Report of the
Comptroller and Auditor General of
India

for the year ended March 2004

Union Government (Defence Services)
Army and Ordnance Factories
No. 6 of 2005

CONTENTS

PREFACE

This Report for the year ended March 2004 has been prepared for submission to the President of India under Article 151 of the Constitution. 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 Production & Supplies, Defence Research and Development Organisation, Border Roads Organisation and Military Engineer Services. The matters arising from the Appropriation Accounts of the Defence Services for 2003-2004 have been included in Audit Report No. 1 of 2005.

The Report includes 36 Paragraphs and two Reviews on (i) Working of Army Base Workshops and (ii) Performance of Ordnance Equipment Group of factories.

The cases mentioned in this Report are among those which came to notice in the course of audit for the period 2003-2004. Matters relating to earlier years which could not be included in the previous Reports and matters relating to the period subsequent to 2003-04, wherever considered necessary have also been included.

OVERVIEW

Working of Army Base Workshops

Eight Army Base Workshops provide repair and overhaul support to the Army for tanks, infantry combat vehicles, artillery guns, transport vehicles and other equipment. Performance audit of the base workshops disclosed significant underperformance with reference to the targets for overhaul. They missed the targets of overhaul by 40 to 68 *per cent* during 1999-2004. The inefficient performance left the Army with accumulation of large number of repairable tanks, combat vehicles and guns, which could affect their battle readiness. The facilities for overhaul of Bofors artillery gun at the annual capacity of mere 20 were woefully inadequate to cover the overhaul requirement of the guns.

The norms for estimating the capacity of the base workshops and the yardstick for overhaul of the tanks were slack and need to be tightened. Besides, the Army and the base workshops need to pay attention to advance planning and procurement/ manufacture of the spares required for repair/overhaul.

(Paragraph 3.1)

Engineer Stores Depots

The two Engineer Stores Depots of Kankinara and Delhi Cantonment responsible for procurement, receipt and issue of engineer equipment, plant and stores of engineer origin, failed to meet the demands of the users timely and effectively, affecting the performance of the dependent units. Engineer Stores Depot Kankinara is largely underloaded while having the major share of manpower.

(Paragraph 4.1)

Poor management of Peace Keeping Mission accounts

Permanent Mission of India held an amount of USD 81.70 Million (Rs 393 crore) in Peace Keeping Mission accounts maintained at New York without proper investment. At the instance of audit, PMI negotiated with the bank and got additional credit of interest of USD 130590 (Rs 60.16 lakh) from January to September 2003 with future recurring benefits. The benefit of earning interest of an estimated USD 0.2 Million (Rs 96 lakh) per annum however had been lost in the past.

(Paragraph 2.1)

Infructuous expenditure of Rs 2.63 crore on invalidation of recruits

Between 1999 and 2004, 1608 recruits declared medically fit at the time of their enrolment by Recruiting Medical Officers were subsequently declared medically unfit during second medical examination. Out of these, 1083 recruits were invalidated on grounds of diseases which existed even before enrolment but could not be detected by RMO. Apart from creating doubt about the quality of medical examination, this resulted in infructuous expenditure of Rs 2.63 crore on pay, allowances and ration of these recruits till their invalidation.

(Paragraph 3.3)

Delayed purchase and insignificant utilisation of equipment procured under Fast Track Procedure

Demining equipment valuing Rs 103.91 crore were procured from a foreign firm under "Fast Track Procedure" in view of operational urgency. The equipment were received eight to sixteen months after the requirement. Army had, meanwhile, to resort to manual demining which involved risk to human life.

(Paragraph 2.2)

Non-encashment of performance bonds despite supply of defective equipment

Even as equipment worth Rs 13.22 crore were lying idle due to defective supplies against two foreign purchase contracts, department failed to encash performance bonds worth Rs 66 lakh.

(Paragraph 2.3)

Failure to recover advance of Rs 12.93 crore from a foreign firm

While importing modification kits for air defence system, Defence Research and Development Laboratory (DRDL) accepted a bank guarantee for advance payment of Rs 12.93 crore as per vendor's format. When the vendor did not supply the equipment due to arms embargo, DRDL failed to encash the bank guarantee and recover the amount as the format favoured the foreign vendor.

(Paragraph 6.1)

Non-utilisation of Radio Receiver sets

Radio receiver sets valued at Rs 7.79 crore urgently required for national security remained unutilized from May 2002 onwards due to rejection of antenna mast, which was an accessory and could have been replaced by purchasing at risk and cost of the defaulting firm.

(Paragraph 2.4)

Non-removal of encroachment and non-levy of damages

Due to inaction of Defence Estates Officer, Allahabad and Cantonment Executive Officer, Varanasi three acres of Defence land valued at Rs 3.72 crore had been encroached upon in 1996 and was being exploited for commercial purposes. The damages to the extent of Rs 97.53 lakh were neither levied nor collected till date.

(Paragraph 3.4)

Procurement of defective Transmission Reception units

Due to inadequate inspection by SQAE (A) Chennai, department accepted equipment worth Rs 3.85 crore which were subsequently found defective. Ignoring the previous defective supplies the department placed fresh orders on the same supplier for the same item leading to further procurement of defective equipment worth Rs 91.42 lakh. Department failed to get the defective equipment replaced by the supplier.

(Paragraph 3.6)

Infructuous expenditure of Rs 2.77 crore on procurement of Ammunition shells

Department of Defence Production and Supplies did not cancel a contract despite failure of the firm to supply the item for over eight years. The long delay resulted in the item being no longer required leading to wasteful expenditure of Rs 2.77 crore and undue benefit to the firm.

(Paragraph 5.3)

Loss of Rs 1.44 crore due to over provisioning of specialized Oil-OX-320

Failure of Western Command Headquarters to assess the actual requirement of Oil-OX-320 resulted in over-provisioning. The oil had a limited shelf life and provisions worth Rs 1.44 crore would be rendered unfit for consumption, resulting in loss.

(Paragraph 3.7)

Extra expenditure due to delay in implementing 'Fast Track Procedure'

Failure of Military Engineer Services to accept the tenders for married accommodation projects within the time stipulated under the Fast Track Procedure led to re-tendering and resultant extra expenditure of Rs 1.44 crore on acceptance of the contracts at higher rates. The main objective of sanctioning the work under Fast Track Procedure was thus defeated.

(Paragraph 4.2)

Non-recovery of Rs 1.17 crore from a firm on failure to complete the supply

Ignoring the guidelines issued by Ministry in 1987, Department of Defence Production and Supplies paid advance to a firm for supply of an equipment. The firm was facing financial problems and was later declared sick. This led to non-recovery of Rs 1.17 crore on advance and interest even after a period of more than eight years.

(Paragraph 5.1)

Avoidable payment of container detention charges

Failure of Directorates of Service Headquarters/consignees to send shipping documents to Embarkation Headquarters in time coupled with the delay by Embarkation Headquarters in fulfilling port formalities resulted in avoidable payment of container detention charges of Rs 1.04 crore.

(Paragraph 3.8)

Payment of Rs 1.01 crore to a firm before rectification of defective supplies

While final trial on a cable developed by a firm was yet to be conducted, the Chief Quality Assurance Establishment (Weapon Stores) issued a clear inspection note for the cable in April 2000. Based on this Controller of Defence Accounts released 95 *per cent* payment to the firm. Subsequent trials were not successful and the cable has not yet been rectified. The aim of indigenising the cable remains unfulfilled.

(Paragraph 5.2)

Avoidable extra expenditure due to injudicious planning

Army Headquarters approved the road improvement work in SSG road to National Highways Double Lane (NHDL) specification in October 1999. Meanwhile, Director General Border Roads executed an intermediate berm strengthening work on three portions of the same stretch leading to duplication of work and an avoidable extra expenditure of Rs 72.83 lakh.

(Paragraph 7.1)

Overpayment to contractors

In disregard of rules, Garrison Engineer Mathura allowed execution of works for 33 deviations on two contracts involving additions/omissions, without the prior approval of the Chief Engineer, leading to overpayment of Rs 52.91 lakh approximately to the contractors during the period between March 1997 and May 2000. The amount is yet to be recovered.

(Paragraph 4.4)

ORDNANCE FACTORY ORGANISATION

Performance of Ordnance Factory Organisation

The Ordnance Factory Organisation comprising of 39 Ordnance Factories with a manpower of 1.22 lakh is engaged in production of arms, ammunition, equipment, clothing etc. primarily for the Armed Forces of the country. The value of production aggregated to Rs 8253.05 crore in 2003-04 which was 4.35 *per cent* higher than the value of production of Rs 7908.69 crore in 2002-03.

The total expenditure of Ordnance Factory Organisation increased steadily from Rs 4994.88 crore to Rs 6651.56 crore during 1999-2000 to 2003-04.

During 2003-04, production of 98 items (out of 462 items for which demands existed and targets were fixed) was behind schedule.

In respect of 23 major items, the production spilled over beyond the financial year 2003-04, the total value of which amounted to Rs.412.87 crore approximately. This had affected the accuracy, reliability and completeness of Annual Accounts of Ordnance Factory Organisation for the year 2003-04.

(*Paragraph 8.1*)

Performance of Ordnance Equipment Group of Factories

Review of performance of ordnance equipment group of factories, which are entrusted with manufacturing of clothing items of combat uniforms, parachutes, tents, blankets etc. for defence services disclosed significant underperformance. The ordnance factories could not meet the targets of production and overstated the figures of production and issues in their report and accounts. They carried forward large spill-over productions from the previous years during each of the financial years covered under the review. The material and labour cost of the same items produced by two or more factories varied in an unacceptable range. The ordnance factories paid enormous amount of overtime, while the available standard man hours remained unutilized. The factories failed to realize good value for money from equipment/machines due to setting up excess capacity, sub-optimal utilization and failure to commission the machines.

(*Paragraph 8.2*)

Extra expenditure due to rejection of 5.56 mm rifles

Rifle Factory Ishapore incurred extra expenditure of Rs 3.05 crore in manufacture of 2800 service rifles which were issued as Drill Purpose due to rejection in proof. The factory also accumulated 866 rejected rifles valuing Rs 1.50 crore that were awaiting conversion for use in training establishment.

(*Paragraph 8.3*)

Extra expenditure in procurement of item from sister factory

Ordnance Factory, Dehu Road obtained tail units from a sister factory at un-economic costs in disregard of OFB instructions. This led to an additional burden of Rs 3.04 crore on the defence exchequer.

(Paragraph 8.4)

Loss due to use of defective castings

Gun and Shell Factory Cossipore suffered a loss of Rs 67.13 lakh due to use of defective die-castings received from Ordnance Factory Ambajhari duly cleared in inspection.

(Paragraph 8.5)

Loss due to defective manufacture of cartridge cases

Defective manufacture of empty cartridge cases at Ordnance Factory Varangaon and Metal and Steel Factory Ishapore resulted in rejection of cartridge cases worth Rs 6.44 crore. The defective manufacture has not been regularised as of November 2004.

(Paragraph 8.6)

Loss due to rejection of ammunition

Defective manufacture of Armour Piercing Tracer ammunition at Ordnance Factory Khamaria had resulted in rejection of ammunition worth Rs 17.12 crore.

(Paragraph 8.7)

Repair due to defective and inept handling of stores

Heavy Vehicles Factory failed to properly store the hydraulic control system of T-72 tanks procured from HMT. This, coupled with their inability to utilise the items within the warranty period resulted in avoidable expenditure of Rs 56.24 lakh towards repair during the years 2001 to 2002.

(Paragraph 8.8)

Improper assessment of requirement of armour plates

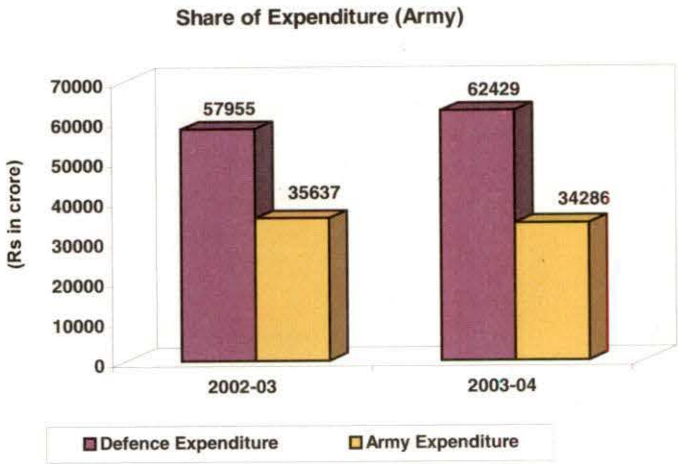
Heavy Vehicles Factory Avadi failed to assess the requirement of armour plates required for hulls of T-72 tanks properly resulting in avoidable accumulation of inventory and non-utilisation of items worth Rs 82.08 lakh since their procurement in 1997-98.

(Paragraph 8.9)

CHAPTER I : FINANCIAL ASPECTS

1 Financial Aspects

1.1 The total revenue and capital expenditure on Defence Services during 2003-04 was Rs 62429 crore, which was 7.72 *per cent* higher than the expenditure of 2002-03. The share of the Army in the total expenditure on Defence Services in 2003-04 was Rs 34286 crore, including that on capital acquisitions. This was 3.79 *per cent* less than the expenditure during the preceding year.



1.2 Expenditure on the Army during 2003-04 under broad categories is analysed in the following table:

(Rupees in crore)

	Expenditure during 2003-04	**Expenditure during 2002-03**	**Percentage in relation to total expenditure of 2003-04**
Pay and Allowances	13017.05	12733.97	37.97
Stores	9796.93	9466.48	28.57
Works	2546.13	2240.43	7.43
Other Expenses	3752.83	5905.49	10.94
Capital Acquisition	5173.30	5290.57	15.09
Total	**34286.24**	**35636.94**	**100.00**

1.3 The summarised position of appropriation and expenditure during 2003-04 in respect of the Army is reflected in the table below:

(Rupees in crore)

	Final Grant/ Appropriation	**Actual Expenditure**	**Total unspent provision(-)/Excess(+)**
REVENUE			
Voted	29640.65	29102.25	(-) 538.40
Charged	11.97	10.69	(-) 1.28
CAPITAL			
Voted	5089.06	5170.49	(+) 81.43
Charged	3.35	2.81	(-) 0.54
Total	**34745.03**	**34286.24**	**(-) 458.79**

The overall unspent provision of the Army constituted 1.32 *per cent* of the final grant/ appropriation. An overall amount of Rs 5430.40 crore remained unutilised in the grants of Defence Services.

The total capital expenditure on Defence Services for the year 2003-04 was Rs 16862.61 crore. The Army accounted for 30.68 *per cent* of this expenditure.

1.4 An analysis of the Appropriation Accounts, Defence Services has been included in the Report of the Comptroller and Auditor General of India for the year ended March 2004: Union Government – Accounts of the Union Government (Report No.1 of 2005).

CHAPTER II : MINISTRY OF DEFENCE

2.1 Poor management of Peace Keeping Mission accounts

USD 81.70 million (Rs 393 crore) was held in Peace Keeping Mission accounts maintained at New York in low return investment. While benefit of earning interest of an estimated USD 0.20 million (Rs 96 lakh) per annum was lost in the past, additional credit of interest of USD 130590 (Rs 60.16 lakh) could be secured at the instance of audit, from January to September 2003, with recurring benefits in future till the closure of the accounts.

India participated in 12 Peace Keeping Missions of the United Nations, during the 1990s and later. UN periodically reimburses the expenses incurred by the Government of India in connection with these missions, through the Permanent Mission of India (PMI), New York. PMI deposits the amount so received in accounts opened in respect of each mission and operated by it with Chase/SBI banks in New York, on behalf of the participating Ministries viz. the Ministry of Defence (MOD) and the Ministry of Home Affairs (MHA). As of August 2003, PMI operated ten accounts of MOD and two of MHA.

The combined closing balance as on 31 March 2003 in the bank accounts held on behalf of MOD and MHA was USD 81.70 million (Rs 393 crore) and USD 0.042 million (Rs 20 lakh) respectively. Prudent cash management calls for appropriate estimation of cash requirements for meeting expenditure and proper investment of surplus amount in long term deposits to earn better returns. MOD, in February 2001, stated that the account balances were being kept in money market accounts and certificates of deposits (CD) for earning better yield of interest. Audit noticed however that MOD did not make adequate efforts for proper management of these funds. A test check of records in August 2003 showed that while no amount was kept in long term deposits (CD), the deposits in respect of two missions viz. UNAMIR and UNAVEM of MOD had been earning lower interest as they were kept in standalone money market accounts. During the year 2002-03, the rate of interest earned in these accounts varied between 0.50 and 0.80 *per cent*, while the interest rate in relationship/business money market accounts, in which the balances relating to other missions were kept, varied between 1.35 and 1.75 *per cent*. Thus, there was a loss of interest to the tune of USD 0.20 million (Rs 96 lakh) in the year 2002-03 alone in respect of the two accounts.

On this being pointed out in August 2003, PMI took up the matter with the Bank and could get additional credit of interest of USD 130590 (Rs 60.16 lakh) in UNAVEM and UNAMIR accounts for the period from January 2003 to September 2003. The Bank refused to give higher interest for the period prior to January 2003 as their rules did not permit it. PMI stated in December 2003 that the matter concerning keeping money in CD for earning better interest rates was under examination in consultation with MOD.

The matter was referred to the Ministry in March 2004; their reply was awaited as of December 2004.

2.2 Delayed purchase and insignificant utilisation of equipment procured under Fast Track Procedure

Demining equipment were purchased from a foreign firm under Fast Track Procedure after eight to 16 months of requirement. Army had already cleared substantial mines manually with high degree of risk to human life.

Ministry of Defence while formulating the guidelines for Fast Track Procedure (FTP) in August 2002 indicated a time frame of six to nine months and in exceptional cases of 12 months for items to be imported. Army Headquarters proposed in August 2002 procurement of 40 Demining Equipment under FTP through an Empowered Committee for demining over 10 lakh mines laid in the Western Front during OP Parakram. They wanted the equipment urgently by October 2002 in order to minimize the risk of casualty involved in manual demining and to free the mined land for cultivation. The Defence Procurement Board approved the proposal on October 1, 2002.

A Technical Evaluation Committee (TEC) visited three shortlisted firms, located abroad from 25 October 2002 to 4 November 2002 for technical evaluation of demining equipment. TEC in its report (November 2002) found one of them suitable for employment in the Indian operational scenario. The firm had given a delivery schedule of four months for 32 equipment from the date of signing the contract. The TEC, however, recommended to procure only a part of the sanctioned quantity considering the limited exploitation of the equipment, lack of sufficient data and the need for further examining its employability in Indian terrain.

In view of the operational urgency, the Price Negotiation Committee (PNC) accepted the unit price of Euro 730000/724000 (Rs 3.98 crore/3.95 crore) offered by the firm. Accordingly, a contract was concluded with the firm in March 2003, five months after the stipulated supply date, for the supply of 24 mining equipment alongwith accessories at a total cost of Euro 19.05 million equivalent to Rs 103.91 crore. The delivery period was nine months from the date of the contract even though the firm had given a delivery schedule of four months for the supply of 32 equipment during technical evaluation. Equipment were received at Engineer Stores Depots, Delhi between June 2003 and March 2004, eight to 16 months beyond the date indicated by Army Headquarters. As of March 2004, 22 equipment were issued to the field units and two equipment were kept as "Reserve". The actual utilisation of the equipment purchased due to operational urgency to demine 10 lakh mines revealed that most of the mine fields had already been demined manually without the help of demining equipment due to delay in procurement of the equipment.

The purchase was made through FTP keeping in view the urgency of the equipment. Audit noticed that though the firm had offered a delivery schedule of four months to the TEC, it was allowed a delivery period of nine months in the contract.

The placement of order on the foreign supplier was delayed, the supplier's delivery schedule of four months intimated to TEC was enhanced to nine months and even after the enhancement of delivery schedule, 50 *per cent* of the ordered quantity i.e. 12 equipment were supplied after the expiry of the delivery period of nine months. By adopting the FTP, the benefit of competitive rates through open tenders was lost, while the very purpose of FTP was defeated due to delayed procurement.

Out of 2,78,300 mines proposed to be recovered, only 1182 mines (0.42 *per cent*) were recovered using the 19 demining equipment and remaining mines were recovered manually.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

2.3 Non-encashment of performance bonds despite supply of defective equipment

Even as equipment worth Rs 13.22 crore were lying idle due to defective supplies, department failed to encash performance bonds worth Rs 66 lakh.

It was seen in audit that in two foreign purchase contracts concluded during 2001 there was supply of defective equipment worth Rs 13.22 crore but the supplies were neither rectified nor replaced by the supplier as of September 2004. The performance bonds worth Rs 66 lakh were not encashed. The cases are detailed below:

Ministry of Defence concluded a contract with a foreign supplier on 8 March 2001 for supply of simulator for missiles at a total cost of Rs 12.80 crore (USD 2.73 million). Articles 5 and 6 of the contract stipulated that the quantity claims should be presented within 120 days from the date of arrival of the equipment in Indian Port of destination and the quality claim should be presented during the guarantee period of 12 months from the date of arrival of the equipment at the Port or 14 months from the date of Bill of Lading. Several equipment on receipt in March 2002 were found deficient and defective. Despite quantity and quality claims preferred in time, two quality claims remained pending with the supplier, resulting in equipment worth Rs 12.80 crore lying idle as of September 2004.

The contract provided for a performance bond. Under this provision, the firm had undertaken to pay upto US Dollar 136605 i.e. five *per cent* of the value of equipment in case of missing equipment, detection of defects or delay in delivery. The guarantee was to expire automatically if the claim was not made within the time fixed. The supplier submitted performance bond which was valid upto 24 June 2002. Ministry allowed the performance bond to lapse in June 2002 although the inspection was not yet completed and failed to avail of the opportunity to realise USD 136605 or Rs 0.64 crore for the defective equipment.

Ministry concluded another contract in March 2001 with the same supplier for the procurement of two Self-Loading Vehicles at a total cost of Rs 41.61 lakh. The vehicles were received at the Embarkation Headquarters Mumbai on 20 May 2002 but were not accepted in inspection held at Central Vehicle Depot (CVD) Delhi in July 2002 as both the vehicles were found to have certain defects, deficiencies and damages. Quantity/quality claim was preferred in August 2002. After protracted correspondence, the firm informed that it would supply the deficient items and send experts for repair in May 2003 but the commitment was yet to be fulfilled. Due to prolonged storage, additional defects came to notice in April 2003 by the Resident Inspector. In May 2003, CVD Delhi referred the case to Army Headquarters to initiate necessary action for the repairs of these defective vehicles. The vehicles worth Rs 41.61 lakh were still lying in defective condition as of July 2004. Despite the provision of performance bond, Ministry did not avail of the opportunity to realize the amount of USD 4465 or Rs 2.08 lakh.

