administratively approved.

A Board of Officers presided over by the Commandant, Combat Army Aviation Training School (CAATS) recommended in March 2005, provisioning of accommodation for CAATS at Nasik in two phases at a cost of Rs 8.42 crore, which included special items of work costing Rs 49.94 lakh. Army HQ accorded administrative approval in March 2005 for the entire project at a cost of Rs 7.97 crore. Of this, cost of Phase I was Rs 2.87 crore, inclusive of Rs 10.08 lakh for special items. Several superior specifications recommended by the Board of Officers and included in the approximate estimates were not agreed to by the Army HQ. After obtaining approval to line plans from the Commandant in August 2005, the Chief Engineer Pune Zone concluded a contract for Rs 2.81 crore in December 2005. The work was to be completed by 15 October 2006. Garrison Engineer, Nasik Road (GE) was the nominated Executive Engineer for the work.

The new Commandant who took over charge in February 2006 informed the GE in April 2006 that the buildings were not designed aesthetically and suggested several changes involving special nature of works (superior specifications etc.). The Chief Engineer estimated that the changes suggested by the Commandant would cost Rs 37.50 lakh and would require substantial changes in the structural design of the building portion. Further it was not possible to order the additional work on the running contract. The executing agencies therefore did not appreciate the changes suggested by the Commandant. The contractor started the work in the first week of May 2006. However, the user unit (CAATS) did not allow the contractor to unload construction materials and therefore the work was stopped on 9 May 2006.

The CE in July 2006 initiated a proposal for revision of the cost of Phase 1 to Rs 3.07 crore including Rs 19.15 lakh as special items, which was approved in October 2006 by Army HQ. While submitting the revised estimates, the special works of Rs 37.50 lakh as suggested by the new Commandant were restricted to Rs 19.15 lakh to keep the amount of special works in both the Phases I & II within the delegated financial powers of the Chief of Army Staff (Rs 50 lakh). As the contractor demanded enhancement in rate by 50 *per cent* on the contract rates due to enormous increase in prices, the contract was foreclosed in March 2007. The lowest tendered amount received in the fourth call against a fresh tender issued in January 2008 was Rs 4.30 crore and the fresh contract was signed in May 2008, after obtaining corrigendum to the revised Administrative Approval of October 2006.

Thus, stoppage of work by the new Commandant arbitrarily resulted in time and cost overrun of the project by two years and Rs 1.23 crore respectively, although the financial effect of additional special works was only Rs 9.07 lakh.

The matter was referred to the Ministry in September 2009; their reply was awaited as of April 2010.

CHAPTER V : BORDER ROADS ORGANISATION

5.1 Hasty procurement of segregators

Six segregators procured by DGBR for Rs 4.55 crore could not be gainfully utilized due to non availability of natural aggregates, site for installation and economical viability of the segregators.

The Director General Border Roads (DGBR) requested the chief engineers of the projects to send the requirements of 'segregators[15] and other modern equipment for 2006-07 as he had noticed during his visits to the projects that a number of quarries were available where segregators could be utilized to improve the speed of construction and maintenance of border roads.

The Chief Engineer (Project) Himank and Sampark in Northern Command forwarded the requirement of six and twelve segregates among other equipments in April/May 2006 which were included in the Annual Procurement Plan for 2006-07. On the basis of these demands, DGBR placed a supply order in September, 2006 on M/s Puzzolana Machinery Fabricators, Hyderabad for six segregators which were supplied at a total cost of Rs 4.55 crore between October 2006 and December 2006 and 80 *per cent* payment of Rs 4.09 crore was released on receipt of equipment and the remaining 20 *per cent* had not been yet released.

Out of the four segregators meant for Project Himank, two were installed by the firm one each in November 2007 and June 2009. The remaining two segregators were still lying unused as of January 2010 as the site was not prepared and made available to the supplier for installation of the plant. One segregator of project Sampark had been commissioned in May 2007 while the other segregator had been transferred to project Udayak, Arunachal Pradesh in November 2008 and could not yet be installed as the site had not been selected so far. The position of installation/commissioning and utilization of the segregators is as given below:

Sl. No.	Project	Task Force (TF) Consignee	Date of Receipt	Date of commissioning	Total hours for which utilised
1	Himank	753 TF (Chushul-Mahe Road	3.10.2006	Not yet commissioned	NIL
2	Himank	753 TF (Upshi Sarchu Road	3.10.2006	Not yet commissioned	NIL
3	Himank	762 TF (Zojilla Kargil-Leh Road(55 RCC)	2.10.2006	8.11.2007	274
4	Himank	16 TF (Khalsi-Batalik Road	2.12.2006	1.06.2009	20
5	Sampark	13 TF (Tanda Bhamla Road)	8.12.2006	20.05.2007	286
6	Sampark	31 TF (Reasi-Amas Mohar Road)	15.12.2006	Transferred to project Udayak at in Arunachal Pradesh and could not be installed as the site had not been selected.	NIL

[15] A segregator plant consist of Dump Hopper, Vibrating feeder, Vibratory segregator with motor, conveyer system with motors, Diesel Gen Set and Operators platform and is used for segregation of natural aggregates into minimum four different sizes by selecting different screen sieves. It had a capacity of 50 tonne per hour.

The two segregators received by the project Himank at Chusul and Upshi-Sarchu Road could not be installed as the site was not made available to the supplier and would not be utilized even if installed as no central location was available to install and economically utilize the segregators as the area of activity is wide spread and it was uneconomical to re install them frequently. The work was progressing by procuring the material locally. The CE of the project had declared the segregators as surplus and requested the DGBR to transfer them to some other project. The DGBR however, insisted in October 2008 that to clear the balance payment (20 *per cent*) of the firm, the plants be installed at the predetermined location and the transfer be considered later. Accordingly one segregator was installed in June 2009 at Khalsi-Batalik Road though the CE (Project) had stated that commissioning of the segregators would cost an additional expenditure of Rs 20 lakh which would be infructuous. The plant has run for only 20 hours up to October 2009. The warranty for free replacement of defective parts etc. was for 1800 hours run or 12 months from the date of commissioning which ever is earlier and had expired in case of three segregators. The trial run was to be conducted for 150 hours and as per records one segregator commissioned had not even completed trial run and was lying unused.

Thus the high capacity segregators purchased without conducting the economic feasibility, ensuring availability of natural aggregates and making available site after obtaining clearance from Forest Department and Pollution Control Board resulted in wasteful expenditure without any gainful use.

The matter was referred to the Ministry in August 2009; their reply was awaited as of April 2010.

5.2 Misappropriation of Government stores

Absence of prior verification of credentials of a Private contractor engaged for handling and transportation of stores by two Chief Engineers of Border Roads Organisation led to misappropriation of Government stores worth Rs 1.67 crore by the contractor.

Prior verification of credentials including financial status, business ethics, market standing, etc is essential before enlisting service providers for any services. Chief Engineer of Project Udayak of Border Roads Organisation (BRO), provisionally enlisted a private firm M/s Shree Ganesh Road Line Guwahati, without verifying their credentials, and concluded a handling and conveyance contract in February 2008 for transportation of steel items at an estimated cost of Rs 26.29 lakh from Guwahati to Dinjan and various locations under a Border Road Task Force (BRTF).

Earlier, the BRTF had placed a supply order on M/s Indian Oil Corporation (IOC) Guwahati in December 2007 for supply of 500 MT bitumen to a BRO Unit by 25 January 2008. However, no arrangements were made by the BRTF for transportation of the bitumen ex-IOC Depot, though as per the Standard Operating Procedure (SOP) issued by the Director General Border Roads

(DGBR), contracts for handling and conveyance of stores should be concluded well in advance of likely date of receipt of stores. In the absence of any arrangements for transportation of the bitumen, Officer Commanding (OC) of the consignee unit forwarded a proposal on 18 February 2008 to the CE, through the Commander BRTF, for amending the above handling and conveyance contract concluded with M/s Shree Ganesh Road Line to include handling and transportation of the bitumen also. On 16 February 2008, i.e. even before submitting the above proposal, the OC placed work order on the same firm for removing 263.130 MT bitumen from IOC Guwahati and transporting it to a BRO detachment located in Arunachal Pradesh. The mandatory Security Deposit (SD) amounting to Rs 2.17 lakh required under the terms of contract was also not collected form the contractor.

Out of 250.600 MT bitumen lifted by the private contractor from IOC during February/ March 2008, only 67.400 MT was delivered to the consignee and the balance bitumen of 183.200 MT valuing Rs 63.23 lakh was misappropriated and yet to be delivered as of August 2009. Though the departmental instruction necessitated lodging of First Information Report (FIR) within 15 days, the FIR was lodged with the police only after four months thereby delaying the investigation. No response either from contractor or from police authorities had been received as of August 2009.

Audit enquiry further revealed that another Chief Engineer of BRO, i.e., CE Project Setuk, had concluded a contract with the same contractor in August 2007, after provisional enlisting. 12 MT bitumen lifted by the firm in November 2007 was delivered to the consignee only in July 2008 after police intervention. Even then, in August 2008, CE Project Setuk placed another order on the contractor for transportation of 250 MT bitumen and allowed the private firm to misappropriate additional quantity of 249.98 MT Bitumen 60/70 grade, costing about Rs 1.04 crore, lifted by the contractor in August 2008. The bitumen was not delivered to the consignee as of October 2009. The FIR lodged with police was pending finalisation as of October 2009.An investigation by State Police authorities revealed that eight vehicles of the bitumen were sold by the contractor to another private party. Thus, bitumen worth over Rs 1.67 crore intended for transportation to BRO Units under two separate contracts was misappropriated by the contractor.

The case reveals that absence of proper verification of credentials of the contractor before awarding contract for services and lack of co-ordination between different project authorities of BRO led to misappropriation of bitumen worth Rs 1.67 crore.

The matter was referred to the Ministry in July 2009; their reply was awaited as of April 2010.

5.3 Additional cost due to delay in opening of commercial bids

Delay in opening of commercial bids for procurement of Concrete Mixers and Tandem Vibratory Road Rollers and placing of repeat order for both items in the intervening period at higher rates resulted in extra cost of Rs 97.63 lakh.

Concrete mixers and Tandem Vibratory Road Roller (TVRR) are indispensable equipments used by the Border Roads Organization (BRO) in road projects. There is a recurrent requirement for these equipments in BRO. Although these were procured from the budgetary allocation under the capital outlay, Director General Border Roads (DGBR) has been following the Defence Procurement Manual, applicable for revenue procurement, for the purchase of these equipments. The Defence Procurement Manual 2006 stipulates the requirement for conclusion of rate contracts for common user items for three years to ensure economy of scale, while providing safeguard provisions like fall clause and short-closure in the event of fall in prices. DPM-2006 also permits placing repeat order upto 50 per *cent* quantity only if there is no downward trend in prices. These major highlights of the DPM-2006 were prominently mentioned by the then Raksha Mantri in his foreword to the DPM-2006. Even so, DGBR did not follow these conditions in the procurement of these items during 2007-08 and 2008-09 as brought out in the seceding paragraphs.

In January 2008, DGBR placed supply orders on two different suppliers[16] for purchase of 89 Concrete Mixers and 50 TVRR at a unit rate of Rs 8.25 lakh and Rs 15.50 lakh respectively, excluding duties/taxes.

DGBR floated a fresh tender in May 2008 for purchase of 56 Concrete Mixers and 15 TVRRs to partly meet the requirement of another 100 Concrete Mixers and 40 TVRRs for the year 2008-09. For the remaining quantity of 44 Concrete Mixers and 25 TVRRs, he sought sanction of Ministry of Defence to place repeat orders under the supply orders of January 2008.

Technical bids received in response to the notice of tender of May 2008 were opened on 2 July 2008 and the Technical Evaluation Committee on 18 July 2008 found that all the offers met qualitative requirements. The commercial bids were however not opened within the stipulated period of two weeks after the technical evaluation.

The Ministry communicated its approval on 5 September 2008 for placing the repeat order for 25 TVRR, and for 56 Concrete Mixer on 17 September 2008. DGBR placed repeat orders for 25 TVRRs on 8 September 2008, and 44 Concrete Mixers on 18 September 2008. After placing the repeat orders, the commercial bids for TVRR were opened on 17 September 2008 and those of Concrete Mixers were opened on 23 September 2008 when it was found that the lowest unit rate for Concrete Mixer and TVRR stood at Rs 6.98 lakh and Rs 14.95 lakh, respectively. Thus the rates received in the fresh tenders were

[16] (1) Universal Construction Machineries
(2) Escorts Construction Equipment Ltd

lower than the earlier supply orders/ repeat orders. Cost of transportation to various stations was also substantially lower, compared to the orders of January 2008.

The failure of DGBR to adhere to the stipulated time of two weeks for opening the commercial bids after evaluation of the technical bids in July 2008 resulted in additional cost of Rs 79.37 lakh. In addition, the extra amount involved in transportation of these equipments to consignees was Rs 18.26 lakh.

On being pointed out in Audit, DGBR stated in July 2009 that repeat orders were placed after assessing trend of market. The price index of engines and steel showed upward trend, but the rates in fresh tendering had come down due to the competition between the firms. The facts remains that the failure to comply with the timeline in opening commercial bids and non-insertion of fall clause in the contract led to the concealment of the advantage of the prevailing competitive market, entailing an additional cost of Rs 97.63 lakh.