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

2.4 Non-utilisation of Radio Receiver Sets

Radio receiver sets valuing Rs 7.79 crore remained unutilised for the last two and a half years due to rejection of Antenna Masts.

The Central Monitoring Organisation (CMO) under the Ministry of Defence monitors national radio networks, both defence and non defence, for preventing any leakage of intelligence to hostile countries and anti-national groups. Radio Receiver (Very/Ultra High Frequency) of 1970 vintage held by the CMO needed replacement. The Ministry concluded a contract with a foreign firm in December 2001 for supply of 180 receiver sets of High Frequency/Very High Frequency/Ultra High Frequency with accessories at a total cost of Rs 7.79 crore (US Dollar 1.62 million) as per technical specification mentioned in the contract agreement. The copy of contract was also sent to CMO Directorate and Director General Quality Assurance (DGQA). The agreement provided that the supplier might source parts and accessories indigenously. On the request of the firm, Ministry permitted them in March 2002 to supply indigenous mast and monitor without consulting the users (CMO) or DGQA with regard to the detailed specifications. Accordingly, antenna mast and monitor of Indian origin were supplied by the firm.

The receiver sets were received in May 2002 at a Radio Monitoring Company. An amount of Rs 6.35 crore being 80 *per cent* of the total value of equipment supplied was paid to the firm in June 2002. A Joint Receipt Inspection (JRI) held in May/August 2002 *inter alia* observed that antenna masts of the receiver sets were made of galvanised iron pipes which were heavy and had low paint binding qualities. The firm was asked to replace the mast by mild steel seamless/alluminium alloy pipe painted with high quality olive green paint but the firm did not agree on the plea that no mast specifications were laid down in the contract.

In December 2002 and again in February 2003, the Ministry asked the firm to rectify the defects/remove all the discrepancies observed by the JRI. Ministry sent a quality claim to the vendor in June 2003 for replacing the mast intimating that in the event of non-compliance of quality claim, the rejected quantity would be purchased at his risk and cost. The vendor did not replace the masts. As a result, sensitive electronic equipment valuing Rs 7.79 crore was lying unutilised. The condition of the equipment was deteriorating due to lack of proper storage facilities and maintenance as of November 2004.

It was seen in audit that although the final notice was given to the firm in July 2003 to comply with the quality claim and 20 *per cent* balance payment i.e. Rs 1.56 crore was sufficient to meet the cost of antenna masts if outsourced, Ministry did not take any action up to October 2004 to procure the required antenna masts at the risk and cost of the defaulting firm.

Rejection of antenna mast which was only an accessory and could be procured locally coupled with lack of action in replacing them led to imported equipment valued at Rs 7.79 crore required urgently for national security lying unutilised for the last two and a half years.

While accepting the facts Ministry confirmed (December 2004) that the equipment was still lying unutilised and stated that rejection of equipment was due to lack of coordination between various agencies involved in the procurement of equipment.

2.5 Loss due to defective provision in the supply order

Non-inclusion of a clause regarding payment of Foreign Exchange as per actuals in the Supply order led to loss of Rs 84.11 lakh to the exchequer.

Director General of Ordnance Services (DGOS) placed an order in August 2002 on Bharat Electronics Limited (BEL) for supply of 1022 Hand Held Thermal Imager Sights at Rs 233.31 crore plus excise duty and taxes. The order included a foreign exchange (FE) content of US Dollar 40.34 million.

The Order stipulated payment of FE content of US Dollar 40.34 million at an exchange rate of Rs 48.92 per US Dollar with the provision that any upward revision of exchange rate had to be compensated by the Ministry. There was, however, no provision in the supply order for downward revision in case of reduction in exchange rate. It was seen that the Price Negotiation Committee had recommended in May 2002 that any variation in FE rate would be compensated within the delivery period, but only the upward revision clause was included in the order. It was also noticed that in a similar contract concluded with another Public Sector undertaking Bharat Earth Movers Limited in March 2002 for Tatra T815 vehicles both plus or minus variations were to be compensated. Twenty *per cent* advance payment was made to BEL in August 2002 at Rs 48.92 per US Dollar when the prevailing exchange rate was Rs 48.95 per Dollar. The next 65 *per cent* advance was paid at the fixed rate of Rs 48.92 per US Dollar in December 2002 though the prevailing rate in November 2002 was Rs 48.59 per US Dollar, as there was no clause to safeguard the financial interest of the State. Acceptance of this one-sided provision in the contract by the DGOS, Army HQ resulted in a loss of Rs 84.11 lakh to the Government on excess payment of FE content to BEL.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

2.6 Response of the Ministry/Departments 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 by the respective Audit Offices to the Secretaries of the concerned Ministry/departments through Demi Official letters drawing their attention to the audit findings and requesting them to send their response within six weeks. It is brought to their personal notice that since the issues are likely to be included 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 the Report of the Comptroller and Auditor General of India for the year ended March 2004: Union Government (Defence Services), Army and Ordnance Factories: No. 6 of 2005 were forwarded to the Secretary, Ministry of Defence between April 2004 and December 2004 through Demi Official letters.

The Secretary of the Ministry of Defence did not send replies to 18 Draft Paragraphs out of 24 Paragraphs. Thus, the response of the Secretary of the Ministry could not be included in them.

2.7 Follow up on Audit Reports

Despite repeated instructions/recommendations of the Public Accounts Committee, the Ministry did not submit initial Action Taken Notes on 20 Audit Paragraphs.

With a view to ensuring enforcement of 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 laying of the Reports in Parliament.

Review of ATNs relating to Army as of 10 November 2004 revealed that ATNs on 114 paragraphs included in the Audit Reports up to and for the year ended March 2002 had remained outstanding, of which Ministry failed to submit even the initial ATNs in respect of 20 paragraphs as per Annexure-I.

Ministry while accepting the facts replied in October 2004 that the Secretary, Defence Finance in his weekly meeting held in March 2004 had directed all concerned wings to have periodic review meeting with Audit to initiate follow up action early on all such pending cases.

CHAPTER III : ARMY

3.1 Working of Army Base Workshops

3.1.1 Highlights

- **There were significant underperformances in achieving the targets for overhaul of various equipment. The shortfall in overhaul of tanks and Infantry Combat Vehicles was up to 68 *per cent*, transport vehicles up to 58 *per cent* for vehicle engines it was up to 40 *per cent* and for manufacture of spares it was up to 42 *per cent*. As a result the overhaul schedule of these equipment was not adhered to, adversely affecting their operational readiness**

(Paragraph 3.1.5)

- **The Army Base Workshops (ABWs) overstated the capacity utilisation, which was inconsistent with the actual performance for repair and overhaul.**

(Paragraph 3.1.5)

- **The ABWs were yet to implement the revised norm for working out the capacity and the yardstick for repair/overhaul of tanks.**

(Paragraph 3.1.5)

- **Non-availability of spares was a major bottleneck in the overhaul and repairs undertaken by the ABWs. The various agencies responsible for providing spares did not take effective advance action for spares.**

(Paragraph 3.1.5)

- **512 ABW consumed considerable excess time over the norm in overhaul of tanks and Infantry Combat Vehicles. It completed overhaul of only six *per cent* within the norm of 90 days, while others took up to 30 months.**

(Paragraph 3.1.5)

- **Capacity to fulfill the overhaul obligations of Bofors guns was yet to be created. With the available capacity timely overhaul of the Bofors guns is not possible.**

(Paragraph 3.1.5)

- **Equipment overhauled by the ABWs did not conform to the required quality standard. 201 'B' vehicle engines overhauled and issued to users during 1999-2000 to 2003-04 failed prematurely.**

(Paragraph 3.1.5)

- **The Depots failed to take over the repaired/overhauled equipment for long periods. They advanced questionable grounds for their inability to collect the repaired equipment.**

(Paragraph 3.1.6)

3.1.2. Introduction

Eight Army Base Workshops (ABWs) were established during second world war to carry out repairs and overhaul of weapons, vehicles and equipment to keep the Indian Army operationally ready. Towards this end, they also undertake manufacture of spares. The ABWs work under the overall control of Director General Electronics and Mechanical Engineers (EME) who functions under the Master General of Ordnance (MGO). Headquarters Base Workshop Group is responsible for planning and co-ordination of functions of the ABWs. The ABWs are co-located with the ordnance depots which feed them with repairables and spares. The overhauled/repaired equipment are received by these depots for issue to the user units.

The production/repair capacity of ABWs is determined on the basis of manpower and are fixed in terms of standard units (SUs) which is equivalent to 100 man hours. Various committees have recommended norms for the functioning of the ABWs from time to time.

3.1.3. Audit objective

A review of selected ABWs was conducted to assess whether:-

(i) the ABWs carried out repair and overhaul of weapons, equipment and vehicles effectively to fulfill the requirement of the army;
(ii) the resources of the ABWs were utilised efficiently and economically towards the above end; and
(iii) the equipment/vehicles repaired/overhauled by the ABWs meet the users' requirements.

3.1.4 Scope of audit

Out of the eight ABWs, the following six ABWs were selected for review:

	Name of ABW	Items overhauled
(i)	506 ABW	Artillery guns (Bofors), L-70 gun, small arms
(ii)	508 ABW	Special vehicles[1], bridging equipment, 'B' vehicle[2] engines, generator sets
(iii)	509 ABW	Telecom & electronic equipment, power equipment
(iv)	510 ABW	Air defence missile systems viz. Kvadrat, Schilka etc. 'B' vehicles engines
(v)	512 ABW	'A' vehicles[3] viz. T-55 tanks & variants, Infantry Combat Vehicles (ICVs)
(vi)	515 ABW	Manufacture of spares and simulators and fabrication work

[1] Special vehicle : KRAZ and KOLOS TATRA trucks
[2] 'B' vehicle : Nissan, Shaktiman, Jonga, Mahendra, Ambassador, Motor cycle etc.
[3] 'A' vehicle : T-55 tank and its variants viz. BMP, ARV, BLT etc.

The period of operation of the ABWs covered in the review was 1999-2004.

3.1.5. Production management

Failure to revise the norms for determination of capacity and yard stick for overhaul

Government accepted the downward revision of norms in terms of man hours required for overhaul of tanks on the recommendations of a committee headed by Lt. Gen. P.R. Puri in 1994 and asked the ABWs to revise the norms of man hours for overhaul/repair of other equipment also. The committee had recommended allocation of reduced man hours from 102.25 to 80 towards overheads (for 515 ABW from 150 to 122.85) against every 100 hours of direct labour. Further, it had recommended a lower requirement of standard units for overhaul/repair of tanks from the then existing 58.3 to 43.6.

With the implementation of the recommendation of the committee, the available capacity in the ABWs in terms of overhaul and repair should have increased significantly. However, the ABWs did not implement the optimum yardsticks for overhaul in the case of tanks and did not implement the revised overhead norms.

Since, however, the targets are fixed with reference to the capacity of the ABWs which is determined in terms of standard units consisting of direct labour, retaining the existing relaxed norms despite government orders provided an in-built cushion to the ABWs in determination of the overhaul/repair programme. With the implementation of the revised yardsticks, the targets themselves should have been set significantly higher than what were actually set.

The Army Headquarters stated in December 2004 that the recommendations of Puri Committee regarding manhour norms for calculation of capacity of ABWs were not accepted by the Government. This contention is not tenable as the Government had accepted in 1994 re-allocation of man hours under various standing work orders as recommended by the Puri Committee.

However, in view of non-implementation of government orders, the analyses in the succeeding paragraphs are with reference to the relaxed norms being followed by ABWs and need to be viewed as such.

Shortfall in achievement of overhaul/repair targets

A five year overhaul/repair programme is prepared by the MGO taking into account the population, retention policy, periodicity of overhaul of the weapons, vehicles and equipment and the available capacity of the workshops. After the overhaul/repair programme is sanctioned by the Government, Headquarters Base Workshop Group prepares five year's programme for the various ABWs and assigns targets to them. The target for the ensuing year is 'firm', for the second year is termed as 'planned' and for the next three years are the "forecasts". This system enables advance planning and provisioning of spares etc.

Examination of targets and achievements in six ABWs revealed that there were significant shortfalls in achievement of targets for overhaul and repair of various items. In case of overhaul of 'A' vehicles i.e. tanks, ICV and mechanised equipment, the shortfall ranged between 23 and 68 *per cent*. In case of class 'B' vehicles, the shortfall ranged between 35 and 58 *per cent*, while in case of vehicle engines, it ranged between 15 and 40 *per cent* as under:

Table 1

		1999-2000			2000-01			2001-02			2002-03			2003-04		
Sl. No	Commitment	T	A	S (%)	T	A	S (%)	T	A	S (%)	T	A	S (%)	T	A	S (%)
1.	Overhaul of 'A' vehicle	237	75	68	201	155	23	200	150	25	210	131	38	220	147	33
2.	Overhaul of Spl. vehicle	45	25	44	45	28	38	95	40	58	55	23	58	75	50	33
3.	Overhaul of 'B' vehicle engines	3747	2472	34	2754	2254	18	2657	2262	15	1513	1134	25	1048	625	40
5.	Overhaul of bridging eqpts.	36	-	100	41	25	39	56	34	39	80	38	52	70	44	37
6.	Overhaul of Power eqpts.	220	175	20	303	139	54	237	66	72	184	70	62	125	115	8
7.	Repair of Class 'B' stores	3700	3949	-	3800	3732	2	3800	2412	37	3000	1198	60	2000	1244	38
8.	MOS (506 ABW)	1600	1080	32	1600	1149	28	1600	923	42	1500	902	40	1200	784	35

T : Target
A : Achievement
S : Shortfall in Percentage

T-55 tanks and BMP-I ICVs are two critical 'A' Vehicles overhauled by the ABWs, which are operationally important for the Army. Analysis of targets and achievement showed severe underperformance adversely affecting the overhaul schedule and operational fitness of the vehicles as shown below:

Table 2

Equipment	1999-2000		2000-01		2001-02		2002-03		2003-04	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
Tank T-55	90	40	90	70	90	68	90	47	90	60
ICV-BMP-I	110	30	80	60	80	68	90	70	100	70

T-55 tanks held by the Indian Army are to remain in service up till 2017. The second overhaul of these tanks was to commence in 2000. Between 1999-2000 and 2003-2004, 450 tanks were to be overhauled at the rate of 90 per annum. Against this, 512 ABW overhauled only 285 tanks or 63 *per cent* of the tanks. This has an adverse impact on the operational readiness of large number of tanks that are due for overhaul.

The BMP-I ICVs held by the Army are to be de-inducted in 2018. The overhaul of these ICVs, which began in 1994-95 was to be completed by 2006-07. According to the overhaul schedule during 1999-2000 to 2003-2004, 550 BMPs were to be overhauled at the rate of 110 per annum. The 512 ABWs could, however, overhaul only 298 BMPs during this period.

The Base workshops attributed the shortfall in achievement of targets to the non-availability of repairables and non-availability of spares. The Army Headquarters also stated in December 2004 that the initial target fixed prior to the commencement of the production year should not be taken as final targets since the targets were revised during the mid-term review, based on the availability of the repairables.

The contention of the Base Workshops and Army HQ is not tenable for the following reasons:

- There were delays in overhaul of even the available repairables as brought out in sub paragraph "Delay in repair and overhaul". Adequate stock of repairable transport vehicles and 'B' vehicle engines were available with the feeding depots and the ABWs.

- The targets are fixed according to a five year plan taking into account the requirement of the Army, the availability of repairables and spares as well as the capacity of the Base Workshops. In indicating the overhaul targets for an equipment, the general staff aims to ensure desired level of availability and reliability of the equipment for the operational readiness of the Army. In accepting these targets, the provisioning and maintaining agencies are obliged to take suitable advance action for the timely availability of repairables and spares. Mid-term downward revision of targets is, therefore, questionable.

Such shortfalls in performance of ABWs would have a cascading effect and stretch the overhaul programmes beyond the life span of the equipment besides rendering large number of the equipment unusable.

Overstatement of capacity utilisation

The targets for overhaul are fixed with reference to the available capacity of the workshops with a view to utilising their full capacity. While the workshops were able to achieve only 32 to 60 *per cent* of their target they reported almost 100 *per cent* and more utilisation of capacity. The capacity utilisation of the six ABWs reported by Base Workshop Group is shown below:

Table 3

Capacity vs output average last 5 years (1999-2004)

ABW	Held capacity (SUs)	Output (SUs)	Output as % of held capacity
506	10330	10229	99.0
508	10951	7389	67.5
509	10133	10636	104.0
510	11885	14599	122.7
512	16568	17595	106.2
515	7502	7791	103.8

In the case of 'A' vehicles, which are repaired/overhauled by 512 ABW, while only 61.5 *per cent* of the targets were met over the five years, the capacity utilisation was shown as 106.2 *per cent.* ABW's reporting of utilisation of their full capacity but achieving targets of only 30 to 60 *per cent* highlights production inefficiencies.

Examination revealed that overstatements of capacity utilisation by the ABWs were due to the following reasons:-

(i) Abnormally high booking of monthly time lost on account of manhours lost.
(ii) Excessive manhours booked under overheads.
(iii) Inflated booking of manhours (SUs) for production against the laid down norms.

Non- availability of spares

Non-availability of spares was cited as a reason affecting the overhaul and repair. The shortage of vital spares with reference to some of the critical weapons is shown below:

Table 4

Weapon systems	Average shortfall for 5 years
Tanks T-55	66%
BMP	69%
Schilka engine	83%
Kvadrat engine	89%

There were delays in manufacture of spares by the ABWs themselves. In 515 ABW, 90 *per cent* of the capacity is earmarked for manufacture of spares. Weapon-wise analysis of delay in manufacture of spares by 515 ABW disclosed as under:

Table 5

Equipment	Percentage of outstanding orders for spares on 515 ABW
Tanks T-55	74
155 mm gun	34
Schilka	78
Kolos	80
Kraz	85

These are outstanding for up to five years.

Ministry in their Action Taken Note (ATN) on Report of Comptroller and Auditor General of India for the year ended March 1991, No. 14 of 1992 had stated in August 2000 that steps were taken for improving the availability of repairables and spares. However, the performance of the ABWs continued to be plagued due to non-availability of spares.

Manufacture of spares

Spares not available from civil trade and those which are to be indigenised are manufactured by ABWs. Work orders for manufacture of spares are placed on ABWs by the Depots. There was considerable delay by the ABWs in completing the orders placed by the Depots. Yearwise break up of the work orders placed on the ABWs from 1998-99 to 2002-03 and outstanding as on March 2004 is furnished below:

Table 6

Year	506 ABW	509 ABW	510 ABW	515 ABW	508 ABW	Total
1998-99	-	-	-	30	-	30
1999-2000	14	-	-	102	7	123
2000-01	50	-	34	202	29	315
2001-02	89	-	66	587	99	841
2002-03	102	124	21	232	113	592
Grand Total	**255**	**124**	**121**	**1153**	**248**	**1901**

Thus, 1901 work orders placed on the ABW during 1998-99 to 2002-03 were still outstanding as of March 2004. 468 work orders are more than three years old. Many of these spares were required on priority basis. In 515 ABW, out of the 1153 items pending, 818 items were categorized as 'operational priority'.

ABWs indicated the following reasons for the delay in completion of the work orders:-

(i) Disproportionate priorities assigned by the Depots in placing the work orders (515 ABW).
(ii) Use of vintage machines in the ABW resulted in rejection of the samples produced (508 ABW).
(iii) Mistakes in drawings and estimates (508 & 509 ABW).
(iv) Non-availability of samples (509 ABW).
(v) Non-availability of materials (510 ABW).
(vi) Lack of manufacturing facility (506 ABW).

Non-availability of spares delayed the repair/overhaul of equipment/vehicles.

Delay in repair and overhaul

While the ABWs attributed the shortfalls in achieving the targets to non-availability of repairables (weapon, vehicle and equipment), there was abnormal delay in overhaul of even the available repairables as discussed below:

Tanks and Infantry Combat Vehicles

Tanks and ICVs are overhauled at 512 ABW. The complete process of overhaul of a tank and ICVs requires 90 days time. Of the 304 tanks/BMPs that were received for overhaul during 1999-2004, only 18 i.e. a mere six *per cent* could be overhauled within the time stipulated as given below:

Table 7

Time taken For overhaul	Within 3 month	4 to 6 months	7 to 9 months	10 to 12 months	12 to 30 months	Total
Tanks	18	107	106	26	-	**257**
BMPs	-	55	182	32	07	**276**
Total	**18**	**162**	**288**	**58**	**07**	**533**

Similarly, 80 *per cent* of the ICVs took more than six months for overhaul. Army Headquarters stated in December 2004 that non-availability of spares was the predominant reason for delay. However, provision of spares was also the responsibility of the ordnance depots and ABWs.

Artillery guns - 155 mm Bofors

155 mm Bofors guns are the mainstay of the artillery fire power of Indian army. These guns were due for overhaul after 18 years of service-life depending upon their usage. 506 ABW can overhaul 20 guns per annum. The capacity itself is very low to fulfill the overhaul requirement of Bofors gun. The workshop has overhauled only 12 guns so far. The pilot overhaul of first six guns took 19 to 39 months. The time taken in overhaul of the next six guns ranged from four to seven months. With the inadequate capacity and support available, it would take decades to overhaul the entire population of these guns. Thus large number of the guns are likely to be held without overhaul, adversely affecting their operational preparedness.

ATE Factron 720 is a test equipment used for the repair of printed circuit boards and modules of Bofors Guns and its associated equipment. This equipment which is a critical requirement for the overhaul/repair of Bofors weapon system was imported from UK for Rs 7.20 crore as part of engineering support package for Bofors weapon system in 1989. The system developed snags in 1997 and was yet to be repaired. In its absence tests are carried out manually, which requires more time besides limiting the scope and reliability of testing.

Lack of repair technology

Armoured Recovery Vehicle (ARV) of Polish origin and Bridge Laying Girder (BLG) were inducted in army between 1977 and 1988 and were to be overhauled after 12 years. The overhauls of the entire population of ARVs were to be completed by 2000 and that of BLG (60 M2) by 1998. However 512 ABW could overhaul only two BLGs and none of the ARVs until March 2004. Overhaul of these items could not be processed due to failure to procure/develop repair technology and non-establishment of overhaul line. Army Headquarters decided not to overhaul the low population BLGs. The offer for transfer of technology for overhaul of the ARVs received from a Polish firm in 1999 was yet to be approved. With overhaul long overdue, the operational reliability of the ARVs remained suspect.

Poor quality of overhaul/repair

Final inspection of the equipment overhauled by the ABWs is carried out by the Resident Inspector working directly under Headquarters Base Workshop Group. Assessment of the quality of serviceability of the repaired vehicle/equipment revealed the following:

There were premature failures of 'B' Vehicle[4] engines overhauled by 508 ABW and 510 ABW during 1999-2004. Of the 201 engines failed prematurely, 113 engines

[4] Nissan and TATA Trucks, Ambassador Car, Jeep

were declared beyond economical repairs as shown below:-

Table 8

Year	1999-2000		2000-01		2001-02		2002-03		2003-04		Total	
	508 ABW	510 ABW	508 ABW	510 ABW	508 ABW	510 ABW	508 ABW	510 ABW	508 ABW	510 ABW	508 ABW	510 ABW
No. of engines that failed prematurely	36	38	19	26	35	11	14	10	-	12	104	97
No. engines declared BER	32	4	19	5	35	2	14	2	-	-	100	13

510 ABW attributed in May 2004 the premature failure of the engines to improper maintenance of the vehicle after fitment of the overhauled engine by the users. 100 engines declared beyond economical repairs were overhauled in 508 ABW. Army Headquarters stated in December 2004 that efforts were being made to reduce the premature failure cases by all ABWs.

510 ABW overhauled 150 engines of Kolos Tatra Vehicles during 2003-04 at a cost of Rs 6.75 crore. The overhauled engines were found to have higher smoke in exhaust, reduced power output, oiling up of engine and reduced engine life which reflected deficient quality of overhaul. As a result, 92 engines were lying in the ABW as of October 2004 as the units did not collect them. Army Headquarters stated in December 2004 that the testing parameters were later revised and cleared by Controllerate of Quality Assurance (BEML). The impact of revision on performance of vehicles was not available.

3.1.6 Delay in issue of overhauled equipment

The Base Workshop Group issued instructions to all ABWs in August 1994 for expeditious issue of equipment to the Ordnance Depots after their overhaul. During 'Operation Parakram' in 2002 instructions were issued by the Army to expedite the issue of overhauled equipment lying in Base Workshops. There was undue delay in issue of overhauled equipment to Depots by the ABWs as discussed below:

In 512 ABW 53 *per cent* of the overhauled tanks were issued to Central Armoured Fighting Vehicle Depot (CAFVD) after a delay of 16 to 60 days as would be seen from the following table:-

Table 9

Delay	16-30 days	31-60 days	61-120 days	121-180 days	Above 180 days
No. of tanks/ICVs issued by ABW	137	173	53	01	02

Army Headquarters (HQ) stated in December 2004 that the availability of CAFVD representative to collect the tanks/ICVs depended upon the other prior commitments of the Depot. Since the 512 ABW and CAFVD are adjacent to each other sharing a common separating boundary wall, this contention is not understandable.

There was delay of up to one year in issuing overhauled engine assemblies by 510

ABW as shown below:

Table 10

Delay	1-3 months	3-6 months	6 months to 1 year	More than 1 year	Total
No. of engines	240	174	53	8	475

Army HQ stated in December 2004 that the delay was due to shortage of cases and cradles for transporting the engines. The reasons stated are untenable as it cannot explain the long delay of more than six months in so many cases.

The matter was referred to the Ministry in September 2004; their reply was awaited as of December 2004.

3.2 Recoveries/savings at the instance of Audit

Based on audit observations relating to irregular payments, units and formations recovered unauthorised payment of various allowances, electricity duty, testing charges, electricity/rent and allied charges, liquidated damages etc. amounting to Rs 3.52 crore and cancelled fourteen irregular work sanctions resulting in savings of Rs 18.33 crore.

Recoveries

Test check of records of CDA (O)[5] Pune, Principal CDA, Southern Command (SC) Pune, CDA Southern Command Chennai and CDA Bangalore, eight Pay and Accounts Offices (Other Ranks), unit/formations of the Army, Defence Research and Development Organisation, Military Engineer Services formations and Area Headquarters Chennai revealed instances of various types of overpayments/short recoveries amounting to Rs 3.52 crore as detailed below:-

Recoveries at the instance of audit

(Rupees in lakh)

Sl. No.	Unit/Formation audited	Nature of mistake/irregularity	Overpayment/ Short Recovery
1.	CDA (O), PAO[6] (ORs) CDA Southern Command Pune, CDA Chennai, CDA Bangalore, Area Headquarters, Chennai, GE[7] Bharatpur, GE(A)[8] Jodhpur	Irregular payments on account of Special Compensatory Counter-Insurgency allowance, Field allowance, City compensatory allowance, Compensatory Field Area allowance, Bhutan compensatory allowance, transportation allowance, excess drawal of condiment	246.50

[5] CDA (O) - Controller of Defence Accounts (Officers)

[6] Pay and Accounts Offices, (Other Ranks), Artillery, Nasik, Bombay Engineering Group, Pune, Maratha Light Infantry, Belgaum, Armoured Corps Regiment Ahmednagar, Army Ordnance Corps, Secunderabad, Madras Engineering Group and Centre, Bangalore, Pioneer Corps and Training Centre, Bangalore, General Reserve Engineering Force, Pune

[7] GE- Garrison Engineer

[8] GE(A)- Garrison Engineer (Army)

		allowance, rent and allied charges, outfit allowance, Classification Pay/Dearness Allowance, Compensatory Modified Field Area allowance, Non-recovery of subscription to AFPP Fund and Army Group Insurance, Ration allowance, overpayment of pay and allowances, wrong fixation of pay, TA/DA, Non-recovery of Handling/Clearing charges, Payment of electricity duty to the Rajasthan State Electricity Board.	
2.	Army units/DRDO/GE (North) Bangalore, GE (Air Force) Yelahanka, GE (Air Force) Tambaram, Assistant Garrison Engineer Independent (Research and Developemnt) Avadi, GE (Army) Trivandrum	Non-recovery of testing charges, overpayment to supplier, excess payment of Sales tax, recovery of licence fee, transportation allowance, under recovery of training cost, non-revision of rent, under recovery of electric charges, non-recovery of rent and allied charges, non-recovery of rent from AFWWA Hostel.	80.04
3.	Canteen Stores Department HQ, Mumbai	Non-availing of rebate, non-supply of gift items, non-recovery of liquidated damages, penalty on delayed supplies etc.	24.19
4.	Principal CDA, SC Pune	Non-recovery of liquidated damages, furniture rent, licence fee, acceptance of second lowest quotation etc.	1.05
		Total	**351.78 lakh Say Rs 3.52 crore**

When these instances were pointed out, the units/formations/offices concerned recovered/assured recovery of the above amounts.

Savings

Savings of Rs 18.33 crore at the instance of Audit

During test check of records of various units/formations, audit noticed a few cases of irregular issue of work sanctions. On these being pointed out, the units/formations accepted the audit observations and cancelled the sanctions resulting in savings of Rs 18.33 crore as below:-

Savings at the instance of Audit

(Rupeess in lakh)

Sl. No.	Unit/Formation concerned	Remedial measures for regulation of irregularity	Amount involved
1.	Headquarters Training Command, Indian Air Force Bangalore	Cancellation of sanction for provision of permanent building for Air Force School at Air Force Academy Hyderabad	58.12
2.	Station Headquarters Chennai	Cancellation of sanction for improvement to Guest room in Building No. P/12 at Army Camp Pallavaram, Chennai	2.86
3.	Headquarters 10 Corps C/o 56 APO	Cancellation of sanction for construction of Barrier wall and fountain at TCP gate No. 1 at a Military Station	3.64
4.	Station Headquarters Amritsar Cantonment	Cancellation of sanction for special repair for development of nature park at New Amritsar Military Station	5.00
5.	Headquarters 2 Corps C/o 56 APO	Cancellation of sanction for provision of bus stand at 'N' Area at a Station	1.37
6.	Station Headquarters Fazilka	Cancellation of sanction for provision of tiles in bathrooms, kota stone in kitchen, sanitary fitting & sink in married accommodation at Military Station Fazilka	3.51

7.	Station Headquarters Chandimandir	Cancellation of sanction for provision of Guard rooms at Station Workshop EME at Chandimandir	3.90
8.	Headquarters 91 Sub Area C/o 56 APO	Cancellation of sanction for provision of road at a Range	7.17
9.	Headquarters 91 Sub Area	Cancellation of sanction for provision of guard room at a Range	2.46
10.	Station Headquartrs (Adhoc) Kalka	Cancellation of sanction for provision of compound wall in front and back side of single officers accommodation and side wall of officers mess, 102 Infantry Battalion (Territorial Army) and 5682 Army Supply Corps Battalion (Mechanised Transport) at Military Station Kalka	3.52
11.	Station Headquarters SriGanga Nagar	Cancellation of sanction for provision of eight bus stops at SriGanga Nagar	3.65
12.	Headquarters 33 Armed Division C/o 56 APO	Cancellation of provision of showers in all Bathrooms of Junior Commissioned Officers/Other Ranks living Temporary Residential Huts accommodation in a Military Station	2.42
13.	Headquarters 81 Sub Area C/o 56 APO	Cancellation of sanction for augmentation of water supply in Sector V at a military station	9.99
14.	Ministry of Defence	Deletion of provision of excise duty and sales tax in the contract concluded with Electronics Corporation of India Limited for 13 Modular Surveillance Receiver Systems	1725.00
		Total	**1832.61 lakh Say Rs 18.33 crore**

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

3.3 Infructuous expenditure of Rs 2.63 crore on invalidation of recruits

Failure of Recruiting Medical Officers to carry out proper medical examination of the recruits at the time of their selection resulted in invalidation of 1083 recruits subsequently, casting doubt on the quality of medical examination. This led to infructuous expenditure of Rs 2.63 crore on pay, allowances and ration of invalidated recruits.

Recruiting Medical Officers (RMOs) conduct medical examination of candidates for enrolment in the Armed Forces at the recruitment offices. On selection after declaration of medical fitness, the recruits are sent to different training centres, where they undergo a second medical examination by the RMO of the centre or at the nearest military hospital. Comprehensive guidelines for RMOs regarding their duties, responsibilities and conduct of medical examination for the recruitment in the Armed Forces issued by Directorate General of Medical Services (Army) in May 1989 stipulate that primary medical examination for enrolment in the Army is intended to preclude the acceptance of those candidates who are either unfit or likely to break down under the stress and strain of military services. The guidelines enjoin on the RMOs to remember that discharge of a recruit on medical grounds within a few months of his enrolment causes unnecessary and avoidable expense to the state. The Manual for RMO lays down a list of medical conditions, signs of which if noticed by the RMO would lead to rejection of the candidates.

Audit scrutiny of the records of 31 Training Centres revealed that between 1999-2000 and 2003-04, 1608 recruits declared medically fit at the time of their enrolment by RMOs were subsequently declared medically unfit during the second medical examination conducted at the Training Centres. An examination of these cases revealed that out of these, 1083 or 67 *per cent* recruits were invalidated on grounds of organic diseases and physical deformities which pre-existed even before enrolment and which could have been detected by the RMO during recruitment. Most of the cases pertained to deformities like squint, flat feet, knock knee, deafness, stammering, defective vision, colour blindness etc., where the Medical Board certified that the disability pre-existed before enrolment and was not detected by the RMO.

Failure of RMOs to carry out proper medical examination of recruits at the time of their selection resulted in wasteful expenditure on their training till discharge, besides infructuous expenditure of Rs 2.63 crore on pay, allowances and ration of these recruits before their invalidation.

The matter was referred to the Ministry in September 2004; their reply was awaited as of December 2004.

3.4 Non-removal of encroachment and non-levy of damages

Due to inaction of Defence Estates Officer, Allahabad and Cantonment Executive Officer, Varanasi, three acres of Defence Land valued at Rs 3.72 crore had been encroached upon and is being exploited commercially. The damages to the extent of Rs 97.53 lakh till March 2004 were not levied.

Defence Estates Officers (DEO) are responsible for prevention and removal of encroachment of land under their management. They are also responsible for assessing and levying damages for unauthorised occupation of any public premises and land. A bungalow constructed on defence land covering an area of 6.92 acres at Varanasi Cantonment was held under old grant terms since 1964. The land was under the management of DEO, Allahabad. In November-December 1996, the legal heirs of the bungalow unauthorisedly rented three acres of the adjoining land valued at Rs 3.72 crore to Varanasi Motors for storage and parking of vehicles. In addition, Varanasi Motors also constructed unauthorized structures for residential use. In February 1997, Cantonment Board issued notice for demolition of the structures under Section 185 of the Cantonment Act 1924. An appeal was filed by the offender against the notice. The Director of Defence Estates, Central Command Lucknow held in October 1997 that it was a prima-facie case of encroachment on Government land and did not grant the stay sought for.

Despite these orders of October 1997, the defence land encroached by Varanasi Motors in 1996 continued to be under their possession and exploited for commercial purposes. The damages from October 1997 to March 2004 worked out to Rs 97.53 lakh which was not levied till date.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

3.5 Unauthorised establishment of School

Station Commander, Varanasi, not only reappropriated two Government buildings in August 2001 for unauthorisedly opening an Army School under the aegis of Army Welfare Education Society but also allowed it to construct a building on A-1 Defence land.

Cantonment Land Administrative Rules 1937 provides that Class A(1) land in the Cantonment shall not be used for any purpose other than active military use without the previous sanction of the Central Government. The Ministry of Defence in April 1993 and January 2001 also issued instructions that its prior approval was required for opening of any school in Government land/buildings.

Contrary to the Government instructions, the Station Commander, Varanasi, re-appropriated two Government buildings and two rooms in August 2001 for opening of an Army School with effect from 1 April 2001 under the aegis of Army Welfare Education Society (AWES), a private body. The Station Commander also allowed AWES in April 2001 to occupy two acres of A-1 defence land costing Rs 2.48 crore adjacent to the school buildings, on which building costing Rs 27 lakh was constructed.

On this being pointed out in audit in January 2004, the Station Commander, Varanasi took up the case for regularisation in May 2004 with Madhya Pradesh and Bihar Area Jabalpur to regularize the Army School by obtaining Government sanction.

The matter was referred to the Ministry in April 2004; their reply was awaited as of December 2004.

3.6 Procurement of defective Transmission Reception units

Due to inadequate inspection by Senior Quality Assurance Establishment (Armaments) Chennai, equipment worth Rs 3.85 crore were accepted and subsequently found defective. Ignoring defects in previous supplies another order for Rs 91.42 lakh was placed on the same firm by COD, Agra.

The Ministry of Defence placed a supply order in November 1994 for 162 Transmission and Reception Units, a sub component of Laser Range Finder (LRF) mounted on T-72 tanks, on General Optics Limited, Pondicherry at a cost of Rs 3.85 crore. The supply order provided 12 months warranty of the stores from the date of despatch. After inspection and clearance by Senior Quality Assurance Establishment (Armaments) (SQAE (A)) Chennai, Central Ordnance Depot (COD), Agra and Opto

Electronics Factory (OLF), Dehradun received 82 and 80 equipment respectively between May 1997 and July 1998. COD Agra issued these equipment to 509 Army Base Workshop, Agra between October 1997 and September 1998. 509 Army Base Workshop returned 20 equipment in September 1998 as defective. Another 61 sets were declared defective in February 2000. OLF declared all the 80 modules as defective in April 2000. The firm did not replace the equipment and went for arbitration in April 2001. The Ministry of Defence lost the case in arbitration on the ground that beyond the warranty period of 12 months the firm had no liability to replace or rectify the defect. The award has been challenged in High Court of Delhi.

Audit scrutiny revealed that while giving bulk production clearance, Controllerate of Quality Assurance (Instruments) Dehradun asked the firm to give warranty for six years/265 hours/20,000 radiations. The firm agreed to this change in April 1998 and took up the matter relating to change of warranty with the former in July/August 1998 but the order was never amended to change the warranty. Transmission and Reception Units found serviceable by SQAE (A) Chennai were subsequently found defective by 509 Army Base Workshop and OLF Dehradun, raising doubts on the adequacy of inspection norms adopted by SQAE (A) Chennai.

Even as 509 Army Base Workshop returned 20 equipment as defective in September 1998, COD Agra placed a supply order on the same firm in October 1998 for the same equipment at a cost of Rs 1.05 crore. COD received 44 equipment between February 1999 and June 1999 duly inspected and cleared by the inspecting officer. The supply order did not provide for any other inspection at COD/509 Army Base Workshop. The equipment carried a warranty of 265 hours over the six years of operation and storage. Out of 44 equipment, 40 were issued to 509 Army Base Workshop, Agra in April/May 2000 out of which 37 were found defective. The firm was asked to rectify the defects in August 2002. The firm did not respond to any communication for repair/rectification of defective equipment. Defective equipment worth Rs 91.42 lakh were lying with COD Agra as of April 2004.

The department failed to get defective equipment worth Rs 3.85 crore purchased in November 1994 order replaced by the supplier. Subsequently, placing of a fresh supply order on the same supplier resulted in further procurement of defective stores worth Rs 91.42 lakh.

The matter was referred to the Ministry in April 2004; their reply was awaited as of December 2004.

3.7 Loss of Rs 1.44 crore due to over provisioning of specialized Oil-OX-320

Directorate General of Supplies & Transport (DGST) procured large quantities of oil-OX-320 having a limited shelf life without assessing the actual requirement.

Oil-OX-320 is a lubricant used in tanks and artillery guns. Average annual consumption of OIL-OX-320 over the period of three years from 1998-99 to 2000-01 was 9,723 litres for all the five Army Commands in the country. The shelf life of the item is three years. Between October 2000 and February 2001, 86,872 litres of oil were procured by DGST through Defence Materials & Stores Research & Development Establishment (DMSRDE), Kanpur. As of March 2002, the stock held by all five Commands was 1,08,126 litres.

Despite such huge stock holding, DGST placed another supply order for 47,707 litres of oil costing Rs 81.35 lakh in January 2002, based on the demand projected by the five Army Commands for the year 2002-03. Out of the above quantity, 46,400 litres were for Western Command. In April 2002, DGST asked Western Command to review their abnormally high demand. In response, Western Command reported their requirement as 'nil' in May 2002. By October 2002, 6491 litres were supplied by the firm. After reviewing the stock position, DGST amended the supply order restricting it to 6491 litres.

At the present average annual consumption rate of 9658 litres, the entire quantity of oil would need 11 years to be consumed. At the same rate, in three years, from October 2002 to September 2005, 28,974 litres of oil would be consumed leaving a balance quantity 80,019 litres of oil costing Rs 1.44 crore which would be unfit due to expiry of its limited shelf life.

DGST stated in June 2004 that the Commands made the annual demand for the oil as per the scale authorised for the equipment held by them and consumption of oil was very less due to non-operation of most of these equipment. The contention is not tenable because propriety and prudence demand that requirement of an item should not be projected merely on the basis of scales but on actual need.

Thus, failure of Command HQ to assess the actual requirement of the item before placing the demands/orders resulted in a wasteful expenditure of Rs 1.44 crore on over provisioning of oil.

The matter was referred to the Ministry in September 2004; their reply was awaited as of December 2004.

3.8 Avoidable payment of container detention charges

Failure of Service Headquarters to send shipping documents to Embarkation Headquarters in time and delay by Embarkation Headquarters in completion of port formalities resulted in avoidable expenditure of Rs 1.04 crore on container detention charges.

Avoidable payment of Container Detention Charges (CDC) for delayed clearance of consignments received by Embarkation Headquarters (EHQ), Mumbai from abroad was mentioned in Paragraph 30 of the Report of the Comptroller and Auditor General of India, Union Government Defence Services (Army and Ordnance Factories) for the year ended March 1997. Ministry, in November 2003, through their draft Action Taken Note assured timely despatch of documents to EHQ in future and to clear the consignments on indemnity bond if documents were not received in time.

The Ministry had issued instructions in March 1996 emphasising the need for the Service Headquarters to make available all the shipping documents at least 14 days prior to the arrival of vessels, for clearing the cargo within the stipulated free period.

Audit noted that EHQ Mumbai and Chennai paid a total amount of Rs 1.04 crore as CDC from March 1997 to April 2004 in 424 cases. Test check of 90 such cases revealed that in most of the cases CDC was paid due to delay in despatch of shipping documents by service Headquarters to EHQ as given below:-

EHQ	Period	Total No. of cases of payment of CDC	No. of cases test-checked	CDC paid due to delay in despatch of shipping documents by service HQ to EHQ		CDC paid due to other reason such as delay in completion of port formalities, non-availability of funds etc.	
				No. of cases	**Amount (Rs in lakh)**	**No. of cases**	**Amount (Rs in lakh)**
Mumbai	March 1997 to November 2003	373	79	68	81.02	11	5.65
Chennai	April 1999 to April 2004	51	11	08	1.08	03	0.34

In August 2004, EHQ Mumbai attributed the main reason for payment of CDC as late/incorrect receipt of documents. This contention is not tenable as in case the documents were not received the consignment could have been cleared on indemnity bond.

Thus, failure of contracting directorates of Service Headquarters/consignees in sending shipping documents in time and delay by the EHQs in fulfilling port formalities resulted in avoidable payment of CDC of Rs 1.04 crore.

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

3.9 Diversion of Government revenue to non-public fund

In contravention of the Ministry's orders, Military Farms School & Centre, Meerut credited Rs 30.77 lakh in Non-Public Fund instead of Government Account.

In December 1995, the Ministry revised the policy of cultivation of defence lands. These orders provided that the land intended to be put to cultivation/let-out for other commercial purposes was to be placed under the management of the Defence Estates Officer concerned and the total revenue realised was to be deposited in the Government treasury so as to form part of the Consolidated Fund of India.

Military Farms School & Centre, Meerut leased out 28.7 hectare of cultivable land to two private parties for the period July 1999 to May 2002 and again from June 2002 to

May 2005 instead of placing the same under the management of the Defence Estates Officer, Meerut. The lessees paid Rs 39.15 lakh against Rs 40.40 lakh due as lease rent from them leaving a balance of Rs 1.25 lakh unrealised as of August 2004. A sum of Rs 4.88 lakh out of the amount realised was deposited in Government account and Rs 3.50 lakh was paid to Uttar Pradesh Power Corporation Limited as electric charges in terms of lease agreements. The remaining Rs 30.77 lakh was credited to Regimental Funds. Thus, Rs 30.77 lakh deposited in Non-Public (Regimental) Fund instead of Government Account was not in order.

On being pointed out in audit, Military Farms School and Centre, Meerut agreed in February 2004 to credit Rs 30.77 lakh to Government Account and to realise Rs 1.25 lakh from the lessee and credit the same to Government Account. No action had been taken so far in this regard (August 2004).