The matter was referred to the Ministry in October 2009; their reply was awaited as of April 2010.

CHAPTER VI : DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION

6.1 Injudicious creation of assets

An expenditure of Rs 8.92 crore incurred by Defence Research and Development Organisation (DRDO) for creation of assets to draw power from a power supply corporation became infructuous due to DRDO's failure to assess the corporation's ability to supply stable and uninterrupted power required for operation of highly sensitive equipment and machines.

DRDO imported various sensitive equipment and machines for creation of technical facilities for a programme of strategic importance at a station. These facilities required uninterrupted and high quality stable power supply.

Based on the recommendations of a Board of Officers, Ministry of Defence accorded sanction in March 2000, as amended in December 2001, for provision of external electrification at the station at a total cost of Rs 9.54 crore, to be executed by a Chief Construction Engineer, Research and Development (CCE R&D). The CCE R&D completed the works for power supply receiving and distribution to each of the sites within the station, under the supervision of the State Power Supply Corporation, in November 2001 at a cost of Rs 9.15 crore including expenditure of Rs 0.23 crore for power distribution to living accommodation. The corporation had agreed to supply 4500 KVA of power, in a phased manner, as sought by DRDO.

However, before creating the assets for drawing power from the corporation, DRDO did not get firm assurance from the Power Corporation for supply of the quality of power required by DRDO for operation of the sensitive equipment/machines of the programme. Due to excessive variations in voltage/ frequency/current in the power supplied by the corporation, the imported equipment procured under the programme did not function properly. This along with frequent interruption in power supply forced DRDO to procure DG Sets, separately at a cost of Rs 3.57 crore for the facility. Only the living/ administrative accommodation which required meager quantity of power could use the power received from the corporation. The contract demand was therefore reduced from 4500 KVA to 600 KVA by September 2004 for the day to day operation of the site and other technical facilities including the living/administrative accommodation. Further, a sum of Rs 1.80 crore was spent during 2002-09 for maintenance of the 66 KV line and associated facilities to avoid deterioration. Thus the expenditure incurred on establishing a sub station to support the 66 KV line was rendered infructuous.

The Ministry admitted in September 2009 that DRDO had relied upon the State owned power corporation to adhere strictly to the quality specifications as laid down in the Indian Electricity Rules 1956, which they didn't do. The

Ministry also stated that such a complex technical facility, which is of strategic importance to nation's security, was being established for the first time in the country and DRDO could learn its complex requirements from this experience and argued that the expenditure should not be treated as wasteful as the experience learned from this project was utilized in the next project where they did not seek the provision of electricity from state Electricity Board and had commissioned required DG sets directly. The Ministry added in February 2010 that a new Radar system planned for Air Force requirement would be assembled at the station in a period of two to three years and there would therefore be higher usage of the substation in the future.

The Ministry's statement about the likely utilization of the assets when the planned radar system for the Air Force comes up in the next two-three years does not validate the creation of the assets in the year 2001 and keeping them idle for over a decade.

Thus, the failure of DRDO to assess the ability of state power corporation to supply to the required specifications for operation of sensitive equipment resulted in an infructuous expenditure of Rs 8.92 crore, besides burdening itself with a recurring liability of maintaining the redundant assets.

6.2 Loss due to damage to imported equipment

DRDO suffered a loss of Rs 6.91 crore as an imported equipment was damaged due to mishandling by the Air Consolidation Agent.

The Director of a Defence R&D Laboratory placed purchase order on a UK based firm in October 2006 for a machine required for a project at a cost of Rs 18.46 crore. As per terms of the purchase order, 70 *per cent* payment (Rs 12.23 crore) was made to the firm on shipment of the machine. Remaining 20 *per cent* of the amount was to be paid after installation and 10 *per cent* after the end of the warranty period. The machine was to be delivered by end of July 2007 at the laboratory premises through an Air Consolidation Agent (ACA)[17] having Air Consolidation Contract with the Defence Research and Development Organisation (DRDO). As per terms and conditions of the contract, the ACA was responsible for all losses or damages to the equipment due to any cause whatsoever from the time they receive the shipment till delivery at consignee's end. It was also stipulated in the contract that in case of losses to stores occasioned on account of Agent's negligence, the amount spent on account of ACAs negligence will be recovered from the Agent's pending bills.

The machine arrived at Delhi Airport on 8 August 2007 and was locally transported by the ACA on 9 August 2007. One package consisting of the main equipment of heavy weight and size was damaged as it fell down while unloading at the laboratory premises due to mishandling for which the ACA was responsible.

[17] M/s Balmer Lawrie and Company Limited: responsible for Air Consolidation Services, custom clearance and carrying of machine/stores being imported by DRDO Laboratories.

The Court of Inquiry (COI) constituted by the Director of the laboratory, to assess the loss and circumstances leading to damage found that the damage to the equipment was caused by the ACA while unloading. It was also revealed that the machinery and tools used by ACA while unloading were insufficient. The COI further recommended that pending settlement of the claim for liability of loss, the damaged component be got replaced from the supplying firm. Accordingly, the Director of the laboratory placed order on the same firm in January 2009 for supply of a new equipment for replacing the damaged one at a cost of Euro 960,000 (Rs 6.21 crore) excluding customs duty of Rs 0.70 crore which was to be paid by the Laboratory separately. The equipment was to be delivered by October 2009. Audit observed that despite contractual obligations, the laboratory did not raise any claim for the loss against the ACA though on behalf of the laboratory the ACA had lodged a claim of Rs 9.04 crore in February 2008 with the Insurance Company. The Insurance claim had however, not been finalized by the Insurance Company as of October 2009.

The case reveals that DRDO has not only lost time but also suffered a loss of Rs 6.91 crore on account of damage to the equipment due to mishandling by ACA, which was yet to be made good as of October 2009 for which even the claim has not raised against the transporting agency.

In their reply of October 2009, the Ministry stated that they were making best efforts to recover the money to make good the loss.

6.3 Avoidable expenditure due to poor planning of a work service

Poor planning of a work service by the Programme Director and Chief Construction Engineer, led to an additional expenditure of Rs 1.39 crore towards payment of compensation to the contractor.

In January 2006, Chief Construction Engineer (CCE) Research & Development (R&D) Secunderabad entered into a contract with a firm for construction of accommodation for System and Test Integration RIG (STIR) at the cost of Rs 18.78 crore, to be completed by July 2007.

A Board of Officers had earlier assembled in May 2005 to consider the requirement of work services for STIR of a Defence Research and Development Programme at Bangalore and recommended construction of the facility on top priority and also that the work relating to the shifting of 66 KV power (HT) line running right through the middle of the selected site, be taken up and executed separately to facilitate the construction.

The Programme Director (PD), STIR was to make the site available to the contractor within four weeks of conclusion of the contract. However, action was not taken by the PD to get the HT line shifted. In March 2006, the PD and CCE decided that the work for shifting the line would be executed through the CCE. As clear work front was not made available to the contractor for eight months after the award of work in January 2006 the contractor could not proceed with the work. The CCE concluded a separate contract in June 2006 with the same contractor for shifting the line and got it completed in October 2006. The CCE granted extension of time for completion of work from July 2007 to March 2008. Against a compensation of Rs 3.67 crore claimed by the contractor to offset the expenditure incurred on idle machinery/manpower and increase in cost of material/labour due to the delay in commencement of work, DRDO had to pay an extra-contractual amount of Rs 1.39 crore.

On being pointed out, the CCE informed Audit in November 2007 that it was initially planned that the programme authorities would shift the HT line and make the site available for construction. The task was later transferred to CCE only in June 2006. After transferring the responsibility, the CCE concluded the contract in June 2006 without further loss of time for shifting the HT line. These statements of CCE were not totally correct as in March 2006 itself, the PD and the CCE had decided that the shifting of HT line would be undertaken by the CCE. However, the CCE took another three months to award the contract for shifting the HT line.

Thus due to poor planning of the work services by the PD and the CCE and their failure to ensure shifting of HT line before award of the contract for the work services resulted in an avoidable payment of Rs 1.39 crore to the contractor, besides delaying execution of the work. The case needs to be investigated so as to fix responsibility for the lapse.

The Ministry stated in January 2010 that partially clear site was made available to the contractor and the work on piling was commenced on date in the areas/locations other than 66 KV HT line shadow. It was further stated that delay of eight months was beyond the control of DRDO. The facts, however, remain that the contractor could not progress with the work for eight months due to non-shifting of HT line for which additional payment of Rs 1.39 crore had to be made to the contractor, which could have been avoided had the HT line been shifted in advance.

6.4 Loss due to lack of coordination in procurement of a life saving item

An expenditure of Rs 93.09 lakh incurred on procurement of drugs proved infructuous as the drugs could not be issued to users within their shelf life. Although the life saving item was accepted in September 2004 for use in the Army, it remained undistributed for nearly five years predominantly due to the lack of coordination between the developer and the user.

The Autoject Injector (AJI) set consisting of two individual autoject injectors, one containing Atropine Sulphate and the other containing PAM Chloride was developed by Defence Research and Development Establishment, Gwalior (DRDE) of Defence Research and Development Organisation (DRDO) to treat and counteract nerve agents poisoning. On exposure to nerve agents, these are to be used by individuals for immediate treatment by self administered injection.

Based on the requirement projected by Army HQ, the Ministry of Defence (MOD) issued sanction in September 2004 for production and supply of Autoject Injectors along with equal number of Atropine Sulphate and PAM Chloride drug through DRDO. The sanction stipulated that the terms of supply of equipment would be determined and monitored by Army HQ/MOD in consultation with DRDO.

DRDE procured from private sector firms 32,400 AJI for injecting Atropine Sulphate and 32,400 AJI for PAM Chloride along with 33,000 each of Atropine Sulphate drug cartridges and PAM Chloride drug cartridges at a cost of Rs. 2.80 crore, of which Rs 93.09 lakh was for the drug cartridges. Shelf life of AJIs was five years, that of Atropine Sulphate drug was two years, and it was only one year for PAM Chloride drug. The AJI and drug Cartridges were received during May/December 2005 and September 2005/January 2006 respectively. However, Army HQ did not intimate the consignee details to DRDE. In response to a request by DRDE, Army HQ (Additional Director General Weapons and Equipment) advised them in February 2006 to obtain consignee details from Dy. Director General Perspective Planning (Nuclear Biological and Chemical Warfare) and to deliver the consignments only after the items were duly inspected and certified fit in all respects by the representatives of the users. In the Joint Inspection, which was not attended by the user's representative, held in April 2006 it was found that 25700 AJIs of Atropine Sulphate and 27,689 AJIs of PAM Chloride were acceptable. The remaining were defective and therefore rejected. The date of expiry of the drug PAM Chloride varied from June 2006 to October 2006 and that of the Atropine Sulphate varied from May 2007 to October 2007. In view of the early expiry of the drugs, the Joint inspection team recommended that process be initiated to replenish the drug cartridges.

DRDE informed Army HQ in April 2006 about the acceptance in inspection of AJIs and sought consignee details. In July 2006, Army HQ asked DRDO HQ to send these to the Central Ordnance Depot Kandivli. Army HQ simultaneously informed DRDO HQ that the drug cartridges of PAM Chloride with balance shelf life of less than 75 *per cent* and Atropine Sulphate with shelf life expiring before 01 October 2007 should be replaced. In July 2006, DRDE issued 25,000 AJIs along with drug cartridges to Armed Forces Medical Store Depot Mumbai as later advised by Army HQ. However, the supplied stores could not be used due to non-availability of adequate shelf life of drug cartridges.

DRDE placed supply orders for 8000 each of for AJI (Atropine Sulphate and PAM Chloride) and drug Cartridge 33000 each at a cost of Rs 0.12 crore and at a cost of Rs 1.35 crore respectively.

Joint inspection was carried out for Atropine Sulphate and PAM Chloride drug cartridge received between July and September 2008. However, these were rejected by DGQA in October 2008 due to detection of butyl fragments in the injected content of drug, less injection of drug than the stipulated therapeutic dose making it ineffective and weak plastic bodies of reusable injectors.

Army HQ in June 2009 formed a study group to analyse the complex issue in its totality. Based on the recommendations of the Study Group suggestions of Director General Armed Forces Medical Services and reassurance of DRDO about the efficacy of the drugs, Army HQ agreed to accept the AJIs and the drugs in their present condition for use during emergencies only, with the condition that DRDE would develop improved version at the earliest. The overriding consideration for the acceptance of the AJI/drug was that the advantage of the AJI outweighed the potential risks associated with the deficiencies pointed out by DGQA in October 2008.

The Ministry of Defence stated in November 2009 that there was no loss since the Army had accepted the AJIs and drugs.