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

CHAPTER IV : WORKS AND MILITARY ENGINEER SERVICES

4.1 Engineer Stores Depots

The two Engineer Stores Depots in Kankinara and Delhi Cantonment on which annual expenditure of Rs 6 crore are incurred failed to meet the demands of dependent units timely and effectively thereby affecting the performance of these units. The Engineer Stores Depot Kankinara held only 11 *per cent* of its authorised tonnage as of March 2004.

4.1.1 Introduction

Engineer Store Depots (ESD) are responsible for procurement, receipts and issue of equipment and plant (including spares), their stores, repair of backloaded equipment through the Army Base Workshops and disposal of discarded/surplus equipment and stores. The authorised holding of each ESD is 40,000 tonnes. As of March 2004 two ESDs were functioning and the annual establishment cost of these two ESDs during 1999-2000 to 2003-04 was about Rs 6 crore.

A study on the working of the two ESDs in Kankinara and Delhi Cantonment for the period 1999-2000 to 2003-04 carried out in audit during March 2004 to June 2004 revealed the following:-

4.1.2 Low capacity utilisation of ESDs

The average holding during 1999-2000 to 2003-04 in ESD Kankinara and ESD Delhi Cantonment were 14 *per cent* and 74 *per cent* of the authorised holding respectively as shown in the following table:-

Year	Actual holding			
	ESD Kankinara		ESD Delhi Cantonment	
	Tons	(%) w.r.t. authorised holding of 40,000 Tons	Tons	(%) w.r.t. authorised holding of 40,000 Tons
1999-2000	6800	17	28273	71
2000-01	6000	15	27268	68
2001-02	5500	14	26930	67
2002-03	5000	13	26940	67
2003-04	4500	11	37720	94

The stockholding of ESD Kankinara has been coming down steadily over the years. The Study Report on Non-field forces observed in 1997 that all the ESDs were underloaded and recommended disposal of surplus stores of ESDs on priority. The meager holding of ESD Kankinara includes obsolete stores transferred from ESD Panagarh and ESD Raipur on closure of those ESDs twenty years ago. Disposal of these stores started during the last two years only and ESD Kankinara was still holding 645 tonnes of obsolete/non-moving stores. Engineer-in-Chief's (E-in-C) Branch stated in November 2004 that disposal action was under process. Headquarters, Eastern Command in August 2003 recommended disbandment of ESD, Kankinara so that its resources could be utilised gainfully elsewhere. Accordingly, the Army Headquarters approved disbandment of ESD Kankinara in December 2003 to be completed in two years. E-in-C's Branch of Army Headquarters however stated in November 2004 that the recommendation for closure of ESD Kankinara was not accepted. In May 2004, E-in-C ordered shifting of part of the work load of ESD Delhi Cantonment to ESD Kankinara. Though the redistribution would improve the stock holding in ESD Kankinara, the combined stock holding in both the ESDs would continue to remain low with reference to the authorised holding while ESD Kankinara would continue to incur Rs 3.61 crore per annum on salary and allowances.

4.1.3 Excess manpower in ESD Kankinara

The authorised strength vis-a-vis the posted strength of manpower in the two ESDs during 1999-2000 to 2003-04 was as under:-

Year	ESD Kankinara						ESD Delhi Cantonment.					
	Officers		Subordinate		DSC personnel		Officers		Subordinate		DSC personnel	
	Auth.	Held	Auth.	Held	Auth.	Held	Auth.	Held	Auth.	Held	Auth.	Held
1999-2000	17	14	553	492	113	109	12	7	376	229	57	52
2000-01	17	15	549	466	113	103	12	7	477	257	57	52
2001-02	17	12	560	424	113	112	12	7	480	264	57	52
2002-03	17	11	533	374	113	113	16	9	480	249	57	51
2003-04	17	11	562	337	113	113	18	9	480	299	57	54

It is seen that ESD Kankinara, which had major share of the manpower had only 14 *per cent* of the workload. In January 1998, Army Headquarters ordered reduction in the strength of officers of ESD Kankinara by three and subordinates by 53, but this reduction was not implemented. While ESD Kankinara was holding excess manpower, ESD Delhi Cantonment had shortage of manpower. There was no apparent logic to the distribution of manpower between the two ESDs.

4.1.4 Poor Inventory Management

Shortfall in stock verification

Regular stock-taking is an important function of stores management. E-in-C's standing orders require the Commandant to prepare a stock-taking programme on a monthly basis which would ensure that all items are verified once during the year. While ESD Kankinara carried out stock verification of all the items held by it, there was shortfall ranging between five to 38 *per cent* during 1999-2003 in annual verification by ESD Delhi Cantonment.

ESD Delhi Cantonment stated in August 2004 that the shortfall in stock verification was due to shortage of manpower.

The stocktaking revealed discrepancy in the stock of 59 items in ESD Kankinara. E-in-C's Branch stated in November 2004 that the discrepancy was due to theft during 1997 and loss statement for sanction of the loss had been submitted to the competent authority.

Low demand satisfaction

Delay in registration of demands

The standing instructions allow 20 days time for dispatch of stores to units from the date of receipt of demand in the ESD. A review of the demands of units registered during January to March 2004 in the two ESDs revealed that 30 *per cent* of the demands were registered after more than one month of their receipt in the ESDs.

Delay in issue

In both the ESDs, there was substantial delay in issue of stores to units against their demands. Out of 1956 demands registered by ESD Delhi Cantonment during 2003-04, 253 demands were outstanding as on 19 November 2004. Similarly, out of 1738 demands registered by ESD Kankinara during 2003-04, 494 demands were outstanding as on 31 August 2004. Even some of the stores demanded as early as in April 2003 were not issued as of August 2004. ESD Delhi Cantonment stated in May 2004 that the delay was because of the lengthy procedure for placing supply orders. The Standing Provision Review Directives however require that the requirement of stores be reviewed plant-wise annually as per the time schedule laid down therein without waiting for the demands from units. Thus the ESDs failed to adhere to the time limit prescribed in the Standing Instructions for issue of stores to the user-units thereby affecting their performance. A few instances of failures in meeting the demands are given below.

- Out of 472 spares for excavator loader demanded by Army Base Workshop Delhi Cantonment for meeting the target for 2003-04, as many as 450 were not supplied by the ESD Delhi Cantonment. Similarly out of 390 spares for excavator engine demanded for executing the target for 2003-04, 123 were not supplied by the ESD Delhi Cantonment. The workshop had to procure the spares from trade.

- Out of 132 spares for JCB plant demanded by 153 Medium Regiment during June 2002 to April 2004, 100 were outstanding as of July 2004 when a non-availability certificate was issued by ESD Delhi Cantonment for this outstanding quantity.

- The ESDs failed to supply spares to the Army Base Workshops as a result of which the workshops could not achieve their annual target for certain plants for the year 2003-04. The shortfall was to the extent of 15 *per cent* to 83 *per cent.*

ESD Delhi Cantonment stated in May 2004 that on receipt of demand from the workshop, the available stores were immediately issued but procurement action itself took four to six months time and that non-availability certificates were issued when stores could not be issued within the time frame.

Over provisioning/over issue of stores

During May 2003 to March 2004, ESD Delhi Cantonment procured 39 sets of special maintenance tools (SMT) for repair/overhaul of crawler tractor at a cost of Rs 9.27 crores for issue to Field Repair Workshops/Base Repair Workshops etc as per the authorisation. Of these, 11 sets valuing Rs 2.64 crore were procured in excess of authorisation of the units. Five sets valuing Rs 1.2 crore were issued to units in excess of the authorised scale. ESD Delhi Cantonment stated that corrective action was being taken and three over provisioned SMTs would be issued to units who had not already been issued SMTs.

4.1.5 Summing up

Keeping in view the easy availability of engineer stores/equipment in the civil sector, the continuance of ESD Kankinara with low workload and low efficiency is a drain on scarce resources which could be used gainfully elsewhere. The annual expenditure on ESD Kankinara holding lower inventory is about Rs 3.6 crore while that of Delhi Cantonment is Rs 2.4 crore. The obsolete/non-moving stores held by the ESD Kankinara need to be disposed off on priority. Timely supply against demand also needs to be ensured.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

4.2 Extra expenditure due to delay in implementing 'Fast Track Procedure'

Military Engineer Services failed to accept the tenders for married accommodation projects within the time stipulated under the Fast Track Procedure leading to re-tendering and resultant extra expenditure of Rs 1.44 crore defeating the very purpose of Fast Track Procedure.

Ministry of Defence laid down Fast Track Procedure (FTP) in April 1997 for construction of selected married accommodation of the Army costing above Rs 75 lakh. The objective of FTP was eliminating delays and ensuring planning and execution of projects in a time-bound manner.

FTP stipulates a validity period of 90 days for tenders to have some cushion for any unforeseen delays during scrutiny and approval of estimates. Following evaluation of tenders, a period of nine weeks is assigned for obtaining administrative approval of the competent authority.

Audit scrutiny of works related to construction of married accommodation executed under FTP revealed that in four cases, re-tendering was resorted to for the reasons indicated against each as below:

Name of project *(Tendering authority)*	Original lowest tender	Lowest in re-tendering	Extra expenditure	Reasons for re-tendering
	(Rupees in crore)			
Provision for 10 Majors, 4 Captains and 60 ORs at Kamptee *CE (Fy.) Hyderabad*	3.01	3.53	0.52	Non-adherence to time schedule for evaluation and acceptance of tenders
Provision for 8 Majors and 104 ORs at Bhopal *CE Jabalpur Zone*	4.07	4.56	0.49	
Provision for 32 Majors and 180 ORs at Meerut *CE Bareilly Zone*	9.45	9.64	0.19	
Provision for 24 ORs at Rangapahar *CE Shillong Zone*	1.36	1.60	0.24	Inclusion of loose furniture in tender for building work
Total			**1.44**	

As a result, an extra expenditure of Rs 1.44 crore had to be incurred.

Further scrutiny of the cases revealed that delays in issue of Administrative Approval were attributable to:

- Delay in submission of cases by Chief Engineer;
- Raising of observations in a piecemeal manner by the Engineer-in-Chief and Command Chief Engineer; and
- Delay in furnishing the replies to the observations.

Due to this, the validity period of the existing tenders expired requiring re-tendering. Thus, the main objective of sanctioning the work under FTP was defeated.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

4.3 Irregular payment of electricity duty

In violation of provisions of Constitution of India, a Garrison Engineer paid Electricity Duty of Rs 75.34 lakh on consumption of electricity by Defence Establishments.

Mention was made in the Report of the Comptroller and Auditor General of India, Union Government Defence Services (Army and Ordnance Factories) for the year ended March 1989 regarding payment of Electricity Duty (ED) to Punjab State Electricity Board (PSEB) for electricity supplied to the Military Engineer Services (MES) and consumed by Defence Establishments in contravention of the provisions of Article 287 of the Constitution. In July 1989, Army Headquarters Engineer-in-Chief Branch New Delhi issued instructions to all MES formations to ensure that violation of the provisions of Article 287 of the Constitution of India does not take place. Further in August 1995, Ministry of Defence clarified that exemption from ED/tax under Article 287 of Constitution of India in respect of electricity consumed by Government of India or sold to Government of India for consumption by the Government is only applicable to Government of India offices/establishments, etc. and is not extendable to consumption of electricity for domestic purposes by the employees of the said Government.

At Ferozepur Cantonment, up to July 2002, PSEB billed ED to MES on domestic consumption only. In August 2002, Government of Punjab revised the rate of ED to five *per cent ad valorem* on sale of power charges with effect from 01 August 2002 which was intimated to all by PSEB on 13 August 2002. Based on the revised rate of ED, PSEB floated the electricity bills from August 2002 onwards levying the ED on total consumption which included electricity consumed for non-domestic purpose. Non-domestic consumption was assessed as 97.51 *per cent* of the total consumption, the rest being domestic consumption only. The entire demand on ED was paid by Garrison Engineer (East) Ferozepur (GE) from August 2002 to January 2004. The total irregular amount towards payment of ED on non-domestic purposes worked out to Rs 75.34 lakh.

After this was pointed out by Audit in August 2003, GE intimated in April 2004 that PSEB discontinued charging ED after January 2004 and agreed in principle to refund the extra amount paid by default to them.

Thus, despite constitutional provisions and Ministry of Defence clarification, GE paid ED amounting to Rs 75.34 lakh irregularly on electricity consumed for non-domestic purposes.

While accepting the facts, Ministry admitted (August 2004) that the load agreement of electric supply at Ferozepur Station was common for domestic and non-domestic consumption and after being pointed out by audit they took up the matter with PSEB authorities in November 2003/February 2004 for refund/adjustment of the excess payment made; the final outcome was awaited.

4.4 Overpayment to contractors

Negligence of Garrison Engineer, Mathura, in pricing Deviation Orders led to overpayment of Rs 52.91 lakh to contractors.

The Chief Engineer (CE), Lucknow Zone, concluded two contracts, one for construction of radial well, approach bridge and connected works at Mathura and another for provision of water storage underground sumps and connected building works at Mathura in April 1996 at a total cost of Rs 9.01 crore. The works were completed in July/October 1999.

Regulations for the Military Engineer Services provide that deviations on a contract be authorised only by the officer who accepted the contract unless such powers have been delegated. Deviation orders would clearly state how deviations are to be measured and priced. Audit scrutiny of records revealed that during execution of works Garrison Engineer, (GE) Mathura, allowed 33 deviations between February 1997 and April 2000 in execution of works in both the contracts, involving additions/omissions of certain works. The deviations were allowed without the prior approval of the CE in disregard of the rules.

Subsequently, between May 2000 and August 2002 the deviations were formally approved by the CE. GE had overpriced the plus deviations by Rs 24.58 lakh and under priced the minus deviations by Rs 28.33 lakh resulting in overpayment/under-recovery of Rs 52.91 lakh, thereby giving undue benefit to the contractors. Demands for recovery of Rs 50 lakh (approximately) were placed on the contractors in January 2002/March 2002 but the amount had not been recovered and was under arbitration as of August 2004.

Headquarters, Uttar Bharat Area, in July 2002 ordered a staff Court of Inquiry to investigate the irregularities committed in overpayment relating to contract for the construction of radial well at Mathura. The Court of Inquiry was required to be completed by August 2002. The Court of Inquiry was still under process with HQ Central Command as of July 2004.

Ministry stated in July 2004 that the final bills for both the contracts were being checked.

CHAPTER V: DEPARTMENT OF DEFENCE PRODUCTION AND SUPPLIES

5.1 Non-recovery of Rs 1.17 crore from a firm on failure to complete the supply

In violation of Ministry's guidelines and by amending a supply order, Department of Defence Production and Supplies granted an advance of Rs 48.82 lakh to a firm for the supply of Arm of Road Wheel. The firm failed to supply the full quantity and consequently a sum of Rs 1.17 crore on account of advance and interest remained unrecovered.

Department of Defence Production and Supplies (DDPS) placed a supply order in November 1994 on Praga Tools Limited, Hyderabad, for the supply of 790 Arm of Road Wheel (PGM-2919) at Rs 1.22 crore. Advance sample of the item was to be submitted within five to six months of the date of receipt of supply order. The firm submitted advance sample belatedly in April 1996. Bulk Production Clearance (BPC) was given in February 1997.

The original supply order did not provide for any advance payment. Ministry's guidelines of July 1987 stipulate on account payment only after grant of BPC. In violation of this, DDPS amended the supply order in January 1996 for paying interest bearing advance of Rs 48.82 lakh to the firm against Indemnity Bond. Through another amendment in January 1996, it also increased the quantity of the item from 790 to 952. DDPS also raised the unit rate for the extra supplies thereby raising the total value of supply order to Rs 1.50 crore. Within the extended delivery period of 11 December 1999, the firm could supply only 47 units. Since the firm failed to supply the contracted quantity, DDPS cancelled the supply order in April 2000 at the risk and cost of the firm with forfeiture of security deposit.

DDPS placed a risk purchase supply order on D.D. Industries, Delhi, in February 2001. The second firm also could not make any supply. In January 2004 the indentor, Central Armoured Fighting Vehicle Depot, Kirkee informed DDPS that the item was no longer required and recommended cancellation of the supply order.

Department encashed bank guarantee of Rs 2 lakh obtained from Praga Tools against the supply order towards security deposit and recovered Rs 1.89 lakh from their bills. DDPS requested the firm in August 2000 to deposit Rs 72.75 lakh on account of outstanding advance with interest. The firm stated in February 2000 that it stood referred to Board for Industrial and Financial Reconstruction (BIFR) in December 1998. According to BIFR (May 2004) the firm was stated to be under revival process.

Thus, 14 months after placing supply order and before submission of advance samples, DDPS sanctioned advance payment to the firm ignoring the guidelines issued in 1987 which authorise on account payment for raw materials and components only after grant of BPC. Further, DDPS inordinately delayed cancellation of the supply order till April 2000 while the firm was declared sick in December 1998.

Ministry stated in November 2004 that the firm requested for 'on account' advance for purchase of raw material in November 1995 as it was facing financial difficulties.

The payment of advance to a firm already in financial problems by amending the order placed on it led to non-recovery of Rs 1.17 crore including interest of Rs 71.89 lakh as of November 2004 from the firm even after a period of more than eight years.

5.2 Payment of Rs 1.01 crore to a firm before rectification of defective supplies

Issue of Inspection Note by Chief Quality Assurance Establishment (Weapon Spares) declaring stores as accepted without adequate inspection and trials resulted in payment of Rs 1.01 crore to a firm.

On the basis of Naval Headquarters indent of March 1996, Department of Defence Production and Supplies placed a supply order on Nicco Corporation Ltd., New Delhi in March 1998 for manufacture and supply of two sets of TEM-3 cable assembly at a cost of Rs 2.06 crore plus sales tax. The cable used in the mine sweeping equipment of a warship was to be developed by the firm indigenously by reverse engineering of imported cable. In terms of the delivery schedule, the first set was to be submitted within 10 months from the date of supply order and the second set within 12 months from the date of approval of the first set. Ninety five *per cent* payment was to be made on proof of despatch and production of Inspection Note prior to despatch. Balance five *per cent* payment was to be made on receipt of stores of each consignment.

The first set was offered for trial only in March 2000 after a delay of 14 months. Sea trials without AT-2 cable were conducted in late April 2000 and were considered satisfactory. Retrial with AT-2 cable was recommended and conducted. The cable was considered slightly heavy and rigid. On 17 August 2000, the Chief Quality Assurance Establishment (CQAE) Weapon Spares (WS) Mumbai observed certain defects based on trials and intimated the firm to take care of these observations while manufacturing the second set. The CQAE (WS), however, issued inspection Note on 30 August 2000 without indicating any defects, declaring the stores as accepted. Based on trials of April 2000 and this Inspection Note, Controller of Defence Accounts (Headquarters) New Delhi released 95 *per cent* payment amounting to Rs 1.01 crore to the firm in October 2000.

Subsequent trials in October 2000 and April 2002 were unsuccessful with the cable showing low insulation and damages. The cable, thereafter was taken by the firm for repair. The defective cable was being rectified by the firm as of July 2004 and was not yet handed over to the Navy.

Thus, issue of clear Inspection Note by CQAE (WS) resulted in premature release of payment to the firm leading to blockage of Government money of Rs 1.01 crore.

Further, the warships for which the cable was developed are due for decommissioning in the near future and in that eventuality, the said cable would become redundant. Besides, even after about six years, the aim of indigenising the cable still remained unfulfilled.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

5.3 Infructuous expenditure of Rs 2.77 crore on procurement of Ammunition shells

Department of Defence Production and Supplies (DDPS) did not cancel a contract despite failure of the firm to supply the item even after eight years and even when the item was no longer required. This resulted in creation of an avoidable liability of Rs 2.77 crore to the Government and undue benefit to the firm.

Ordnance Factory Chanda (OFC) placed an indent for 5000 empty shells of 155 mm HE 77B ammunition in May 1994 on DDPS in order to develop a new source of supply from civil trade. DDPS invited tenders and placed a supply order on T.S. Kisan and Company in February 1995 for supply of shells at a cost of Rs 2.77 crore. The firm was paid an advance of Rs 55.44 lakh in February 1995 against bank guarantee of equal amount plus interest for one year i.e. Rs 63.20 lakh. The firm was to submit advance samples to Senior Quality Assurance Establishment (SQAE) within seven months from the date of receipt of supply order. After approval of samples, bulk supply was to be completed within 15 months.

The firm submitted the advance samples in October 1998, three years after the due date. SQAE (Armaments) Delhi Cantonment accorded bulk production clearance on 21 April 2000. OFC withdrew its indent on 22 April 2000 on the ground that the firm failed to develop the item even after five years and requested DDPS to cancel the supply order. DDPS stated in June 2000 that bulk production clearance had been accorded and cancellation of supply order at that juncture would involve litigation and huge financial loss.

In July 2000 Ordnance Factory Board (OFB) informed DDPS that the requirement of the empty shell for 2000-2001 had been met and further supplies would not be accepted since new version of the ammunition i.e. NASCHEM had been inducted, which alone would be acceptable to the Army from 2001 onwards. To solve the *impasse*, DDPS held meetings in October 2000 and February 2001 with the Army and OFB as any cancellation of contract after payment of advance would involve legal problems. Army and OFB agreed to accept the 5000 shells under the above contract.

The firm, however, failed to supply the shells by the stipulated date of 20 July 2001 and applied for extension of delivery period in July 2001. The validity of the bank guarantee of the firm expired in August 2001 and the firm did not extend the guarantee further. The matter was referred to the Legal Advisor (Defence) in April 2002 who advised DDPS to cancel the contract treating July 2001 as the date of breach on account of non-supply of material. As regards bank guarantee, the department was advised to pursue the matter with the Banking Ombudsman.

In January 2003 DDPS decided that the item would be used for fuze proof by Director General Quality Assurance. OFC, however, intimated in March 2003 that there was sufficient stock already available which could be used for proof requirement. In spite of this, DDPS took a decision in January 2003 to amend the supply order to grant further extension of delivery period to the firm for 21 months from the date of issue of the amendment letter. However, the amendment was issued only in February 2004, more than a year after the decision, and the delivery period was fixed as November 2005. The amendment also provided for recovery of 50 *per cent* of the advance from the first bill of the firm and 25 *per cent* each from the two following bills.

Thus, the firm took three years as against seven months to submit advance samples for clearance and failed to supply the item even after eight years. Meanwhile the requirement for the item was over, the legal advisor had advised the cancellation of the supply order, yet, no performance notice was ever issued to the firm for its failure to develop the item in time. The firm also failed to validate the bank guarantee beyond August 2001 and DDPS accepted the firm's demand for adjusting the advance of Rs 63.20 lakh against the bills payable. DDPS did not even invoke the provisions of penal clause/levy of liquidated damages envisaged in the supply order against the firm for non-delivery of items, thus showing a series of extraordinary favours to the firm.

Due to the failure of DDPS to cancel the contract, the OFB would be saddled with a wasteful expenditure of Rs 2.77 crore on account of unwanted empty shells of obsolete ammunition.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

CHAPTER VI : RESEARCH AND DEVELOPMENT ORGANISATION

6.1 Failure to recover advance of Rs 12.93 crore from a foreign firm

While importing modification kits for air defence system, DRDL obtained a Bank Guarantee for advance paid in a format given by vendor. When the vendor did not supply the equipment due to arms embargo, DRDL failed to recover the advance of Rs 12.93 crore from the supplier.

In April 1998, Defence Research and Development Laboratory (DRDL) Hyderabad entered into a contract with a foreign firm for procurement and licenced production of modification kits for air defence system of Trisul Combat Vehicle. The modification kits were to be delivered by May 2000 at a cost of Netherland Guilders (NLG) 9.80 million.

As per the terms of agreement DRDL made an advance payment of NLG 2.94 million (Rs 6.32 crore) to the firm in August 1998. The bank guarantee against this payment accepted by DRDL was according to the supplier's format. To invoke the guarantee, the consent of the seller or an authentic copy of a legal award of a final judgment was needed. This was at variance with the format prescribed by the Ministry in which the bank guarantee could be invoked as soon as the contractor failed to comply with the conditions of the contract without any reference to the seller/contractor. The conditions were thus clearly loaded against the interests of the Government. The contract was to be governed by Swiss law. The disputes arising out of the contract were to be settled in Geneva.

In May 1998, the foreign country imposed sanctions in the aftermath of India's Nuclear tests and despite the likelihood of the supplies being affected by this, DRDL released a progress payment of NLG 2.94 million (Rs 6.61 crore) in December 1998 and accepted a second bank guarantee in the same format. Field acceptance test of the item was carried out in June 2001. Since the supplier did not deliver the item due to embargo, DRDL approached them for encashment of the guarantee in October 2002.

DRDL made attempts to get the stores till February 2003 and set 31 March 2003 as the cut off delivery date. The firm failed to supply the item by that time due to export restrictions. DRDL approached the Bank to encash the bank guarantees in April 2003. The Foreign Bank did not invoke the bank guarantee on the ground that the claim did not fulfill one of the conditions of payment included in the bank guarantee as quoted above. In February 2004, DRDL stated that after consultation with the Government Counsel the matter was under correspondence with the Ambassadors of Netherlands and Switzerland. Embassy of India at Netherlands stated in June 2004 that foreign Government was giving export licence in certain pending cases and the firm should be approached in this regard.

Ministry of Defence stated in October 2004 that the foreign firm had assured that they would find a way to solve the matter with mutual consent immediately. The Ministry further stated that at the time of payments, there was no information to DRDL about sanctions. Moreover, the item being a defensive and tactical system, it was expected that this would not attract sanctions. The Ministry also explained that the foreign firms with monopolistic background do not agree to format prescribed by Defence Research and Development Organisation.

The contention is not tenable as the question of format of the bank guarantee prescribed by the purchaser was not raised during negotiations and the bank guarantees remained unencashed even after over four years of delivery schedule.

Thus, failure of DRDL to obtain an appropriate bank guarantee safeguarding the interest of Government led to blocking of Rs 12.93 crore of public fund for about six years.

CHAPTER VII : BORDER ROADS ORGANISATION

7.1 Avoidable extra expenditure due to injudicious planning

Injudicious planning of expansion of a road by Border Roads Organisation led to duplication of work and avoidable extra expenditure of Rs 72.83 lakh.

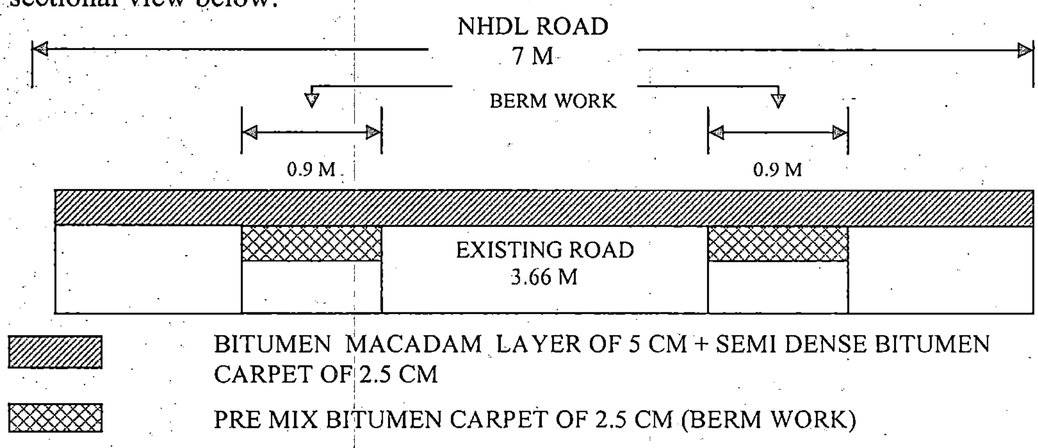
Srinagar-Sonamarg-Gumri road, a part of Srinagar-Kargil-Leh road is an important road link between Kashmir Valley and Ladakh region. Project Beacon of Border Roads Organisation looks after the road from Km 12 to 108.

Chief Engineer Project Beacon observed in July 1999 that existing class-9 road between Km 12 to 81 was not sufficient to sustain heavy traffic as its width was 3.66 metres only. It was proposed to expand it to National Highways Double Lane (NHDL) (7M). Army Headquarters approved the work in October 1999.

Meanwhile in July 1999 itself, Project Chief Engineer, anticipating delay of two to three years in land acquisition for expansion of the road to NHDL, proposed strengthening of 80 to 90 cm berms on either side of the road between Km 12 to 81. This would make two-way traffic possible without involving land acquisition. Director General Border Roads (DGBR) accepted the above proposal and sanctioned the work in November 1999 at a cost of Rs 4.02 crore. The berm work commenced in November 1999 and was completed in March 2003 at an expenditure of Rs 4.20 crore. The work included, among other items, 2.5cm bitumen work which was done at a cost of Rs 1.47 crore.

While land was yet to be acquired, DGBR also accorded three sanctions between November 2002 and August 2003 for improvement of the road to NHDL specification at three stretches of 34.225 Km between Km 12 to 81. The work of NHDL commenced in May 2002 and was in progress as of July 2004.

Bitumen work of NHDL specification involved laying a bitumen macadam layer of 5 cm thickness over which semi dense bitumen carpet of 2.5 cm thickness was to be provided. This work was to be done over the berm work as depicted in the cross-sectional view below:



The bitumen work executed during the strengthening of berm proved infructuous as the bitumen work of NHDL specification had to be done over and above this. The expenditure of Rs 72.83 lakh on the bitumen work done during berm strengthening for road length of 34.225 Km was thus avoidable.

To an audit query, DGBR stated in July 2004 that bituminous work had to be done during NHDL improvement work as the existing surface got damaged due to frequent movement of dozer etc. The reply is not tenable. DGBR instead of doing berm strengthening work could have directly taken up work on NHDL improvement given the fact that Army Headquarters had approved NHDL, as early as in October 1999. NHDL work in the 34.225 Km road stretch was done without any land acquisition, the reason cited for taking up the intermediate berm work.

The matter was referred to the Ministry in September 2004; their reply was awaited as of December 2004.

CHAPTER VIII : ORDNANCE FACTORY ORGANISATION

8.1 Performance of Ordnance Factory Organisation

8.1.1 Introduction

Ordnance Factory Board (OFB) functions under the administrative control of the Department of Defence Production and Supplies of Ministry of Defence and is headed by Director General, Ordnance Factories.

There are 39 factories divided into five product-based Operating Groups/Divisions, as given below:

Sl.No.	Name of Group	No. of Factory
i)	Ammunition & Explosives	10
ii)	Weapons , Vehicles and Equipment	10
iii)	Materials and Components	9
iv)	Armoured Vehicles	5
v)	Ordnance Equipment (Clothing & General Stores)	5

On functional basis, the factories are also classified as shown below:

Sl. No.	Name of Group	No. of factories
1.	Metallurgical	6
2.	Engineering	18
3.	Filling	5
4.	Chemical	4
5.	Equipment and clothing	6

A new propellant factory at Rajgir in Nalanda District of Bihar State has been sanctioned at a total project cost of Rs 941.13 crore work for which is under progress and Rs 207.89 crore has been incurred up to March 2004. At present 904 principal items are produced in these 39 factories, which cover nearly 75 *per cent* of gross value of production, with a man-power of 1.22 lakh employees.

8.1.2 Analysis of performance of OFB

Revenue expenditure

The expenditure under revenue head during 1999-2000 to 2003-2004 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	Total receipts	Net expenditure of ordnance factories
1	2	3	4	5	6 (2-5)
1999-2000	4994.88	5124.43	700.61	5825.04	(-) 830.16
2000-2001	6016.94	5209.17	839.54	6048.71	(-) 31.77
2001-2002	6025.11	5493.15	1102.79	6595.94	(-) 570.83
2002-2003	6464.80	5796.10	1199.21	6995.31	(-) 530.51
2003-2004	6661.56	5698.14	1289.18 *	6987.32	(-) 325.76

Though the total receipts during 2003-2004 decreased by 0.11 *per cent* as compared to the previous year, the total expenditure increased by 3.04 *per cent*.

Value of production

The following table indicates the group-wise/ element-wise break up of expenditure incurred during the year to arrive at the value of production for 2003-04 and percentage of various elements to the value of production:

(Rupees in crore)

Sl. No.	Name of the Group	Value of production	Direct Store and % to value of production	Value added and % to value of production	DL and % to value of production	Overhead charges			
						IDL and % to value of production	IDS and % to value of production	Other expenditure* % to value of production	Total over heads & % to value of production
1	Material & Component Group	1060.01	414.46 (39.10)	645.55 (60.90)	99.59 (9.40)	143.52 (13.54)	87.36 (8.24)	315.08 (29.72)	545.96 (51.51)
2	Weapon, Vehicle and Equipment Group	2182.43	1281.98 (58.74)	900.45 (41.26)	167.28 (7.66)	218.19 (10.00)	115.14 (5.28)	399.84 (18.32)	733.17 (33.59)
3	Ammunition and Explosive Group	2798.03	2096.12 (74.91)	701.91 (25.09)	126.35 (4.52)	170.54 (6.10)	115.52 (4.13)	289.50 (10.35)	575.56 (20.57)
4	Armoured Vehicle Group	1567.13	1213.61 (77.44)	353.52 (22.56)	48.05 (3.07)	57.57 (3.67)	50.77 (3.24)	197.13 (12.58)	305.47 (19.49)
5	Ord. Equipment Group	645.45	396.13 (61.37)	249.32 (38.63)	95.91 (14.86)	57.58 (8.92)	16.09 (2.49)	79.74 (12.35)	153.41 (23.77)
	Total	8253.05	5402.30 (65.46)	2850.75 (34.54)	537.18 (6.51)	647.40 (7.84)	384.88 (4.66)	1281.29 (15.53)	2313.57 (28.03)

During 2003-04, the total value of production was Rs 8253.05 crore with 65.46 *per cent* direct material, 6.51 *per cent* direct labour and 28.03 *per cent* overheads. Ammunition & Explosive group of factories registered the highest value of

* *Other receipts and recoveries include receipt on account of transfer from 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 receipt.*

* *Other expenditure includes supervision charges, contingent charges, superannuation charges, depreciation charges, transportation charges, and cost of DGOF, cost of DAD charges and other miscellaneous charges.*

production of Rs 2798.03 crore with material 74.91 *per cent*, labour 4.52 *per cent* and 20.57 *per cent* overhead while OEF Group of factories registered the lowest value of production of Rs 645.45 crore with 61.37 *per cent* material, 14.86 *per cent* labour and 23.77 *per cent* overhead. Average overhead charges of the OFB Organisation were 28.03 *per cent*. While Material & Component Group registered the highest at 51.51 *per cent* and Armoured Vehicle Group registered the lowest at 19.49 *per cent*, the direct labour and indirect labour percentage to the value of production overall was 6.51 *per cent* and 7.84 *per cent* respectively.

Production programme

Production programme for ammunition, weapon & vehicle, material & component and armoured vehicle items are fixed for one year, while four-yearly production programme is fixed for equipment items. Production of several items for which targets had been fixed by Ordnance Factory Board was behind schedule. Details showing the items for which demands existed, target was fixed and the number of items in respect of which production was behind schedule during the last five years are shown below:

Year	No of items for which demands existed	No of items for which target fixed	No. of items manufactured as per target	No. of items for which target fixed but production was behind schedule
1999-2000	364	307	238	69
2000-2001	375	284	196	88
2001-2002	423	344	265	79
2002-2003	431	354	278	76
2003-2004	462	368	270	98

According to the Ministry of Defence, the delay in production was attributed to various factors, individually and/or collectively, as follows:

a) Late finalisation of annual target.
b) Delay in placement of covering indents.
c) Delay in issuing clearance of designs and other particulars from respective Authority Holding Sealed Particulars in case of new items.
d) Modification of designs for existing items.
e) Sudden increase in target by the indentors in the middle of the financial year.
f) Urgency shown by some indentors for some particular items with enhanced target, affecting the target of same items for other indentors.
g) Unforeseen problem and delay in development for some items.
h) Delay in inspection proof and acceptance.
i) Long lead time required in procurement of some input materials particularly in case of imported ones, after receipt of indent.

Spill over production

It was noticed that during the financial year 2003-2004, although the full production and issues as per target were reported in respect of 23 major items, their actual production spilled over beyond March 2004. The production and actual issues in respect of 11 out of 23 items were yet to be completed as of June 2004. The value of spill over items for the year 2003-2004 was Rs 412.87 crore out of the total value of production of Rs 8253.03 crore as against Rs 347.21 crore reported for the year 2002-03 out of total value of production of Rs 7908.69 crore. The percentage of spill over items to the value of production went up from 4.39 *per cent* in 2002-03 to five *per cent* in 2003-04.

Issue to users

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

(Rupees in crore)

Name of Indentors	1999-2000	2000-01	2001-02	2002-03	2003-04
Army	4637.33	4544.74	4870.67	5215.53	5121.04
Navy	85.24	86.93	84.81	71.27	66.84
Air Force	105.80	170.63	193.17	226.29	229.59
MES, Research and Development (Other Defence Department)	126.41	124.83	162.89	150.38	95.25
Total Defence	4954.78	4927.13	5311.54	5663.47	5512.72
Civil Trade and Export	498.96	603.07	719.35	840.20	972.24
Total issues	5453.74	5530.20	6030.89	6503.67	6484.96

8.1.3 Civil Trade and Export

Civil Trade

The ordnance factories undertook civil trade as a corporate policy in July 1986 for optimal utilisation of capacities and to lessen dependence on budgetary support.
The turnover from civil trade other than supplies to the Ministry of Home Affairs and State Police Departments during 1999-2000 to 2003-04 was as under:

(Rupees in crore)

Year	Number of factories involved	Target	Achievement	Percentage of achievement
1999-2000	38	206.49	206.38	99.95
2000-2001	38	220.22	235.72	107.04
2001-2002	38	245.00	272.56	111.25
2002-2003	38	298.00	274.19	92.01
2003-2004	34	278.30	278.71	100.15

Export

The following table shows the achievement with reference to target in export from 1999-2000 to 2003-2004:

(Rupees in crore)

Year	Factories involved	Target	Achievement	Percentage of achievement
1999-2000	11	8.50	6.19	72.82
2000-2001	15	10.00	11.79	117.90
2001-2002	15	35.00	35.32	100.91
2002-2003	17	60.00	59.52	99.20
2003-2004	16	90.50	103.00	113.81

Thus, the targets set for civil trade and export during the year 2003-04 were fully achieved by ordnance factory organisation.

8.1.4 Inventory management

Stock holdings

As per the existing provisioning policy, the ordnance factories are authorised to hold stock of different types of stores as under:

Sl. No	Types of stores	Months requirement to be held in stock
1.	Imported items	12 months
2.	Difficult indigenous items	9 months
3.	Other indigenous items	6 months

Status of inventory holding

The position of **total inventory holdings** during 1999-2000 to 2003-2004 was as under:

(Rupees in crore)

Sl. No.	Particulars	1999-00	2000-01	2001-02	2002-03	2003-04
1.	Working stock					
a.	Active	1590.70	1640.35	1747.65	1497.63	1524.88
b.	Non-moving	139.26	157.50	146.91	220.02	196.46
c.	Slow moving	105.78	129.11	169.04	232.99	215.01
	Total Working Stock	1835.74	1926.96	2063.60	1950.64	1936.35
2	Waste & Obsolete	31.57	9.36	4.99	13.80	15.94
3.	Surplus/ Scrap	38.59	59.29	73.33	34.51	47.16
4.	Maintenance stores	80.63	87.37	75.60	75.49	93.20
	Total	1986.53	2082.98	2217.52	2074.44	2092.65
5.	Average holdings in terms of number of days' consumption	158	162	155	144	127
6.	Percentage of total slow-moving and non-moving stock to total working stock	13.34	14.87	15.31	23.22	21.25

Average holding in terms of number of day's consumption was within normal limits during 2003-2004

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

(Rupees in crore)

Particulars	1999-2000	2000-01	2001-02	2002-03	2003-04
Holding of Finished articles	89.33	90.75	131.62	93.52	132.66
Total value of production	7086.49	7224.11	7612.07	7908.69	8253.05
Holding of finished stock in terms of no. of days issue	4	4	6	4	6
Holding in terms of percentage of total value of production	1.26	1.17	1.72	1.18	1.61
Finished component holding	483.79	519.63	471.28	390.73	429.45
Holding of finished components in terms of no. of days consumption	124	143	100	32	63

As on 31 March 2004 the values of finished stock holding and finished component holding increased by 41.85 *per cent* and 31 days consumption respectively as compared to the position as of March 2003.

Work- in- progress

The General Manager of an Ordnance Factory authorises a production shop to manufacture an item in the given quantity by issue of warrant, whose normal life is six months. Unfinished items pertaining to different warrants lying at the shop floor constitute work in progress. The position of work in progress during the last five years is as follows:

(Rupees in crore)

As on 31 March	Value of work in progress
2000	1049. 00
2001	1052. 00
2002	1065. 33
2003	1032. 87
2004	1479. 29

The total value of work-in-progress as on 31 March 2004 increased by 43.22 *per cent* as compared to the previous year. The details regarding yearwise position of outstanding warrants were called for from Principal Controller of Accounts (Fys.), Kolkata but could not be made available to audit.

8.1.5 Losses written off

The table below depicts losses written off by competent financial authorities:

(Rupees in lakh)

Sl. No.	Particulars	1999-00	2000-01	2001-02	2002-03	2003-04
1	Over issue of pay & allowances and claims abandoned	3.20	6.83	27.00	0.00	32 . 07
2	Losses due to theft, fraud or neglect	5.77	0.79	13.12	32.32	-
3	Losses due to deficiencies in actual balance not caused by theft, fraud or neglect	0.27	6.51	5.26	25.14	1 . 38
4	Losses in transit	44.97	39.07	5.33	14.74	2 .40
5	Other causes (e.g conditioning of stores not caused by defective storage, stores scrapped due to obsolescence, etc.)	54.86	119.70	8.28	31.60	48 . 59
6	Defective storage loss	0.68	0.58	20.42	2.21	0 . 04
7	Manufacturing Losses	595.93	603.19	775.57	1061.85	643 . 24
	Total	705.68	776.67	854.98	1167.86	727 . 72

As of March 2004, 163 cases of losses amounting to Rs 36.07 crore were awaiting regularisation by the Ministry of Defence for more than one year. The oldest item relates to 1964-65.

8.1.6 Manpower

Employees of the Ordnance Factory Organisation are classified as (i) "Officers",who man senior supervisory levels,(ii) "Non-Gazetted" (NGO) or "Non-Industrial" (NIEs) employees who man junior supervisory levels & 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 numbers)

Category of employees	1999-00	2000-01	2001-02	2002-03	2003-04
Officers	4043	3853	3863	4119	4000
Percentage of officers to total manpower	2.77	2.77	2.90	3.24	3.27
NGO/NIEs	42334	40792	38883	36893	35247
Percentage of NGOs/NIEs to total manpower	28.98	29.29	29.21	28.97	28.84
IEs	99693	94611	90347	86303	82965
Percentage of IEs to total manpower	68.25	67.94	67.88	67.79	67.89
Total	146070	139256	133093	127315	122212

8.1.7 Capacity utilisation

The table below indicates the extent to which the capacity had been utilised in terms of Machine Hours during the last five years:

(Capacity utilisation in terms of Machine Hours)

(Unit in lakh hours)

Year	Machine hours available	Machine hours utilised
1999-2000	1875	1368
2000-2001	2144	1715
2001-2002	1923	1427
2002-2003	1824	1356
2003-2004	1734	1311

8.1.8 Analysis of value of Production

Overhead Charges

The details of overheads in relation to value of production in respect of various ordnance factories during the last five years from 1999-2000 to 2003-2004 are shown below:

(Rupees in crore)

Division	Year	FOH	VOH	Total OH Charges	Value of production	Percentage of OH to Value of production
Materials and Components	1999-2000	242.06	235.17	477.23	941.57	50.68
	2000-2001	252.18	250.67	502.85	1008.91	49.84
	2001-2002	265.31	255.09	520.40	1064.54	48.88
	2002-2003	269.63	267.39	537.02	1155.50	46.48
	2003-2004	285.62	260.34	545.96	1060.01	51.50
Weapons, Vehicles and Equipment	1999-2000	444.70	271.40	716.10	1765.37	40.56
	2000-2001	471.77	292.39	764.16	1926.40	39.67
	2001-2002	460.31	284.89	745.20	1960.94	38.00
	2002-2003	444.99	323.56	768.55	2168.29	35.45
	2003-2004	447.03	286.14	733.17	2182.43	33.59
Ammunitions and Explosives	1999-2000	322.90	193.86	516.76	2686.98	19.23
	2000-2001	374.22	211.81	586.03	2976.20	19.69
	2001-2002	361.50	208.19	569.69	3217.14	17.70
	2002-2003	317.12	260.39	577.51	3159.82	18.28
	2003-2004	365.82	209.74	575.56	2798.03	20.57
Armoured Vehicles	1999-2000	226.03	115.16	341.19	1185.59	28.78
	2000-2001	196.20	97.07	293.27	768.00	38.18
	2001-2002	205.31	93.29	298.60	803.12	37.18
	2002-2003	178.63	82.71	261.34	840.49	31.09
	2003-2004	212.71	92.76	305.47	1567.13	19.49

(Rupees in crore)

Division	Year	FOH	VOH	Total OH Charges	Value of production	Percentage of OH to Value of production
Ordnance Equipment Factories	1999-2000	83.53	61.44	144.97	506.99	28.59
	2000-2001	94.93	58.66	153.59	544.58	28.20
	2001-2002	88.12	54.44	142.56	566.33	25.17
	2002-2003	91.30	53.37	144.67	584.59	24.75
	2003-2004	96.33	57.07	153.40	645.45	23.77
Grand total - Ordnance Factories as a whole	1999-2000	1319.22	877.03	2196.25	7086.50	31.00
	2000-2001	1389.31	910.60	2299.91	7224.11	31.84
	2001-2002	1380.57	895.91	2276.48	7612.07	29.90
	2002-2003	1301.67	987.42	2289.09	7908.69	28.94
	2003-2004	1407.52	906.05	2313.57	8253.05	28.03

It would be seen from the table above that the percentage of overheads to the value of production was more in respect of factories classified under M&C Division where overheads formed 46 to 51 *per cent* of the value of production.