The fact remains that the procurement of drug cartridges at a cost of Rs 93.09 lakh during 2005-06 was clearly a loss since their shelf life expired before the AJIs were accepted for use by the Army. Although the sanction issued by the Ministry in September 2004 stipulated that the terms of supply of equipment would be determined and monitored by Army HQ/MOD in consultation with DRDO, the above events are symptoms of lack of coordination and understanding among DRDO HQ, Army HQ and DRDE. Resultantly, the AJIs and their drugs developed for use in emergencies as life saving items remained without any use for nearly five years with associated financial repercussions such as loss on account of expiry of their shelf life. The case points to the need for a better coordination and communication between the associated agencies to accomplish value for money and the Research and Development efforts.

CHAPTER VII : ORDNANCE FACTORY ORGANISATION

7.1 Performance of Ordnance Factory Organisation

7.1.1 Introduction

The Ordnance Factory Board (OFB) functions under the administrative control of the Department of Defence Production of the Ministry of Defence and is headed by the Director General, Ordnance Factories. There are 39 factories divided into five products based Operating Groups[18] as given below:

Sl. No.	Name of Group	Number of Factories
(i)	Ammunition & Explosives	10
(ii)	Weapons, Vehicles and Equipment	10
(iii)	Materials and Components	8
(iv)	Armoured Vehicles	6
(v)	Ordnance Equipment (Clothing & General Stores)	5

Until July 2008, Ordnance Cable Factory Chandigarh was under Material & Components Division. Ordnance Factory Board in its meeting held in July 2008 decided to change the product mix of the factory in phased manner and to entrust it with production of optoelectronic sight for the armoured vehicles for which there was an increased requirement. The factory was therefore brought under administrative control of Addl. DG/AV (Armoured Vehicles Division).

The Ministry of Defence accorded sanction in November 2001 for setting up of a new propellant factory at Rajgir in Nalanda District of Bihar for manufacture of two lakh Bi-modular charge system (BMCS) per annum required for 155 mm Ammunition at a total cost of Rs 941.13 crore. In February 2009, the project cost was revised by the Ministry to Rs 2160.51 crore excluding Customs Duty. The work on the project is under progress and Rs 698.67 crore had been spent as of September 2009.

In October 2007 Ministry of Defence accorded sanction for setting up of another Ordnance Factory at Korwa in Sultanpur District of Uttar Pradesh for manufacture of 45,000 carbines per annum at an estimated cost of Rs 408.01 crore. The time schedule for completion of the project is 36 months from the

[18] On a functional basis, the factories are grouped into Metallurgical (5 factories), Engineering (13 factories), Armoured vehicles (6 factories), Filling (5 factories), Chemical (4 factories), Equipment and clothing (6 factories).

date of issue of sanction. The work on the project is in progress and as of September 2009 Rs 13.56 crore had been spent.

7.1.2 Core activity

The core activity of OFB is production and supply of arms and ammunition, armoured vehicles, ordnance stores etc. required for Armed Forces. However, with a view to utilize the available spare capacity, the Ordnance Factories also supplies arms and ammunition to Paramilitary Forces, Civil Police, other Govt. Departments and also for Civil Indentors. Based on indents received from the Indentors, OFB fixes targets for production of the required items at the Ordnance Factories.

The product range in these Ordnance Factories covers sophisticated Anti Tank Guns, Anti-Aircraft Guns, Field Guns, Mortars, Small Arms, Sporting Arms including their Ammunitions, Bombs, Rockets, Projectiles, Grenades, Mines, Demolition Charges, Depth Charge, Pyrotechnic Stores, Transport Vehicles, Optical and Fire Control instruments, Bridges, Assault Boats, Clothing and Leather Items, Parachutes etc.

At present 959 principal items are produced in 39 Ordnance Factories, which cover nearly 86 *per cent* of the total cost of production. There were 1.03 lakh employees in the organization as of 1 April 2009.

7.1.3 Analysis of the Performance of OFB

Revenue Expenditure

The expenditure under revenue head during 2004-2005 to 2008-2009 is given in the table below:

(Rupees in crore)

Year	Total expenditure incurred by ordnance factories	Receipts against products supplied to Armed Forces	Other receipts and recoveries [19]	Total receipts	Net receipts of ordnance factories (5-2)
1	2	3	4	5	6
2004-05	6389.89	5330.35	1264.63	6594.98	205.09
2005-06	6847.13	5701.31	1537.81	7239.12	391.99
2006-07	6191.89	5147.77	1384.52	6532.29	340.40
2007-08	7125.63	5850.65	1464.12	7314.77	189.14
2008-09	9081.28	6123.38	1474.54	7597.92	(-) 1483.36

The total receipts and expenditure during 2008-09 had increased by 3.87 *per cent* and 27.45 *per cent* respectively as compared to the previous year. The increase in expenditure was due to increase in volume of production and increase in manpower related cost. Until 2007-08 the ordnance factories had

[19] Other receipts and recoveries includes receipt on account of transfer of RR funds, sale of surplus/obsolete stores, issues to MHA including Police, Central and State Governments, Civil trade including Public Sector Undertaking, export and other miscellaneous receipts.

generated surplus revenues. However, during 2008-09 the expenditure exceeded the receipts by Rs 1483.36 crore.

Capital Expenditure

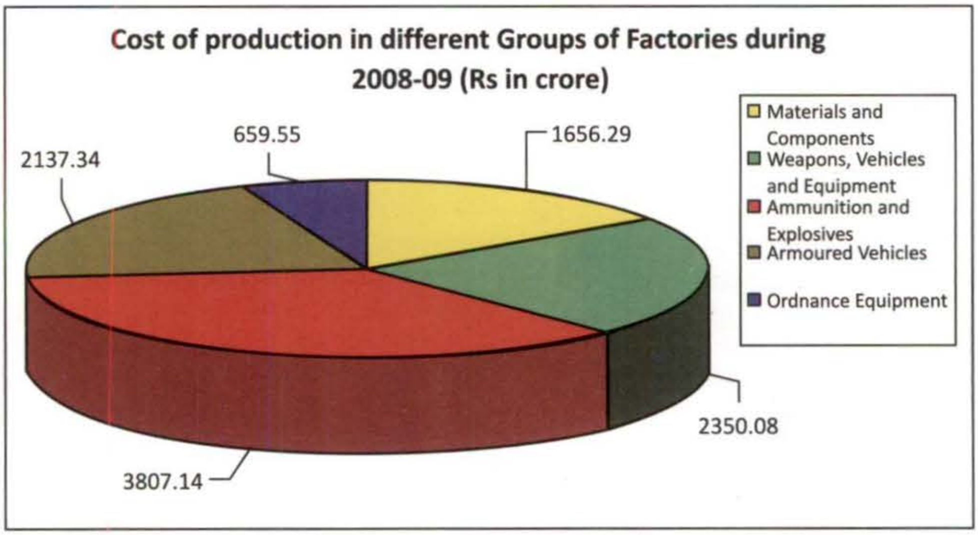
While the average total revenue expenditure was around Rs 7466 crore per annum during the last three years (2006-09), the total annual capital outlay averaged at Rs 188.24 crore. The expenditure from the capital outlay is relatively low when compared with the expenditure under revenue since the expenditure on renewal and replacement of plant and machinery is met out of the renewal and replacement fund funded out of revenue outlay of the ordnance factories.

Cost of production

The following table indicates the group-wise/element-wise expenditure incurred during the year to arrive at the cost of production for 2008-09 and the percentages of various elements to the cost of production:

Sl. No.	Group of factories	Cost of production	Direct material and percentage to cost of production	Direct Labour and percentage to cost of production	Overhead Charges		
					Fixed Overhead and percentage to cost of production	Variable Overhead and percentage to cost of production	Total Overheads & percentage to cost of production (6+7)
1	2	3	4	5	6	7	8
1	Material & Components	1656.29	818.59 **(49.42)**	131.91 **(7.96)**	403.98 **(24.39)**	301.82 **(18.22)**	705.80 **(42.61)**
2	Weapons, Vehicles and Equipment	2350.08	1243.87 **(52.93)**	213.53 **(9.09)**	636.85 **(27.10)**	238.87 **(10.16)**	875.72 **(37.26)**
3	Ammunition and Explosives	3807.14	2655.96 **(69.76)**	206.13 **(5.41)**	547.70 **(14.39)**	393.89 **(10.35)**	941.59 **(24.73)**
4	Armoured Vehicles	2137.34	1624.79 **(76.02)**	80.18 **(3.75)**	299.13 **(14.00)**	133.24 **(6.23)**	432.37 **(20.23)**
5	Ordnance Equipment	659.55	298.56 **(45.27)**	136.35 **(20.67)**	162.31 **(24.61)**	62.32 **(9.45)**	224.63 **(34.06)**
	Total	10610.40	6641.77 **(62.60)**	768.10 **(7.24)**	2049.97 **(19.32)**	1130.14 **(10.65)**	3180.11 **(29.97)**

The element of direct labour in the cost of production is higher in the ordnance equipment group of factories due to the labour intensive nature of their work. However, this component has gone up steadily during the last five years from 17.21 *per cent* during 2004-05 to 20.67 *per cent* during 2008-09.



During 2008-09, Ammunition & Explosives group of factories registered the highest cost of production of Rs 3807.14 crore amongst all the five group of factories with Material, Labour and Overheads at 69.76 *per cent*, 5.41 *per cent* and 24.73 *per cent* respectively while Ordnance Equipment Group of factories registered the lowest cost of production of Rs 659.55 crore with material, labour and overheads at 45.27 *per cent*, 20.67 *per cent* and 34.06 *per cent* respectively. The average overhead charges of OFB were 29.97 *per cent*. While the Material and Component Group registered the highest overheads at 42.61 *per cent* and the Armoured Vehicles Group registered the lowest overheads at 20.23 *per cent*.

Ordnance Factory Board in its meeting held on 25.04.2008 had resolved to account cost of utilities and fuel consumed in production as Direct Material, if cost of utilities becomes seven *per cent* or more of cost of production. Accordingly Principal Controller of Accounts (Fys.) Kolkata issued instruction for charging cost of utilities and fuel consumed in production activities as an element of direct cost against a new nomenclature "Direct Expenses" to be shown in the Production Account. This revised accounting procedure was effective from 01.04.2008. However, Audit observed that only in respect of five factories it has been shown in the Production Account. On this being pointed out, Principal Controller of Accounts (Fys.) Kolkata stated that all the factories had once again been instructed to follow the revised procedure.

Production programme

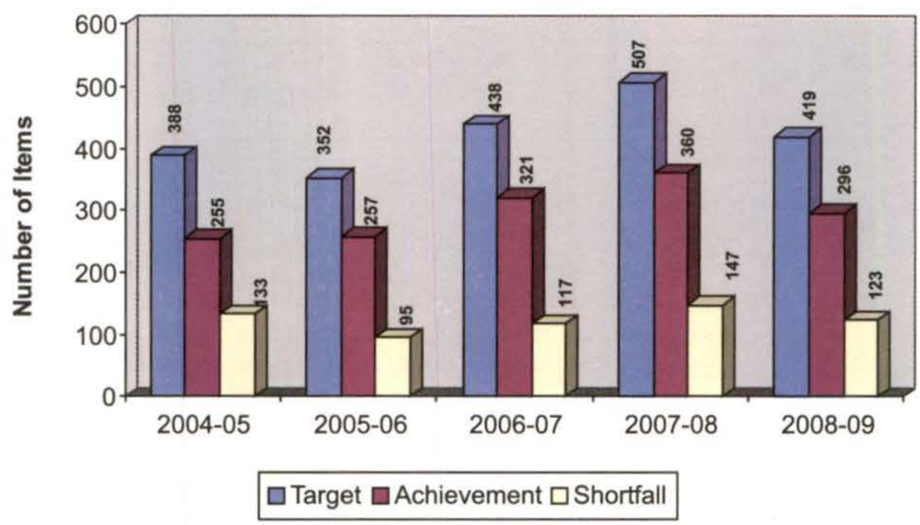
The production programme for ammunition, weapons and vehicles, materials and components and armoured vehicles was fixed for one year, while four yearly production programme was fixed for equipment items. However, there was a shortfall of nearly 29 *per cent* in meeting such targets during 2008-09.

The details of demands, targets fixed and shortfall in achievement of the targets during the last five years are shown in the table below:

Year	Number of items for which demands existed	Number of items for which target fixed	Number of items manufactured as per target	Number of items for which target were not achieved	Percentage of shortfall
2004-05	388	388	255	133	34.28
2005-06	352	352	257	95	26.99
2006-07	552	438	321	117	26.71
2007-08	628	507	360	147	28.99
2008-09	419	419	296	123	29.36

From the above table it may be seen that despite reduction in the target in 2008-09 by 17.36 *per cent* the shortfall in achieving the target increased in comparison with the previous year.