Man power

The details of direct labour, indirect labour, total wages, supervision charges, ratio of supervision charges to total wages and the ratio of supervision charges to direct labour in respect of various ordnance factories (division-wise) as well as for ordnance factories as a whole during the last five years from 1999-2000 to 2003-2004 are shown below:

(Rupees in crore)

Division	Year	Direct Labour	Indirect Labour	Total wages	Supervision charges	Ratio of Supervision charges to total wages	Ratio of Supervision charges to direct labour
Materials and Components	1999-00	74.89	130.36	205.25	105.59	0.51:1	1.41:1
	2000-01	92.98	133.57	226.55	116.64	0.51:1	1.25:1
	2001-02	99.12	127.52	226.64	117.63	0.51:1	1.18:1
	2002-03	105.68	127.33	233.01	120.18	0.51:1	1.13:1
	2003-04	100.32	143.51	243.83	117.15	0.48:1	1.17:1
Weapons, Vehicles and Equipment.	1999-00	124.67	215.95	340.62	197.63	0.58:1	1.58:1
	2000-01	157.18	223.22	380.40	210.64	0.55 :1	1.34:1
	2001-02	166.41	212.94	379.35	202.19	0.53:1	1.21:1
	2002-03	167.95	206.43	374.38	207.93	0.55:1	1.23:1
	2003-04	168.75	218.19	386.94	202.76	0.52:1	1.20:1
Ammunitions and Explosives	1999-00	107.91	155.27	263.18	181.20	0.68:1	1.68:1
	2000-01	140.16	161.72	301.88	195.83	0.65:1	1.39:1
	2001-02	152.73	160.68	313.41	201.66	0.64:1	1.32:1
	2002-03	156.39	175.64	332.03	203.76	0.61:1	1.30:1
	2003-04	156.67	170.54	327.21	208.87	0.64:1	1.33:1

(Rupees in crore)

Division	Year	Direct Labour	Indirect Labour	Total wages	Supervision charges	Ratio of Supervision charges to total wages	Ratio of Supervision charges to direct labour
Armoured Vehicles	1999-00	41.33	45.75	87.08	69.14	0.79:1	1.67:1
	2000-01	43.81	50.71	94.52	72.11	0.76:1	1.64:1
	2001-02	43.67	48.59	92.26	73.07	0.79:1	1.67:1
	2002-03	45.15	54.56	99.71	80.02	0.80:1	1.77:1
	2003-04	47.23	57.57	104.80	81.35	0.78:1	1.72:1
Ordnance Equipment Factories	1999-00	76.20	57.00	133.20	43.91	0.32:1	0.57:1
	2000-01	91.67	55.60	147.27	52.16	0.35 :1	0.57:1
	2001-02	93.15	48.66	141.81	45.68	0.32:1	0.49:1
	2002-03	97.29	51.85	149.14	46.22	0.31:1	0.47:1
	2003-04	95.84	57.58	153.42	44.17	0.29:1	0.46:1
Grand total - Ordnance Factories as a whole	1999-00	425.00	604.33	1029.33	597.47	0.58:1	1.40:1
	2000-01	525.80	624.82	1150.62	647.38	0.56:1	1.23:1
	2001-02	555.08	598.39	1153.47	640.24	0.55:1	1.15:1
	2002-03	572.46	615.81	1188.27	658.11	0.55:1	1.15:1
	2003-04	568.81	647.39	1216.20	654.30	0.54:1	1.15:1

8.2 Performance of Ordnance Equipment Group of factories

8.2.1 Highlights

- **Despite unutilised standard man-hours, the management of Ordnance Clothing Factory Avadi and Ordnance Clothing Factory Shahjahanpur paid overtime of Rs 22.99 crore, out of which Rs 16.81 crore was largely avoidable with effective utilisation of man-hours.**

(Paragraph 8.2.5)

- **Ordnance Equipment Factories Group Headquarters overstated the figures of production and issues of certain items in the Achievement Reports though all the items were not actually manufactured and issued during the particular years.**

(Paragraph 8.2.6)

- **Despite the Ordnance Factory Board's assurance to minimize the spill-over production, it sharply increased from Rs 16.73 crore in 1999-2000 to Rs 171.92 crore in 2003-04.**

(Paragraph 8.2.6)

- **Material and labour cost of the same items produced by two or more factories varied significantly. Compared to the lowest cost of material and labour charged by one of the factories producing similar items, the implications in terms of expenditure were Rs 62.96 crore in respect of 28 items test checked.**

(Paragraph 8.2.6)

- **The management of Ordnance Clothing Factory Shahjahanpur and Ordnance Parachute Factory Kanpur created excess capacity with reference to the existing workload by way of procurement of 56 socks knitting machines.**

(Paragraph 8.2.10)

- **The management of Ordnance Equipment Factory Hazratpur and Ordnance Clothing Factory Avadi failed to obtain good value for money from an investment of Rs 2.23 crore for line concept/assembly systems due to low output of the system in the former and non-commissioning of the equipment in the latter.**

(Paragraph 8.2.11)

8.2.2 Introduction

Ordnance Equipment Factories Group comprises five factories of Ordnance Equipment Factory Kanpur, Ordnance Clothing Factory Shahjahanpur, Ordnance Clothing Factory Avadi, Ordnance Parachute Factory Kanpur and Ordnance Equipment Factory Hazratpur. These factories are under the control of Ordnance Equipment Factories Group Headquarters at Kanpur which is headed by a Member of the Ordnance Factory Board. These factories meet the requirements of the Armed

Forces for clothing items, combat uniforms, parachutes, tents, boot-ankles, blankets and mosquito-nets etc.

8.2.3 Scope of audit

Performance audit of the Ordnance Equipment Group of factories for the period 1999-2000 to 2003-04 was conducted during February – June 2004 through test check of documents maintained by the factories and Ordnance Equipment Factories Group Headquarters, Kanpur.

8.2.4 Audit objectives

The overall objective of audit was to assess the extent to which the Ordnance Equipment Group of factories are functioning efficiently, economically and effectively to meet the requirement of the Services.

8.2.5 Capacity utilisation

Machine-hours

The annual availability of machine-hours is computed on the basis of average number of machines held in production section multiplied by 3840 working hours. Percentages of utilisation of available machine-hours in respect of the five factories during 1999-2000 to 2003-04 were as under:

Name of the Factory	Percentage of utilisation of machine-hours				
	1999-2000	2000-01	2001-02	2002-03	2003-04
Ordnance Clothing Factory Shahjahanpur	38	50	51	49	18
Ordnance Equipment Factory Kanpur	62	62	62	62	62
Ordnance Clothing Factory Avadi	68	65	63	66	69
Ordnance Parachute Factory Kanpur	100	68	76	54	53
Ordnance Equipment Factory Hazratpur	113	87	87	70	68

The utilisation of machine-hours was generally unsatisfactory. In particular the machine-hour utilisation in Ordnance Clothing Factory Shahjahanpur was consistently low, at 18 to 51 *per cent*. In Ordnance Parachute Factory Kanpur, the utilisation was declining and touched a low of 54 and 53 *per cent* during 2002-03 and 2003-04. Further, the figures for machine-hour utilisation for the years from 1999-2000 to 2002-03 furnished by the management of Ordnance Clothing Factory Shahjahanpur to Audit were inconsistent with the quarterly machine-hour utilisation data reported by them to the Ordnance Factory Board as indicated below:

Machine-hours utilised		(in lakh hours)
Year	**As furnished to Audit**	**As reported to Ordnance Factory Board**
1999-2000	69.56	(for three quarters only) 0.73
2000-01	67.10	0.91
2001-02	68.53	22.04
2002-03	66.53	22.28

The factory management did not, however, furnish the basis on which the data reported to Audit had been compiled. In view of material variation between two sets of figures with regard to machine-hours utilisation in all the years in question, the performance of the factory can not be determined correctly. Besides, none of the factory managements maintained any basic/primary records, indicating shop-wise and machine-wise utilisation.

Manpower

The ordnance factory management determines the manpower capacity in terms of input SMH[⊖] on the basis of number of direct industrial employees (IEs) engaged in production activities and quantifies the workload accomplished by the factory in terms of output SMH utilised in production.

In two factories, the available SMH was not fully utilised. Yet the management resorted to work on overtime basis as under:

Year	SMH available (in lakh hours)	Total SMH utilised (in lakh hours) including OT	Overtime allowed		Avoidable overtime	
			Hours (Lakh)	Payment (Rs in lakh)	Hours (Lakh)	Amount (Rs in lakh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Ordnance Clothing Factory Avadi					
2000-01	46.53	45.13	13.98	469.70	13.98	469.70
2001-02	43.89	45.28	12.00	488.37	10.61	431.80
2002-03	43.33	42.33	13.46	620.88	13.46	620.88
Total			**39.44**	**1578.95**		**1522.38**
	Ordnance Clothing Factory Shahjahanpur					
2001-02	76.72	96.24	25.05	720.18	5.53	158.99

It would be seen from the above that the management of Ordnance Clothing Factory Avadi paid Rs 15.79 crore towards overtime wages for 39.44 lakh hours during 2000-01 to 2002-03. Out of this, payment of Rs 15.22 crore was avoidable in view of underutilisation of available SMH. Similarly, the management of Ordnance Clothing Factory Shahjahanpur could have avoided the payment of Rs.1.59 crore towards overtime wages during 2001-02 by fully exploiting the SMH available. Proper planning of the production could avoid payment of overtime by utilisation of unutilised man-hours.

8.2.6 Production performance

Incorrect reporting of issues

Ordnance Equipment Factories Group Headquarters fix production targets for various items before the commencement of a financial year on the basis of outstanding orders at the beginning of the year, delivery schedule and the capacity in the five factories in terms of machinery and manpower. They report the details of annual target, production and issue for various items to the Ordnance Factory Board and the Ministry through Achievement Report in March every year. Examination of documents disclosed that the Ordnance Equipment Factories Group Headquarters

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⊖ *SMH → Standard man-hours*

overstated the figures of production and issue by Rs 52.58 crore in the Achievement Reports for the years 1999-2004 in respect of only three factories. Annual Achievement Reports in respect of Ordnance Equipment Factory Hazratpur and Ordnance Equipment Factory Kanpur were not made available to Audit. The factories were yet to complete the targeted production and issues for the items physically as of 31 March but these were reported as produced in the factories and issued to the Services. A few such cases are detailed in the Annexure-II. The year-wise consolidated position of issues reported in excess was as under:

(Rupees in lakh)

Year	Factory involved	Number of Items	Issues reported in excess in the achievement
1999-2000	Ordnance Parachute Factory Kanpur	6	224.88
2000-01	Ordnance Parachute Factory Kanpur	6	274.59
2001-02	Ordnance Parachute Factory Kanpur	4	620.64
	Ordnance Clothing Factory Shahjahanpur Ordnance Clothing Factory Avadi	3	628.45
2002-03	Ordnance Parachute Factory Kanpur	4	428.98
	Ordnance Clothing Factory Shahjahanpur	1	812.29
	Ordnance Clothing Factory Avadi	2	52.21
2003-04	Ordnance Clothing Factory Shahjahanpur	4	1485.88
	Ordnance Parachute Factory Kanpur	8	729.81
			Total Rs 5257.73 lakh

This resulted in concealment of shortfalls in production and issue with reference to the targets. Thus, the Ordnance Equipment Factories Group Headquarters failed to effectively and efficiently monitor the performance reporting.

Spill-over production

The manufactured items are accepted after inspection. The accepted items are brought on charge in the production ledger. Issues of the items are subsequently made to the indentors through production issue vouchers. Scrutiny of records revealed that the factories were showing a good number of items as issued to the indentors by 31 March of a financial year though many items were neither actually manufactured nor physically issued to the indentors during the particular years. They completed the actual production and issues of the left-over quantity in the subsequent years. Such cases are referred to as 'spill-over production'.

The quantum of factory-wise 'spill-over production'/'issues' during the last five years are indicated below:

(Rupees in crore)

Year	Ordnance Equipment Factory Kanpur	Ordnance Clothing Factory Shahjahanpur	Ordnance Parachute Factory Kanpur	Ordnance Clothing Factory Avadi	Ordnance Equipment Factory Hazratpur	Total
1999-2000	Nil	Nil	5.93	10.80	Nil	16.73
2000-01	50.00	32.23	14.60	6.67	Nil	103.50
2001-02	40.93	37.17	17.41	8.48	6.57	110.56
2002-03	52.32	49.36	14.65	29.38	6.03	151.74
2003-04	100.04	34.90	12.53	21.03	3.42	171.92

Due to 'spill-over production', the expenditure on production towards material and labour may be incurred in the following year either in full or in part even though the issues have been accounted for in the current year. Some of the accounting implications arising out of this situation are as follows :

- In the year of 'reported' issue, either partial or no expenditure is booked under labour and material, whereas full credit is taken for inflating the value of production and value of issues in the Finished Stock Account. Some of the details of labour (SMH) booked by the factories during 2003-04 in order to liquidate the 'spill-over production' of 2002-03 are indicated below:

Name of the factory	Labour booked (in lakh SMH)
Ordnance Equipment Factory Kanpur	12.09
Ordnance Clothing Factory Shahjahanpur	19.71
Ordnance Parachute Factory Kanpur	3.63
Ordnance Clothing Factory Avadi	7.00
Ordnance Equipment Factory Hazratpur	0.42

- In the subsequent years i.e. the years of actual manufacture and issue, although the expenditure towards manufacture of spill-over items is fully booked in the Production Account, no credit of payment is taken for the issues of the spill-over items, thereby rendering the value of issues understated in the Finished Stock Account.

This affects the reliability and correctness of the Annual Accounts of the Ordnance Factory Organization and is inconsistent with the established accounting principles and does not represent a true and fair view.

Although the Ordnance Factory Board in the context of 'spill-over' up to 2001 had stated in January 2002 that all out efforts were being made to minimize the spill-over transaction, the same showed an increasing trend in the Ordnance Equipment Group of factories as depicted below:

			(Rupees in crore)
Year	**Total value of production in Ordnance Equipment Group**	**Total value of spill -over production**	**Percentage of spill-over to value of production**
1999-2000	506.99	16.73	3
2000-01	544.58	103.50	19
2001-02	566.33	110.56	20
2002-03	584.59	151.74	26
2003-04	645.46	171.92	27

The management's responses with regard to the spill-over transactions is summarised as under:

Name of the factory	Management's response
Ordnance Equipment Factory Hazratpur	Completing the spill-over target of previous year is a regular feature.
Ordnance Equipment Factory Kanpur	Manufacture of items was reported in advance to appropriate the budget of various indentors.
Ordnance Clothing Factory Shahjahanpur	Spill-over was due to uneven and interrupted supply of basic materials.
Ordnance Clothing Factory Avadi	Non-availability/deficiency of basic material.

The ordnance equipment group of factories were yet to liquidate spill-over production amounting to Rs 41.68 crore as of October 2004 in respect of the spill-over production reported for the year 2003-04. Ordnance Clothing Factory Shahjahanpur was yet to liquidate the spill-over transactions even for the years 2001-02 and 2002-03, involving 29 and 17 items respectively as of April 2004. Similarly, Ordnance Clothing Factory Avadi was yet to liquidate the spill-over production in respect of two items for 2002-03 even as of March 2004. Details for the remaining three factories were not made available to Audit.

Wide variation in cost for common items of production

Certain items are simultaneously manufactured in two or more factories. Based on sample comparative analysis of the rates for the items categorized under the same work order and description, it was noticed that there was wide variation in the unit cost of production of certain items manufactured in different factories. Compared to the higher cost of production charged in case of production of the same item in two or more factories and the minimum cost in any one of them, there was an extra expenditure of Rs 62.96 crore in respect of 28 items selected for scrutiny. Significant variation noticed in the cost of material, labour and overheads are depicted in Annexure-III.

It would be seen therefrom that the variation in the material cost ranged between eight and 38 *per cent* and those for labour and overhead costs ranged up to 1804 and 1516 *per cent* respectively.

General Manager Ordnance Clothing Factory Avadi stated in March 2004 that the variation in material cost between Kanpur group of factories and Avadi existed due to difference in transportation cost, while the differences in labour cost occurred because of difference in hourly labour rates. The reply is not verifiable in the absence of data in support of this contention. However, material and labour estimates of similar items were identical. The management of Ordnance Clothing Factory Shahjahanpur stated in March 2004 that exercise to contain the unit cost was an ongoing process and admitted that no comparative study was made at factory level.

Thus, the wide variation in cost for common items of production not only signifies slackness in exercising cost control but also affects the overall economy in production in the factories where the cost is high.

Shortfall in supplies of principal items

Significant shortfall in production and supply of certain principal items to the Services with reference to their outstanding orders during 1999-2000 to 2003-04 was noticed. A few such cases test checked are depicted below:

Items	Outstanding order as of 1 April 1999 plus subsequent orders received up to March 2004	Total during 1999-2000 to 2003-04 as per Achievement Report		Shortfall in issue with reference to outstanding order as of March 2004
		Target	Issue	
(1)	(2)	(3)	(4)	(5)
Coat Combat ICK	6,81,316	4,20,000	4,40,000	2,41,316
Jacket Combat ICK	22,58,610	18,21,500	18,21,500	4,37,110
Socks Men wool OG	1,05,74,944	65,00,000	66,81,500	38,93,444
Socks Woolen Heavy Khaki	17,18,313	13,18,000	14,31,166	2,87,147
Shorts Men PC Khaki	35,04,004	23,00,000	23,30,016	11,73,988
Boot Ankle DVS	38,98,042	23,00,000	23,00,000	15,98,042
Shirt Men Angola Drab	48,34,846	33,65,000	33,42,609	14,92,237
Blanket Barrack Type 'A' NG	29,14,201	17,00,000	17,30,000	11,84,201
Trouser Serge BD	32,55,278	25,04,020	24,54,020	8,01,258
Jersey Woolen OG 'V' Neck	29,76,952	21,25,000	20,85,000	8,91,952
Shirt Plain Weave PC OG	23,49,250	20,10,000	15,20,000	8,29,250
Trouser Plain Weave PC OG	27,14,484	20,60,000	15,71,450	11,43,034
Jacket Combat Drill Disruptive	47,67,520	31,50,000	33,35,000	14,32,520
Trouser Combat Drill Disruptive	37,72,168	31,30,000	32,40,033	5,32,135
Overall Combination Drill Disruptive	36,06,804	18,55,000	19,77,850	16,28,954
Bag Kit Universal OG	22,00,029	14,50,000	14,50,000	7,50,029
Brake Parachute (Mig 21 Aircraft)	5192	4185	4285	907
Brake Parachute (Mirage 2000 Aircraft)	526	432	346	180

The production and supplies were not commensurate with the requirement of the services resulting in significant deficiencies of the clothing and equipment items at their end. In fact, the quantum of deficiencies in supplies would go up further if the quantum of spill-over production as of March 2004 is excluded.

8.2.7 Analysis of overheads

Value of production(VOP) mainly includes direct material, direct labour and overheads. Overheads charged in the ordnance factory are classified into variable and fixed according to the nature of expenses.

Factory-wise value of production and percentage of overheads to the value of production of Ordnance Equipment Factories Group, during 1999-2000 to 2003-04 are shown below:

(Rupees in crore)

Factory	1999-2000		2000-01		2001-02		2002-03		2003-04		Average
	VOP	Overheads (percentage to VOP)	VOP	Overheads (percentage to VOP)	VOP	Overheads (percentage to VOP)	VOP	Overheads (percentage to VOP)	VOP	Overheads (percentage to VOP)	
Ordnance Equipment Factory Kanpur	180.22	45.39 ***(25)***	187.95	47.92 ***(25)***	186.22	42.97 ***(23)***	234.65	43.06 ***(18)***	215.66	49.91 ***(23)***	23
Ordnance Clothing Factory Shahjahanpur	152.08	46.44 ***(31)***	159.19	51.52 ***(32)***	172.66	48.21 ***(28)***	142.83	43.38 ***(30)***	220.75	46.24 ***(21)***	28
Ordnance Clothing Factory Avadi	79.82	26.04 ***(33)***	85.91	26.38 ***(31)***	95.86	23.70 ***(25)***	89.71	27.77 ***(31)***	92.24	26.53 ***(29)***	30
Ordnance Parachute Factory Kanpur	70.06	20.32 ***(29)***	81.41	19.78 ***(24)***	80.82	20.02 ***(25)***	83.38	22.12 ***(27)***	84.19	22.48 ***(27)***	26
Ordnance Equipment Factory Hazratpur	24.81	6.77 ***(27)***	30.12	7.99 ***(27)***	30.77	7.67 ***(25)***	34.02	8.35 ***(25)***	32.62	8.23 ***(25)***	26

The percentage of overheads to the value of production of the factories ranged between 18 and 33 during 1999-2004. Ordnance Clothing Factory Shahjahanpur and Ordnance Clothing Factory Avadi which had the highest percentage of overheads attributed this to high indirect labour and supervision charges as compared to direct labour.

The managements may take effective measures to reduce the overheads by curtailing expenditure on indirect labour and supervision charges, especially for these two factories to secure economy in production.

8.2.8 Non-moving and blocked inventory

Non-moving stores are those which have not been drawn for the purpose of production for a period of three years or more from the date of their receipt. Blocked inventory represents raw materials, semi-finished or finished articles arising out of abrupt cancellation/shortclosure of orders by the indentors and for which there is no prospect of utilisation.