Shortfall in production



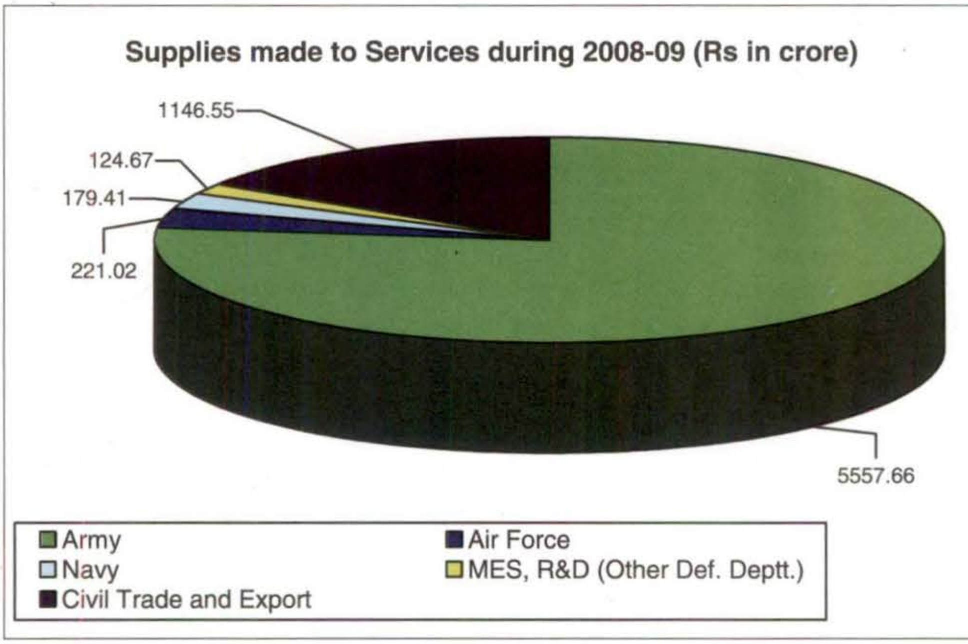
Issue to users (Indentors)

The indentor-wise value of issues during the last five years was as under:

(Rupees in crore)

Name of Indentors	2004-05	2005-06	2006-07	2007-08	2008-09
Army	4854.73	5187.25	4535.43	5252.15	5557.66
Air Force	180.96	203.44	208.09	239.53	221.02
Navy	79.87	147.49	130.76	119.39	179.41
MES, Research and Development (Other Defence Department)	93.26	106.15	143.08	145.63	124.67
Total Defence	**5208.83**	**5644.33**	**5017.36**	**5756.70**	**6082.76**
Civil Trade and Export	977.75	1247.35	1179.98	1181.11	1146.55
Total issues	**6186.58**	**6891.68**	**6197.34**	**6937.81**	**7229.31**

As evident from the chart below the Army remained the major recipient of the products of the ordnance factories, accounting for nearly 77 *per cent* during 2008-09. Total value of issues during 2008-09 has increased by 4.20 *per cent* in comparison to the previous year.



Civil Trade

The ordnance factories also supplied manufacture products to Public Sector Undertakings, private indentors, Government departments other than Ministry of Home Affairs and State Police, since July 1986 for optimal utilization of spare capacities and to lessen dependence on budgetary support. The turn-over from civil trade during 2004-2009 was as under:

(Rupees in crore)

Year	Number of factories involved	Target	Achievement	Percentage of achievement
2004-05	37	250.00	248.78	99.51
2005-06	33	266.00	312.17	117.36
2006-07	33	279.16	298.56	106.95
2007-08	32	335.01	359.56	107.33
2008-09	39	351.12	329.30	93.79

Though the achievement of civil trade in 2005-06 to 2007-08 was higher in comparison to the target, during the year 2008-09 there was short fall of 6.21 *per cent* in achieving the target. The reason for shortfall has been attributed to pending issue to indentor, shortage of industrial employees, higher demand from services, non-materialising of outsourcing, non placement of orders covering the target by the indentors etc. As on 31 March 2009 a total amount of Rs 6.7 crore was outstanding for recovery from Govt. Departments under the head Civil Trade.

Export

The following table shows the achievement with reference to target in export to friendly foreign governments during the period from 2004-2005 to 2008-2009:

(Rupees in crore)

Year	Factories involved	Target	Achievement	Shortfall (-) /Excess (+)	Percentage of achievement w.r.t. target
2004-05	17	115.00	58.00	(-) 57.00	50.43
2005-06	11	15.00	14.66	(-) 0.34	97.73
2006-07	13	25.00	15.12	(-) 9.88	60.48
2007-08	10	30.00	27.44	(-) 2.56	91.47
2008-09	11	35.00	41.07	(+) 6.07	117.34

Though during the last few years there was shortfall in achieving the export target, during the year 2008-09 the achievement was 17.34 *per cent* higher than the target. However, earnings from export were negligibly low at 0.39 *per cent* of the cost of production of Rs 10610 crore during 2008-09. The earnings from export had peaked to Rs 103 crore in 2003-04 and declined thereafter. Earlier in 2005-06, OFB had attributed the decline in export to the restrictions on export to Nepal.

Inventory Management

Stock holding

The level of store-in-hand inventory holding by a factory at any time in respect of imported stores as well as indigenous items, will depend upon the criticality of the items in maintaining the continuity of production, lead time required to procure the item, availability of alternate capacity verified and established sources, availability of storage space etc. The optimum level of store- in- hand inventory for any item may be fixed by the General Managers in such a way that overall assessed inventory holding for the factory should not normally exceed the maximum level as indicated below :

Sl. No.	Group of Factories	Authorized limit of inventory holding (maximum)
1.	Armoured Vehicles	6 months
2.	Ordnance Equipment Factories	3 months
3.	Others	4 months

However, 16 ordnance factories were holding inventory in excess of their maximum authorized limit. Necessary action needs to be taken by the factory management to reduce the excess inventory holding which have blocked Govt. money.

Status of inventory holding

The position of total inventory holdings during 2004-2005 to 2008-2009 was as under:

(Rupees in crore)

Sl. No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	Percentage of increase (+) / decrease (-) during 2008-09 in comparison to previous year
1.	Working stock						
a.	Active	1670.52	1649.99	1734.00	2160.00	2354.00	8.98
b.	Non-moving	219.84	253.55	256.00	333.00	322.00	-3.30
c.	Slow moving	217.43	241.48	194.00	211.00	287.00	36.02
	Total Working Stock	**2107.79**	**2145.02**	**2184.00**	**2704.00**	**2963.00**	**9.58**
2	Waste & Obsolete	11.94	10.43	14.00	14.00	26.00	85.71
3.	Surplus/ Scrap	48.61	57.88	80.00	81.00	68.00	-16.05
4.	Maintenance stores	95.58	73.28	87.00	79.00	73.00	-7.59
	Total	**2263.92**	**2286.61**	**2365.00**	**2878.00**	**3130.00**	**8.76**
5.	Average holdings in terms of number of days' consumption	147	151	169	160	149	-6.88
6.	Percentage of total slow-moving and non-moving stock to total working stock	20.75	23.08	20.60	20.12	20.55	2.14

Average holding in terms of days' consumption has decreased by 6.88 *per cent* during 2008-2009 in comparison to 2007-08. The huge accumulation of Non moving as well as Waste & Obsolete stores needs immediate review by the management with a view to explore reasons and effective utilization/disposal of the stores.

Finished stock holding

Position of Finished stock holding (completed articles and components) during the last five years was as under:

(Rs in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Holding of Finished articles	90.20	121.06	125.11	332.66[20]	505.80
Total cost of production	8331.74	8811.59	7957.53	9312.61	10610.40
Holding of finished stock in terms of number of days issue	4	5	5	13	17
Holding in terms of percentage of total cost of production	1.08	1.37	1.57	3.57	4.77
Finished component holding	520.36	437.92	465.45	363.10	458.33
Holding of finished components in terms of number of days consumption	54	46	52	26	38

[20] Incorrect classification of finished articles valued at Rs 254.05 crore as finished components in the accounts for year 2007-08 has been corrected subsequently.

The value of finished (completed) articles in hand as on 31.3.2009 increased by 52.05 *per cent* compared to 31.3.2008. This was mainly on account of the non-acceptance by the Army of the MBT Arjun produced by the Heavy Vehicles Factory, Avadi. Immediate action needs to be taken for clearance of huge finished articles.

Work-in-progress

The General Manager of an Ordnance Factory authorizes a production shop to manufacture an item in the given quantity by issue of a warrant whose normal life is six months. Unfinished item pertaining to different warrants lying at the shop floor constituted the work-in-progress.

The position of the work-in-progress during the last five years was as under:

(Rupees in crore)

As on 31 March	Value of work-in-progress
2005	1637.66
2006	1270.68
2007	1179.31
2008	1265.00
2009	1961.82

The total value of work-in-progress as on 31 March 2009 has increased by 55.08 *per cent* as compared to the previous year. As on 31.03.2009 total 29306 warrants were outstanding, of which 21389 warrants pertain to the year 2008-09 and balance 7917 warrants pertain to the years prior to 2008-09. Necessary action needs to be taken by OFB for closure of the warrants outstanding for more than six months as authorized.

7.1.4 Man power

The employees of the Ordnance Factory Organization are classified as (i) "Officers" of senior supervisory level, (ii) "Non-Gazetted" (NGO) or "Non-Industrial" (NIEs) employees who are of junior supervisory level and the clerical establishment and (iii) "Industrial Employees" (IEs), who are engaged in the production and maintenance operations. The number of employees of various categories during the last five years is given in the table below:

(In number)

Category of employees	2004-05	2005-06	2006-07	2007-08	2008-09
Officers	4187	3866	3877	4036	3947
Percentage of officers to total manpower	3.51	3.31	3.47	3.77	3.84
NGO/NIEs	35105	35517	33783	32359	31105

(In number)

Category of employees	2004-05	2005-06	2006-07	2007-08	2008-09
Percentage of NGOs/NIEs to total manpower	29.43	30.38	30.20	30.22	30.27
Industrial Employees (IE)	80000	77528	74181	70666	67717
Percentage of IEs to total manpower	67.06	66.31	66.33	66.01	65.89
Total	**119292**	**116911**	**111841**	**107061**	**102769**

In 2008-09 the manpower of Ordnance Factory Organization registered an overall decline by 13.85 *per cent* compared to the manpower in 2004-05.

7.1.5 *Capacity utilization*

The table below indicates the extent to which the capacity had been utilized in terms of machine hours during the last five years.

(Capacity utilization in terms of Machine Hours)

(Unit in lakh hours)

Year	Machine hours available	Machine hours utilized	Percentage of Capacity utilization
2004-05	1754	1303	74.29
2005-06	1763	1392	78.96
2006-07	1472	1120	76.08
2007-08	1351	1147	84.90
2008-09	1696	1294	76.30

Though the percentage of capacity utilization had reduced during 2008-09 as compared to that of the previous year, the Machine hours available and the Machine hours utilized have increased.

7.1.6 *Overhead Charges*

The details of overheads in relation to the cost of production in respect of various ordnance factories from 2004-05 to 2008-2009 are in **Annexure IV.**

The percentage of overheads to the cost of production was more in respect of factories classified under Material and Components Division where overheads averaged at 45 *per cent* of the cost of production. The overall increase in overhead charges as percentage of cost of production was due to implementation of 6th Central Pay Commissions recommendations and consequential increase in Pay & Allowances, Supervision Charges etc.

The matter was referred to the Ministry of Defence/Ordnance Factory Board in December 2009; their replies were awaited as of April 2010.

Planning

7.2 Injudicious sanction of Ordnance Factory Korwa Project

The project for establishment of a new ordnance factory at Korwa, Amethi at an estimated investment of Rs 408.01 crore by October 2010 to meet an operationally urgent need for acquisition of new generation carbines was sanctioned without finalization of new generation carbines to be produced in the factory. This coupled with selection of inappropriate site and inadequate monitoring resulted in slow progress of the project. The project is likely to be delayed very badly, thereby delaying the supply of urgently required carbines to the Army.

Indian Army projected, in October 2005, an operationally urgent need for acquisition of new generation carbines at an approximate cost of Rs 2524 crore. Raksha Mantri accepted the necessity for acquisition of 2.18 lakh Protective carbines and 1.60 lakh Close Quarter Battle {CQB} carbines during XI Acquisition Plan 2007-12. In order to meet the requirement, Defence Acquisition Council (DAC) accorded approval in February 2006 for the induction of CQB carbines through import with Transfer of Technology (TOT) and Protective carbines through indigenous production as the OFB was already undertaking user trials of the next generation Protective carbines since January 2006. Apart from the Army, the Paramilitary forces and State Police too had the requirements for the carbines.

Based on a detailed examination of the options available with the Government, Ministry of Defence decided to set up a new factory for production of these carbines. Accordingly Raksha Mantri accorded his in-principle approval in April 2006 to set up a green field project for production of the carbines and constituted (May 2006) a site selection committee with the specific instruction that the available surplus Defence lands be used to avoid the problems associated with land acquisition /rehabilitation and to reduce overall expenditure. Based on the recommendations of the Committee, the Competent Financial Authority (CFA) sanctioned, in October 2007, the establishment of a new ordnance factory at Korwa, Amethi by October 2010 at an estimated investment of Rs 408.01 crore.

Scrutiny of records of the Ministry of Defence, Ordnance Factory Board and other subordinate offices related to the setting up of the new ordnance factory at Korwa revealed as follows:

I Selection of site

The Site Selection Committee was to be guided *inter alia* by the following terms :

(i) Guidelines issued by the Bureau of Public Enterprises;

(ii) Requests made in the past by the Chief Ministers and Members of Parliament for set up of new ordnance factories in their States;

(iii) Avoidance of problems associated with land acquisition process/ rehabilitation and reduction of overall expenditure;

(iv) Availability of land, water, electricity, etc.;

(v) Availability of industrial infrastructure;

(vi) Safety and security aspects;

(vii) Government policy regarding development of backward areas.