The year-wise details of non-moving stores in the five factories were as under:

(Rupees in lakh)

Name of the factory	Value of non-moving stores as of 31 March				
	2000	2001	2002	2003	2004
Ordnance Clothing Factory Avadi	68.64	20.44	154.38	91.30	104.24
Ordnance Parachute Factory Kanpur	59.55	52.12	50.57	78.58	95.46
Ordnance Equipment Factory Kanpur	53.19	75.23	74.60	85.49	206.61
Ordnance Equipment Factory Hazratpur	7.07	Nil	1.06	4.54	5.86
Ordnance Clothing Factory Shahjahanpur	2.53	1.47	0.77	0.20	0. 24
Total	**190.98**	**149.26**	**281.38**	**260.11**	**412.41**

It would be seen from the above that the value of non-moving stores has increased more than two fold, from Rs 1.91 crore as of March 2000 to Rs 4.12 crore as of March 2004. Ordnance Equipment Factory Kanpur, Ordnance Clothing Factory Avadi and Ordnance Parachute Factory Kanpur among them were consistently holding most of the non-moving stores during all these years.

The factory management should explore possibility of utilising the stores in their own or other factories or initiate action for their disposal.

In addition to the non-moving inventory, two factories held blocked inventory to the tune of Rs 86.62 lakh due to foreclosure of orders as of March 2004 as under:

(Rupees in lakh)

Factory	Value of blocked inventory
Ordnance Parachute Factory Kanpur	81.60
Ordnance Clothing Factory Avadi	5.02

8.2.9 Monitoring and internal control

In order to carry on the planning, production and other related activities in an efficient manner, to ensure adherence to management policies, to safeguard the assets and to secure the completeness and accuracy of the records, various types of executive and financial controls are required to be implemented in any organisation. The important control areas in functioning of Ordnance Equipment Group of factories embrace mainly planning and production, inventory, quality, human resource, cost and accounting and internal audit.

Certain instances of inadequate control and lack of proper monitoring noticed during test check of records are discussed below:

Based on the indents received from the users, Ordnance Equipment Factories Group Headquarters Kanpur place extracts for manufacture of stores on the factories and fix the annual target of production as per the core competency and capacity available with the factories. They are also responsible for monitoring the production through review meetings with the factories where decisions are taken to resolve issues relating to production bottleneck.

However, Ordnance Equipment Factories Group Headquarters were not maintaining the position of outstanding indents and details of year-wise and factory-wise orders placed on various factories. In the absence of these data, it is not clear as to how the Ordnance Equipment Factories Group Headquarters monitored the production and issue with reference to the Services' indents. Besides, reporting of overstated production and issues in the Achievement Reports to the Ministry/Ordnance Factory Board and suppressing the shortfall in actual production/issue with reference to the target, as discussed in paragraph 8.2.6.1 are suggestive of slackness in monitoring and effective control over production as well as deficiency in the performance reporting system.

8.2.10 Unjustified procurement and underutilisation of machines

Ordnance factories procure plants and machinery based on assessment of actual production load and known demand from the user Services on a medium term basis. In two instances, two factories procured socks knitting machines without valid justification creating excess capacity with reference to the existing pattern of workload and did not utilize the machines optimally as discussed below:

Ordnance Clothing Factory Shahjahanpur

Mention was made in Paragraph 7.3.6 (iv) of the Report of the Comptroller and Auditor General of India for the year ended March 2003 (No. 6 of 2004) about excess procurement of 10 computerised automatic power socks knitting machines costing Rs 1.28 crore with reference to the then workload at Ordnance Clothing Factory Shahjahanpur. Further scrutiny revealed that the factory management procured another 15 machines costing Rs 1.80 crore in March 2004, despite holding 35 socks knitting machines. The management stated in April 2004 that they procured 15 additional machines as the expected workload of socks was likely to be in the range of 12 lakh to 17 lakh pairs per annum and also to compensate the loss of production due to break-down of the existing 35 machines. The management, however, did not furnish any basis on which the expected workload was assessed. Their reply is also not tenable in view of the following facts:

(i) The capacity of the existing 35 machines commissioned in 2001 was 16.80 lakh pairs per annum and chances of their major break-down should be minimal as these were commissioned only three years back.

(ii) The annual productions of socks during 2002-03 and 2003-04 were only 11.50 lakh and 12 lakh pairs respectively, as against the existing capacity of 16.80 lakh pairs per annum.

(iii) The tentative target as per four-yearly production programme during 2004-05 to 2006-07 never exceeded 12 lakh pairs per annum, for which the existing 35 machines were more than adequate.

Ordnance Parachute Factory Kanpur

Mention was made in Paragraph 7.3.6 (i) of the Report of the Comptroller and Auditor General of India for the year ended March 2003 (No.6 of 2004) about creation of excess manufacturing capacity at Ordnance Parachute Factory Kanpur by way of procurement of 31 computerized socks knitting machines at a total cost of Rs 2.43 crore.

Further scrutiny with regard to utilisation of these machines revealed that the factory produced only 6.10 lakh pairs of socks in 2002-03 and 4.52 lakh pairs in 2003-04 against their annual manufacturing capacity of 18.43 lakh pairs. The extent of utilisation of the capacity worked out to only 33 and 25 *per cent* respectively. In spite of gross underutilisation of these machines, the management resorted to fabrication of 2,54,500 pairs of socks by trade at a total cost of Rs 32.64 lakh during 2002-03 and 2003-04.

Thus, the managements of these two factories could not efficiently exploit the socks knitting machines to their optimum capacity.

8.2.11 Non-realisation of value for money

In two instances the management of two factories failed to derive value for money from an investment of Rs 2.23 crore for line concept/assembly systems as brought out below:

Ordnance Equipment Factory Hazratpur

Ordnance Equipment Factory Hazratpur procured a modern line concept system costing Rs 1.20 crore to manufacture 1.50 lakh pairs of trousers ICK* per annum. Despite certain deficiencies noticed during inspection, the factory management installed it in December 2001 and paid Rs 92.98 lakh to the firm. During 2002-03 and 2003-04, the system could produce only 53,301 and 76,684 trousers respectively. The management did not release balance 20 *per cent* payment to the firm and forfeited its security deposit of Rs 5 lakh as per contractual terms. In view of poor performance of the system, the management had to offload fabrication of 1.13 lakh trousers ICK between September 2002 and September 2003 to meet the production target. Thus, the value for money could not be fully realised from an investment of Rs 92.98 lakh for the line concept system.

Ordnance Clothing Factory Avadi

Ordnance Clothing Factory Avadi placed an order on Apparel and Leather Techniques Private Limited Bangalore in September 2000 for supply of two assembly lines at a total cost of Rs 1.30 crore for fabrication of 2.47 lakh shirts PC khaki per annum with the estimated saving in man-power of 114 persons and reduction in unit cost of production of the item from the existing Rs 292.05 to Rs 176.41. The machine was not commissioned as of March 2004. Non-commissioning of the line assembly system even three years after its receipt deprived possible cost saving to the extent of Rs 8.57 crore during 2001-02 to 2003-04.

The draft report was forwarded to the Ministry in August 2004. Its reply was awaited as of December 2004.

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* *I C K→ Infantry Combat Kit*

Planning

8.3 Extra expenditure due to rejection of 5.56 mm rifles

Rejection of 2800 rifles (5.56 mm) produced at Rifle Factory, Ishapore and their issue for drill purposes resulted in extra expenditure of Rs 3.05 crore and accumulation of rejected rifles valuing Rs 1.50 crore awaiting conversion for use in training establishments.

Rifle Factory Ishapore (RFI) manufactures and supplies 5.56 mm rifles to Armed Forces and Ministry of Home Affairs (MHA) after clearance by the Controllerate of Quality Assurance -Small Arms (CQA-SA), Ishapore. The rifles failing in proof are repaired and subjected to reproof, repeatedly, till they are finally accepted.

CQA-SA noted that rifles, which had been repeatedly repaired and components replaced till final acceptance at Rifle Factory Ishapore, became trouble-prone in the hands of the users and a burden to the quality assurance establishments owing to abnormal expenditure on ammunition spent in repeated reproof. CQA-SA introduced a modified proof procedure for testing of 5.56 mm rifles with effect from October 2001 according to which only those rifles ex-RFI that passed in proof first time and during first reproof in Horizontal Functioning test were to be issued to the Armed Forces and MHA. The rifles cleared in subsequent reproof were to be issued to other establishments while rifles failing in third time reproof in Horizontal Functioning test were to be sentenced as "Drill Purpose" (DP) to be issued to training establishments for use in training.

Audit noticed that between April 2002 and June 2004, 3666 rifles (5.56 mm) manufactured by RFI at a cost of Rs 6.37 crore failed in third time reproof in Horizontal Functioning test and were recommended for conversion to DP by CQA-SA. Ordnance Factory Board stated in November 2004 that 2800 such rifles had been issued up to September 2004 to meet the requirement of DP rifles and further issues as DP rifles were being made.

DP rifles are ineffective and nonconvertible to fireable arms by any means. These are normally built up from rejected components or components retrieved from un-serviceable rifles. No proof test is required for such rifles. Cost of production of DP rifles is thus significantly less than that of 5.56 mm rifles. By issuing 2800 rifles (5.56 mm) as DP, RFI incurred an extra expenditure of Rs 3.05 crore, being the difference between cost of production of 5.56 mm rifles and DP rifles. Another 866 rifles valuing Rs 1.50 crore were awaiting conversion for use in training. The failure of 5.56 mm rifles in third time reproof was not investigated by RFI.

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

8.4 Extra expenditure in procurement of item from sister factory

Procurement of tail adapter by Ordnance Factory Dehu Road from Ordnance Factory Kanpur at higher rate despite being aware of its availability from trade at cheaper rates resulted in an additional expenditure of Rs 3.04 crore.

Ordnance Factory Dehu Road (OFDR) received 1.04 lakh tail adapters between June 2002 and February 2004 against their two inter-factory demands (IFD) of April 2002 for 80,000 and of March 2003 for 30,000 placed on Ordnance Factory Kanpur (OFC), at Rs 320.73 and Rs 454.02 each respectively.

Meanwhile, OFDR procured 68,000 tail adapters from trade at an average cost of Rs 60.59 each against its two orders of June 2002 and December 2002, which was far cheaper than the OFC/IFD cost. Thus, procurement of 1.04 lakh tail adapters, as of February 2004, from OFC at an exorbitant cost instead of from trade at a far cheaper rate, resulted in extra expenditure of Rs 3.04 crore.

As per Ordnance Factory Board's instructions of October 1997, if material price alone of the IFD factory is more than the total (unit) cost of the finished goods obtained ex-trade, the buying factory has the option to buy from trade. The guidelines also stipulate that factories may be encouraged to purchase material from sister factories even if its price exceeds the trade price but in that case, issues will be priced at trade price.

In the present case, the material cost alone of OFC during 2002-03 was Rs 81 each, overheads were 3.6 times of material cost and cost of labour was almost equal to total (unit) cost of Rs 60.59 for the finished goods ex-trade. Hence, OFC could have opted for trade procurement to save extra expenditure to the tune of Rs 3.04 crore.

Ordnance Factory Board stated in August 2004 that the factories are encouraged to obtain inputs from sister Ordnance Factories and the supplying factories are directed to review the production process with a view to reduce the cost of product. The contention of Ordnance Factory Board is not tenable as the OFC had failed to review the production process to reduce the cost of product. Failure to do so resulted in an additional expenditure of Rs 3.04 crore.

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

Production/Manufacturing

8.5 Loss due to use of defective castings

Use of defective die-castings in processing the body of 84 mm TPT bomb at Gun and Shell Factory, Cossipore, resulted in abnormal rejection and consequent loss of Rs 67.13 lakh.

The Gun and Shell Factory Cossipore (GSF) procures die-castings in pre-machined condition from Ordnance Factory, Ambajhari (OFAj) for manufacture and supply of empty bomb body of 84 mm Tracer Path Target (TPT) to Ordnance Factory, Khamaria (OFK).

Mention was made in paragraph 64 of Comptroller and Auditor General of India's Report No. 7 of 2001 regarding rejection of 17,781 die-castings ex-OFAj valuing Rs 76.57 lakh during machining operation at GSF owing to presence of blow-holes and eccentricity. The Ministry of Defence in their Action Taken Note stated in March 2002 that in order to avoid rejection of die-casting ex-OFAj at consignee's end due to blow-holes, the OFAj had installed an X-ray machine in October 1999. The Ministry of Defence also added that basic component design had been modified and tracer hole introduced in the casting operation where maximum instances of blow-holes were observed after machining.

Further examination revealed that even after implementation of modified production process, the die-castings supplied by OFAj continued to get rejected during machining operation at GSF owing to presence of blow-holes.

GSF received Inter Factory Demand (IFD) of February 2001 from OFK for manufacture and supply of 2.25 lakh (84 mm) TPT projectile. GSF completed manufacture of 1.32 lakh projectiles against five warrants issued between May 2001 and September 2002 from TPT body castings, received from OFAj and trade. An avoidable abnormal rejection of 13,000 TPT body castings as against 10 *per cent* normal rejection was registered during machining operation. In view of the rejections the General Manager, GSF constituted a Board of Enquiry in March 2003 which in its findings of April 2003 attributed the rejection to blow-holes, less material thickness and cracks which in turn was attributed to inherent process limitation at OFAj. As a remedial measure the Board of Enquiry suggested enhancing the normal rejection from the existing level of 10 *per cent* to 15 *per cent*. The General Manager, GSF however, enhanced the normal rejection to 14 *per cent* as approved by OFB earlier in January 2000. With enhanced normal rejection levels (14 *per cent*), abnormal rejections during May 2001 to September 2002 worked out to 7200.

Failure of OFAj in controlling the manufacturing process of die-castings even after introduction of modified design coupled with their failure to locate the blow-holes despite installing X-ray machine in November 1999 resulted in loss of Rs 67.13 lakh towards abnormal rejection of 7200 die-castings at GSF.

While accepting the facts, Ordnance Factory Board stated in October 2004 that corrective measures were being taken at Ordnance Factory Ambajhari.

The matter was referred to Ministry in May 2004; their reply was awaited as of December 2004.

8.6 Loss due to defective manufacture of cartridge cases

Defective manufacture of empty cartridge cases at Metal and Steel Factory Ishapore and Ordnance Factory Varangaon resulted in rejection of cartridge cases worth Rs 6.44 crore without any prospect of its utilisation.

Based on Army's indent of May 1985 Ordnance Factory Board (OFB) Kolkata placed an extract in December 1985 on Ordnance Factory Khamaria (OFK) for manufacture and supply of 4,63,500 cartridges of 23 mm schilka ammunition to Central Ammunition Depot (CAD) Pulgaon by March 1989. Production did not commence till March 1998 due to availability of initially manufactured ammunition using imported components and Army informing no further requirement. OFK placed two inter factory demands (IFD) for empty cartridge cases in April 1998 (for 1.30 lakh cases) and February 2001 (for 0.80 lakh cases) on Ordnance Factory Varangaon (OFV).

OFV supplied 1,71,137 empty cartridge cases to OFK between February 1999 and March 2002 duly cleared in inspection by the Quality Assurance Establishment (QAE) Varangaon. Of the 1,71,137 cartridge cases, 24,005 valuing Rs 1.27 crore were rejected between April 2000 and February 2002 due to repeated rupturing and jamming of cartridge cases and another 10,721 valuing Rs 56.66 lakh were banned for further use. Yet another 13,542 cartridge cases valuing Rs 71.56 lakh were held in stock of OFK unutilised.

In view of repeated rejection of cartridge cases, OFK directed OFV in April 2002 to stop further supply of cartridge cases and shortclosed their IFD of February 2001 at supplied quantity. OFK informed OFV that unused cartridge cases found unsuitable for assembly would be backloaded. OFV, however, did not agree to back-loading of unused cartridge cases, since all the cartridge cases were passed by QAE, Varangaon.

In view of shortclosure of OFK's IFD, OFV stopped production of the cartridge cases and the twelve machines valuing Rs 4.95 crore which were procured for manufacture of these cartridge cases were shifted to Metal and Steel Factory (MSF) Ishapore in July 2002 and March 2004. OFV, however, continued to hold 25,335 rejected finished/semi-finished empty cartridge cases valuing Rs 1.39 crore at their end without any prospect of issue/utilisation.

Meanwhile, OFK placed another IFD on MSF Ishapore in October 2001 for manufacture and supply of 4.90 lakh empty cartridge cases of 23 mm Schilka Armour Piercing Incendiary Tracer (De Coppering) ammunition, against which 2,20,732 cases were supplied to OFK between April 2001 and August 2003. Of these, 52,488 cases valuing Rs 2.51 crore were rejected by Senior Quality Assurance Establishment (Armaments) (SQAE(A)) Khamaria between November 2002 and September 2003 since the cartridge cases got completely ruptured.

SQAE(A), Khamaria had opined in December 2002 that the cause of rupture was inadequate control during annealing process at MSF Ishapore and intimated MSF, Ishapore for backloading the rejected cartridge cases but the same was lying at OFK as of November 2004.

Thus, defective manufacture of empty cartridge cases at OFV and MSF Ishapore resulted in net loss of Rs 4.33 crore, after providing credit for scrap, due to rejection/ban on issue of 87,214 cartridge cases which were awaiting backloading to OFV/MSF Ishapore as of November 2004. Besides, 38,877 rejected empty cartridge cases worth Rs 2.11 crore were held at OFV and OFK. The rejected cases require regularisation by OFB after due constitution of Board of Enquiry and implementation of remedial measures to avoid recurrence of heavy losses in future. This has not been done till November 2004.

The matter was referred to the Ministry in May 2004; their reply was awaited as of December 2004.

8.7 Loss due to rejection of ammunition

Defective manufacture of 30 mm Armour Piercing Tracer ammunition at Ordnance Factory Khamaria resulted in rejection of ammunition worth Rs 17.12 crore during 2000-01 to 2003-04.

Based on Army's three indents placed between June 1999 and August 2001, Ordnance Factory Board (OFB) placed three extracts between July 1999 and October 2001 on Ordnance Factory Khamaria (OFK) for manufacture and supply of 10.11 lakh ammunition to the Central Ammunition Depot, Pulgaon.

In manufacture of 2.85 lakh rounds of ammunition in 2000-01, the factory sustained rejection of 48,283 ammunition in proof at Long Proof Range, Khamaria due to misfire, case rupture, more or less muzzle velocity etc during February 2001 to December 2001. Taking into account the normal rejection of 3.60 *per cent*, abnormal rejection was 38,030 ammunition valuing Rs 7.87 crore.

Similarly, in manufacture of 3.77 lakh rounds of ammunition in 2001-02 the factory recorded rejection of 47,095 ammunition in proof due to higher muzzle velocity and higher pressure resulting in abnormal rejection of 35,045 ammunition valuing Rs 7.02 crore.

The joint investigation team, constituted in April 2002 with members of the factory and Senior Quality Assurance Establishment (Armament) Khamaria, failed to pinpoint the actual cause for failure of ammunition in proof. The factory constituted a Board of Enquiry in December 2002 to investigate the causes of failure of the ammunition. The Board in its findings attributed rejection of lots to more/less muzzle velocity and recommended that the affected lots be subjected to Doppler Radar Test. The review of affected lots was awaited as of October 2004 at OFK. Meanwhile, during 2002-03 and 2003-04, OFK also registered abnormal rejection of 11,009 ammunition valuing Rs 2.23 crore for the same reasons.

Thus, the factory failed to control the abnormal rejection of ammunition manufactured during 2000-01 to 2003-04 which resulted in loss of Rs 17.12 crore.

OFB stated in October 2004 that another Board of Enquiry constituted in June 2004 recommended repair of ammunition rejected due to case rupture and misfire by replacing primers and cases. OFB also added that value of rejection would be much less after implementation of remedial measures suggested by Board of Enquiry. The contention of OFB is not tenable since the Board of Enquiry itself had commented in October 2004 that repair would involve an additional expenditure of Rs 1001 in respect of each rejected ammunition. Thus, the proposed repair of rejected ammunition would involve additional burden to the state exchequer, provided the ammunition was passed in proof after rectification.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

Provisioning of Stores

8.8 Repair due to defective and inept handling of stores

Improper storage, mishandling of stores and non-detection of defects within warranty period, non-utilisation of hydraulic control system of T-72 tanks for a long time by Heavy Vehicles Factory, Avadi, forced them to bear an avoidable expenditure of Rs 56.24 lakh towards repair.

In order to manufacture T-72 tanks, Heavy Vehicles Factory (HVF), Avadi procured 1237 sets of hydraulic control system (Code-66), from Hindustan Machine Tools (HMT) Ltd., Ajmer between August 1993 and April 2000 against four supply orders of Ministry of Defence placed between September 1987 and February 1999. Code-66 items comprised of value device, pipeline assembly etc.

Indian Army had complained about the failure noticed in Code-66 ex-HMT assembled in T-72 Tanks. A meeting was therefore arranged in December 2000 between HMT, Controller of Quality Assurance/Heavy Vehicles, Avadi and HVF and it was held that though some damages could have been caused to some components in transit, poor quality of Code-66 ex-HMT could not be ignored. It was therefore decided to backload all the available stock of pipelines/hoses held by HVF to HMT for revalidation of quality problem and also for servicing/rectification.

HMT, however, refused to undertake repair/revalidation at their cost on the ground that (i) stores had been damaged while storing at HVF, heavy damage had taken place due to improper loose packing done in old and extraordinary big packing cases, (ii) items supplied from 1996 onwards had not been used, (iii) studs in the oil priming pump were broken due to mishandling at HVF, (iv) leakage through breather hole was due to aging effect of oil seal since the stores were kept unused for long duration at HVF and (v) warranty period was over.

HVF placed four supply orders valuing Rs 56.24 lakh on HMT and its sub-contractor Imperial Auto Industries, Faridabad between January 2001 and September 2002 for repair/revalidation.

Thus, improper handling and packing of stores coupled with HVF's inability to detect unserviceability of Code-66 within the warranty period forced them to bear an avoidable extra-expenditure of Rs 56.24 lakh towards repair/revalidation of the stores.

Armoured Vehicles Headquarters (AVHQ), Avadi, stated in June 2004 that the defects were not noticed at the time of drawal of the item but the functional problems occurred after the items were fitted in the tanks/during trials. They also added that the quality problem was not attributed to improper storage/mishandling as the stores were stored properly with original packing. The contention of AVHQ is not tenable since the HVF paid for all repairs/revalidation which amounted to tacit acceptance of its lapse.

The extra expenditure for Rs 56.24 lakh towards repair/revalidation could have been avoided had the factory detected unserviceability of Code-66 under strict vigil within the warranty period.

The matter was referred to the Ministry of Defence/Ordnance Factory Board in August 2004; their replies were awaited as of December 2004.

8.9 Improper assessment of requirement of armour plates

Improper assessment with regard to requirement of armour plates by Heavy Vehicles Factory, Avadi resulted in non-utilisation of items worth Rs 82.08 lakh.

Heavy Vehicles Factory (HVF), Avadi requires armour plates of 60 x 750 x 4000 mm dimensions in manufacture of T-72 tanks and its overhauling.

In May 1996 HVF assessed a requirement of 74,036 kgs of armour plates for manufacture of 232 original tanks and overhaul of 100 tanks. The net deficiency after taking into account available stock worked out to 61,190.254 kgs of armour plates. HVF procured 60,024 kgs armour plates from Steel Authority of India Limited, Rourkela between February 1997 and January 1998 against its order of September 1996.

Audit noticed that out of this procurement, HVF held 48,657 kgs of armour plates valuing Rs 82.08 lakh in their stock as of July 2004, even though by that date the factory had already assembled 1108 T-72 tanks and overhauled 292 tanks, which were well beyond the originally indented quantities of 232 original equipment and 100 overhauling of tanks. Thus, requirement of the plates by the factory was assessed improperly resulting in avoidable accumulation of inventory.

Ordnance Factory Board (OFB) admitted in October 2004 that assessment of consumption for overhaul was on higher side. The Board added that the plates in stock of HVF Avadi would be utilised in manufacture of hulls of T-72 and T-90 tanks and to meet the requirement of spares and overhauls. The contention of OFB is not tenable since the thickness of the components of T-72 tanks and T-90 tanks were different (88.5 mm/67.5 mm/40 mm) from the procured plates which had a thickness of 60 mm. Utilisation of the procured plates would require heavy machining, thereby entailing avoidable extra expenditure and material wastage.

Thus, improper assessment of the requirement of armour plates during May 1996 by HVF resulted in unnecessary accumulation of plates worth Rs 82.08 lakh till March 2004.

The matter was referred to the Ministry in August 2004; their reply was awaited as of December 2004.

Miscellaneous

8.10 Unauthorised handing over of Defence land and building

Ordnance Equipment Factory, Kanpur handed over defence land and building to a registered society for running a school without approval of the competent authority, resulting in exploitation of immovable assets worth Rs 2.55 crore.

Ordnance Equipment Factory Kanpur (OEFC) was running classes of standard I to X at a departmental school under Central Board of Secondary Education at Ordnance Equipment Factory Inter College on self help basis since 1981.

In view of Ordnance Factory Board's instruction of May 1989 that no unauthorised higher classes or authorised classes on self help basis should be run by the General Managers of Ordnance Factories directly or through committees headed by General Managers, it became necessary to shift the classes run in OEFC Inter College to some other premises.

As closure of classes I to X would lead to inconvenience and affect education prospects of students of various classes, officers and staff of OEFC and Ordnance Parachute Factory, Kanpur formed a Society which was registered with Uttar Pradesh Government as "Ordnance Equipment Factory Kalyan Samiti". Under the aegis of this society, the departmental school named "OEF High School" was shifted to the factory-owned building at Larmour Bagh with effect from April 2000. The market value of the land and building was Rs 2.55 crore.

In April 2000 OEFC sought the approval of the Ordnance Factory Board for leasing out of the land and the building, which was awaited as of August 2004.

Handing over of defence land and assets worth Rs 2.55 crore by OEFC without lease agreement and without the approval of Ordnance Factory Board was not only a violation of extant provisions governing leasing of defence land but also allowed the OEF Kalyan Samiti to exploit the defence land at the cost of the State.

The case was referred to the Ministry of Defence/Ordnance Factory Board in August 2004; their replies were awaited as of December 2004.

8.11 Follow up on Audit Reports

The Ministry of Defence failed to submit remedial Action Taken Notes on 13 Audit Paragraphs as of December 2004.

With a view to ensuring enforcement of accountability of the executives in respect of all the issues dealt with in various Audit Reports, the Public Accounts Committee desired that Action Taken Notes 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 Report in Parliament.

The Audit Report for the year ended March 2003 was laid in Parliament on 13 July 2004. Review of outstanding Action Taken Notes relating to Ordnance Factory Board as of November 2004 revealed that the Ministry of Defence had not submitted Action Taken Notes in respect of 13 Paragraphs included in the Audit Report for the years ended March 2003 as per Annexure-IV.

8.12 Response of the Ministry/ Departments 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 always forwarded by the respective Audit Officers to the Secretaries of the concerned ministries/departments through Demi Official letters drawing their attention to the audit findings and requesting them to send their response within six weeks. It is brought to their personal notice that since the issues are likely to be included 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 the Ordnance Factory Section of the Report of the Comptroller and Auditor General of India for the year ended March 2004: Union Government (Defence Services), Army and Ordnance Factories No.6 of 2005 were forwarded to the Secretary, Department of Defence Production and Supplies, Ministry of Defence between May 2004 and December 2004 through Demi Official letters.

The Secretary Department of Defence Production and Supplies did not send reply to any of the nine Draft Paragraphs included in the Report. Thus, the response of the Secretary of the Ministry could not be included in them.

(B.K. CHATTOPADHYAY)
Director General of Audit
Defence Services

New Delhi
Dated : 12 April 2005

Countersigned

(VIJAYENDRA N. KAUL)
Comptroller and Auditor General of India

New Delhi
Dated : 12 April 2005

ANNEXURE-I

Position of outstanding ATNs

(i) **Pending for more than five years**

(Referred to in Paragraph 2.7)

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*	Contracts 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.		15**	Extra expenditure due to wrong termination of meat contract.
11.		17**	Infructuous expenditure on procurement of dal chana.
12.	No.8 of 1992	20**	Procurement of sub-standard goods in an Ordnance Depot.
13.		28**	Avoidable payment of maintenance charges for Defence tracks not in use.
14.	No. 13 of 1992	Part I*	Recruitment of Other Ranks
15.	No. 8 of 1993	15**	Non-utilisation of assets
16.		22**	Over-provisioning of corrugated card board boxes
17.		29*	Import of mountaineering equipment and sports items
18.		31*	Avoidable payment of detention charges
19.	No. 8 of 1995	12*	Working of the Department of Defence Supplies
20.		13*	Delay in repair of defective imported ammunition
21.		29*	Manufacture of defective parachutes
22.		30*	Non-utilisation of parachutes
23.	No. 8 of 1996	24*	Wasteful expenditure on injudicious procurement of tyres

Sl.No.	Report No. and Year	Para No.	Subject
24.	No. 7 of 1997	14**	Loss due to improper despatch of imported equipment
25.		15***	Over provisioning of seats and cushions for vehicles
26.		18*	Management of Defence Land
27.		23**	Avoidable expenditure on Demurrage charges
28.		24*	Undue favour to a firm
29.		27**	Non-realisation of claims from the Railways
30.		69**	Defective construction of blast pens and taxi track
31.	No. 7 of 1998	14**	Extra expenditure on modification of radar
32.		16*	Questionable deal
33.		17*	Procurement of defective radars
34.		18***	Extra expenditure on procurement of rifles and ammunition due to failure to adequately safeguard Government interest
35.		20**	Excess procurement of barrels
36.		21***	Extra expenditure due to non-adherence of contract provision
37.		22**	Import of defective missiles
38.		30*	Avoidable payment of container detention charges
39.		32*	Infructuous expenditure on procurement of substandard cylinders
40.		34**	Unauthorised issue of free rations
41.		36*	Procurement of batteries at higher rates
42.		52*	Loss of revenue
43.		64**	Unfruitful expenditure on procurement of substandard hot mix plants
44.	No.7 of 1999	12***	Presumptive fraud in import of ammunition
45.		13**	Defective training ammunition supplied by Bofors
46.		14**	Delay in renewal of lease agreement
47.		15***	Premature deterioration of imported ammunition
48.		17*	Procurement of defective sleeping bags
49.		24**	Negligence in framing terms of supply orders
50.		28*	Non-recovery of advance
51.		30***	Failure to meet operational requirement
52.		32**	Non-utilisation of friction drop hammers
53.		33**	Failure to observe proper issue procedure for batteries
54.		36**	Non-recovery/overpayment of electricity charges
55.		38*	Failure to administer a risk and expense contract

Sl.No.	Report No. and Year	Para No.	Subject
56.		40*	Delay in setting up of repair facilities for helicopters
(ii)	**Pending for more than 3 years**		
57.	No. 7 of 2000	13*	Failure to Safeguard Government Interest
58.		19**	Overhaul of infantry combat vehicles and engines (Project – White Lily)
59.		20*	Rejection of Barrels manufactured for T-72 tanks
60.		21**	Downgradation of mines due to manufacturing defects
61.		23***	Procurement of defective bullet proof windscreen glasses
62.		24**	Procurement of Batteries at higher rates
63.		27*	Extra expenditure due to delay in taking risk purchase action
64.		28**	Non-recovery of due from a commercially run club occupying Prime Defence Land
65.		30**	Delay in setting up of an aviation base
66.		36**	Unjustified payment towards sewerage cess
67.		41**	Nugatory expenditure on indigenisation of a Rocket
68.		42**	Delay in construction of bridges by Director General of Border Roads
69.		52***	Repowering of Vijayanta Tank
70.	No.7A of 2000	Entire* Report	Review of Inventory Management in Ordnance Services
(iii)	**Pending upto 3 years**		
71.	No. 7 of 2001	14*	Non-utilisation of imported radars
72.		15**	Procurement of an incomplete equipment
73.		19**	Infructuous expenditure on procurement of entertainment films
74.		20***	Inadequate follow up on deficient supplies leading to avoidable loss
75.		24**	Unauthorised use of defence land by a club at Mumbai
76.		26**	Hiring of buildings by Defence Estates Officer from an unauthorised party
77.		27***	Undue benefit to a private society
78.		32***	Wrongful credit of sale proceeds of usufructs to regimental fund
79.		34*	Non-levy of penalty by Canteen Stores Department for supplies in default

Sl.No.	Report No. and Year	Para No.	Subject
80.		37**	Payment for water lost in transmission from MIDC tapping junction to R&D(E) Pune take-over point
81.		38** (Case-II)	Cracks in garages and collapse of living accommodation due to defective design
82.		42**	Staff Projects completed by Vehicle Research and Development Establishment
83.	No.7A of 2001	Entire*$^{\Delta}$ Report	Review of Procurement for OP VIJAY(Army)
84.	No. 7 of 2002	15***	Avoidable expenditure on creating storage accommodation and helipad with allied facilities for helicopters
85.		18***	Delegation of special financial powers to GOC-in-C to meet urgent and immediate requirements of counter insurgency operations and internal security duties
86.		20***	Bouncing of Bank Guarantee furnished by Punjab Wireless System Ltd.
87.		21**	Over provisioning of minor fire extinguisher and subsequent excess issue
88.		22*	Recovery/saving at the instance of Audit
89.		23*	Improper provisioning of tyres
90.		25**	Overpayment of Rs 2.49 crore to Civil Hired Transport contractors
91.		27***	Inept handling of loss of store
92.		34*	Re-appropriation of single living accommodation constructed for Sailors
93.		35***	Construction of married accommodation for which no utility exists
94.		37**	Time and cost over-run in construction of Road due to lapse on the part of Border Roads Organisation
95.		38*	Avoidable expenditure due to lapse in supervision
96.	**No. 6 of 2003**	2***	Exploitation of Defence lands
97.		3*	Non-functional equipment
98.		4*	Non-recovery of outstanding advance
99.		5***	Unnecessary import of spares
100.		6**	Response of the ministries/departments to Draft Audit Paragraphs
101.		7*	Follow up on Audit Reports
102.		8**	Idle investment on manufacture of defective ammunition

Sl.No.	Report No. and Year	Para No.	Subject
103.		9*	Accumulation of stocks of Grenades
104.		10*	Additional expenditure attributable to non-adherence to fuel policy
105.		11*	Recoveries effected at the instance of Audit
106.		13***	Unauthorised opening of a riding school and club
107.		14***	Irregular recruitment of personnel
108.		15**	Unproductive expenditure on construction of residential accommodation
109.		18*	Idle investment on construction of a transmitting station
110.		19**	Short recovery of electricity charges
111.		20*	Unfruitful expenditure on an air-conditioning plant
112.		24*	Over-provisioning of Tippers
113.		25*	Avoidable expenditure on construction of a Border Road
114.		26*	Infructuous expenditure on construction of accommodation

* **Action Taken Notes awaiting final settlement/vetting - 49**

** **Copy of the finalised ATN/Corrigendum to the finalised ATN awaited from Ministry, after being duly vetted by Audit – 45**

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

Δ **Action Taken Notes on 06 individual paras and 7 Macro Analysis paras totalling 13 out of 42, not received even for the first time, though indicated at Sl. No. 83 as one 'Review'.**

ANNEXURE-II

(Referred to in sub paragraph 8.2.6)

Factory involved	Item	Target	Issue as per Achievement Report of OEF Group Hqrs.	Actual physical issue as of 31 March as per factory's records	Issues reported in excess in the Achievement Report		
					Quantity	Percentage	Money value (Rs in lakh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1999-2000 Ordnance Parachute Factory Kanpur	PTA –M	800	1000	749	251	34	130.37
	PTA – (R)	800	800	583	217	37	58.83
	Drogue Para 22"	50	50	Nil	50	100	0.84
	BP Mig 23 Aircraft	200	200	188	12	6	2.46
	BP Mirage 2000 Aircraft	62	62	23	39	170	29.88
	Pilot Para BMK-41	25	25	23	2	9	2.50
2000-01 Ordnance Parachute Factory Kanpur	PTA-M	600	600	400	200	50	103.88
	PTA-R	700	700	509	191	38	51.78
	Suit NBC	7000	7000	5844	1156	20	44.68
	BP Mig 23 Aircraft	600	600	509	91	18	20.11
	BP Mig 29 Aircraft	275	275	250	25	10	8.75
	Socks Heavy Khaki	450000	450000	404608	45392	11	45.39
2001-02 Ordnance Parachute Factory Kanpur	Socks Heavy Khaki	300000	300000	150000	150000	100	141.00
	PTA –M	800	1000	639	361	56	200.64
	PTA –R	Nil	300	Nil	300	100	90.00
	HAP	500	700	430	270	63	189.00
Ordnance Clothing Factory Shahjahanpur Ordnance Clothing Factory Avadi	Overall D.G.	20000	20000	Nil 6324	13676	216	85.58
Ordnance Clothing Factory Shahjahanpur	Socks OG	1500000	1500000	819023	680977	83	540.56
	Blanket	500	500	Nil	500	100	2.31
2002-03 Ordnance Parachute Factory Kanpur	PTA-M	800	800	300	500	167	277.90
	PTA-R	1000	1000	700	300	43	90.00
	BP Mig-23 Aircraft	950	950	810	140	17	32.48
	Socks Wool Black	170000	170000	126000	44000	35	28.60
Ordnance Clothing Factory Shahjahanpur	Vest FSOG	500000	500000	110000	390000	355	812.29
Ordnance Clothing Factory Avadi	Overall Combination Navy Blue	20000	20000	14114	5886	42	21.19
	Overall Greenish Khaki	16000	16000	8220	7780	95	31.02
2003-04 Ordnance Clothing Factory Shahjahanpur	Shirt Men Angola Drab	865000	865000	703200	161800	23	Not available
	Trouser BD Serge	554020	554020	452270	101750	22	873.69
	Vest Men FS Woolen	500000	500000	394317	105683	27	279.18
	Suit BG	29000	29000	11477	17523	153	333.01
Ordnance Parachute Factory Kanpur	Coat CD I/L	200000	200000	180000	20000	11	175.00
	HAP (M)	400	400	200	200	100	147.00
	BP Mig -23 Aircraft	516	516	Nil	516	100	119.71
	BP Jaguar Aircraft	200	200	60	140	233	56.00
	BP Mig -29 Aircraft	100	100	17	83	488	36.94
	BP Mig -21 Aircraft	500	500	270	230	85	40.71
	BP Mirage 2000 Aircraft	90	90	10	80	800	65.60
	Pilot Para BMK- 41 Kiran	62	62	Nil	62	100	88.85
						Total	**Rs 5257.73 lakh**

ANNEXURE-III

(Referred to in sub paragraph 8.2.6)

Year	Material			Labour			Overheads		
Principal items	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2000 1999-2000 Net Mosquito khaki S.M.	OEF Kanpur♠	206.19		OEF Hazratpur	2.44	1095	OEF Hazratpur	6.67	715
	OCF Avadi♠	276.70	34	OEF Kanpur	29.16		OEF Kanpur	54.33	
Tent 80 kg Fly outer	OEF Hazratpur ♠	2553.61		OEF Hazratpur	599.71		OEF Hazratpur	1612.00	10
	OCF Avadi	2760.00	8	OCF Avadi	724.19	21	OCF Avadi	1470.11	
Overall Combination	-	-	-	OPF Kanpur	5.20		OPF Kanpur	10.21	
				OCF Avadi	41.25	693	OCF Avadi	83.74	720
2000-01 Jacket combat disruptive	OCF Avadi	180.84	38	-	-		OPF Kanpur	117.18	51
	OEF Hazratpur	249.62					OEF Hazratpur	177.38	
Trouser combat disruptive	-	-	-	OEF Hazratpur	32.06	131	OPF Kanpur	46.65	205
				OCF Avadi	73.96		OCF Avadi	142.43	
Overall combat disruptive	OCF Shahjahanpur♠	391.08		OEF Hazratpur	4.52		OEF Hazratpur	10.64	
	OCF Avadi	513.20	31	OCF Avadi	25.90	473	OCF Avadi	49.88	369
Coat combat ICK	-	-	-	O PF Kanpur	46.48	343	OPF Kanpur	70.73	601
				OEF Hazratpur	205.73		OEF Hazratpur	495.98	
Shirt poly OG cotton	-	-	-	OCF Shahjahanpur	3.30		OCF Shahjahanpur	5.94	
				OPF Kanpur	34.53	946	OPF Kanpur	51.61	769
2001-02 Trouser combat disruptive	-	-	-	OEF Hazratpur	15.44	342	OEF Hazratpur	36.67	166
				OPF Kanpur	68.20		OPF Kanpur	97.46	
Overall combination disruptive	OCF Shahjahanpur	411.28		OEF Hazratpur	1.99		OEF Hazratpur	4.39	
	OCF Avadi	548.82	33	OCF Avadi	20.48	929	OCF Avadi	31.13	609
Coat combat ICK	OPF Kanpur ♠	701.25	9	OPF Kanpur	20.05	1031	OPF Kanpur	29.97	1134
	OCF Shahjahanpur	763.65		OCF Shahjahanpur	226.84		OCF Shahjahanpur	369.74	
Shirt poly OG cotton	-	-	-	OCF Shahjahanpur	4.39	1286	OCF Shahjahanpur	7.37	1134
				OPF Kanpur	60.85		OPF Kanpur	90.95	
2002-03 Trouser combat disruptive	-	-	-	OPF Kanpur	41.28		OPF Kanpur	68.21	132
				OEF Hazratpur	72.51	76	OEF Hazratpur	157.93	
Overall combination disruptive	OCF Shahjahanpur	339.98		OCF Shahjahanpur	9.72		OCF Shahjahanpur	15.16	

♠ *OEF Kanpur→ Ordnance Equipment Factory Kanpur* ♠ *OCF Avadi → Ordnance Clothing Factory Avadi*
♠ *OEF Hazratpur → Ordnance Equipment Factory Hazratpur* ♠ *OCF Shahjahanpur → Ordnance Clothing Factory Shahjanpur*
♠ *OPF Kanpur → Ordnance Parachute Factory Kanpur*

Year	Material			Labour			Overheads		
Principal items	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**	**Factory involved**	**Cost (Rs)**	**Percent-age of variation**
	OEF Hazratpur	437.17	**29**	OPF Kanpur	57.19	**488**	OPF Kanpur	87.89	**480**
S.D.Para 8.5 M	OPF Kanpur	2712.22	**8**	OPF Kanpur	636.54	**28**	OPF Kanpur	1064.30	**53**
	OEF Hazratpur	2918.68		OEF Hazratpur	812.18		OEF Hazratpur	1624.07	
Coat combat disruptive ICK	OCF Shahjahanpur	683.29	**16**	OEF Hazratpur	11.19	**1804**	OEF Hazratpur	20.26	**1516**
	OEF Hazratpur	792.55		OCF Shahjahanpur	213.07		OCF Shahjahanpur	327.44	
Jacket ICK	-	-	-	OPF Kanpur	61.65	**62**	-	-	
				OCF Shahjahanpur	100.03		-	-	-
Coat combat disruptive with lining	OCF Shahjahanpur	372.45	**15**	OPF Kanpur	94.76	**79**	OPF Kanpur	151.89	**72**
	OPF Kanpur	427.45		OCF Shahjahanpur	169.44		OCF Shahjahanpur	260.59	
2003-04 Jacket combat disruptive	-	-	-	OEF Hazratpur	40.79	**148**	OEF Hazratpur	77.15	**113**
				OCF Avadi	101.35		OCF Avadi	164.06	
Socks men's wool OG	-	-	-	OPF Kanpur	7.55	**189**	OPF Kanpur	13.21	**153**
				OCF Shahjahanpur	21.85		OCF Shahjahanpur	33.39	
Overall combination disruptive	OCF Shahjahanpur	423.86	**12**	OCF Shahjahanpur	7.24	**407**	OCF Shahjahanpur	10.92	**475**
	OCF Avadi	475.84		OCF Avadi	36.74		OCF Avadi	62.84	

ANNEXURE-IV

Position of outstanding ATNs

(Referred to in paragraph 8.11)

Report No. & Year	Sl. No.	Para No.	Subject	Remarks
6 of 2004	1.	7.1	Performance of Ordnance Factory Organisation	ATN not at all received
	2.	7.2	Working of Metal and Steel Factory, Ishapore	- do -
	3.	7.3	Functioning of CNC machines in Ordnance Factories	- do -
	4.	7.4	Blocked inventory due to abrupt withdrawal of demand by user	- do -
	5.	7.5	Loss due to failure of cartridge cases in proof	- do -
	6.	7.6	Receipt of defective stores due to incorrect specification in the supply order	- do -
	7.	7.7	Injudicious procurement of spares	- do -
	8.	7.8	Loss due to non-replacement of defective instruments	- do -
	9.	7.9	Uneconomical procurement of machines	- do -
	10.	7.10	Failure to develop a propellant	- do -
	11.	7.11	Non-recovery of inspection charges	- do -
	12.	7.13	Suppression of excess consumption of components	- do -
	13.	7.14	Deterioration of forgings due to long storage	- do -