The Committee, constituted in June 2006, evaluated twelve sites and zeroed in on two sites viz. Field Gun Factory (FGF) Kanpur and Hindustan Aeronautics Limited (HAL) Korwa, Amethi in the state of Uttar Pradesh. Though the Committee opined that 118 acres of surplus land and residential buildings available at FGF, Kanpur were adequate, yet they did not recommend locating the new factory at Kanpur observing that the five existing factories located there suffered from militant trade unionism. The Committee therefore recommended Korwa for the new factory.

HAL had offered 34 acres land at Korwa against the requirement of 60 acres. The remaining land was therefore required to be acquired. The decision to locate the factory at Korwa was therefore flawed to this extent since the acquisition of land was still pending with the UP Government as of November 2009.

OFB stated in November 2009 that the surplus land of FGF could be utilised for augmentation of capacity for high calibre guns as there was increased requirement of the same. OFB added that addition of a factory in Armapore region of Kanpur might not be desirable from security point of view. Audit however observed that the OFB's views on the increased requirement of high calibre guns was not backed by the trends of production of high calibre guns during last three years. The plea of security is also not tenable as five factories had been continuing production in Armapore region of Kanpur for decades without security problems.

II Project sanction

Though the Ministry's Note to the CFA for seeking the project sanction mentioned the production of CQB carbine as per TOT and Protective carbine after successful development by OFB/Armament Research and Development Establishment (ARDE) of Defence Research and Development Organisation (DRDO), there was no finality in the selection of products. Till the time of approval of the project, the Government had not selected the foreign firm from which CQB carbine was to be procured under TOT. Even the user trial evaluation of the Protective carbines had not been completed. Thus, the requirement of plants and machinery was worked out by OFB without knowing the final products to be manufactured and their technology to be adopted.

Though the project is to be completed by October 2010, the tender for the procurement of CQB carbine has not yet been finalised. Similarly, the user trials of the Protective carbine have not been successful. As a result, neither the choice of CQB carbine nor the Protective carbine have been finalised resulting into uncertainty regarding types of plant and machinery required to be procured for the factory.

OFB stated in November 2009 that the proposal for setting up a new factory was going on simultaneously with indigenous development of Protective carbine.

Fresh Request for Proposal (RFP) was also under progress for TOT for CQB carbine. Thus, OFB has tacitly admitted that the project was sanctioned without even deciding the technology to be adopted and the items to be produced. Hasty sanction of the new factory, citing urgency of the requirement for the new generation carbines, was proved injudicious since the same level of urgency in sanction of a new project was not translated into action during execution of the project as discussed in the succeeding paragraphs.

While sanctioning a new ordnance factory, the Ministry had also failed to learn lessons from the experience of setting up of a new factory at Nalanda, which was targeted for completion by October 2005. The project has been badly delayed and resulted time and cost overrun was reported in Paragraph 6.3 of the Report No.CA 4 of 2008 of the Comptroller and Auditor General of India. Subsequently, in February 2009, the estimated cost of Nalanda project was revised to Rs 2160.51 crore, an increase of Rs 1219.38 crore from the initially sanctioned cost of Rs 941.13 crore i.e. an increase of 130 *per cent*.

III Products not yet finalised

A - User trials of Protective carbine not sucessful

Mention was made in Paragraph 47 of Report No. 7 of 2001 of the Comptroller and Auditor General of India, about failure of ARDE and Small Arms Factory Kanpur (SAF) to develop and produce 5.56 mm INSAS Carbine even after a lapse of 13 years and expenditure of Rs 22.18 crore and Army's foreclosure of the requirement in January 2000. Ministry in their Action Taken Note (ATN) of June 2002 stated that Army finalised a revised General Staff Qualitative Requirement (GSQR) in September 2001 for modern sub-machine carbine and their requirement was being met with the existing 9 mm carbine. Subsequently, ARDE and SAF separately developed carbine viz. 5.56 mm MSMC and 5.56 mm AKC respectively. Both the carbines were offered for user trials between January 2006 and January 2009.

In the confirmatory trials of January 2009, the trial team observed that there was a definite and sharp decline in reliability performance, manufacturing, workmanship standards and material appropriateness. The weapons were not fit for induction into service. The team recommended that the development agencies should undertake de-novo approach breaking free from the current unsuccessful design and the GSQR might be reviewed or a fresh QR formulated as certain qualitative requirements were either against weapon reliability or/and also against the basic user aspiration.

Subsequently, a meeting was held on 4 February 2009 to resolve the impasse on the Protective carbine and following decisions were taken:

- DRDO and OFB in association with the user should develop a successful model for trials within six months;
- A twin approach i.e. selection of a CQB Carbine and Protective Carbine would be pursued. Once a weapon was selected, the production could be limited to one weapon; and
- The calibre is to remain 5.56 mm.

OFB stated in November 2009 that a de-novo development had been adopted. Thus the Protective carbine to be produced in the new factory at Korwa was still under development stage.

B- Non-finalisation of tender for CQB carbine & resultant non-existent TOT

Army issued GSQR in November 2005 for the CQB carbine. In order to import the CQB carbine, the Ministry issued Request for Proposal (RFP) in April 2007 for procurement of CQB carbines along with TOT. However, they withdrew the RFP in December 2007 without assigning any reason. The Ministry issued another RFP in April 2008 with specific mention of "Less the TOT for passive night sight". However, in June 2009, it withdrew the RFP owing to inadequate competition and the technical specifications not meeting the user's requirement. Thus, a supplier for the CQB carbine could not be identified even as of November 2009 though the Army had shown operational urgency in 2005.

IV Delayed execution of the project

Land acquisition

As per Detailed Project Report (DPR), transfer of 34 acres of land and spare accommodation by HAL Korwa and acquisition of balance land was to be completed by February 2008. However, the HAL was yet to transfer the land as of October 2009. Although the sanction of the project had envisaged acquisition of 20 acres of land at an estimated cost of Rs 5 crore, the requirement nearly doubled to 39 acres. The application submitted in February 2009 for acquisition of the land was pending with the Uttar Pradesh Government as of November 2009.

Thus, selection of project site at Korwa instead of FGF involved delays and impasse in land acquisition although it had been perceived to be a possible bottleneck at the time of the initiation of the project and was to be avoided while selecting the site.

Civil works

Floor area of six production shops was originally estimated as 12,600 sq. metre. But it was revised to 17,184 sq. metre during May-August 2008, considering safety distances and aesthetic look, which would involve an estimated additional expenditure of Rs 5.98 crore. Construction of 150 residential quarters, owing to non-transfer of residential accommodation by HAL as originally expected, would entail an additional expenditure of Rs 14.89 crore.

Only the re-routing of various utilities and construction of three production shops were completed till September 2009 and works in respect of other shops started in March–April 2009, i.e. after a lapse of 18 months from the date of project sanction.

Plants and machinery

Procurement of plants and machinery was scheduled to commence in February 2008 to be completed by April 2010. However, due to non-finalisation of the carbine, only the procurement of general purpose plants and machinery was initiated and that too was in the tendering stage as of October 2009.

Project expenditure

Even though the project was sanctioned for completion by October 2010, not much headway has been made in the execution of the project. Only a sum of Rs 13.56 crore could be expended up to September 2009 against sanctioned amount of Rs 408.01 crore. Thus, the progress in terms of the expenditure was only a meager three *per cent* though two-third of the sanctioned time for completion of the project had elapsed.

OFB stated in November 2009 that Rs 21.79 crore was spent apart from committed liability of Rs 59.82 crore towards civil works. This appeared an inflated amount since the Half-yearly Progress Report of the project as of October 2009 indicated an expenditure of only Rs 11 crore for civil works.

V Ineffective project monitoring

Ministry constituted, in January 2008, a Project Management Board (PMB) under the Chairmanship of Secretary (Defence Production) and member representatives from the Ministry, Army, DRDO, DGQA and OFB, to review/monitor the progress. Although the PMB was required to meet at least once in six months to ensure establishment of the project within the scheduled time, only one meeting was held in May 2008.

Another Steering Committee, at Board level, met four times between April 2008 and October 2009 and took various decisions for time-bound completion of all the activities. Despite this no significant progress was made to meet the operationally urgent requirement of the Army.

OFB stated that the Steering Committee in its meeting of October 2009 decided to issue tenders for plants and machinery for similar small arms components with typical drawings to hold the project timeframe. The Committee also identified a sporting rifle to be produced at Ordnance Factory Korwa to give flexibility in production. This is yet another indication of defective planning and imprudent decision as production of sporting rifle was not the activity for which the project was conceived. The shift to production of sporting rifle in priority over the production of new generation carbines for which urgent operational requirement had been projected by the Army in October 2005 would only cast doubt about the very genesis of the project.

VI Conclusions and Recommendations

The sanction of a new ordnance factory to be set up at Korwa in Amethi was ill conceived as obvious from the tardy progress shown in its execution. The sanction was untimely since the carbines to be produced in the factory were yet to be decided. The site selection was flawed since even the minimum land required to set up the factory was not available and was awaiting acquisition. Diversion of the production activity of the proposed factory into production of sports rifle signifies that the new generation carbines for which the Army and the Paramilitary forces had projected urgent operational requirement took a back seat. In the present stalemated state, the necessity for continuation with the project needs to be reviewed urgently by the Ministry and a pragmatic decision taken by looking into the cost and benefits of setting up a new factory *vis a vis* the augmentation of the facility in any of the existing ordnance factories.

The matter was referred to the MOD in October 2009; their reply was awaited as of April 2010.

Procurement of Stores and Machinery

Stores

7.3 Extra expenditure in procurement of Oleum

The failure of HEF to invoke risk purchase clause coupled with OFB's failure to allot funds in time to make contractual payments for supplies received, foreclosed the possibility of obtaining Oleum at an economical cost. It also resulted in an extra expenditure of Rs 2.80 crore incurred in the purchase of Oleum to make good the shortage in supply.

High Explosives Factory Kirkee (HEF) procures Oleum from trade to manufacture Trinitrotoluene (TNT). HEF placed an order in April 2007 on M/s Rama Krishi Rasayan Limited Pune (Firm 'A') for supply of 7432 tonne Oleum at a fixed unit cost of Rs 3327 per tonne (inclusive of all taxes).

Firm 'A' supplied only 3558 tonne Oleum up to November 2007 with interruption between September 2007 and October 2007, due to major problem at the firm's end. Subsequently, firm 'A' refused to supply remaining 3874 tonne attributing it to the failure of HEF to pay for Oleum already supplied. The Firm 'A' claimed that Rs 45.07 lakh due upto October 2007, which increased to Rs 48.65 lakh upto November 2007 was not paid within 30 days stipulated in the supply order. HEF released the outstanding payments to the firm 'A' in December 2007 after withholding Rs 18.22 lakh. HEF attributed the delay ranging between 9 days and 70 days in making payment to firm 'A' to delay in release of funds by Ordnance Factory Board (OFB). When Audit enquired in March 2009 from OFB about the reasons for delay in releasing budgetary allotment to HEF, OFB did not furnish any reasons.

Firm 'A' did not supply the balance quantity of 3874 tonne on order, citing HEF's failure to make timely payments as per contract. HEF did not take any action against the firm "A' for their failure to supply Oleum in September 2007 and October 2007 nor resort to risk purchase when they refused to supply the balance quantity on order. Instead, HEF procured Oleum under three orders, viz. 1200 tonne in October 2007 at unit cost of Rs 6732, 2200 tonne in December 2007 at unit cost of Rs 10,039 and 700 tonne in March 2008 at unit cost of Rs 16,342 from two firms, viz. M/s HOC Limited Mumbai and M/s Narottam Das and Company Nagpur. HEF incurred an extra expenditure of Rs 2.80 crore in procurement of 3874 tonne of Oleum (included in 4100 tonne procured under the three orders), which was contractually required to be supplied by firm 'A'. As an alternative of making risk purchase under supply order of April 2007, HEF decided to refer the matter for arbitration, which was yet to be initiated as of August 2009, forfeit an amount of Rs 18.22 lakh which was due to the firm and blacklist them.

The Ministry of Defence (MOD) stated in October 2009 that the non-supply of Oleum was not due to the non-payment of dues to the firm but due to the pollution problem at the factory of the firm 'A' and increase in the price of Sulphur which is the raw material for production of Oleum.

However, it is a fact that HEF did not invoke risk purchase to enable recovery of the extra expenditure of Rs 2.80 crore incurred in the purchase of 3874 tonne Oleum, when firm 'A' refused to supply the remaining quantity on order. The refusal of firm 'A' to supply the remaining ordered quantity citing failure to make the payments within the time limit also could not be effectively countered by HEF as there was an admitted delay in payment due to delay in allotment of funds by OFB. Thus OFB and HEF had made it possible for the firm to dishonour the contractual liability to supply Oleum at a time when there was a surge in the price of Sulphur. OFB was also yet to refer the case to arbitration as of October 2009, although the breach of contract was committed in December 2007.

7.4 Undue benefit to a firm in procurement of Oleum

Ordnance Factory Itarsi accorded undue benefit to a firm by acceding to their request for acceptance of price variation clause, excise duty component and increased freight charges after opening of the tender and placement of order.

Ordnance Factory Itarsi (OFI) requires Oleum to manufacture Nitroglycerine, Nitrocellulose and Nitroguinadine. OFI issued a limited tender enquiry in December 2007 to eight firms for procurement of 1558 tonne Oleum. Only M/s Lalit Brothers, Ratlam submitted bid within the scheduled time and date, i.e., 14:30 hours on 03 January 2008. The firm quoted fixed rate of Rs 12,834 per tonne, which included basic rate of Rs 11,182, VAT of Rs 447 and freight of Rs 1205.

At 07:08 PM on the same day, OFI received a fax from the firm seeking enhancement in the basic rate by Rs 1700 per tonne and inclusion of price escalation clause, citing unexpected increase in the price of Sulphur, the raw material for Oleum. Again at 7:10 PM, OFI received another fax from M/s Khaitan Chemicals and Fertilizers Limited, Indore quoting Rs 16,531 per tonne, inclusive of basic cost of Rs 11,500, excise duty of Rs 1895, VAT of Rs 536 and freight of Rs 2600. Despite the clear provision in the General Financial Rules that late bids, i.e. bids received after the specified date and time of receipt of bids, should not be considered OFI took cognizance of these fax quotations. As per the laid down rules of ordnance factory board spot comparative statement duly signed by the officers opening the tenders are to be prepared immediately after opening the bids. However, in the instant case the comparative statement of tenders was prepared by recording the second bid which was received after opening of the bid and the enhancement in rates quoted by the first lone bidder. Based on the recommendations of the tender purchase committee to accept the lowest offer, OFI placed supply order on M/s Lalit Brothers on 11 January 2008 for supply of 1558 tonnes Oleum at a cost of Rs 2.28 crore at the enhanced basic rate of Rs 12882 per tonne sought by the firm in addition to VAT and freight. As the supply order had an option clause to enhance the quantity by 25 *per cent*, in June 2008 OFI exercised the option to procure additional quantity of 390 tonne. OFI received 1951.76 tonne Oleum between February 2008 and February 2009 and paid Rs 3.47 crore to the supplier.

Even though the supply order of January 2008 did not contain any provision for payment of excise duty over and above the quoted rate, in May 2008 OFI decided to pay excise duty as an additional element. OFI justified this payment stating that when the revised rate of Oleum was fixed in March 2008 by considering the formula for increase in cost as indicated by the firm's principal viz. M/s Khaitan Chemicals and Fertilizers Limited, Indore the addition of excise element was omitted due to oversight. Thus, the unit rate of Oleum went up to Rs 18,148, inclusive of all charges, retrospectively from 25 January 2008.

While the limited tenders were issued to both the firms considering them as separate tenders, it became clear that M/s Lalit Brothers was only a dealer of M/s Khaitan Chemicals and Fertilizers Limited. This had limited the scope for getting competitive rates.

In June 2008, OFI agreed to yet another request of M/s Lalit Brothers to enhance the freight from Rs 1205 per tonne to Rs 1596 per tonne on account of increase in cost of fuel. OFI, however, ignored the fact that the element of freight was fixed and the escalation factor did not apply to it.

When Audit pointed out the above irregularities and highlighted the resultant undue benefit of about Rs 1.07 crore given to the supplier, Ordnance Factory Board stated in October 2009 that M/s Lalit Brothers did not charge any thing extra for the Oleum which they purchased from their principal and supplied to OFI, except charging the freight. OFB admitted that the increase in freight given by OFI was wrong and that the excess payment of Rs 3.79 lakh on that account had been deducted from the pending bills.

Regarding acceptance of late bids, OFB stated that a Board of Enquiry had been appointed to investigate whether there had been any serious violation of the system of documentation in General Manager's office as it had been found that they did not maintain any record of the receipt/dispatch of the fax quotation in the instant case.

Audit views that the entire pre and post contract activities showed an inclination to favour the single vendor, viz. M/s Lalit Brothers who acted on behalf of the principal, viz. M/s Khaitan Chemicals and Fertilizers Limited. Despite knowing that these two firms had principal-dealer relationship, they were treated as two competing bidders and thus losing the scope for getting competitive bids. The acts of accepting late bids and amending the supply order to facilitate extra payments to the supplier merit independent investigation.

The matter was referred to the Ministry of Defence in April 2009; their reply was awaited as of April 2010.

7.5 Non-utilisation of propellant

Acceptance of two types of propellants in mismatched combination lots by Ordnance Factory Badmal resulted in non-utilisation of one type of propellant valuing Rs 40.55 lakh for over two years.

Ordnance Factory Badmal (OFBL) imported 95,000 Kg and 85,000 Kg of propellant-15/1 and propellant-12/7 respectively against a supply order of September 2006, from M/s Tasko Export Ukraine for production of semi-combustible cartridge cases of two versions of 125 mm ammunition. After their receipt in March 2007, OFBL could not utilize 9150 Kg propellant-12/7, since the two propellants were received in mismatched combination lots.

OFBL had ordered supply of the two propellants in the ratio of 1:0.80, whereas the firm manufactured and supplied propellant-15/1 and propellant-12/7 in a different ratio based on assessed charge mass value which was not as per the requirements of OFBL. OFBL overlooked this variation in supply and accepted the supply by waiving the need for undertaking pre-despatch inspection. As a result, 9150 Kg propellant-12/7 valuing Rs 40.55 lakh received was lying with OFBL without use as of December 2009 for want of matching lot of propellant-15/1.

In April 2008, OFBL proposed to import 11,438 Kg propellant-15/1 to facilitate utilization of the unused 9150 Kg propellant-12/7. The Senior Quality Assurance Establishment (Armament) Badmal (SQAE), however, disapproved the proposal on the ground that procurement of both the propellants needs to in matching combination lots of ballistic similarity, which can be established only through confirmatory firings by the original equipment manufacturer, i.e., the overseas supplier. However, later in May 2009 OFBL ordered supply of 11,438 Kg propellant-15/1 from the same supplier. The receipt of 11,438 Kg propellant 15/1 was awaited as of November 2009.

Reversing its earlier opinion, the SQAE stated in November 2009 that utilization of the propellants might be possible if the laboratory tests and confirmatory firing to be undertaken at their end are satisfactory. The prospect of utilization of the propellant-12/7 however remained uncertain as of November 2009.

OFB admitted in October 2009 that OFBL had erred in accepting the propellants in mismatching quantities, but stated that with the receipt of 11,438 Kg propellant-15/1, the propellant-12/7 lying at the factory would be gainfully utilized. OFB however was silent as to the time frame within which the matching quantity of two propellants would be utilized.

Acceptance of mismatched combination lot of two propellants by OFBL led to non-utilisation of propellant valuing Rs 40.55 lakh for over two years. Its utilization was also uncertain as it is contingent up on the satisfactory laboratory test and confirmatory firing test to be undertaken by SQAE.

The matter was referred to the Ministry of Defence in April 2009; their reply is awaited as of April 2010.

7.6 Extra expenditure due to delay in finalisation of offer

Delay in acceptance of an offer within its validity period resulted in import of the items at an extra cost involving an additional expenditure of Rs 2.85 crore. Failure of the Ministry to take a decision despite the clearly available 22 weeks validity, against time frame of 12 weeks prescribed, is indicator of lack of time consciousness in dealing with such cases.

The Ministry of Defence (Ministry) in 2005 fixed a time limit of 12 weeks, including one week for preparation and dispatch of supply order, for finalizing the commercial offer for procurement of stores and machinery.

Heavy Vehicles Factory (HVF) issued tender enquiry for ten product support items for indigenous manufacture of T-90 tanks. HVF received a commercial offer from the collaborator (Rosboronexport, Russia) in July 2006 with a validity period up to 31 December 2006. As the total value of nine items was beyond the financial power of the General Manager, HVF approached Armoured Vehicles Headquarters, Avadi (AVHQ) in August 2006 for their sanction to procure it at a total cost of USD 20.50 million (Rs 96.75 crore). AVHQ in turn referred the case to Ministry in September 2006 for necessary sanction.

Ministry in December 2006, after a lapse of more than two months from the date of receipt of the request, directed the HVF/AVHQ *inter alia* to furnish the basis on which they ascertained the reasonability of prices quoted and efforts made to get the reasonable discount from the collaborator which was furnished by HVF in December 2006. Ministry, in turn, directed Ordnance Factory Board /AVHQ in January 2007 to finalise the case at their end under the enhanced financial powers delegated to OFB with effect from December 2006. In the meantime the validity of the offer expired in December 2006. Resultantly, HVF received fresh price bid from the firm in June 2007 and placed order in November 2007 at a cost of USD 28.94 million (Rs 118.37 crore) for ten items inclusive of a few additional sub items not included in the earlier offer.

In the revised offer of the firm, rate of three items were more than the original offer of July 2006, of which in one item viz. fire fighting system, the increase was more than two fold, i.e. from USD 5,727.63 per unit to USD 11,462 per unit. In the case of other two items i.e. Mounting Automatic Loading Gear and 12.7 AA Gun mount, the unit rate went up from USD 24,360.76 and USD 7092.04 to USD 31,433 and USD 8,226.41. The increased rates of the collaborator were accepted by OFB without any negotiation.

Thus, the failure of Ministry to accord sanction within the stipulated time resulted in an extra expenditure of USD 697,049 equivalent to Rs 2.85 crore in procurement of the items.

OFB stated in August 2009 that (i) 12 weeks prescribed in the procurement manual is only a general guideline and the time frame varies from case to case basis and also processing involves multiple authorities and (ii) since the overall percentage increase of cost of the revised offer with respect to the first offer was only 1.67 *per cent* over period of one year the question of price reduction did not arise and hence it was decided to procure the items at revised offer. OFB further added that the unit rate went up in respect of only one item and for the remaining two items the increase in rates was due to addition of one sub assembly. OFB's contention is not tenable since the (i) time schedule of 12 weeks was fixed by the Ministry only after factoring the ground realities (ii) overall increase in the cost of three items ranged between 16 *per cent* and more than 100 *per cent* and (iii) the item codes mentioned in original and revised commercial offer for the two items was one and the same and as such the cost of items in both the commercial offers was inclusive of sub assembly. Further, the collaborator had given a validity period of 22 weeks for the HVF to finalise the commercial offer.

The case was referred to the Ministry in May 2009: their reply was awaited as of April 2010.

7.7 Extra expenditure in the purchase of sponge iron

Failure of Metal and Steel Factory Ishapore to accept the supplies offered against a supply order by a supplier and subsequent purchase of the item against a new supply order placed within a year at a unit rate higher by 79 *per cent* resulted in an additional burden of Rs 39.62 lakh.

Metal and Steel Factory Ishapore (MSF) placed an order in August 2007 on M/s Abhishek Mineral Industries Kolkata for supply of 300 tonne sponge iron at a unit cost of Rs 16101, to be completed by November 2007 to meet the production requirement during 2007-08. The firm offered the item for inspection in October 2007. MSF did not undertake inspection and asked the firm to withhold the supply due to lack of storage space.

In February 2008, when MSF asked the firm to offer the item for inspection, the firm informed that the market rate of the sponge iron had gone up to Rs 19,000 and therefore sought the enhanced price for the supply. MSF rejected the demand for enhanced rate claiming that the supply order had no price variation clause. MSF met their requirement of 2007-08 by using 293.095 tonne received at the rate of Rs 16,101 per tonne from another firm, M/s Alloys and Metals (India) Kolkata against the order placed in June 2007.

Further, MSF procured 716.3 tonne sponge iron in August 2008 from M/s Alloys and Metals (India) Kolkata in water proof bags at a unit rate of Rs 28,800 per tonne, which was higher by 79 *per cent* when compared with the earlier supply order. Audit pointed out in August 2009 that the procurement of the sponge iron in August 2008 at enhanced rate could have been avoided had the supply offered by M/s Abhishek Mineral Industries Kolkata against the order placed on them in August 2007 been accepted within the validity of the supply order, i.e., November 2007. Audit also observed that by freeing M/s Abhishek Mineral Industries Kolkata of their contractual liability to supply the sponge iron at the contracted rate of Rs 16,101 per tonne, and subsequent procurement from M/s Alloys and Metals (India) Kolkata at the increased rate of Rs 28,800, there was an avoidable extra expenditure of Rs 39.62 lakh, inclusive of taxes.

Ministry stated in March 2010 that the requirement for production during 2007-08 could be met as sufficient stock of sponge iron and steel scrap was available with MSF. The firm was asked not supply the store in October 2007 for want of storage space and to avoid deterioration in storage. Ministry added that the knowledge that sponge iron deteriorates in open storage was gained only as a matter of experience. Regarding the additional expenditure incurred in the subsequent purchase, Ministry stated that nobody was aware in advance that the price of the item would go up and they do not engage in speculative buying. This contention of the Ministry obfuscates the fact that the requirement of 300 tonnes had been projected by MSF for use during 2007-08 and it was only on this account that the supply order had been placed on M/s

Abhishek Mineral Industries Kolkata in August 2007. The contention that the MSF was unaware of the fact that the sponge iron when stored in open would deteriorate and it had to be learnt by experience is an attempt to elude criticism since possible deterioration of sponge iron in open storage is a well known fact.

Thus, by refusing to accept the sponge iron offered in October 2007 at a unit rate of Rs 16,101, MSF had to incur extra expenditure of Rs 39.62 lakh, in its subsequent purchase made at the rate of Rs 28,800 within less than a year.

Miscellaneous

7.8 Recoveries at the instance of Audit

Based on Audit observations, five ordnance factories recovered Rs 1.60 crore from private and public authorities.

At the instance of Audit, five ordnance factories recovered Rs 1.60 crore on account of excess payment of Central Sales Tax/Value Added Tax ,Service tax and stamp duty, interest on security deposit with the electricity companies and recovery of rent/water/electricity charges from the residents of the factory's estates, as per the details given below: -

Sl No	Units/formations	Nature of irregularity	Period	Amount recovered (Rs in lakh)
1	Ordnance Factory Kanpur and Ordnance Factory Muradnagar	The factories failed to obtain interest on security deposits from Kanpur Electric Supply Corporation Kanpur and Paschimanchal Vidhyut Nigam Limited Muradnagar	March 2002 to March 2008	101.95
2	Ordnance Factory Dehu Road	The factory paid excess amount on account of Central Sales Tax/Value Added Tax to M/s Micron Instruments Private Limited New Delhi, M/s Sandeep Metal Crafts Private Limited and M/s Priya Precision Comp Limited	March 2005 to April 2009	26.35
3	Ordnance Factory Ambernath	The factory paid excess amount on account of Service tax and stamp duty on clearing/handling and transportation charges to M/s Minerals and Metals Trading Corporation Mumbai.	November 2007 to January 2009	23.31
4	Ordnance Factory Dehra Dun	The factory failed to recover water charges from the residents of its estates at appropriate rates	October 2003 to April 2008	8.30
			Total	**159.91**

Ordnance Factory Board in December 2009 accepted the above mentioned facts.

The matter was referred to the Ministry of Defence in July 2009; their reply was awaited as of April 2010.

7.9 Loss due to non-availing of power and load factor incentives

Ordnance Factory Ambernath and Ordnance Factory Dehu Road could not obtain incentives estimated at Rs 13.33 crore from their electric supply companies due to their failure to achieve the desired power and load factors.

The Maharashtra Electricity Regulatory Commission (MERC) offered power factor[21] and load factor[22] incentives to all its electricity consumers with effect from December 2003, for attaining the power/load factor as under:-

Sl. No.	Power factor	Incentives as a percentage of electricity charges	Load factor as a percentage of total contracted demand	Rebates as a percentage of electricity charges
1	0.95	Nil	Below 75 *per cent*	Nil
2	0.96	1	Between 75 *per cent* and up to 85 *per cent*	0.75 *per cent* for every percentage point increase beyond 75 *per cent*
3	0.97	2	Above 85 *per cent*	1 *per cent* for every percentage point increase beyond 85 *per cent* and up to a maximum of 15 *per cent*
4	0.98	3	-	-
5	0.99	5	-	-
6	1.00	7	-	-

While Ammunition Factory Kirkee obtained maximum power and load factor incentives from their electric supply agency by achieving the prescribed factors, Ordnance Factory Dehu Road (OFDR) and Ordnance Factory Ambernath (OFA) could normally achieve power factor ranging between 0.95 and 0.98 but the load factor was well below 75 *per cent* of the contracted demand during April 2004 to October 2008.

Power factor of unity (1) could have been achieved with the installation of condenser and capacitor banks at all major installations for which adequate infrastructure was available at OFA. Load factor above 75 *per cent* could also have been attained by readjusting the maximum demand of electricity based on the past consumption pattern. Having failed to do so, OFDR and OFA did not obtain incentives/rebates of about Rs 13.33 crore (Rs 5.05 crore as power factor incentives and Rs 8.28 crore as load factor rebates). Further, OFA did not obtain even the eligible power factor incentive of Rs 0.71 crore despite achieving power factor ratio ranging between 0.96 and 0.98 during April 2004 to October 2008.

[21] Power factor is the ratio of the real power flowing to the load to the apparent power

[22] Load factor is the ratio of the total units of electricity consumed to the contracted maximum demand of electricity

Ordnance Factory Board (OFB) stated in November 2009 that OFDR had initiated action to install capacitor banks at all major load centers and that OFA was trying to achieve the power factor of 0.99, though it would involve huge capital investment and maintenance cost. OFB further stated that OFA had started receiving power factor incentives from October 2006 onwards and that the power factor incentive was not given by their supply agency till September 2006. OFB's contention that power factor incentive was applicable only from October 2006 is not tenable since the MERC had extended the incentives to all consumers with effect from December 2003. OFA needs to take up the matter with their electricity supplier to obtain Rs 0.71 crore due as power factor incentive.

Regarding the load factor, OFB stated that it was not possible for OFDR to achieve load factor above 75 *per cent* as it would involve continuous usage of the electrical gadgets irrespective of their requirements in production process. Further, OFA had reduced the contracted demand to obtain load factor rebates, although such reduction was not considered desirable as it might cause difficulty in the future when the demand for electricity is to be enhanced. The contention about the necessity for continuous usage of electrical gadgets irrespective of production load to obtain load factor incentives is irrelevant since load factor is the ratio of the consumption during a month to the possible maximum consumption. It is therefore a measure of efficiency and should be achievable with better load management by periodic analysis of average consumption pattern.

Considering the fact that the incentives lost by the two factories, viz. OFDR and OFA for the period up to October 2008 was a huge amount of about Rs 13.33 crore, concerted efforts are required to be taken by all the ordnance factories based in Maharashtra State to achieve the desired power/load factors to avail of the maximum possible incentives admissible under the incentive scheme announced by the Maharashtra Electricity Regulatory Commission.

The matter was referred to the Ministry of Defence in July 2009; their reply was awaited as of April 2010.

7.10 Suspected fraud in reimbursement of Customs duty to suppliers

Two private firms got "reimbursement" of Customs Duty of Rs 1.19 crore from Ordnance Equipment Factory Kanpur for supply of machines, by producing documents, suspected to be forged to claim the re-imbursement. Audit examination revealed that one firm did not pay Customs Duty and another firm undervalued the cost of machines to pay lower rate to the Customs and managed to obtain reimbursement of higher rate of Customs Duty from the factory.

Mention was made in Paragraph 7.8 of the Compliance Report No 17 of 2008-09 of the Comptroller and Auditor General of India regarding a suspected fraud in payment of customs duty of Rs 31.20 lakh by the

Ordnance Equipment Factory Kanpur (OEF) to M/s Anurag Trading Company, Kanpur for import of two hydraulic shaving machines against its order of December 2007. Action Taken Note on the Paragraph was awaited as of February 2010 from the Ministry of Defence.

Further examination by Audit revealed that while procuring Moulding machine, Hydraulic Splitting machine, Fleshing machine and Splitting machine against its four orders placed between June 2006 and December 2007, OEF reimbursed customs duty amounting to Rs 1.18 crore to M/s Anurag Trading Company Kanpur. It was found that M/s Anurag Trading Company Kanpur got released the imported machines at nil rate of duty by producing customs duty exemption certificate bearing the signature of General Manager, OEF to the Customs.

After the case of suspected fraud, which was reported in Paragraph 7.8 of Compliance Audit Report No 17 of 2008-09 was raised by Audit in June 2008, M/s Anurag Trading Company Kanpur paid Customs duty of Rs 87.92 lakh (out of Rs 1.18 crore received from OEF), to the Customs in October 2008 along with penalty and interest of Rs 38.59 lakh. These cases reveal that the said firm had been persistently evading payment of Customs duties by producing 'fake' Customs duty exemption certificate but claiming the amount from OEF.

Audit also came across another case where M/s Perfect DMS Engineering Limited Kanpur, while importing clicking machine against OEF's order of October 2006, actually remitted Rs 1.25 lakh as duty to the Customs by undervaluing the cost of machine and obtained reimbursement of customs duty of Rs 2.56 lakh from OEF by submitting a forged duplicate copy of the Bill of Entry.

On being pointed out in Audit, Ordnance Factory Board (OFB) stated (November 2009) that there was no fault on the part of the factory as the firm fraudulently obtained exemption of Customs duty on the basis of forged documents without the knowledge of the customer. OFB's contention is not tenable since the factory had failed to ensure the authenticity of the documents provided by the private firms before reimbursement of customs duty.

The suspected fraud was, apparently, possible owing to absence of any system for verification of the genuineness of the claims submitted by the importers. The Ministry may devise a system for making an independent and mandatory verification from the customs authorities concerned by the purchasing agencies to ensure genuineness of the claims of suppliers for re-imbursement of customs duties in cases of supply of imported stores to the Defence Services. Although it is desirable to make pre-payment verification in all cases, post payment verifications may be resorted to where the time allowed for making contractual payment is limited making it impossible to verify genuineness before the due date of payment. In such cases, re-imbursement may be made by taking adequate

safeguards for effecting recovery, if the claims were found non-bona fide in the subsequent independent verification.

The matter was referred to the Ministry in August 2009; their reply was awaited as of April 2010.

(GAUTAM GUHA)
Director General of Audit
Defence Services

New Delhi
Dated: 22 June 2010

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

New Delhi
Dated: 22 June 2010

ANNEXURE-IA

(Referred to in Paragraph 1.8)

Position of outstanding ATNs

Ministry of Defence[Ψ] - excluding Ordnance Factory Board

(i) Pending for more than ten years

Sl.No.	Report No. and Year	Para No.	Subject
1.	Audit Report, Union Government (Defence Services) for the year 1985-86	34*	Loss due to delay in pointing out short/ defective supply.
2.	No.2 of 1988	9**	Purchase of Combat dress from trade.
3.	No. 2 of 1989	11**	Purchase and licence production of 155mm towed gun system and ammunition
4.	No.12 of 1990	9**	Contract with Bofors for (a) purchase and licence production of 155mm gun system and (b) Counter Trade
5.		10*	Induction and de-induction of a gun system.
6.		19*	Import of ammunition of old vintage.
7.		46**	Ration article-Dal.
8.	No.8 of 1991	10*	Procurement of stores in excess of requirement.
9.		13*	Central Ordnance Depot, Agra.
10.		17**	Infructuous expenditure on procurement of dal chana.
11.	No.8 of 1992	20**	Procurement of sub-standard goods in an Ordnance Depot.
12.		28**	Avoidable payment of maintenance charges for Defence tracks not in use.
13.	No. 8 of 1993	15**	Non-utilisation of assets.
14.		22**	Over-provisioning of corrugated card board boxes

[Ψ] Position in respect of the Air Force, Navy, Coast Guard and AF/Naval R&D is indicated in the Audit Report on the Air Force and Navy

Sl.No.	Report No. and Year	Para No.	Subject
15.		29*	Import of mountaineering equipment and sports items
16.		31*	Avoidable payment of detention charges
17.	No. 7 of 1997	15*	Over provisioning of seats and cushions for vehicles
18.		18*	Management of Defence Land
19.		23**	Avoidable expenditure on Demurrage charges
20.		27**	Non-realisation of claims from the Railways.
21.		69**	Defective construction of blast pens and taxi track
22.	No. 7 of 1998	21***	Extra expenditure due to non-adherence of contract provision
23.		30**	Avoidable payment of container detention charges
24.		32*	Infructuous expenditure on procurement of substandard cylinders
25.		36**	Procurement of batteries at higher rates
26.		52*	Loss of revenue
27.	No. 7 of 2000	23**	Procurement of defective bullet proof windscreen glasses
28.		52***	Repowering of Vijayanta Tank
(ii)	**Pending more than 5 years upto 10 years**		
29.	No. 7 of 2001	15**	Procurement of an incomplete equipment
30.		19**	Infructuous expenditure on procurement of entertainment films
31.		20*	Inadequate follow up on deficient supplies leading to avoidable loss
32.		26**	Hiring of buildings by Defence Estates Officer from an unauthorised party
33.		27***	Undue benefit to a private society
34.		32***	Wrongful credit of sale proceeds of usufructs to regimental fund

Sl.No.	Report No. and Year	Para No.	Subject
35.	No.7A of 2001	@Entire Report (ATN for 8 out of 42 paras yet to be received even for the 1st time.	Review of Procurement for OP VIJAY(Army)
36.	No.7 of 2002	35**	Construction of married accommodation for which no utility exists
37.	**No. 6 of 2003**	2*	Exploitation of Defence lands
38.		11**	Recoveries effected at the instance of Audit
39.		14***	Irregular recruitment of personnel
40.	No. 6 of 2004	2.1**	Injudicious authorization of winter clothing leading to their non-utilisation.
41.		3.2*	Recoveries/Savings at the instance of Audit.
(iii)	**Pending more than 3 years upto 5 years**		
42.	No. 6 of 2005	3.1**	Working of Army Base Workshops
43.		3.2*	Recoveries/savings at the instance of Audit
44.		3.4***	Non-removal of encroachment and non-levy of damages
45	No.18 of 2005 (Performance Audit)	Standalone Report**	Performance Audit of the Directorate General of Quality Assurance
46	No.3 of 2006 (Performance Audit)	Chapter I**	Working of Border Roads Organisation
47.	No. 4 of 2006	2.2*	Loss of revenue of Rs 2.33 crore for not organizing auction of sand
48.		3.1*	Recoveries/savings at the instance of Audit
(iv)	**Pending upto 3 years**		
49.	Report No. 4 of 2007	2.1**	Delay in execution/renewal of lease
50.		2.4**	Follow up on Audit Reports
51.		3.3***	Unauthorised use of Defence assets and public fund for running educational institutes

Sl.No.	Report No. and Year	Para No.	Subject
52.		3.4***	Non-crediting of revenue into Public Fund
53.		3.5*	Recoveries/savings at the instance of Audit
54.		6.2**	Irregular payment of counter insurgency allowance
55.	No. 4 of 2007 (Performance Audit)	Chapter II**	Recruitment and Training of Personnel Below Officers Rank in the Army
56.		Chapter III*	Management of Transport in the Army
57.	Report No. CA 4 of 2008	2.1**	Irregularities in procurement of Bullet Proof Vehicles
58.		2.8***	Follow up on Audit Reports
59.		3.2*	Avoidable extra expenditure in procurement of blankets
60.		3.3***	Recovery and savings at the instance of Audit
61.		3.4*	Avoidable loss due to acceptance of defective ammunition
62.	Report No. PA 4 of 2008 (Performance Audit)	Chapter I***	Supply Chain Management of General Stores and Clothing in the Army
63.	Report No. CA 17 of 2008-09	2.7***	Non-renewal of lease of land occupied by Army Golf Club
64.		2.8**	Outstanding service charges of Territorial Army
65.		2.9*	Overpayment to Cantonment Board Ambala
66.		2.10***	Irregular payment of service charges to a Cantonment Board
67.		3.1***	Avoidable expenditure of Rs 7.98 crore on procurement of an item
68.		3.2**	Acceptance of substandard batteries
69.		3.3*	Abnormal delay in procurement of equipments after making advance payment
70.		3.4***	Unauthorized use of A-1 Defence land by Army Welfare Education Society
71.		3.5***	Utilisation of Government assets for non-governmental purposes
72.		3.6***	Misuse of special financial powers by Army Commanders
73.		3.7*	Irregular sanction of works out of operational funds
74.		3.8**	Non-recovery of training charges

Sl.No.	Report No. and Year	Para No.	Subject
75.		3.9*	Non-availing of concessions on Value Added Tax
76.		3.10***	Recoveries and savings at the instance of Audit
77.		4.1*	Irregular diversion of savings of a project for execution of new works
78.		4.2***	Avoidable cost overrun in civil works
79.		4.3*	Extra expenditure due to delay in obtaining financial concurrence
80.		5.1***	Defective Procurement of Hot Mix Plants

* **Action Taken Notes examined by Audit but yet to be finalised by the Ministry in the light of Audit remarks – 27**

** **ATN vetted by Audit but copy of the finalised ATN awaited from Ministry – 32**

*** **Action Taken Notes not received even for the first time - 20**

@ **Part ATN received – 1**

ANNEXURE-IB

(Referred to in paragraph No 1.8)

Ministry of Defence - Ordnance Factory Board

Action Taken Notes which have not been received even for the first time

Sl. No.	Report No. & Year	Para No.	Subject
1	No. PA 4 of 2008 (Performance Audit)	Chapter-IV	Manufacture and issue of 23mm and 30mm ammunition in ordnance factories
2	No. CA 17 of 2008-09	1.7	Response of the Ministry/ Department to Draft Audit paragraphs
3		1.8	Action Taken on earlier Audit Reports
4		7.1	Performance of Ordnance Factory Organisation
5		7.2	Extra expenditure due to delay in finalization of offer
6		7.3	Injudicious manufacture of an instrument
7		7.4	Failure to exercise option clause
8		7.5	Irregularities in procurement of aluminium plates
9		7.6	Avoidable import of components
10		7.7	Non incorporation of risk purchase clause leading to extra expenditure
11		7.8	Suspected fraud in reimbursement of Customs duty to a supplier
12		7.10	Non/under recovery of fixed electricity charges.

ANNEXURE-IC

(Referred to in paragraph No 1.8)

Ministry of Defence - Ordnance Factory Board

Action Taken Notes on which Audit has given comments/observations but revised ATNs were awaited from the Ministry/Department

Sl No.	Report No. & Year	Para No.	Subject	Remarks (Date of Return)
1	6 of 2004	7.11	Non recovery of inspection charges	13 June 2005
2		7.3	Functioning of CNC machines in ordnance factories	20 November 2009
3	4 of 2006	7.6	Rejection of imported propellant powder	27 November 2009
4	No. 4 of 2007	7.1	Performance of Ordnance Factory Organization	23 September 2008
5	No. 19 of 2007	Entire	Performance Audit review on Procurement of stores and machinery in Ordnance Factories	1 May 2009
6	No. CA 4 of 2008	6.2	Non utilization of costly X-ray machine	10 December 2009
7		6.3	Abnormal delay in execution of Ordnance Factory Project Nalanda	17 December 2009
8		6.6	Loss due to irregular risk purchase	27 January 2010
9		6.9	Questionable utilization of deficient items	26 November 2009
10		6.12	Recoveries at the instance of audit	9 February 2009
11		6.14	Response of the Ministry/Department to draft audit paragraph	22 June 2009

ANNEXURE-II

(Referred to in Paragraph 3.6)

Recoveries at the instance of Audit

Sl. No.	Unit/Formation	Nature of overpayment/ non-recovery	Amount (Rs in lakh)
1	DRDO, New Delhi	Non-Adjustment /remittance of the interest earned by a society	**993.00**
2	RCI Hyderabad	Recovery of cost of Servo valves	**227.36**
3	46 BRTF	Non levy of departmental charges	**150.00**
4	GE Lalgarh Jattan	Recovery of excess consumption of electricity, fixed charges from JCOs/ORs, recovery of water and electricity charges	**72.60**
5	(i) (a)GE Pithoragarh (b) 510 ABW Meerut (c) GE (STM) Pallavaram	Non-Recovery of rent, electric and water charges in respect of Defence buildings handed over to GREF and Punjab National Bank Non- recovery of LF from Nursery school at OTA Chennai	3.30
	(ii) GE Sevoke Road PO Salugara Distt. Jalpaiguri (WB)	Non-Recovery of electricity charges	6.96
	(iii)GE Panagarh	Non-Recovery of Water charges from JCOs/ORs	9.18
	(iv)GE Bhuj	Non-Recovery of rent, electric and water charges	12.01
	(v) HQ MG&GA Mumbai/ RCI Hyderabad/ Programme AD Hyderabad/ JCDA (R&D) Pashan	Non-Recovery of licence fee/ non-availing of 5% discount offered by Supplier/Non-Recovery of Income Tax	5.35
	(vi) PAO (ORs) MLI Belgaum	Non-Recovery of Pay and allowances of JCO attached with AWHO	2.50
			39.30
6	FOL Depot ASC Bathinda Cantt/Supply Depot ASC Ferozepur Cantt	Excess payment of VAT to IOC	3.70
			3.70
		Total	**1485.96**

ANNEXURE-III

(Referred to in paragraph No 3.6)

Savings at the instance of Audit

Sl. No.	Unit/ formation	Nature of irregularity	Remedial measure taken by auditee	Amount involved (Rs in lakh)
1.	16 Corps	Unauthorised sanction of shopping complex (Rs 49.06 lakh revised to Rs 83.17 lakh)	Cancellation of revised Admin Approval	83.17
2.	HQ Andhra Sub Area Secunderabad	Special repairs to Building No18 of AOC Centre	Cancellation of Administrative Approval	64.01
3.	HQ 16 Corps C/o 56 APO	Provision of 8 X Single Officer accommodation for minor units at Nagrota.	Cancellation of Admin Approval	48.27
4.	CCE (R&D) Secunderabad	Addition/alteration to management block at ASL.	Cancellation of Admin Approval	23.86
5.	15 Inf. Div	Sanction of eight shops at shopping complex over and above the authorisation	Cancellation of Administrative Approval	14.90
6.	HQ 2 Mountain Division C/o 99 APO	Provision of walking plaza	Cancellation of sanction	14.90
7.	HQ 9 Corps	Sanctioning of landscaping and arboriculture work as a separate project instead of a part project	Cancellation of Administrative Approval	14.87
8.	HQ 9 Corps	Sanctioning of landscaping and arboriculture work as a separate project instead of a part project	Cancellation of Administrative Approval	14.49
9.	HQ MSA Mumbai	Special Repair to Mahindra Gate at COD Kandivili, Mumbai	Cancellation of Admin Approval	13.00
10.	26 Infantry Division	Sanction of unauthorised items	Cancellation of Admin Approval	9.88
11.	19 Infantry Division C/o 56 APO	Sanction of unauthorised items	Cancellation of Admin Approval	7.46
12.	Station HQ Chandimandir	Unauthorised provision of training sheds for an Infantry Unit	Cancellation of Administrative Approval	3.76

Sl. No.	Unit/ formation	Nature of irregularity	Remedial measure taken by auditee	Amount involved (Rs in lakh)
13.	CEPZ Pune	Erroneous inclusion of establishment charges	Issue of re-revised Admin Approval	2.98
14.	HQ Jodhpur Sub Area	Irregular sanction of shed for specialist vehicles for ILP Unit	Cancellation of Administrative Approval	1.98
15.	Adhoc Station HQ Mount Abu	Unauthorised provision of children park for JCOs/ORs married accommodation	Cancellation of Administrative Approval	1.97
16.	HQ ASA Secunderabad	Improvement of wall finishing and provisioning of vitrified tiles in flooring of College House Meadows Lines	Cancellation of Admin Approval	1.86
17.	HQ 11 Corps	Irregular sanction of AC for 11 Corps Library	Cancellation of Administrative Approval	1.54
18.	Station HQ Alwar	Unauthorised provision of glazed tiles in single JCO's accommodation	Cancellation of Administrative Approval	1.20
			Total	**324.10**

ANNEXURE-IV

(Referred to in paragraph No 7.1.6)

Overhead Charges

(Rupees in crore)

Division	Year	Fixed overhead Charges	Variable overhead Charges	Total overhead Charges (3+4)	Cost of Production	Percentage of overhead to Cost of Production	Average Percentage of overhead to Cost of Production
1	2	3	4	5	6	7	8
Materials and Components	2004-05	276.49	244.60	521.09	1100.66	47.34	44.69
	2005-06	288.67	238.20	526.87	1148.08	45.89	
	2006-07	321.86	226.91	548.77	1191.23	46.07	
	2007-08	337.07	251.54	588.61	1417.35	41.53	
	2008-09	403.98	301.82	705.80	1656.29	42.61	
Weapons, Vehicles and Equipment	2004-05	465.81	292.20	758.01	2232.62	33.95	35.03
	2005-06	540.49	308.58	849.07	2588.77	32.80	
	2006-07	506.76	264.21	770.97	2027.79	38.02	
	2007-08	544.71	287.29	832.00	2512.26	33.12	
	2008-09	636.85	238.87	875.72	2350.08	37.26	
Ammunition and Explosives	2004-05	358.50	208.05	566.55	2483.93	22.81	22.24
	2005-06	376.95	210.29	587.24	2611.83	22.48	
	2006-07	396.81	181.58	578.39	2736.10	21.14	
	2007-08	415.16	216.80	631.96	3149.68	20.06	
	2008-09	547.70	393.89	941.59	3807.14	24.73	
Armoured Vehicles	2004-05	228.42	106.88	335.30	1844.57	18.18	21.89
	2005-06	247.35	122.81	370.16	1830.41	20.22	
	2006-07	271.88	100.36	372.24	1422.57	26.17	
	2007-08	265.39	149.08	414.47	1682.75	24.63	
	2008-09	299.13	133.24	432.37	2137.34	20.23	
Ordnance Equipment Factories	2004-05	108.08	66.66	174.74	669.96	26.08	30.04
	2005-06	118.11	61.84	179.95	632.50	28.45	
	2006-07	117.21	54.31	171.52	579.84	29.58	
	2007-08	122.79	53.54	176.33	550.57	32.03	
	2008-09	162.31	62.32	224.63	659.55	34.06	
Grand total-Ordnance Factories as a whole	2004-05	1437.30	918.39	2355.69	8331.74	28.27	29.17
	2005-06	1571.57	941.72	2513.29	8811.59	28.52	
	2006-07	1614.52	827.38	2441.90	7957.53	30.69	
	2007-08	1685.12	958.25	2643.37	9312.61	28.38	
	2008-09	2049.97	1130.14	3180.11	10610.40	29.97	

NOTE : The figures incorporated in this paragraph are mainly based on the figures of the Consolidated Annual Accounts of Ordnance and Ordnance Equipment Factories in India finalised by Principal Controller of Accounts (Fys.), Kolkata for the year 2008-09, documents maintained by and information supplied by Principal Controller of Accounts (Fys.), Kolkata as well as Ordnance Factory Board, Kolkata.

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